

**GW-028**

**2016**

**AGWMR**

**Part 7 of 8**

**2017**



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 19:47	WG870074
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 19:47	WG870074
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 19:47	WG870074
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 19:47	WG870074
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 19:47	WG870074
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 19:47	WG870074
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 19:47	WG870074
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Ethylbenzene	0.00107		0.000384	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Isopropylbenzene	0.0602		0.000326	0.00100	0.00100	1	05/05/2016 19:47	WG870074
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 19:47	WG870074
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 19:47	WG870074
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 19:47	WG870074
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 19:47	WG870074
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 19:47	WG870074
Methyl tert-butyl ether	0.00120		0.000367	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 19:47	WG870074
n-Propylbenzene	0.00513		0.000349	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 19:47	WG870074
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 19:47	WG870074
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 19:47	WG870074
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 19:47	WG870074
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 19:47	WG870074
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 19:47	WG870074
(S) Toluene-d8	105				90.0-115		05/05/2016 19:47	WG870074
(S) Dibromofluoromethane	100				79.0-121		05/05/2016 19:47	WG870074
(S) 4-Bromofluorobenzene	94.6				80.1-120		05/05/2016 19:47	WG870074

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2.19		0.0247	0.100	0.100	1	05/03/2016 15:53	WG869249
(S) o-Terphenyl	116				50.0-150		05/03/2016 15:53	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3590		2.82	10.0	10.0	1	05/04/2016 16:22	WG869764

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.737	B J	0.197	0.100	1.00	10	05/11/2016 13:26	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	314		2.60	1.00	50.0	50	05/03/2016 18:12	WG869281
Fluoride	0.837		0.00990	0.100	0.100	1	05/03/2016 17:58	WG869281
Sulfate	2700		3.87	5.00	250	50	05/03/2016 18:12	WG869281

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00430	J	0.00125	0.00200	0.0100	5	05/06/2016 16:41	WG869264
Arsenic,Dissolved	0.00350	J	0.00125	0.00200	0.0100	5	05/04/2016 18:42	WG869664
Barium	0.0133	J	0.00180	0.00500	0.0250	5	05/06/2016 16:41	WG869264
Barium,Dissolved	0.00925		0.000360	0.00500	0.00500	1	05/04/2016 18:39	WG869664
Calcium	574		0.230	1.00	5.00	5	05/06/2016 16:41	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 16:41	WG869264
Chromium,Dissolved	0.00119	J	0.000540	0.00200	0.00200	1	05/04/2016 18:39	WG869664
Iron	0.170	J	0.0750	0.100	0.500	5	05/06/2016 16:41	WG869264
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/04/2016 18:39	WG869664
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 16:41	WG869264
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/04/2016 18:39	WG869664
Manganese	0.0744		0.00125	0.00500	0.0250	5	05/06/2016 16:41	WG869264
Manganese,Dissolved	0.0661		0.000250	0.00500	0.00500	1	05/04/2016 18:39	WG869664
Potassium	2.54	J	0.185	1.00	5.00	5	05/06/2016 16:41	WG869264
Selenium	0.00285	J	0.00190	0.00200	0.0100	5	05/06/2016 16:41	WG869264
Selenium,Dissolved	0.00538	B J	0.00190	0.00200	0.0100	5	05/04/2016 18:42	WG869664
Sodium	214		0.550	1.00	5.00	5	05/06/2016 16:41	WG869264

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/02/2016 15:28	WG869042
(S) a,a,q-Trifluorotoluene(FID)	101				62.0-128		05/02/2016 15:28	WG869042

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/03/2016 13:00	WG868978
Benzene	U		0.000331	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Bromoform	U		0.000469	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Bromomethane	U		0.000866	0.00500	0.00500	1	05/03/2016 13:00	WG868978
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/03/2016 13:00	WG868978
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Carbon disulfide	0.000321	J	0.000275	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/03/2016 13:00	WG868978



Collected date/time: 04/28/16 10:20

L832422

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Chloroethane	U		0.000453	0.00500	0.00500	1	05/03/2016 13:00	WG868978
Chloroform	U		0.000324	0.00500	0.00500	1	05/03/2016 13:00	WG868978
Chloromethane	U		0.000276	0.00250	0.00250	1	05/03/2016 13:00	WG868978
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 13:00	WG868978
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/03/2016 13:00	WG868978
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/03/2016 13:00	WG868978
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/03/2016 13:00	WG868978
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/03/2016 13:00	WG868978
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/03/2016 13:00	WG868978
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/03/2016 13:00	WG868978
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/03/2016 13:00	WG868978
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/03/2016 13:00	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/03/2016 13:00	WG868978
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Naphthalene	U		0.00100	0.00500	0.00500	1	05/03/2016 13:00	WG868978
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Styrene	U		0.000307	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Toluene	U		0.000780	0.00500	0.00500	1	05/03/2016 13:00	WG868978
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/03/2016 13:00	WG868978
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/03/2016 13:00	WG868978
o-Xylene	U		0.000341	0.00100	0.00100	1	05/03/2016 13:00	WG868978
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/03/2016 13:00	WG868978
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/03/2016 13:00	WG868978
(S) Toluene-d8	106				90.0-115		05/03/2016 13:00	WG868978
(S) Dibromofluoromethane	106				79.0-121		05/03/2016 13:00	WG868978
(S) 4-Bromofluorobenzene	99.5				80.1-120		05/03/2016 13:00	WG868978

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.361		0.0247	0.100	0.100	1	05/03/2016 16:09	WG869249
(S) o-Terphenyl	106				50.0-150		05/03/2016 16:09	WG869249





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4990		2.82	10.0	10.0	1	05/04/2016 16:22	WG869764

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	4.61		0.197	0.100	1.00	10	05/11/2016 13:32	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	575		2.60	1.00	50.0	50	05/03/2016 20:27	WG869281
Fluoride	1.26		0.00990	0.100	0.100	1	05/03/2016 20:12	WG869281
Sulfate	3080		3.87	5.00	250	50	05/03/2016 20:27	WG869281

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00120	0.00500	0.00500	1	05/10/2016 21:36	WG871518

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/02/2016 12:41	WG868783
Mercury,Dissolved	U	J6	0.0000490	0.000200	0.000200	1	05/02/2016 13:04	WG868782

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00401	J	0.00125	0.00200	0.0100	5	05/06/2016 16:44	WG869264
Arsenic,Dissolved	0.00279		0.000250	0.00200	0.00200	1	05/04/2016 18:18	WG869664
Barium	0.0131	J	0.00180	0.00500	0.0250	5	05/06/2016 16:44	WG869264
Barium,Dissolved	0.00849		0.000360	0.00500	0.00500	1	05/04/2016 18:18	WG869664
Boron	0.741		0.00750	0.0200	0.100	5	05/06/2016 16:44	WG869264
Boron,Dissolved	0.647		0.00150	0.0200	0.0200	1	05/05/2016 10:56	WG869664
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 16:44	WG869264
Cadmium,Dissolved	U		0.000160	0.00100	0.00100	1	05/04/2016 18:18	WG869664
Calcium	619		0.230	1.00	5.00	5	05/06/2016 16:44	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 16:44	WG869264
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/04/2016 18:18	WG869664
Cobalt	0.0122		0.00130	0.00200	0.0100	5	05/06/2016 16:44	WG869264
Cobalt,Dissolved	0.00479		0.000260	0.00200	0.00200	1	05/04/2016 18:18	WG869664
Iron	U		0.0750	0.100	0.500	5	05/06/2016 16:44	WG869264
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/04/2016 18:18	WG869664
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 16:44	WG869264
Lead,Dissolved	0.000318	J	0.000240	0.00200	0.00200	1	05/04/2016 18:18	WG869664
Manganese	0.552		0.00125	0.00500	0.0250	5	05/06/2016 16:44	WG869264
Manganese,Dissolved	0.398		0.000250	0.00500	0.00500	1	05/04/2016 18:18	WG869664
Nickel	0.0100		0.00175	0.00200	0.0100	5	05/06/2016 16:44	WG869264
Nickel,Dissolved	0.00956		0.000350	0.00200	0.00200	1	05/04/2016 18:18	WG869664
Potassium	1.37	J	0.185	1.00	5.00	5	05/06/2016 16:44	WG869264
Selenium	0.00528	J	0.00190	0.00200	0.0100	5	05/06/2016 16:44	WG869264
Selenium,Dissolved	0.00669	B	0.000380	0.00200	0.00200	1	05/04/2016 18:18	WG869664
Sodium	271		0.550	1.00	5.00	5	05/06/2016 16:44	WG869264



## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.0247	U	0.00165	0.0100	0.0500	5	05/06/2016 16:44	WG869264
Uranium,Dissolved	0.0217		0.000330	0.0100	0.0100	1	05/04/2016 18:18	WG869664
Vanadium	0.0258		0.000900	0.00500	0.0250	5	05/06/2016 16:44	WG869264
Vanadium,Dissolved	0.0217		0.000180	0.00500	0.00500	1	05/04/2016 18:18	WG869664

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/03/2016 13:23	WG868978
Benzene	U		0.000331	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Bromoform	U		0.000469	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Bromomethane	U		0.000866	0.00500	0.00500	1	05/03/2016 13:23	WG868978
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/03/2016 13:23	WG868978
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Chloroethane	U		0.000453	0.00500	0.00500	1	05/03/2016 13:23	WG868978
Chloroform	U		0.000324	0.00500	0.00500	1	05/03/2016 13:23	WG868978
Chloromethane	U		0.000276	0.00250	0.00250	1	05/03/2016 13:23	WG868978
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 13:23	WG868978
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/03/2016 13:23	WG868978
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/03/2016 13:23	WG868978
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/03/2016 13:23	WG868978
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/03/2016 13:23	WG868978
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/03/2016 13:23	WG868978
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/03/2016 13:23	WG868978
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/03/2016 13:23	WG868978
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/03/2016 13:23	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/03/2016 13:23	WG868978
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Naphthalene	U		0.00100	0.00500	0.00500	1	05/03/2016 13:23	WG868978
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Styrene	U		0.000307	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Toluene	U		0.000780	0.00500	0.00500	1	05/03/2016 13:23	WG868978
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/03/2016 13:23	WG868978
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/03/2016 13:23	WG868978
o-Xylene	U		0.000341	0.00100	0.00100	1	05/03/2016 13:23	WG868978
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/03/2016 13:23	WG868978
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/03/2016 13:23	WG868978
(S) Toluene-d8	106				90.0-115		05/03/2016 13:23	WG868978

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



Collected date/time: 04/28/16 12:20

L832422

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

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
(S) Dibromofluoromethane	106				79.0-121		05/03/2016 13:23	WG868978
(S) 4-Bromofluorobenzene	98.8				80.1-120		05/03/2016 13:23	WG868978

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	0.127		0.0247	0.100	0.100	1	05/03/2016 16:25	WG869249
(S) o-Terphenyl	106				50.0-150		05/03/2016 16:25	WG869249

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1410		2.82	10.0	10.0	1	05/04/2016 16:22	WG869764

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 13:34	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	313		2.60	1.00	50.0	50	05/03/2016 20:57	WG869281
Fluoride	1.03		0.00990	0.100	0.100	1	05/03/2016 20:42	WG869281
Sulfate	83.1		0.0774	5.00	5.00	1	05/03/2016 20:42	WG869281

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00703	J	0.00125	0.00200	0.0100	5	05/06/2016 16:47	WG869264
Arsenic,Dissolved	0.00454		0.000250	0.00200	0.00200	1	05/04/2016 18:20	WG869664
Barium	0.327		0.00180	0.00500	0.0250	5	05/06/2016 16:47	WG869264
Barium,Dissolved	0.245		0.000360	0.00500	0.00500	1	05/04/2016 18:20	WG869664
Calcium	246		0.230	1.00	5.00	5	05/06/2016 16:47	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 16:47	WG869264
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/04/2016 18:20	WG869664
Iron	0.546		0.0750	0.100	0.500	5	05/06/2016 16:47	WG869264
Iron,Dissolved	0.332		0.0150	0.100	0.100	1	05/04/2016 18:20	WG869664
Lead	0.00143	J	0.00120	0.00200	0.0100	5	05/06/2016 16:47	WG869264
Lead,Dissolved	0.000729	J	0.000240	0.00200	0.00200	1	05/04/2016 18:20	WG869664
Manganese	2.55		0.00125	0.00500	0.0250	5	05/06/2016 16:47	WG869264
Manganese,Dissolved	2.13		0.000250	0.00500	0.00500	1	05/04/2016 18:20	WG869664
Potassium	0.206	J	0.185	1.00	5.00	5	05/06/2016 16:47	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 16:47	WG869264
Selenium,Dissolved	0.00226	B	0.000380	0.00200	0.00200	1	05/04/2016 18:20	WG869664
Sodium	199		0.550	1.00	5.00	5	05/06/2016 16:47	WG869264

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0500	0.0500	0.250	5	05/03/2016 13:46	WG868978
Benzene	12.4		0.0828	0.00100	0.250	250	05/06/2016 13:17	WG870046
Bromodichloromethane	U		0.00190	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Bromoform	U		0.00234	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Bromomethane	U		0.00433	0.00500	0.0250	5	05/03/2016 13:46	WG868978
n-Butylbenzene	0.00837		0.00180	0.00100	0.00500	5	05/03/2016 13:46	WG868978
sec-Butylbenzene	0.00944		0.00182	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Carbon disulfide	0.00197	J	0.00138	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Carbon tetrachloride	U		0.00190	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Chlorobenzene	U		0.00174	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Chlorodibromomethane	U		0.00164	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Chloroethane	U		0.00226	0.00500	0.0250	5	05/03/2016 13:46	WG868978
Chloroform	U		0.00162	0.00500	0.0250	5	05/03/2016 13:46	WG868978
Chloromethane	U		0.00138	0.00250	0.0125	5	05/03/2016 13:46	WG868978
1,2-Dibromoethane	U		0.00190	0.00100	0.00500	5	05/03/2016 13:46	WG868978
1,1-Dichloroethane	U		0.00130	0.00100	0.00500	5	05/03/2016 13:46	WG868978



Collected date/time: 04/28/16 09:25

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	0.00683		0.00180	0.00100	0.00500	5	05/03/2016 13:46	WG868978
1,1-Dichloroethene	U		0.00199	0.00100	0.00500	5	05/03/2016 13:46	WG868978
cis-1,2-Dichloroethene	U		0.00130	0.00100	0.00500	5	05/03/2016 13:46	WG868978
trans-1,2-Dichloroethene	U		0.00198	0.00100	0.00500	5	05/03/2016 13:46	WG868978
1,2-Dichloropropane	U		0.00153	0.00100	0.00500	5	05/03/2016 13:46	WG868978
cis-1,3-Dichloropropene	U		0.00209	0.00100	0.00500	5	05/03/2016 13:46	WG868978
trans-1,3-Dichloropropene	U		0.00210	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Ethylbenzene	0.799		0.00192	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Isopropylbenzene	0.0477		0.00163	0.00100	0.00500	5	05/03/2016 13:46	WG868978
p-Isopropyltoluene	0.00591		0.00175	0.00100	0.00500	5	05/03/2016 13:46	WG868978
2-Butanone (MEK)	U		0.0196	0.0100	0.0500	5	05/03/2016 13:46	WG868978
2-Hexanone	U		0.0191	0.0100	0.0500	5	05/03/2016 13:46	WG868978
Methylene Chloride	U		0.00500	0.00500	0.0250	5	05/03/2016 13:46	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0100	0.0500	5	05/03/2016 13:46	WG868978
Methyl tert-butyl ether	0.138		0.00184	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Naphthalene	0.137		0.00500	0.00500	0.0250	5	05/03/2016 13:46	WG868978
n-Propylbenzene	0.0883		0.00174	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Styrene	U		0.00154	0.00100	0.00500	5	05/03/2016 13:46	WG868978
1,1,1,2-Tetrachloroethane	U		0.00192	0.00100	0.00500	5	05/03/2016 13:46	WG868978
1,1,2,2-Tetrachloroethane	U		0.000650	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Tetrachloroethene	U		0.00186	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Toluene	0.120		0.00390	0.00500	0.0250	5	05/03/2016 13:46	WG868978
1,1,1-Trichloroethane	U		0.00160	0.00100	0.00500	5	05/03/2016 13:46	WG868978
1,1,2-Trichloroethane	U		0.00192	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Trichloroethene	U		0.00199	0.00100	0.00500	5	05/03/2016 13:46	WG868978
1,2,4-Trimethylbenzene	0.876		0.00186	0.00100	0.00500	5	05/03/2016 13:46	WG868978
1,3,5-Trimethylbenzene	0.134		0.00194	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Vinyl chloride	U		0.00130	0.00100	0.00500	5	05/03/2016 13:46	WG868978
o-Xylene	0.243		0.00170	0.00100	0.00500	5	05/03/2016 13:46	WG868978
m&p-Xylene	1.64		0.00360	0.00100	0.00500	5	05/03/2016 13:46	WG868978
Xylenes, Total	1.88		0.00530	0.00300	0.0150	5	05/03/2016 13:46	WG868978
(S) Toluene-d8	106				90.0-115		05/03/2016 13:46	WG868978
(S) Toluene-d8	102				90.0-115		05/06/2016 13:17	WG870046
(S) Dibromofluoromethane	114				79.0-121		05/06/2016 13:17	WG870046
(S) Dibromofluoromethane	101				79.0-121		05/03/2016 13:46	WG868978
(S) 4-Bromofluorobenzene	102				80.1-120		05/03/2016 13:46	WG868978
(S) 4-Bromofluorobenzene	84.7				80.1-120		05/06/2016 13:17	WG870046

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.75		0.0247	0.100	0.100	1	05/03/2016 16:42	WG869249
(S) o-Terphenyl	104				50.0-150		05/03/2016 16:42	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1090		2.82	10.0	10.0	1	05/04/2016 16:22	WG869764

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 13:35	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	190		2.60	1.00	50.0	50	05/03/2016 21:26	WG869281
Fluoride	1.42		0.00990	0.100	0.100	1	05/03/2016 21:12	WG869281
Sulfate	U		0.0774	5.00	5.00	1	05/03/2016 21:12	WG869281

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0226		0.00125	0.00200	0.0100	5	05/06/2016 16:49	WG869264
Arsenic,Dissolved	0.0156		0.000250	0.00200	0.00200	1	05/04/2016 18:23	WG869664
Barium	4.31		0.00180	0.00500	0.0250	5	05/06/2016 16:49	WG869264
Barium,Dissolved	3.93		0.000360	0.00500	0.00500	1	05/04/2016 18:23	WG869664
Calcium	149		0.230	1.00	5.00	5	05/06/2016 16:49	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 16:49	WG869264
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/04/2016 18:23	WG869664
Iron	7.43		0.0750	0.100	0.500	5	05/06/2016 16:49	WG869264
Iron,Dissolved	5.93		0.0150	0.100	0.100	1	05/04/2016 18:23	WG869664
Lead	0.00131	J	0.00120	0.00200	0.0100	5	05/06/2016 16:49	WG869264
Lead,Dissolved	0.000669	J	0.000240	0.00200	0.00200	1	05/04/2016 18:23	WG869664
Manganese	0.199		0.00125	0.00500	0.0250	5	05/06/2016 16:49	WG869264
Manganese,Dissolved	0.165		0.000250	0.00500	0.00500	1	05/04/2016 18:23	WG869664
Potassium	0.573	J	0.185	1.00	5.00	5	05/06/2016 16:49	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 16:49	WG869264
Selenium,Dissolved	0.00194	B J	0.000380	0.00200	0.00200	1	05/04/2016 18:23	WG869664
Sodium	153		0.550	1.00	5.00	5	05/06/2016 16:49	WG869264

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.500	0.0500	2.50	50	05/05/2016 20:05	WG870074
Benzene	5.26		0.0166	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Bromodichloromethane	U		0.0190	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Bromoform	U		0.0234	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Bromomethane	U		0.0433	0.00500	0.250	50	05/05/2016 20:05	WG870074
n-Butylbenzene	U		0.0180	0.00100	0.0500	50	05/05/2016 20:05	WG870074
sec-Butylbenzene	U		0.0182	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Carbon disulfide	0.0329	J	0.0138	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Carbon tetrachloride	U		0.0190	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Chlorobenzene	U		0.0174	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Chlorodibromomethane	U		0.0164	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Chloroethane	U		0.0226	0.00500	0.250	50	05/05/2016 20:05	WG870074
Chloroform	U		0.0162	0.00500	0.250	50	05/05/2016 20:05	WG870074
Chloromethane	U		0.0138	0.00250	0.125	50	05/05/2016 20:05	WG870074
1,2-Dibromoethane	U		0.0190	0.00100	0.0500	50	05/05/2016 20:05	WG870074
1,1-Dichloroethane	U		0.0130	0.00100	0.0500	50	05/05/2016 20:05	WG870074



Collected date/time: 04/28/16 11:25

L832422

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.0180	0.00100	0.0500	50	05/05/2016 20:05	WG870074
1,1-Dichloroethene	U		0.0199	0.00100	0.0500	50	05/05/2016 20:05	WG870074
cis-1,2-Dichloroethene	U		0.0130	0.00100	0.0500	50	05/05/2016 20:05	WG870074
trans-1,2-Dichloroethene	U		0.0198	0.00100	0.0500	50	05/05/2016 20:05	WG870074
1,2-Dichloropropane	U		0.0153	0.00100	0.0500	50	05/05/2016 20:05	WG870074
cis-1,3-Dichloropropene	U		0.0209	0.00100	0.0500	50	05/05/2016 20:05	WG870074
trans-1,3-Dichloropropene	U		0.0210	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Ethylbenzene	0.437		0.0192	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Isopropylbenzene	0.0442	U	0.0163	0.00100	0.0500	50	05/05/2016 20:05	WG870074
p-Isopropyltoluene	U		0.0175	0.00100	0.0500	50	05/05/2016 20:05	WG870074
2-Butanone (MEK)	U		0.196	0.0100	0.500	50	05/05/2016 20:05	WG870074
2-Hexanone	U		0.191	0.0100	0.500	50	05/05/2016 20:05	WG870074
Methylene Chloride	U		0.0500	0.00500	0.250	50	05/05/2016 20:05	WG870074
4-Methyl-2-pentanone (MIBK)	U		0.107	0.0100	0.500	50	05/05/2016 20:05	WG870074
Methyl tert-butyl ether	3.71		0.0184	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Naphthalene	0.150	U	0.0500	0.00500	0.250	50	05/05/2016 20:05	WG870074
n-Propylbenzene	0.0616		0.0174	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Styrene	U		0.0154	0.00100	0.0500	50	05/05/2016 20:05	WG870074
1,1,1,2-Tetrachloroethane	U		0.0192	0.00100	0.0500	50	05/05/2016 20:05	WG870074
1,1,2,2-Tetrachloroethane	U		0.00650	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Tetrachloroethene	U		0.0186	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Toluene	0.0937	U	0.0390	0.00500	0.250	50	05/05/2016 20:05	WG870074
1,1,1-Trichloroethane	U		0.0160	0.00100	0.0500	50	05/05/2016 20:05	WG870074
1,1,2-Trichloroethane	U		0.0192	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Trichloroethene	U		0.0199	0.00100	0.0500	50	05/05/2016 20:05	WG870074
1,2,4-Trimethylbenzene	0.323		0.0186	0.00100	0.0500	50	05/05/2016 20:05	WG870074
1,3,5-Trimethylbenzene	0.0886		0.0194	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Vinyl chloride	U		0.0130	0.00100	0.0500	50	05/05/2016 20:05	WG870074
o-Xylene	0.184		0.0170	0.00100	0.0500	50	05/05/2016 20:05	WG870074
m&p-Xylene	0.645		0.0360	0.00100	0.0500	50	05/05/2016 20:05	WG870074
Xylenes, Total	0.829		0.0530	0.00300	0.150	50	05/05/2016 20:05	WG870074
(S) Toluene-d8	99.2				90.0-115		05/05/2016 20:05	WG870074
(S) Dibromofluoromethane	100				79.0-121		05/05/2016 20:05	WG870074
(S) 4-Bromofluorobenzene	90.3				80.1-120		05/05/2016 20:05	WG870074

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5.24		0.0247	0.100	0.100	1	05/03/2016 16:58	WG869249
(S) o-Terphenyl	107				50.0-150		05/03/2016 16:58	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	4640		2.82	10.0	10.0	1	05/04/2016 16:22	WG869764

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.79		0.197	0.100	1.00	10	05/11/2016 13:36	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	193		2.60	1.00	50.0	50	05/03/2016 21:56	WG869281
Fluoride	2.85		0.00990	0.100	0.100	1	05/03/2016 21:41	WG869281
Sulfate	3800		3.87	5.00	250	50	05/03/2016 21:56	WG869281

## Wet Chemistry by Method D 7511-09e2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Cyanide	U		0.00120	0.00500	0.00500	1	05/10/2016 21:39	WG871518

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00400	J	0.00125	0.00200	0.0100	5	05/06/2016 16:52	WG869264
Arsenic,Dissolved	0.00399		0.000250	0.00200	0.00200	1	05/04/2016 14:56	WG869664
Barium	0.0124	J	0.00180	0.00500	0.0250	5	05/06/2016 16:52	WG869264
Barium,Dissolved	0.00975		0.000360	0.00500	0.00500	1	05/04/2016 14:56	WG869664
Calcium	542		0.230	1.00	5.00	5	05/06/2016 16:52	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 16:52	WG869264
Chromium,Dissolved	0.000707	J	0.000540	0.00200	0.00200	1	05/04/2016 14:56	WG869664
Iron	U		0.0750	0.100	0.500	5	05/06/2016 16:52	WG869264
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/04/2016 14:56	WG869664
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 16:52	WG869264
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/04/2016 14:56	WG869664
Manganese	U		0.00125	0.00500	0.0250	5	05/06/2016 16:52	WG869264
Manganese,Dissolved	0.00112	J	0.000250	0.00500	0.00500	1	05/04/2016 14:56	WG869664
Potassium	1.13	J	0.185	1.00	5.00	5	05/06/2016 16:52	WG869264
Selenium	0.00436	J	0.00190	0.00200	0.0100	5	05/06/2016 16:52	WG869264
Selenium,Dissolved	0.00511	B	0.000380	0.00200	0.00200	1	05/04/2016 14:56	WG869664
Sodium	186		0.550	1.00	5.00	5	05/06/2016 16:52	WG869264

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 20:22	WG870074
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 20:22	WG870074
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 20:22	WG870074
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Carbon disulfide	0.000636	J	0.000275	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 20:22	WG870074





Collected date/time: 04/28/16 13:15

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 20:22	WG870074
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 20:22	WG870074
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 20:22	WG870074
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 20:22	WG870074
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 20:22	WG870074
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 20:22	WG870074
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 20:22	WG870074
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 20:22	WG870074
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 20:22	WG870074
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 20:22	WG870074
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 20:22	WG870074
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 20:22	WG870074
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 20:22	WG870074
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 20:22	WG870074
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 20:22	WG870074
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 20:22	WG870074
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 20:22	WG870074
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 20:22	WG870074
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 20:22	WG870074
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 20:22	WG870074
(S) Toluene-d8	99.4				90.0-115		05/05/2016 20:22	WG870074
(S) Dibromofluoromethane	103				79.0-121		05/05/2016 20:22	WG870074
(S) 4-Bromofluorobenzene	92.6				80.1-120		05/05/2016 20:22	WG870074

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 mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/03/2016 09:36	WG868978
Benzene	U		0.000331	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Bromoform	U		0.000469	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Bromomethane	U		0.000866	0.00500	0.00500	1	05/03/2016 09:36	WG868978
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/03/2016 09:36	WG868978
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Chloroethane	U		0.000453	0.00500	0.00500	1	05/03/2016 09:36	WG868978
Chloroform	U		0.000324	0.00500	0.00500	1	05/03/2016 09:36	WG868978
Chloromethane	U		0.000276	0.00250	0.00250	1	05/03/2016 09:36	WG868978
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 09:36	WG868978
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/03/2016 09:36	WG868978
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/03/2016 09:36	WG868978
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/03/2016 09:36	WG868978
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/03/2016 09:36	WG868978
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/03/2016 09:36	WG868978
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/03/2016 09:36	WG868978
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/03/2016 09:36	WG868978
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/03/2016 09:36	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/03/2016 09:36	WG868978
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Naphthalene	U		0.00100	0.00500	0.00500	1	05/03/2016 09:36	WG868978
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Styrene	U		0.000307	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Toluene	U		0.000780	0.00500	0.00500	1	05/03/2016 09:36	WG868978
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/03/2016 09:36	WG868978
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/03/2016 09:36	WG868978
o-Xylene	U		0.000341	0.00100	0.00100	1	05/03/2016 09:36	WG868978
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/03/2016 09:36	WG868978
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/03/2016 09:36	WG868978
(S) Toluene-d8	106				90.0-115		05/03/2016 09:36	WG868978
(S) Dibromofluoromethane	106				79.0-121		05/03/2016 09:36	WG868978
(S) 4-Bromofluorobenzene	97.6				80.1-120		05/03/2016 09:36	WG868978

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



Collected date/time: 04/28/16 12:30

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## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2670		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 13:37	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	146		2.60	1.00	50.0	50	05/03/2016 19:12	WG869281
Fluoride	1.70		0.00990	0.100	0.100	1	05/03/2016 22:41	WG869281
Sulfate	1680		3.87	5.00	250	50	05/03/2016 19:12	WG869281

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00154	J	0.00125	0.00200	0.0100	5	05/06/2016 16:55	WG869264
Arsenic,Dissolved	0.000937	J	0.000250	0.00200	0.00200	1	05/04/2016 18:25	WG869664
Barium	0.0392		0.00180	0.00500	0.0250	5	05/06/2016 16:55	WG869264
Barium,Dissolved	0.0253		0.000360	0.00500	0.00500	1	05/04/2016 18:25	WG869664
Calcium	504		0.230	1.00	5.00	5	05/06/2016 16:55	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 16:55	WG869264
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/04/2016 18:25	WG869664
Iron	0.512		0.0750	0.100	0.500	5	05/06/2016 16:55	WG869264
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/04/2016 18:25	WG869664
Lead	0.00311	J	0.00120	0.00200	0.0100	5	05/06/2016 16:55	WG869264
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/04/2016 18:25	WG869664
Manganese	0.0321		0.00125	0.00500	0.0250	5	05/06/2016 16:55	WG869264
Manganese,Dissolved	0.0214		0.000250	0.00500	0.00500	1	05/04/2016 18:25	WG869664
Potassium	1.76	J	0.185	1.00	5.00	5	05/06/2016 16:55	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 16:55	WG869264
Selenium,Dissolved	0.00176	B J	0.000380	0.00200	0.00200	1	05/04/2016 18:25	WG869664
Sodium	127		0.550	1.00	5.00	5	05/06/2016 16:55	WG869264

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.03		0.157	0.100	0.500	5	05/02/2016 15:51	WG869042
(S) a,a,q-Trifluorotoluene(FID)	92.4				62.0-128		05/02/2016 15:51	WG869042

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 20:39	WG870074
Benzene	0.0112		0.000331	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 20:39	WG870074
n-Butylbenzene	0.000770	J	0.000361	0.00100	0.00100	1	05/05/2016 20:39	WG870074
sec-Butylbenzene	0.0146		0.000365	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Carbon disulfide	0.00126		0.000275	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 20:39	WG870074



Collected date/time: 04/28/16 12:30

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 20:39	WG870074
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 20:39	WG870074
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 20:39	WG870074
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 20:39	WG870074
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 20:39	WG870074
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 20:39	WG870074
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 20:39	WG870074
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Ethylbenzene	0.000609	U	0.000384	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Isopropylbenzene	0.0775		0.000326	0.00100	0.00100	1	05/05/2016 20:39	WG870074
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 20:39	WG870074
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 20:39	WG870074
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 20:39	WG870074
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 20:39	WG870074
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 20:39	WG870074
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 20:39	WG870074
n-Propylbenzene	0.00468		0.000349	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 20:39	WG870074
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,2,4-Trimethylbenzene	0.000760	U	0.000373	0.00100	0.00100	1	05/05/2016 20:39	WG870074
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 20:39	WG870074
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 20:39	WG870074
m&p-Xylene	0.0144		0.000719	0.00100	0.00100	1	05/05/2016 20:39	WG870074
Xylenes, Total	0.0144		0.00106	0.00300	0.00300	1	05/05/2016 20:39	WG870074
(S) Toluene-d8	102				90.0-115		05/05/2016 20:39	WG870074
(S) Dibromofluoromethane	98.5				79.0-121		05/05/2016 20:39	WG870074
(S) 4-Bromofluorobenzene	90.1				80.1-120		05/05/2016 20:39	WG870074

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4.92		0.0247	0.100	0.100	1	05/03/2016 17:14	WG869249
(S) o-Terphenyl	115				50.0-150		05/03/2016 17:14	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3040		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 13:38	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	74.2		0.0519	1.00	1.00	1	05/03/2016 22:56	WG869281
Fluoride	1.43		0.00990	0.100	0.100	1	05/03/2016 22:56	WG869281
Sulfate	1690		3.87	5.00	250	50	05/03/2016 23:11	WG869281

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00199	J	0.00125	0.00200	0.0100	5	05/06/2016 16:57	WG869264
Arsenic,Dissolved	0.00153	J	0.000250	0.00200	0.00200	1	05/04/2016 18:27	WG869664
Barium	0.0204	J	0.00180	0.00500	0.0250	5	05/06/2016 16:57	WG869264
Barium,Dissolved	0.0164		0.000360	0.00500	0.00500	1	05/04/2016 18:27	WG869664
Calcium	539		0.230	1.00	5.00	5	05/06/2016 16:57	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 16:57	WG869264
Chromium,Dissolved	0.00107	J	0.000540	0.00200	0.00200	1	05/04/2016 18:27	WG869664
Iron	U		0.0750	0.100	0.500	5	05/06/2016 16:57	WG869264
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/04/2016 18:27	WG869664
Lead	0.00934	J	0.00120	0.00200	0.0100	5	05/06/2016 16:57	WG869264
Lead,Dissolved	0.00629		0.000240	0.00200	0.00200	1	05/04/2016 18:27	WG869664
Manganese	0.0312		0.00125	0.00500	0.0250	5	05/06/2016 16:57	WG869264
Manganese,Dissolved	0.0222		0.000250	0.00500	0.00500	1	05/04/2016 18:27	WG869664
Potassium	U		0.185	1.00	5.00	5	05/06/2016 16:57	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 16:57	WG869264
Selenium,Dissolved	0.00216	B	0.000380	0.00200	0.00200	1	05/04/2016 18:27	WG869664
Sodium	89.6		0.550	1.00	5.00	5	05/06/2016 16:57	WG869264

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	14.7		0.785	0.100	2.50	25	05/02/2016 19:43	WG869042
(S) a,a,a-Trifluorotoluene(FID)	99.8				62.0-128		05/02/2016 19:43	WG869042

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		1.00	0.0500	5.00	100	05/03/2016 15:17	WG868978
Benzene	4.07		0.0331	0.00100	0.100	100	05/03/2016 15:17	WG868978
Bromodichloromethane	U		0.0380	0.00100	0.100	100	05/03/2016 15:17	WG868978
Bromoform	U		0.0469	0.00100	0.100	100	05/03/2016 15:17	WG868978
Bromomethane	U		0.0866	0.00500	0.500	100	05/03/2016 15:17	WG868978
n-Butylbenzene	U		0.0361	0.00100	0.100	100	05/03/2016 15:17	WG868978
sec-Butylbenzene	U		0.0365	0.00100	0.100	100	05/03/2016 15:17	WG868978
Carbon disulfide	0.0306	J	0.0275	0.00100	0.100	100	05/03/2016 15:17	WG868978
Carbon tetrachloride	U		0.0379	0.00100	0.100	100	05/03/2016 15:17	WG868978



Collected date/time: 04/28/16 11:40

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.0348	0.00100	0.100	100	05/03/2016 15:17	WG868978
Chlorodibromomethane	U		0.0327	0.00100	0.100	100	05/03/2016 15:17	WG868978
Chloroethane	U		0.0453	0.00500	0.500	100	05/03/2016 15:17	WG868978
Chloroform	U		0.0324	0.00500	0.500	100	05/03/2016 15:17	WG868978
Chloromethane	U		0.0276	0.00250	0.250	100	05/03/2016 15:17	WG868978
1,2-Dibromoethane	U		0.0381	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,1-Dichloroethane	U		0.0259	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,2-Dichloroethane	U		0.0361	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,1-Dichloroethene	U		0.0398	0.00100	0.100	100	05/03/2016 15:17	WG868978
cis-1,2-Dichloroethene	U		0.0260	0.00100	0.100	100	05/03/2016 15:17	WG868978
trans-1,2-Dichloroethene	U		0.0396	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,2-Dichloropropane	U		0.0306	0.00100	0.100	100	05/03/2016 15:17	WG868978
cis-1,3-Dichloropropene	U		0.0418	0.00100	0.100	100	05/03/2016 15:17	WG868978
trans-1,3-Dichloropropene	U		0.0419	0.00100	0.100	100	05/03/2016 15:17	WG868978
Ethylbenzene	0.430		0.0384	0.00100	0.100	100	05/03/2016 15:17	WG868978
Isopropylbenzene	0.0409	U	0.0326	0.00100	0.100	100	05/03/2016 15:17	WG868978
p-Isopropyltoluene	U		0.0350	0.00100	0.100	100	05/03/2016 15:17	WG868978
2-Butanone (MEK)	U		0.393	0.0100	1.00	100	05/03/2016 15:17	WG868978
2-Hexanone	U		0.382	0.0100	1.00	100	05/03/2016 15:17	WG868978
Methylene Chloride	U		0.100	0.00500	0.500	100	05/03/2016 15:17	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.214	0.0100	1.00	100	05/03/2016 15:17	WG868978
Methyl tert-butyl ether	U		0.0367	0.00100	0.100	100	05/03/2016 15:17	WG868978
Naphthalene	0.139	U	0.100	0.00500	0.500	100	05/03/2016 15:17	WG868978
n-Propylbenzene	0.0527	U	0.0349	0.00100	0.100	100	05/03/2016 15:17	WG868978
Styrene	U		0.0307	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,1,1,2-Tetrachloroethane	U		0.0385	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,1,2,2-Tetrachloroethane	U		0.0130	0.00100	0.100	100	05/03/2016 15:17	WG868978
Tetrachloroethene	U		0.0372	0.00100	0.100	100	05/03/2016 15:17	WG868978
Toluene	0.220	U	0.0780	0.00500	0.500	100	05/03/2016 15:17	WG868978
1,1,1-Trichloroethane	U		0.0319	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,1,2-Trichloroethane	U		0.0383	0.00100	0.100	100	05/03/2016 15:17	WG868978
Trichloroethene	U		0.0398	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,2,4-Trimethylbenzene	0.177		0.0373	0.00100	0.100	100	05/03/2016 15:17	WG868978
1,3,5-Trimethylbenzene	0.0462	U	0.0387	0.00100	0.100	100	05/03/2016 15:17	WG868978
Vinyl chloride	U		0.0259	0.00100	0.100	100	05/03/2016 15:17	WG868978
o-Xylene	U		0.0341	0.00100	0.100	100	05/03/2016 15:17	WG868978
m&p-Xylene	0.865		0.0719	0.00100	0.100	100	05/03/2016 15:17	WG868978
Xylenes, Total	0.865		0.106	0.00300	0.300	100	05/03/2016 15:17	WG868978
(S) Toluene-d8	106				90.0-115		05/03/2016 15:17	WG868978
(S) Dibromofluoromethane	103				79.0-121		05/03/2016 15:17	WG868978
(S) 4-Bromofluorobenzene	98.7				80.1-120		05/03/2016 15:17	WG868978

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	6.88		0.0247	0.100	0.100	1	05/03/2016 17:30	WG869249
(S) o-Terphenyl	115				50.0-150		05/03/2016 17:30	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3270		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 13:39	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	206		2.60	1.00	50.0	50	05/03/2016 23:41	WG869281
Fluoride	3.06		0.00990	0.100	0.100	1	05/03/2016 23:26	WG869281
Sulfate	2130		3.87	5.00	250	50	05/03/2016 23:41	WG869281

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0137		0.00125	0.00200	0.0100	5	05/06/2016 17:00	WG869264
Arsenic,Dissolved	0.0100		0.000250	0.00200	0.00200	1	05/04/2016 18:45	WG869664
Barium	0.0231	J	0.00180	0.00500	0.0250	5	05/06/2016 17:00	WG869264
Barium,Dissolved	0.0197		0.000360	0.00500	0.00500	1	05/04/2016 18:45	WG869664
Calcium	677		0.230	1.00	5.00	5	05/06/2016 17:00	WG869264
Chromium	0.00907	J	0.00270	0.00200	0.0100	5	05/06/2016 17:00	WG869264
Chromium,Dissolved	0.00692		0.000540	0.00200	0.00200	1	05/04/2016 18:45	WG869664
Iron	0.858		0.0750	0.100	0.500	5	05/06/2016 17:00	WG869264
Iron,Dissolved	0.219		0.0150	0.100	0.100	1	05/04/2016 18:45	WG869664
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 17:00	WG869264
Lead,Dissolved	0.000301	J	0.000240	0.00200	0.00200	1	05/04/2016 18:45	WG869664
Manganese	0.0663		0.00125	0.00500	0.0250	5	05/06/2016 17:00	WG869264
Manganese,Dissolved	0.0540		0.000250	0.00500	0.00500	1	05/04/2016 18:45	WG869664
Potassium	1.76	J	0.185	1.00	5.00	5	05/06/2016 17:00	WG869264
Selenium	0.0242		0.00190	0.00200	0.0100	5	05/06/2016 17:00	WG869264
Selenium,Dissolved	0.0180		0.000380	0.00200	0.00200	1	05/04/2016 18:45	WG869664
Sodium	164		0.550	1.00	5.00	5	05/06/2016 17:00	WG869264

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.06		0.0314	0.100	0.100	1	05/02/2016 20:06	WG869042
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/02/2016 20:06	WG869042

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0500	0.0500	0.250	5	05/03/2016 15:40	WG868978
Benzene	0.258		0.00166	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Bromodichloromethane	U		0.00190	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Bromoform	U		0.00234	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Bromomethane	U		0.00433	0.00500	0.0250	5	05/03/2016 15:40	WG868978
n-Butylbenzene	U		0.00180	0.00100	0.00500	5	05/03/2016 15:40	WG868978
sec-Butylbenzene	0.00208	J	0.00182	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Carbon disulfide	0.00216	J	0.00138	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Carbon tetrachloride	U		0.00190	0.00100	0.00500	5	05/03/2016 15:40	WG868978



Collected date/time: 04/28/16 08:25

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00174	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Chlorodibromomethane	U		0.00164	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Chloroethane	U		0.00226	0.00500	0.0250	5	05/03/2016 15:40	WG868978
Chloroform	U		0.00162	0.00500	0.0250	5	05/03/2016 15:40	WG868978
Chloromethane	U		0.00138	0.00250	0.0125	5	05/03/2016 15:40	WG868978
1,2-Dibromoethane	U		0.00190	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,1-Dichloroethane	U		0.00130	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,2-Dichloroethane	U		0.00180	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,1-Dichloroethene	U		0.00199	0.00100	0.00500	5	05/03/2016 15:40	WG868978
cis-1,2-Dichloroethene	U		0.00130	0.00100	0.00500	5	05/03/2016 15:40	WG868978
trans-1,2-Dichloroethene	U		0.00198	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,2-Dichloropropane	U		0.00153	0.00100	0.00500	5	05/03/2016 15:40	WG868978
cis-1,3-Dichloropropene	U		0.00209	0.00100	0.00500	5	05/03/2016 15:40	WG868978
trans-1,3-Dichloropropene	U		0.00210	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Ethylbenzene	0.0106		0.00192	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Isopropylbenzene	0.0119		0.00163	0.00100	0.00500	5	05/03/2016 15:40	WG868978
p-Isopropyltoluene	U		0.00175	0.00100	0.00500	5	05/03/2016 15:40	WG868978
2-Butanone (MEK)	U		0.0196	0.0100	0.0500	5	05/03/2016 15:40	WG868978
2-Hexanone	U		0.0191	0.0100	0.0500	5	05/03/2016 15:40	WG868978
Methylene Chloride	U		0.00500	0.00500	0.0250	5	05/03/2016 15:40	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0100	0.0500	5	05/03/2016 15:40	WG868978
Methyl tert-butyl ether	U		0.00184	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Naphthalene	0.0113	U	0.00500	0.00500	0.0250	5	05/03/2016 15:40	WG868978
n-Propylbenzene	0.00919		0.00174	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Styrene	U		0.00154	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,1,1,2-Tetrachloroethane	U		0.00192	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,1,2,2-Tetrachloroethane	U		0.000650	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Tetrachloroethene	U		0.00186	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Toluene	U		0.00390	0.00500	0.0250	5	05/03/2016 15:40	WG868978
1,1,1-Trichloroethane	U		0.00160	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,1,2-Trichloroethane	U		0.00192	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Trichloroethene	U		0.00199	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,2,4-Trimethylbenzene	0.0331		0.00186	0.00100	0.00500	5	05/03/2016 15:40	WG868978
1,3,5-Trimethylbenzene	0.00543		0.00194	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Vinyl chloride	U		0.00130	0.00100	0.00500	5	05/03/2016 15:40	WG868978
o-Xylene	U		0.00170	0.00100	0.00500	5	05/03/2016 15:40	WG868978
m&p-Xylene	0.0567		0.00360	0.00100	0.00500	5	05/03/2016 15:40	WG868978
Xylenes, Total	0.0567		0.00530	0.00300	0.0150	5	05/03/2016 15:40	WG868978
(S) Toluene-d8	105				90.0-115		05/03/2016 15:40	WG868978
(S) Dibromofluoromethane	105				79.0-121		05/03/2016 15:40	WG868978
(S) 4-Bromofluorobenzene	98.5				80.1-120		05/03/2016 15:40	WG868978

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7.83		0.0247	0.100	0.100	1	05/03/2016 17:47	WG869249
(S) o-Terphenyl	112				50.0-150		05/03/2016 17:47	WG869249





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1990		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 15:11	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	500		2.60	1.00	50.0	50	05/04/2016 00:11	WG869281
Fluoride	1.81		0.00990	0.100	0.100	1	05/03/2016 23:56	WG869281
Sulfate	1.84	J	0.0774	5.00	5.00	1	05/03/2016 23:56	WG869281

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0113		0.00125	0.00200	0.0100	5	05/06/2016 17:03	WG869264
Arsenic,Dissolved	0.00911		0.000250	0.00200	0.00200	1	05/04/2016 18:47	WG869664
Barium	12.8		0.00180	0.00500	0.0250	5	05/06/2016 17:03	WG869264
Barium,Dissolved	10.9		0.000720	0.00500	0.0100	2	05/04/2016 19:07	WG869664
Calcium	110		0.230	1.00	5.00	5	05/06/2016 17:03	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 17:03	WG869264
Chromium,Dissolved	0.000955	J	0.000540	0.00200	0.00200	1	05/04/2016 18:47	WG869664
Iron	0.456	J	0.0750	0.100	0.500	5	05/06/2016 17:03	WG869264
Iron,Dissolved	0.0206	J	0.0150	0.100	0.100	1	05/04/2016 18:47	WG869664
Lead	0.0186		0.00120	0.00200	0.0100	5	05/06/2016 17:03	WG869264
Lead,Dissolved	0.000319	J	0.000240	0.00200	0.00200	1	05/04/2016 18:47	WG869664
Manganese	0.105		0.00125	0.00500	0.0250	5	05/06/2016 17:03	WG869264
Manganese,Dissolved	0.0697		0.000250	0.00500	0.00500	1	05/04/2016 18:47	WG869664
Potassium	2.14	J	0.185	1.00	5.00	5	05/06/2016 17:03	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 17:03	WG869264
Selenium,Dissolved	0.00164	B J	0.000380	0.00200	0.00200	1	05/04/2016 18:47	WG869664
Sodium	561		0.550	1.00	5.00	5	05/06/2016 17:03	WG869264

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	34.7		0.157	0.100	0.500	5	05/02/2016 20:29	WG869042
(S) a,a,q-Trifluorotoluene(FID)	100				62.0-128		05/02/2016 20:29	WG869042

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0500	0.0500	0.250	5	05/03/2016 16:02	WG868978
Benzene	15.5		0.0828	0.00100	0.250	250	05/06/2016 13:38	WG870046
Bromodichloromethane	U		0.00190	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Bromoform	U		0.00234	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Bromomethane	U		0.00433	0.00500	0.0250	5	05/03/2016 16:02	WG868978
n-Butylbenzene	0.0254		0.00180	0.00100	0.00500	5	05/03/2016 16:02	WG868978
sec-Butylbenzene	0.0225		0.00182	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Carbon disulfide	0.00185	J	0.00138	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Carbon tetrachloride	U		0.00190	0.00100	0.00500	5	05/03/2016 16:02	WG868978



Collected date/time: 04/28/16 09:15

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00174	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Chlorodibromomethane	U		0.00164	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Chloroethane	U		0.00226	0.00500	0.0250	5	05/03/2016 16:02	WG868978
Chloroform	U		0.00162	0.00500	0.0250	5	05/03/2016 16:02	WG868978
Chloromethane	U		0.00138	0.00250	0.0125	5	05/03/2016 16:02	WG868978
1,2-Dibromoethane	U		0.00190	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,1-Dichloroethane	U		0.00130	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,2-Dichloroethane	U		0.00180	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,1-Dichloroethene	U		0.00199	0.00100	0.00500	5	05/03/2016 16:02	WG868978
cis-1,2-Dichloroethene	U		0.00130	0.00100	0.00500	5	05/03/2016 16:02	WG868978
trans-1,2-Dichloroethene	U		0.00198	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,2-Dichloropropane	U		0.00153	0.00100	0.00500	5	05/03/2016 16:02	WG868978
cis-1,3-Dichloropropene	U		0.00209	0.00100	0.00500	5	05/03/2016 16:02	WG868978
trans-1,3-Dichloropropene	U		0.00210	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Ethylbenzene	0.179		0.00192	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Isopropylbenzene	0.161		0.00163	0.00100	0.00500	5	05/03/2016 16:02	WG868978
p-Isopropyltoluene	U		0.00175	0.00100	0.00500	5	05/03/2016 16:02	WG868978
2-Butanone (MEK)	U		0.0196	0.0100	0.0500	5	05/03/2016 16:02	WG868978
2-Hexanone	U		0.0191	0.0100	0.0500	5	05/03/2016 16:02	WG868978
Methylene Chloride	U		0.00500	0.00500	0.0250	5	05/03/2016 16:02	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0100	0.0500	5	05/03/2016 16:02	WG868978
Methyl tert-butyl ether	0.0297		0.00184	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Naphthalene	0.193		0.00500	0.00500	0.0250	5	05/03/2016 16:02	WG868978
n-Propylbenzene	0.268		0.00174	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Styrene	U		0.00154	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,1,1,2-Tetrachloroethane	U		0.00192	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,1,2,2-Tetrachloroethane	U		0.000650	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Tetrachloroethene	U		0.00186	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Toluene	0.00412	U	0.00390	0.00500	0.0250	5	05/03/2016 16:02	WG868978
1,1,1-Trichloroethane	U		0.00160	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,1,2-Trichloroethane	U		0.00192	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Trichloroethene	U		0.00199	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,2,4-Trimethylbenzene	U		0.00186	0.00100	0.00500	5	05/03/2016 16:02	WG868978
1,3,5-Trimethylbenzene	U		0.00194	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Vinyl chloride	U		0.00130	0.00100	0.00500	5	05/03/2016 16:02	WG868978
o-Xylene	0.00284	U	0.00170	0.00100	0.00500	5	05/03/2016 16:02	WG868978
m&p-Xylene	0.0147		0.00360	0.00100	0.00500	5	05/03/2016 16:02	WG868978
Xylenes, Total	0.0176		0.00530	0.00300	0.0150	5	05/03/2016 16:02	WG868978
(S) Toluene-d8	103				90.0-115		05/03/2016 16:02	WG868978
(S) Toluene-d8	101				90.0-115		05/06/2016 13:38	WG870046
(S) Dibromofluoromethane	114				79.0-121		05/06/2016 13:38	WG870046
(S) Dibromofluoromethane	96.9				79.0-121		05/03/2016 16:02	WG868978
(S) 4-Bromofluorobenzene	100				80.1-120		05/03/2016 16:02	WG868978
(S) 4-Bromofluorobenzene	83.3				80.1-120		05/06/2016 13:38	WG870046

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	28.7		0.494	0.100	2.00	20	05/04/2016 14:48	WG869249
(S) o-Terphenyl	125	J7			50.0-150		05/04/2016 14:48	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2180		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 15:12	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	571		2.60	1.00	50.0	50	05/04/2016 00:25	WG869281
Fluoride	1.13		0.00990	0.100	0.100	1	05/04/2016 01:25	WG869281
Sulfate	164		0.774	5.00	50.0	10	05/10/2016 16:38	WG870882

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	0.0290	J	0.0120	0.00500	0.0500	10	05/10/2016 21:42	WG871518

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/02/2016 12:50	WG868783
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/02/2016 14:00	WG868782

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00777	J	0.00125	0.00200	0.0100	5	05/06/2016 17:06	WG869264
Arsenic,Dissolved	0.00620		0.000250	0.00200	0.00200	1	05/04/2016 18:49	WG869664
Barium	0.220		0.00180	0.00500	0.0250	5	05/06/2016 17:06	WG869264
Barium,Dissolved	0.169		0.000360	0.00500	0.00500	1	05/04/2016 18:49	WG869664
Boron	1.56		0.00750	0.0200	0.100	5	05/06/2016 17:06	WG869264
Boron,Dissolved	1.08		0.00150	0.0200	0.0200	1	05/05/2016 10:59	WG869664
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 17:06	WG869264
Cadmium,Dissolved	U		0.000160	0.00100	0.00100	1	05/04/2016 18:49	WG869664
Calcium	160		0.230	1.00	5.00	5	05/06/2016 17:06	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 17:06	WG869264
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/04/2016 18:49	WG869664
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 17:06	WG869264
Cobalt,Dissolved	U		0.000260	0.00200	0.00200	1	05/04/2016 18:49	WG869664
Iron	0.221	J	0.0750	0.100	0.500	5	05/06/2016 17:06	WG869264
Iron,Dissolved	0.0158	J	0.0150	0.100	0.100	1	05/04/2016 18:49	WG869664
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 17:06	WG869264
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/04/2016 18:49	WG869664
Manganese	0.164		0.00125	0.00500	0.0250	5	05/06/2016 17:06	WG869264
Manganese,Dissolved	0.128		0.000250	0.00500	0.00500	1	05/04/2016 18:49	WG869664
Nickel	0.00598	J	0.00175	0.00200	0.0100	5	05/06/2016 17:06	WG869264
Nickel,Dissolved	0.00484		0.000350	0.00200	0.00200	1	05/04/2016 18:49	WG869664
Potassium	2.03	J	0.185	1.00	5.00	5	05/06/2016 17:06	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 17:06	WG869264
Selenium,Dissolved	0.00157	B J	0.000380	0.00200	0.00200	1	05/04/2016 18:49	WG869664
Sodium	568		0.550	1.00	5.00	5	05/06/2016 17:06	WG869264



## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/06/2016 17:06	WG869264
Uranium,Dissolved	U		0.000330	0.0100	0.0100	1	05/04/2016 18:49	WG869664
Vanadium	0.00531	U	0.000900	0.00500	0.0250	5	05/06/2016 17:06	WG869264
Vanadium,Dissolved	0.00403	U	0.000180	0.00500	0.00500	1	05/04/2016 18:49	WG869664

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	4.86		0.157	0.100	0.500	5	05/02/2016 20:52	WG869042
(S) a,a,a-Trifluorotoluene(FID)	94.2				62.0-128		05/02/2016 20:52	WG869042

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.100	0.0500	0.500	10	05/03/2016 16:25	WG868978
Benzene	1.46		0.00331	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Bromoform	U		0.00469	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Bromomethane	U		0.00866	0.00500	0.0500	10	05/03/2016 16:25	WG868978
n-Butylbenzene	0.00732	U	0.00361	0.00100	0.0100	10	05/03/2016 16:25	WG868978
sec-Butylbenzene	0.0138		0.00365	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Carbon disulfide	0.00332	U	0.00275	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Chloroethane	U		0.00453	0.00500	0.0500	10	05/03/2016 16:25	WG868978
Chloroform	U		0.00324	0.00500	0.0500	10	05/03/2016 16:25	WG868978
Chloromethane	U		0.00276	0.00250	0.0250	10	05/03/2016 16:25	WG868978
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/03/2016 16:25	WG868978
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/03/2016 16:25	WG868978
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/03/2016 16:25	WG868978
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/03/2016 16:25	WG868978
cis-1,2-Dichloroethene	U		0.00260	0.00100	0.0100	10	05/03/2016 16:25	WG868978
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/03/2016 16:25	WG868978
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/03/2016 16:25	WG868978
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/03/2016 16:25	WG868978
trans-1,3-Dichloropropene	U		0.00419	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Ethylbenzene	0.309		0.00384	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Isopropylbenzene	0.0759		0.00326	0.00100	0.0100	10	05/03/2016 16:25	WG868978
p-Isopropyltoluene	U		0.00350	0.00100	0.0100	10	05/03/2016 16:25	WG868978
2-Butanone (MEK)	U		0.0393	0.0100	0.100	10	05/03/2016 16:25	WG868978
2-Hexanone	U		0.0382	0.0100	0.100	10	05/03/2016 16:25	WG868978
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/03/2016 16:25	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/03/2016 16:25	WG868978
Methyl tert-butyl ether	0.0955		0.00367	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Naphthalene	0.0959		0.0100	0.00500	0.0500	10	05/03/2016 16:25	WG868978
n-Propylbenzene	0.0867		0.00349	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Styrene	U		0.00307	0.00100	0.0100	10	05/03/2016 16:25	WG868978
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/03/2016 16:25	WG868978
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Toluene	0.0158	U	0.00780	0.00500	0.0500	10	05/03/2016 16:25	WG868978
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/03/2016 16:25	WG868978
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/03/2016 16:25	WG868978

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/28/16 10:05

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.00373	0.00100	0.0100	10	05/03/2016 16:25	WG868978
1,3,5-Trimethylbenzene	U		0.00387	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/03/2016 16:25	WG868978
o-Xylene	U		0.00341	0.00100	0.0100	10	05/03/2016 16:25	WG868978
m&p-Xylene	0.00736	J	0.00719	0.00100	0.0100	10	05/03/2016 16:25	WG868978
Xylenes, Total	U		0.0106	0.00300	0.0300	10	05/03/2016 16:25	WG868978
(S) Toluene-d8	105				90.0-115		05/03/2016 16:25	WG868978
(S) Dibromofluoromethane	103				79.0-121		05/03/2016 16:25	WG868978
(S) 4-Bromofluorobenzene	99.1				80.1-120		05/03/2016 16:25	WG868978

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	15.5		0.124	0.100	0.500	5	05/04/2016 13:26	WG869249
(S) o-Terphenyl	135				50.0-150		05/04/2016 13:26	WG869249

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3950		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 15:14	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	343		5.19	1.00	100	100	05/10/2016 18:13	WG870882
Fluoride	1.87		0.00990	0.100	0.100	1	05/04/2016 01:55	WG869281
Sulfate	2160		7.74	5.00	500	100	05/10/2016 18:13	WG870882

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	0.348	J	0.120	0.00500	0.500	100	05/10/2016 21:48	WG871518

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/02/2016 12:52	WG868783
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/02/2016 14:03	WG868782

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0893		0.00125	0.00200	0.0100	5	05/06/2016 17:50	WG869264
Arsenic,Dissolved	0.0671		0.000250	0.00200	0.00200	1	05/04/2016 18:51	WG869664
Barium	0.0567		0.00180	0.00500	0.0250	5	05/06/2016 17:50	WG869264
Barium,Dissolved	0.0397		0.000360	0.00500	0.00500	1	05/04/2016 18:51	WG869664
Boron	0.982		0.00750	0.0200	0.100	5	05/06/2016 17:50	WG869264
Boron,Dissolved	0.760		0.00150	0.0200	0.0200	1	05/05/2016 11:02	WG869664
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 17:50	WG869264
Cadmium,Dissolved	U		0.000160	0.00100	0.00100	1	05/04/2016 18:51	WG869664
Calcium	178		0.230	1.00	5.00	5	05/06/2016 17:50	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 17:50	WG869264
Chromium,Dissolved	0.000810	J	0.000540	0.00200	0.00200	1	05/04/2016 18:51	WG869664
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 17:50	WG869264
Cobalt,Dissolved	U		0.000260	0.00200	0.00200	1	05/04/2016 18:51	WG869664
Iron	0.0953	J	0.0750	0.100	0.500	5	05/06/2016 17:50	WG869264
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/04/2016 18:51	WG869664
Lead	0.00601	J	0.00120	0.00200	0.0100	5	05/06/2016 17:50	WG869264
Lead,Dissolved	0.00429		0.000240	0.00200	0.00200	1	05/04/2016 18:51	WG869664
Manganese	0.144		0.00125	0.00500	0.0250	5	05/06/2016 17:50	WG869264
Manganese,Dissolved	0.103		0.000250	0.00500	0.00500	1	05/04/2016 18:51	WG869664
Nickel	0.0101		0.00175	0.00200	0.0100	5	05/06/2016 17:50	WG869264
Nickel,Dissolved	0.00729		0.000350	0.00200	0.00200	1	05/04/2016 18:51	WG869664
Potassium	2.43	J	0.185	1.00	5.00	5	05/06/2016 17:50	WG869264
Selenium	0.00327	J	0.00190	0.00200	0.0100	5	05/06/2016 17:50	WG869264
Selenium,Dissolved	0.00345	B	0.000380	0.00200	0.00200	1	05/04/2016 18:51	WG869664
Sodium	1740		0.550	1.00	5.00	5	05/06/2016 17:50	WG869264



Collected date/time: 04/28/16 11:00

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## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/06/2016 17:50	WG869264
Uranium,Dissolved	U		0.000330	0.0100	0.0100	1	05/04/2016 18:51	WG869664
Vanadium	0.00840	U	0.000900	0.00500	0.0250	5	05/06/2016 17:50	WG869264
Vanadium,Dissolved	0.00646		0.000180	0.00500	0.00500	1	05/04/2016 18:51	WG869664

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	33.8		3.14	0.100	10.0	100	05/02/2016 21:15	WG869042
(S) a,a,a-Trifluorotoluene(FID)	101				62.0-128		05/02/2016 21:15	WG869042

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		2.50	0.0500	12.5	250	05/03/2016 19:28	WG868978
Benzene	9.65		0.0828	0.00100	0.250	250	05/03/2016 19:28	WG868978
Bromodichloromethane	U		0.0950	0.00100	0.250	250	05/03/2016 19:28	WG868978
Bromoform	U		0.117	0.00100	0.250	250	05/03/2016 19:28	WG868978
Bromomethane	U		0.216	0.00500	1.25	250	05/03/2016 19:28	WG868978
n-Butylbenzene	U		0.0902	0.00100	0.250	250	05/03/2016 19:28	WG868978
sec-Butylbenzene	U		0.0912	0.00100	0.250	250	05/03/2016 19:28	WG868978
Carbon disulfide	0.0722	U	0.0688	0.00100	0.250	250	05/03/2016 19:28	WG868978
Carbon tetrachloride	U		0.0948	0.00100	0.250	250	05/03/2016 19:28	WG868978
Chlorobenzene	U		0.0870	0.00100	0.250	250	05/03/2016 19:28	WG868978
Chlorodibromomethane	U		0.0818	0.00100	0.250	250	05/03/2016 19:28	WG868978
Chloroethane	U		0.113	0.00500	1.25	250	05/03/2016 19:28	WG868978
Chloroform	U		0.0810	0.00500	1.25	250	05/03/2016 19:28	WG868978
Chloromethane	U		0.0690	0.00250	0.625	250	05/03/2016 19:28	WG868978
1,2-Dibromoethane	U		0.0952	0.00100	0.250	250	05/03/2016 19:28	WG868978
1,1-Dichloroethane	U		0.0648	0.00100	0.250	250	05/03/2016 19:28	WG868978
1,2-Dichloroethane	U		0.0902	0.00100	0.250	250	05/03/2016 19:28	WG868978
1,1-Dichloroethene	U		0.0995	0.00100	0.250	250	05/03/2016 19:28	WG868978
cis-1,2-Dichloroethene	U		0.0650	0.00100	0.250	250	05/03/2016 19:28	WG868978
trans-1,2-Dichloroethene	U		0.0990	0.00100	0.250	250	05/03/2016 19:28	WG868978
1,2-Dichloropropane	U		0.0765	0.00100	0.250	250	05/03/2016 19:28	WG868978
cis-1,3-Dichloropropene	U		0.104	0.00100	0.250	250	05/03/2016 19:28	WG868978
trans-1,3-Dichloropropene	U		0.105	0.00100	0.250	250	05/03/2016 19:28	WG868978
Ethylbenzene	1.65		0.0960	0.00100	0.250	250	05/03/2016 19:28	WG868978
Isopropylbenzene	0.104	U	0.0815	0.00100	0.250	250	05/03/2016 19:28	WG868978
p-Isopropyltoluene	U		0.0875	0.00100	0.250	250	05/03/2016 19:28	WG868978
2-Butanone (MEK)	U		0.982	0.0100	2.50	250	05/03/2016 19:28	WG868978
2-Hexanone	U		0.955	0.0100	2.50	250	05/03/2016 19:28	WG868978
Methylene Chloride	U		0.250	0.00500	1.25	250	05/03/2016 19:28	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.535	0.0100	2.50	250	05/03/2016 19:28	WG868978
Methyl tert-butyl ether	U		0.0918	0.00100	0.250	250	05/03/2016 19:28	WG868978
Naphthalene	0.262	U	0.250	0.00500	1.25	250	05/03/2016 19:28	WG868978
n-Propylbenzene	0.159	U	0.0872	0.00100	0.250	250	05/03/2016 19:28	WG868978
Styrene	U		0.0768	0.00100	0.250	250	05/03/2016 19:28	WG868978
1,1,1,2-Tetrachloroethane	U		0.0962	0.00100	0.250	250	05/03/2016 19:28	WG868978
1,1,2,2-Tetrachloroethane	U		0.0325	0.00100	0.250	250	05/03/2016 19:28	WG868978
Tetrachloroethene	U		0.0930	0.00100	0.250	250	05/03/2016 19:28	WG868978
Toluene	2.53		0.195	0.00500	1.25	250	05/03/2016 19:28	WG868978
1,1,1-Trichloroethane	U		0.0798	0.00100	0.250	250	05/03/2016 19:28	WG868978
1,1,2-Trichloroethane	U		0.0958	0.00100	0.250	250	05/03/2016 19:28	WG868978
Trichloroethene	U		0.0995	0.00100	0.250	250	05/03/2016 19:28	WG868978

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/28/16 11:00

L832422

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	0.460		0.0932	0.00100	0.250	250	05/03/2016 19:28	WG868978
1,3,5-Trimethylbenzene	0.102	J	0.0968	0.00100	0.250	250	05/03/2016 19:28	WG868978
Vinyl chloride	U		0.0648	0.00100	0.250	250	05/03/2016 19:28	WG868978
o-Xylene	0.539		0.0852	0.00100	0.250	250	05/03/2016 19:28	WG868978
m&p-Xylene	0.694		0.180	0.00100	0.250	250	05/03/2016 19:28	WG868978
Xylenes, Total	1.23		0.265	0.00300	0.750	250	05/03/2016 19:28	WG868978
(S) Toluene-d8	106				90.0-115		05/03/2016 19:28	WG868978
(S) Dibromofluoromethane	104				79.0-121		05/03/2016 19:28	WG868978
(S) 4-Bromofluorobenzene	99.9				80.1-120		05/03/2016 19:28	WG868978

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	11.8		0.124	0.100	0.500	5	05/04/2016 13:43	WG869249
(S) o-Terphenyl	103				50.0-150		05/04/2016 13:43	WG869249

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3010		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 15:15	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	457		2.60	1.00	50.0	50	05/09/2016 13:46	WG869673
Fluoride	0.867		0.00990	0.100	0.100	1	05/09/2016 13:30	WG869673
Sulfate	1090		3.87	5.00	250	50	05/09/2016 13:46	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00814	J	0.00125	0.00200	0.0100	5	05/06/2016 17:52	WG869264
Arsenic,Dissolved	0.00492		0.000250	0.00200	0.00200	1	05/04/2016 18:54	WG869664
Barium	0.0274		0.00180	0.00500	0.0250	5	05/06/2016 17:52	WG869264
Barium,Dissolved	0.0204		0.000360	0.00500	0.00500	1	05/04/2016 18:54	WG869664
Calcium	295		0.230	1.00	5.00	5	05/06/2016 17:52	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 17:52	WG869264
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/04/2016 18:54	WG869664
Iron	0.182	J	0.0750	0.100	0.500	5	05/06/2016 17:52	WG869264
Iron,Dissolved	0.0401	J	0.0150	0.100	0.100	1	05/04/2016 18:54	WG869664
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 17:52	WG869264
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/04/2016 18:54	WG869664
Manganese	0.197		0.00125	0.00500	0.0250	5	05/06/2016 17:52	WG869264
Manganese,Dissolved	0.137		0.000250	0.00500	0.00500	1	05/04/2016 18:54	WG869664
Potassium	0.617	J	0.185	1.00	5.00	5	05/06/2016 17:52	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 17:52	WG869264
Selenium,Dissolved	0.00121	B J	0.000380	0.00200	0.00200	1	05/04/2016 18:54	WG869664
Sodium	601		0.550	1.00	5.00	5	05/06/2016 17:52	WG869264

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.737		0.0314	0.100	0.100	1	05/02/2016 21:37	WG869042
(S) a,a,q-Trifluorotoluene(FID)	87.6				62.0-128		05/02/2016 21:37	WG869042

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0500	0.0500	0.250	5	05/03/2016 19:51	WG868978
Benzene	0.103		0.00166	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Bromodichloromethane	U		0.00190	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Bromoform	U		0.00234	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Bromomethane	U		0.00433	0.00500	0.0250	5	05/03/2016 19:51	WG868978
n-Butylbenzene	U		0.00180	0.00100	0.00500	5	05/03/2016 19:51	WG868978
sec-Butylbenzene	0.00562		0.00182	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Carbon disulfide	0.00212	J	0.00138	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Carbon tetrachloride	U		0.00190	0.00100	0.00500	5	05/03/2016 19:51	WG868978



Collected date/time: 04/28/16 12:05

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00174	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Chlorodibromomethane	U		0.00164	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Chloroethane	U		0.00226	0.00500	0.0250	5	05/03/2016 19:51	WG868978
Chloroform	U		0.00162	0.00500	0.0250	5	05/03/2016 19:51	WG868978
Chloromethane	U		0.00138	0.00250	0.0125	5	05/03/2016 19:51	WG868978
1,2-Dibromoethane	U		0.00190	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,1-Dichloroethane	U		0.00130	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,2-Dichloroethane	U		0.00180	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,1-Dichloroethene	U		0.00199	0.00100	0.00500	5	05/03/2016 19:51	WG868978
cis-1,2-Dichloroethene	U		0.00130	0.00100	0.00500	5	05/03/2016 19:51	WG868978
trans-1,2-Dichloroethene	U		0.00198	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,2-Dichloropropane	U		0.00153	0.00100	0.00500	5	05/03/2016 19:51	WG868978
cis-1,3-Dichloropropene	U		0.00209	0.00100	0.00500	5	05/03/2016 19:51	WG868978
trans-1,3-Dichloropropene	U		0.00210	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Ethylbenzene	U		0.00192	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Isopropylbenzene	0.0325		0.00163	0.00100	0.00500	5	05/03/2016 19:51	WG868978
p-Isopropyltoluene	U		0.00175	0.00100	0.00500	5	05/03/2016 19:51	WG868978
2-Butanone (MEK)	U		0.0196	0.0100	0.0500	5	05/03/2016 19:51	WG868978
2-Hexanone	U		0.0191	0.0100	0.0500	5	05/03/2016 19:51	WG868978
Methylene Chloride	U		0.00500	0.00500	0.0250	5	05/03/2016 19:51	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0100	0.0500	5	05/03/2016 19:51	WG868978
Methyl tert-butyl ether	0.0114		0.00184	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Naphthalene	U		0.00500	0.00500	0.0250	5	05/03/2016 19:51	WG868978
n-Propylbenzene	0.0138		0.00174	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Styrene	U		0.00154	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,1,1,2-Tetrachloroethane	U		0.00192	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,1,2,2-Tetrachloroethane	U		0.000650	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Tetrachloroethene	U		0.00186	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Toluene	U		0.00390	0.00500	0.0250	5	05/03/2016 19:51	WG868978
1,1,1-Trichloroethane	U		0.00160	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,1,2-Trichloroethane	U		0.00192	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Trichloroethene	U		0.00199	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,2,4-Trimethylbenzene	0.0169		0.00186	0.00100	0.00500	5	05/03/2016 19:51	WG868978
1,3,5-Trimethylbenzene	U		0.00194	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Vinyl chloride	U		0.00130	0.00100	0.00500	5	05/03/2016 19:51	WG868978
o-Xylene	U		0.00170	0.00100	0.00500	5	05/03/2016 19:51	WG868978
m&p-Xylene	0.0380		0.00360	0.00100	0.00500	5	05/03/2016 19:51	WG868978
Xylenes, Total	0.0380		0.00530	0.00300	0.0150	5	05/03/2016 19:51	WG868978
(S) Toluene-d8	106				90.0-115		05/03/2016 19:51	WG868978
(S) Dibromofluoromethane	105				79.0-121		05/03/2016 19:51	WG868978
(S) 4-Bromofluorobenzene	100				80.1-120		05/03/2016 19:51	WG868978

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5.88		0.0247	0.100	0.100	1	05/03/2016 19:58	WG869249
(S) o-Terphenyl	105				50.0-150		05/03/2016 19:58	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2530		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/11/2016 15:16	WG870052

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	312		2.60	1.00	50.0	50	05/09/2016 14:18	WG869673
Fluoride	1.04		0.00990	0.100	0.100	1	05/09/2016 14:02	WG869673
Sulfate	1180		3.87	5.00	250	50	05/09/2016 14:18	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00578	J	0.00125	0.00200	0.0100	5	05/06/2016 17:55	WG869264
Arsenic,Dissolved	0.00459		0.000250	0.00200	0.00200	1	05/04/2016 18:56	WG869664
Barium	0.0210	J	0.00180	0.00500	0.0250	5	05/06/2016 17:55	WG869264
Barium,Dissolved	0.0177		0.000360	0.00500	0.00500	1	05/04/2016 18:56	WG869664
Calcium	258		0.230	1.00	5.00	5	05/06/2016 17:55	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 17:55	WG869264
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/04/2016 18:56	WG869664
Iron	U		0.0750	0.100	0.500	5	05/06/2016 17:55	WG869264
Iron,Dissolved	0.0198	J	0.0150	0.100	0.100	1	05/04/2016 18:56	WG869664
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 17:55	WG869264
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/04/2016 18:56	WG869664
Manganese	0.888		0.00125	0.00500	0.0250	5	05/06/2016 17:55	WG869264
Manganese,Dissolved	0.740		0.000250	0.00500	0.00500	1	05/04/2016 18:56	WG869664
Potassium	0.393	J	0.185	1.00	5.00	5	05/06/2016 17:55	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 17:55	WG869264
Selenium,Dissolved	0.00129	B J	0.000380	0.00200	0.00200	1	05/04/2016 18:56	WG869664
Sodium	453		0.550	1.00	5.00	5	05/06/2016 17:55	WG869264

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.171		0.0314	0.100	0.100	1	05/02/2016 22:01	WG869042
(S) a,a,q-Trifluorotoluene(FID)	93.7				62.0-128		05/02/2016 22:01	WG869042

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 20:56	WG870074
Benzene	0.00360		0.000331	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 20:56	WG870074
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 20:56	WG870074
sec-Butylbenzene	0.00444		0.000365	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Carbon disulfide	0.00136		0.000275	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 20:56	WG870074



Collected date/time: 04/28/16 11:10

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 20:56	WG870074
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 20:56	WG870074
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 20:56	WG870074
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 20:56	WG870074
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 20:56	WG870074
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 20:56	WG870074
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 20:56	WG870074
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Isopropylbenzene	0.0170		0.000326	0.00100	0.00100	1	05/05/2016 20:56	WG870074
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 20:56	WG870074
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 20:56	WG870074
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 20:56	WG870074
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 20:56	WG870074
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 20:56	WG870074
Methyl tert-butyl ether	0.00384		0.000367	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 20:56	WG870074
n-Propylbenzene	0.00125		0.000349	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 20:56	WG870074
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 20:56	WG870074
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 20:56	WG870074
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 20:56	WG870074
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 20:56	WG870074
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 20:56	WG870074
(S) Toluene-d8	103				90.0-115		05/05/2016 20:56	WG870074
(S) Dibromofluoromethane	103				79.0-121		05/05/2016 20:56	WG870074
(S) 4-Bromofluorobenzene	95.4				80.1-120		05/05/2016 20:56	WG870074

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2.26		0.0247	0.100	0.100	1	05/03/2016 20:14	WG869249
(S) o-Terphenyl	106				50.0-150		05/03/2016 20:14	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3120		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:31	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	185		2.60	1.00	50.0	50	05/09/2016 14:34	WG869673
Fluoride	1.51		0.00990	0.100	0.100	1	05/10/2016 00:39	WG869673
Sulfate	1380		3.87	5.00	250	50	05/09/2016 14:34	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0150		0.00125	0.00200	0.0100	5	05/06/2016 17:58	WG869264
Arsenic,Dissolved	0.0112		0.00125	0.00200	0.0100	5	05/07/2016 03:02	WG869123
Barium	0.0379		0.00180	0.00500	0.0250	5	05/06/2016 17:58	WG869264
Barium,Dissolved	0.0323		0.00180	0.00500	0.0250	5	05/07/2016 03:02	WG869123
Calcium	422		0.230	1.00	5.00	5	05/06/2016 17:58	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 17:58	WG869264
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:02	WG869123
Iron	U		0.0750	0.100	0.500	5	05/06/2016 17:58	WG869264
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 03:02	WG869123
Lead	0.00274	J	0.00120	0.00200	0.0100	5	05/06/2016 17:58	WG869264
Lead,Dissolved	0.00207	J	0.00120	0.00200	0.0100	5	05/07/2016 03:02	WG869123
Manganese	0.0113	J	0.00125	0.00500	0.0250	5	05/06/2016 17:58	WG869264
Manganese,Dissolved	0.00654	J	0.00125	0.00500	0.0250	5	05/07/2016 03:02	WG869123
Potassium	4.40	J	0.185	1.00	5.00	5	05/06/2016 17:58	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 17:58	WG869264
Selenium,Dissolved	0.0103		0.00190	0.00200	0.0100	5	05/07/2016 03:02	WG869123
Sodium	271		0.550	1.00	5.00	5	05/06/2016 17:58	WG869264

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	23.9		0.785	0.100	2.50	25	05/02/2016 22:23	WG869042
(S) a,a,a-Trifluorotoluene(FID)	96.9				62.0-128		05/02/2016 22:23	WG869042

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.250	0.0500	1.25	25	05/03/2016 20:36	WG868978
Benzene	12.7		0.166	0.00100	0.500	500	05/06/2016 14:00	WG870046
Bromodichloromethane	U		0.00950	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Bromoform	U		0.0117	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Bromomethane	U		0.0216	0.00500	0.125	25	05/03/2016 20:36	WG868978
n-Butylbenzene	U		0.00902	0.00100	0.0250	25	05/03/2016 20:36	WG868978
sec-Butylbenzene	U		0.00912	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Carbon disulfide	0.0107	J	0.00688	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Carbon tetrachloride	U		0.00948	0.00100	0.0250	25	05/03/2016 20:36	WG868978



Collected date/time: 04/28/16 09:15

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00870	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Chlorodibromomethane	U		0.00818	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Chloroethane	U		0.0113	0.00500	0.125	25	05/03/2016 20:36	WG868978
Chloroform	U		0.00810	0.00500	0.125	25	05/03/2016 20:36	WG868978
Chloromethane	U		0.00690	0.00250	0.0625	25	05/03/2016 20:36	WG868978
1,2-Dibromoethane	U		0.00952	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,1-Dichloroethane	U		0.00648	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,2-Dichloroethane	U		0.00902	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,1-Dichloroethene	U		0.00995	0.00100	0.0250	25	05/03/2016 20:36	WG868978
cis-1,2-Dichloroethene	U		0.00650	0.00100	0.0250	25	05/03/2016 20:36	WG868978
trans-1,2-Dichloroethene	U		0.00990	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,2-Dichloropropane	U		0.00765	0.00100	0.0250	25	05/03/2016 20:36	WG868978
cis-1,3-Dichloropropene	U		0.0104	0.00100	0.0250	25	05/03/2016 20:36	WG868978
trans-1,3-Dichloropropene	U		0.0105	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Ethylbenzene	0.0446		0.00960	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Isopropylbenzene	0.0329		0.00815	0.00100	0.0250	25	05/03/2016 20:36	WG868978
p-Isopropyltoluene	U		0.00875	0.00100	0.0250	25	05/03/2016 20:36	WG868978
2-Butanone (MEK)	U		0.0982	0.0100	0.250	25	05/03/2016 20:36	WG868978
2-Hexanone	U		0.0955	0.0100	0.250	25	05/03/2016 20:36	WG868978
Methylene Chloride	U		0.0250	0.00500	0.125	25	05/03/2016 20:36	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.0535	0.0100	0.250	25	05/03/2016 20:36	WG868978
Methyl tert-butyl ether	0.0580		0.00918	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Naphthalene	0.0442	U	0.0250	0.00500	0.125	25	05/03/2016 20:36	WG868978
n-Propylbenzene	0.0430		0.00872	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Styrene	U		0.00768	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,1,1,2-Tetrachloroethane	U		0.00962	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,1,2,2-Tetrachloroethane	U		0.00325	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Tetrachloroethene	U		0.00930	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Toluene	0.124	U	0.0195	0.00500	0.125	25	05/03/2016 20:36	WG868978
1,1,1-Trichloroethane	U		0.00798	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,1,2-Trichloroethane	U		0.00958	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Trichloroethene	U		0.00995	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,2,4-Trimethylbenzene	0.0824		0.00932	0.00100	0.0250	25	05/03/2016 20:36	WG868978
1,3,5-Trimethylbenzene	0.0114	U	0.00968	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Vinyl chloride	U		0.00648	0.00100	0.0250	25	05/03/2016 20:36	WG868978
o-Xylene	U		0.00852	0.00100	0.0250	25	05/03/2016 20:36	WG868978
m&p-Xylene	0.203		0.0180	0.00100	0.0250	25	05/03/2016 20:36	WG868978
Xylenes, Total	0.203		0.0265	0.00300	0.0750	25	05/03/2016 20:36	WG868978
(S) Toluene-d8	104				90.0-115		05/03/2016 20:36	WG868978
(S) Toluene-d8	101				90.0-115		05/06/2016 14:00	WG870046
(S) Dibromofluoromethane	115				79.0-121		05/06/2016 14:00	WG870046
(S) Dibromofluoromethane	99.9				79.0-121		05/03/2016 20:36	WG868978
(S) 4-Bromofluorobenzene	96.9				80.1-120		05/03/2016 20:36	WG868978
(S) 4-Bromofluorobenzene	83.6				80.1-120		05/06/2016 14:00	WG870046

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	19.5		0.124	0.100	0.500	5	05/04/2016 13:59	WG869249
(S) o-Terphenyl	110				50.0-150		05/04/2016 13:59	WG869249



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1270		2.82	10.0	10.0	1	05/04/2016 15:50	WG869765

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.197	J P1	0.197	0.100	1.00	10	05/06/2016 05:32	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	239		2.60	1.00	50.0	50	05/10/2016 01:11	WG869673
Fluoride	0.940		0.00990	0.100	0.100	1	05/10/2016 00:55	WG869673
Sulfate	168		0.774	5.00	50.0	10	05/10/2016 21:35	WG871228

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0293		0.00125	0.00200	0.0100	5	05/06/2016 18:00	WG869264
Arsenic,Dissolved	0.0210		0.000250	0.00200	0.00200	1	05/04/2016 18:58	WG869664
Barium	0.0898		0.00180	0.00500	0.0250	5	05/06/2016 18:00	WG869264
Barium,Dissolved	0.0758		0.000360	0.00500	0.00500	1	05/04/2016 18:58	WG869664
Calcium	220		0.230	1.00	5.00	5	05/06/2016 18:00	WG869264
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 18:00	WG869264
Chromium,Dissolved	0.000621	J	0.000540	0.00200	0.00200	1	05/04/2016 18:58	WG869664
Iron	1.38		0.0750	0.100	0.500	5	05/06/2016 18:00	WG869264
Iron,Dissolved	1.11		0.0150	0.100	0.100	1	05/04/2016 18:58	WG869664
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 18:00	WG869264
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/04/2016 18:58	WG869664
Manganese	1.34		0.00125	0.00500	0.0250	5	05/06/2016 18:00	WG869264
Manganese,Dissolved	1.09		0.000250	0.00500	0.00500	1	05/04/2016 18:58	WG869664
Potassium	0.522	J	0.185	1.00	5.00	5	05/06/2016 18:00	WG869264
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 18:00	WG869264
Selenium,Dissolved	0.00105	B J	0.000380	0.00200	0.00200	1	05/04/2016 18:58	WG869664
Sodium	169		0.550	1.00	5.00	5	05/06/2016 18:00	WG869264

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.614		0.0314	0.100	0.100	1	05/02/2016 22:46	WG869042
(S) a,a,q-Trifluorotoluene(FID)	97.0				62.0-128		05/02/2016 22:46	WG869042

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/03/2016 11:07	WG868978
Benzene	0.0664	J6	0.000331	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Bromoform	U		0.000469	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Bromomethane	U		0.000866	0.00500	0.00500	1	05/03/2016 11:07	WG868978
n-Butylbenzene	0.000427	J	0.000361	0.00100	0.00100	1	05/03/2016 11:07	WG868978
sec-Butylbenzene	0.00151		0.000365	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/03/2016 11:07	WG868978



Collected date/time: 04/28/16 08:25

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Chloroethane	U		0.000453	0.00500	0.00500	1	05/03/2016 11:07	WG868978
Chloroform	U		0.000324	0.00500	0.00500	1	05/03/2016 11:07	WG868978
Chloromethane	U		0.000276	0.00250	0.00250	1	05/03/2016 11:07	WG868978
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 11:07	WG868978
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/03/2016 11:07	WG868978
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/03/2016 11:07	WG868978
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/03/2016 11:07	WG868978
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Ethylbenzene	0.00176		0.000384	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Isopropylbenzene	0.00564		0.000326	0.00100	0.00100	1	05/03/2016 11:07	WG868978
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/03/2016 11:07	WG868978
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/03/2016 11:07	WG868978
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/03/2016 11:07	WG868978
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/03/2016 11:07	WG868978
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/03/2016 11:07	WG868978
Methyl tert-butyl ether	0.119		0.000367	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Naphthalene	U		0.00100	0.00500	0.00500	1	05/03/2016 11:07	WG868978
n-Propylbenzene	0.00597		0.000349	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Styrene	U		0.000307	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Toluene	U		0.000780	0.00500	0.00500	1	05/03/2016 11:07	WG868978
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/03/2016 11:07	WG868978
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/03/2016 11:07	WG868978
o-Xylene	U		0.000341	0.00100	0.00100	1	05/03/2016 11:07	WG868978
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/03/2016 11:07	WG868978
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/03/2016 11:07	WG868978
(S) Toluene-d8	105				90.0-115		05/03/2016 11:07	WG868978
(S) Dibromofluoromethane	105				79.0-121		05/03/2016 11:07	WG868978
(S) 4-Bromofluorobenzene	101				80.1-120		05/03/2016 11:07	WG868978

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5.84		0.0247	0.100	0.100	1	05/03/2016 20:47	WG869249
(S) o-Terphenyl	103				50.0-150		05/03/2016 20:47	WG869249





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3050		2.82	10.0	10.0	1	05/04/2016 18:17	WG869816

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:34	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1140		2.60	1.00	50.0	50	05/10/2016 01:43	WG869673
Fluoride	0.478		0.00990	0.100	0.100	1	05/10/2016 01:27	WG869673
Sulfate	1070		3.87	5.00	250	50	05/10/2016 01:43	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Calcium	370		0.230	1.00	5.00	5	05/06/2016 18:03	WG869264
Potassium	3.67	J	0.185	1.00	5.00	5	05/06/2016 18:03	WG869264
Sodium	695		0.550	1.00	5.00	5	05/06/2016 18:03	WG869264

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/03/2016 14:56	WG868976
Benzene	U		0.000331	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Bromoform	U		0.000469	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Bromomethane	U		0.000866	0.00500	0.00500	1	05/03/2016 14:56	WG868976
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/03/2016 14:56	WG868976
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Chloroethane	U		0.000453	0.00500	0.00500	1	05/03/2016 14:56	WG868976
Chloroform	U		0.000324	0.00500	0.00500	1	05/03/2016 14:56	WG868976
Chloromethane	U		0.000276	0.00250	0.00250	1	05/03/2016 14:56	WG868976
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 14:56	WG868976
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/03/2016 14:56	WG868976
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/03/2016 14:56	WG868976
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/03/2016 14:56	WG868976
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/03/2016 14:56	WG868976
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/03/2016 14:56	WG868976
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/03/2016 14:56	WG868976
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/03/2016 14:56	WG868976
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/03/2016 14:56	WG868976
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/03/2016 14:56	WG868976

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/28/16 12:00

L832422

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/06/2016 14:21	WG870046
Naphthalene	U		0.00100	0.00500	0.00500	1	05/03/2016 14:56	WG868976
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Styrene	U		0.000307	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Toluene	U		0.000780	0.00500	0.00500	1	05/03/2016 14:56	WG868976
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/03/2016 14:56	WG868976
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/03/2016 14:56	WG868976
o-Xylene	U		0.000341	0.00100	0.00100	1	05/03/2016 14:56	WG868976
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/03/2016 14:56	WG868976
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/03/2016 14:56	WG868976
(S) Toluene-d8	103				90.0-115		05/03/2016 14:56	WG868976
(S) Toluene-d8	102				90.0-115		05/06/2016 14:21	WG870046
(S) Dibromofluoromethane	120				79.0-121		05/06/2016 14:21	WG870046
(S) Dibromofluoromethane	102				79.0-121		05/03/2016 14:56	WG868976
(S) 4-Bromofluorobenzene	98.0				80.1-120		05/03/2016 14:56	WG868976
(S) 4-Bromofluorobenzene	81.5				80.1-120		05/06/2016 14:21	WG870046

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

WG869764

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832422-01,02,03,04,05,06,07,08,09

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134189-1 05/04/16 16:22

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

L832360-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832360-01 05/04/16 16:22 • (DUP) R3134189-4 05/04/16 16:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	11800	11800	1	0.169		5

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

(LCS) R3134189-2 05/04/16 16:22 • (LCSD) R3134189-3 05/04/16 16:22

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 %
Dissolved Solids	8800	8720	8560	99.1	97.3	85.0-115			1.85	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869765

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832422-11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134188-1 05/04/16 15:50

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

L832422-11 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-11 05/04/16 15:50 • (DUP) R3134188-4 05/04/16 15:50

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	2670	2640	1	1.13		5

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

(LCS) R3134188-2 05/04/16 15:50 • (LCSD) R3134188-3 05/04/16 15:50

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 %
Dissolved Solids	8800	8730	8710	99.2	99.0	85.0-115			0.229	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832422-21

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134195-1 05/04/16 18:17

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

L832422-21 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-21 05/04/16 18:17 • (DUP) R3134195-4 05/04/16 18:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3050	3020	1	0.824		5

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

(LCS) R3134195-2 05/04/16 18:17 • (LCSD) R3134195-3 05/04/16 18:17

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 %
Dissolved Solids	8800	8450	8500	96.0	96.6	85.0-115			0.590	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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WG870052

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832422-01,02,03,04,05,06,07,08,09,11,12,13,14,15,16,17,18

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135762-5 05/11/16 13:17

Analyte	MB Result mg/l	MB Qualifier mg/l	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	0.0240	B J	0.0197	0.100

L832422-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-01 05/11/16 13:21 • (DUP) R3135762-8 05/11/16 13:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.430	ND	10	17.0	B J	20

L832422-15 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-15 05/11/16 15:12 • (DUP) R3135762-11 05/11/16 15:13

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

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

(LCS) R3135762-6 05/11/16 13:18 • (LCSD) R3135762-7 05/11/16 13:19

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 %
Nitrate-Nitrite	5.00	4.78	4.80	96.0	96.0	90.0-110			0.000	20

L832422-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L832422-06 05/11/16 13:32 • (MS) R3135762-9 05/11/16 13:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	4.61	52.5	96.0	10	90.0-110	

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

WG870052

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832422-01,02,03,04,05,06,07,08,09,11,12,13,14,15,16,17,18

ONE LAB. NATIONWIDE.



L834500-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L834500-01 05/11/16 15:23 • (MS) R3135762-12 05/11/16 15:24 • (MSD) R3135762-13 05/11/16 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 %
Nitrate-Nitrite	5.00	0.562	5.32	5.34	95.0	96.0	1	90.0-110			1.00	20

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

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832422-19,20,21

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134229-1 05/06/16 05:27

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

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

L832422-20 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-20 05/06/16 05:32 • (DUP) R3134229-4 05/06/16 05:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.197	ND	10	25.0	J P1	20

L832435-07 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-07 05/06/16 05:48 • (DUP) R3134229-6 05/06/16 05:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.258	ND	10	2.00	J	20

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

(LCS) R3134229-2 05/06/16 05:28 • (LCSD) R3134229-3 05/06/16 05:29

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 %
Nitrate-Nitrite	5.00	4.98	5.01	100	100	90.0-110			1.00	20

L832435-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-02 05/06/16 05:36 • (MS) R3134229-5 05/06/16 05:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	0.500	3.82	8.04	84.3	10	90.0-110	J6

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832422-19,20,21

ONE LAB. NATIONWIDE.



L832435-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-12 05/06/16 05:57 • (MS) R3134229-7 05/06/16 05:59 • (MSD) R3134229-8 05/06/16 06:00

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	%	%		%			%	%
Nitrate-Nitrite	0.500	U	4.43	4.16	86.0	80.7	10	90.0-110	J6	J6	6.19	20

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

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832422-01,02,04,05,06,07,08,09,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133711-4 05/03/16 07:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chloride	0.0955		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

L832422-15 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-15 05/04/16 00:25 • (DUP) R3133711-6 05/04/16 00:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	571	558	50	2		15
Sulfate	138	136	50	1	J	15

L832422-15 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-15 05/04/16 01:25 • (DUP) R3133711-7 05/04/16 01:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Fluoride	1.13	1.16	1	3		15

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

(LCS) R3133711-5 05/03/16 07:15 • (LCSD) R3133711-8 05/03/16 07:30

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	%	%	%			%	%
Chloride	40.0	40.3	40.7	101	102	80-120			1	15
Fluoride	8.00	8.18	8.23	102	103	80-120			1	15
Sulfate	40.0	40.7	40.8	102	102	80-120			0	15

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832422-17,18,19,20,21

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135221-1 05/09/16 12:11

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

L832435-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-02 05/09/16 15:22 • (DUP) R3135221-4 05/09/16 15:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Fluoride	0.907	0.903	1	1		15

L832435-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-02 05/09/16 15:54 • (DUP) R3135221-5 05/09/16 16:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	293	280	50	5		15
Sulfate	1030	1030	50	1		15

L832409-10 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-10 05/10/16 01:59 • (DUP) R3135221-7 05/10/16 02:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	421	417	20	1		15
Fluoride	1.28	1.15	20	11	J	15
Sulfate	355	350	20	1		15

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

(LCS) R3135221-2 05/09/16 12:27 • (LCSD) R3135221-3 05/09/16 12:43

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	%	%	%			%	%
Chloride	40.0	39.1	39.3	98	98	80-120			0	15
Fluoride	8.00	7.86	7.94	98	99	80-120			1	15

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832422-17,18,19,20,21

ONE LAB. NATIONWIDE.



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

(LCS) R3135221-2 05/09/16 12:27 • (LCSD) R3135221-3 05/09/16 12:43										
	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	%	%	%			%	%
Sulfate	40.0	38.7	39.4	97	98	80-120			2	15

L832435-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-03 05/09/16 16:26 • (MS) R3135221-6 05/09/16 16:42							
	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	0.548	5.43	98	1	80-120	

L832435-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-12 05/10/16 03:02 • (MS) R3135221-8 05/10/16 03:18 • (MSD) R3135221-9 05/10/16 03:34												
	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	0.360	51.2	51.2	102	102	1	80-120			0	15
Fluoride	5.00	U	5.00	5.03	100	101	1	80-120			1	15
Sulfate	50.0	0.227	50.3	50.4	100	100	1	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870882

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832422-03,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136016-1 05/09/16 23:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	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

L832488-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832488-01 05/10/16 03:48 • (DUP) R3136016-4 05/10/16 04:04

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Fluoride	2.56	2.53	1	1		15

L832488-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832488-01 05/10/16 11:35 • (DUP) R3136016-6 05/10/16 11:51

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	3690	3620	100	2		15
Sulfate	2510	2500	100	0		15

L832422-15 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-15 05/10/16 16:38 • (DUP) R3136016-7 05/10/16 16:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	569	559	10	2		15
Fluoride	0.587	0.553	10	6	J	15
Sulfate	164	155	10	5		15

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

(LCS) R3136016-2 05/10/16 00:01 • (LCSD) R3136016-3 05/10/16 00:17

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	%	%	%			%	%
Chloride	40.0	40.2	39.7	100	99	80-120			1	15
Fluoride	8.00	8.00	7.93	100	99	80-120			1	15

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WG870882

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832422-03,15,16

ONE LAB. NATIONWIDE.



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

(LCS) R3136016-2 05/10/16 00:01 • (LCSD) R3136016-3 05/10/16 00:17										
	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	%	%	%			%	%
Sulfate	40.0	40.2	39.8	100	99	80-120			1	15

L832488-14 Original Sample (OS) • Matrix Spike (MS)

(OS) L832488-14 05/10/16 07:47 • (MS) R3136016-5 05/10/16 09:50							
	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	0.603	4.08	70	1	80-120	<u>J6</u>

L832422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832422-03 05/10/16 17:09 • (MS) R3136016-8 05/10/16 17:25 • (MSD) R3136016-9 05/10/16 17:41												
	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	U	49.3	49.3	99	99	1	80-120			0	15
Fluoride	5.00	U	4.86	4.89	97	98	1	80-120			1	15
Sulfate	50.0	U	49.2	49.2	98	98	1	80-120			0	15

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

WG871228

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832422-20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135448-1 05/10/16 11:38

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

L832435-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-04 05/10/16 22:04 • (DUP) R3135448-4 05/10/16 22:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	199	215	10	8		15

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

(LCS) R3135448-2 05/10/16 11:52 • (LCSD) R3135448-3 05/10/16 12:07

	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	39.1	39.2	98	98	80-120			0	15

L832654-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832654-01 05/11/16 01:06 • (MS) R3135448-5 05/11/16 01:20 • (MSD) R3135448-6 05/11/16 01:35

	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	%	%		%			%	%
Sulfate	50.0	19.9	68.7	69.0	98	98	1	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG871518

Wet Chemistry by Method D 7511-09e2

QUALITY CONTROL SUMMARY

L832422-06,09,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136170-1 05/10/16 20:39

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.0012	0.00500

L832409-16 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-16 05/10/16 21:15 • (DUP) R3136170-4 05/10/16 21:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	U	0.000	1	0		20

L832435-14 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-14 05/10/16 21:54 • (DUP) R3136170-6 05/10/16 21:57

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	0.00500	0.00400	1	22	J P1	20

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

(LCS) R3136170-2 05/10/16 20:42 • (LCSD) R3136170-3 05/10/16 20:45

	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	0.0970	0.0980	97	98	86-114			1	20

L832409-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-17 05/10/16 21:24 • (MS) R3136170-10 05/10/16 22:19 • (MSD) R3136170-11 05/10/16 22:22

	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	%	%		%			%	%
Cyanide	0.100	0.0230	0.113	0.117	90	94	1	64-136			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



WG868782

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832422-06,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133036-1 05/02/16 12:55

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

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

(LCS) R3133036-2 05/02/16 12:58 • (LCSD) R3133036-3 05/02/16 13:01

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 %
Mercury,Dissolved	0.00300	0.00291	0.00307	97	102	80-120			5	20

L832422-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832422-06 05/02/16 13:04 • (MS) R3133036-4 05/02/16 13:07 • (MSD) R3133036-5 05/02/16 13:10

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 %
Mercury,Dissolved	0.00300	U	0.00137	0.00144	46	48	1	75-125	J6	J6	5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832422-06,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133035-1 05/02/16 11:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL 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) R3133035-2 05/02/16 11:39 • (LCSD) R3133035-3 05/02/16 11:42

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 %
Mercury	0.00300	0.00299	0.00297	100	99	80-120			1	20

L832391-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832391-03 05/02/16 11:45 • (MS) R3133035-4 05/02/16 11:48 • (MSD) R3133035-5 05/02/16 11:51

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 %
Mercury	0.00300	ND	0.00201	0.00292	67	97	1	75-125	J6	J3	37	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832422-19

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134619-1 05/07/16 02:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	0.0221		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	U		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134619-2 05/07/16 02:40 • (LCSD) R3134619-3 05/07/16 02:43

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 %
Arsenic,Dissolved	0.0500	0.0482	0.0496	96	99	80-120			3	20
Barium,Dissolved	0.0500	0.0494	0.0487	99	97	80-120			1	20
Chromium,Dissolved	0.0500	0.0490	0.0490	98	98	80-120			0	20
Iron,Dissolved	5.00	4.78	4.82	96	96	80-120			1	20
Lead,Dissolved	0.0500	0.0491	0.0499	98	100	80-120			2	20
Manganese,Dissolved	0.0500	0.0492	0.0491	98	98	80-120			0	20
Selenium,Dissolved	0.0500	0.0482	0.0482	96	96	80-120			0	20

L832409-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-25 05/07/16 02:46 • (MS) R3134619-5 05/07/16 02:51 • (MSD) R3134619-6 05/07/16 02:54

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 %
Arsenic,Dissolved	0.0100	0.00741	0.0242	0.0123	34	10	5	75-125	J6	J3 J6	65	20
Barium,Dissolved	0.0100	0.0650	0.105	0.122	81	115	5	75-125			15	20
Chromium,Dissolved	0.0100	U	0.0434	0.0503	87	101	5	75-125			15	20
Iron,Dissolved	1.00	U	4.41	5.39	88	108	5	75-125			20	20
Lead,Dissolved	0.0100	0.00386	0.0479	0.0534	88	99	5	75-125			11	20
Manganese,Dissolved	0.0100	0.00359	0.0451	0.0551	83	103	5	75-125			20	20
Selenium,Dissolved	0.0100	0.596	0.0371	0.0348	0	0	5	75-125	V	V	6	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832422-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134386-1 05/05/16 20:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.00079		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

Method Blank (MB)

(MB) R3134488-1 05/06/16 13:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Barium,Dissolved	U		0.00036	0.00500

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

(LCS) R3134386-2 05/05/16 20:40 • (LCSD) R3134386-3 05/05/16 20:42

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,Dissolved	0.0500	0.0504	0.0500	101	100	80-120			1	20
Chromium,Dissolved	0.0500	0.0488	0.0496	98	99	80-120			2	20
Iron,Dissolved	5.00	4.70	4.79	94	96	80-120			2	20
Lead,Dissolved	0.0500	0.0506	0.0506	101	101	80-120			0	20
Manganese,Dissolved	0.0500	0.0485	0.0485	97	97	80-120			0	20
Selenium,Dissolved	0.0500	0.0482	0.0502	96	100	80-120			4	20

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

(LCS) R3134488-2 05/06/16 13:16 • (LCSD) R3134488-3 05/06/16 13:19

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 %
Barium,Dissolved	0.0500	0.0522	0.0509	104	102	80-120			2	20

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Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832422-01

ONE LAB. NATIONWIDE.



L832409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-01 05/05/16 20:45 • (MS) R3134386-5 05/05/16 20:50 • (MSD) R3134386-6 05/05/16 20:53

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	%	%		%			%	%
Arsenic,Dissolved	0.0100	U	0.0573	0.0573	115	115	5	75-125			0	20
Chromium,Dissolved	0.0100	U	0.0550	0.0537	110	107	5	75-125			2	20
Iron,Dissolved	1.00	U	5.36	5.24	107	105	5	75-125			2	20
Lead,Dissolved	0.0100	U	0.0553	0.0540	111	108	5	75-125			2	20
Manganese,Dissolved	0.0100	0.00200	0.0528	0.0521	102	100	5	75-125			1	20
Selenium,Dissolved	0.0100	0.0141	0.0709	0.0703	114	112	5	75-125			1	20

L832409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-01 05/11/16 10:40 • (MS) R3135630-5 05/11/16 10:50 • (MSD) R3135630-6 05/11/16 10:55

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	%	%		%			%	%
Barium,Dissolved	0.00500	0.0125	0.0605	0.0621	96	99	10	75-125			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

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ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134594-1 05/06/16 16:04

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
Boron	U		0.0015	0.0200
Cadmium	U		0.00016	0.00100
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.00164		0.00025	0.00500
Nickel	0.000785		0.00035	0.00200
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Uranium	U		0.00033	0.0100
Vanadium	U		0.00018	0.00500

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134594-2 05/06/16 16:06 • (LCSD) R3134594-3 05/06/16 16:09

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 %
Arsenic	0.0500	0.0523	0.0531	105	106	80-120			2	20
Barium	0.0500	0.0524	0.0524	105	105	80-120			0	20
Boron	0.0500	0.0472	0.0481	94	96	80-120			2	20
Cadmium	0.0500	0.0554	0.0559	111	112	80-120			1	20
Calcium	5.00	5.26	5.25	105	105	80-120			0	20
Chromium	0.0500	0.0517	0.0513	103	103	80-120			1	20
Cobalt	0.0500	0.0522	0.0522	104	104	80-120			0	20
Iron	5.00	5.05	5.05	101	101	80-120			0	20
Lead	0.0500	0.0522	0.0522	104	104	80-120			0	20
Manganese	0.0500	0.0525	0.0524	105	105	80-120			0	20
Nickel	0.0500	0.0522	0.0541	104	108	80-120			4	20
Potassium	5.00	5.09	5.16	102	103	80-120			1	20
Selenium	0.0500	0.0508	0.0505	102	101	80-120			1	20
Sodium	5.00	5.28	5.18	106	104	80-120			2	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832422-01,02,03,04,05,06,07,08,09,11,12,13,14,15,16,17,18,19,20,21

ONE LAB. NATIONWIDE.



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

(LCS) R3134594-2 05/06/16 16:06 • (LCSD) R3134594-3 05/06/16 16:09

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 %
Uranium	0.0500	0.0528	0.0521	106	104	80-120			1	20
Vanadium	0.0500	0.0510	0.0505	102	101	80-120			1	20

L832422-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832422-02 05/06/16 16:12 • (MS) R3134594-5 05/06/16 16:17 • (MSD) R3134594-6 05/06/16 16:20

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 %
Arsenic	0.0100	0.00165	0.0631	0.0640	123	125	5	75-125			2	20
Barium	0.0100	0.0343	0.0931	0.0943	118	120	5	75-125			1	20
Boron	0.0100	0.167	0.215	0.224	95	113	5	75-125			4	20
Cadmium	0.0100	U	0.0637	0.0638	127	128	5	75-125	J5	J5	0	20
Calcium	1.00	179	187	189	164	201	5	75-125	V	V	1	20
Chromium	0.0100	U	0.0608	0.0606	122	121	5	75-125			0	20
Cobalt	0.0100	U	0.0598	0.0605	120	121	5	75-125			1	20
Potassium	1.00	4.96	11.2	11.3	124	126	5	75-125		J5	1	20
Iron	1.00	U	5.99	6.07	120	121	5	75-125			1	20
Lead	0.0100	U	0.0608	0.0621	122	124	5	75-125			2	20
Manganese	0.0100	0.0113	0.0701	0.0699	118	117	5	75-125			0	20
Nickel	0.0100	U	0.0616	0.0592	123	118	5	75-125			4	20
Selenium	0.0100	U	ND	0.0544	0	109	5	75-125	J6	J3	200	20
Sodium	1.00	43.6	48.8	50.5	105	138	5	75-125		V	3	20
Uranium	0.0100	U	0.0622	0.0610	124	122	5	75-125			2	20
Vanadium	0.0100	U	0.0594	0.0602	119	120	5	75-125			1	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832422-02,03,04,05,06,07,08,09,11,12,13,14,15,16,17,18,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133781-7 05/04/16 14:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	0.000553		0.00024	0.00200
Manganese,Dissolved	U		0.00025	0.00500
Nickel,Dissolved	U		0.00035	0.00200
Selenium,Dissolved	0.00107		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	0.0015		0.00018	0.00500

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Cp

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Tc

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Method Blank (MB)

(MB) R3133974-1 05/05/16 10:43

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0015	0.0200

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

(LCS) R3133781-8 05/04/16 14:40 • (LCSD) R3133781-9 05/04/16 14:43

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 %
Arsenic,Dissolved	0.0500	0.0483	0.0479	97	96	80-120			1	20
Barium,Dissolved	0.0500	0.0523	0.0493	105	99	80-120			6	20
Cadmium,Dissolved	0.0500	0.0502	0.0500	100	100	80-120			0	20
Chromium,Dissolved	0.0500	0.0501	0.0491	100	98	80-120			2	20
Cobalt,Dissolved	0.0500	0.0509	0.0500	102	100	80-120			2	20
Iron,Dissolved	5.00	4.88	4.84	98	97	80-120			1	20
Lead,Dissolved	0.0500	0.0503	0.0494	101	99	80-120			2	20
Manganese,Dissolved	0.0500	0.0494	0.0477	99	95	80-120			3	20
Nickel,Dissolved	0.0500	0.0512	0.0499	102	100	80-120			3	20
Selenium,Dissolved	0.0500	0.0502	0.0493	100	99	80-120			2	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832422-02,03,04,05,06,07,08,09,11,12,13,14,15,16,17,18,20

ONE LAB. NATIONWIDE.



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

(LCS) R3133781-8 05/04/16 14:40 • (LCSD) R3133781-9 05/04/16 14:43										
	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	%	%	%			%	%
Uranium,Dissolved	0.0500	0.0503	0.0493	101	99	80-120			2	20
Vanadium,Dissolved	0.0500	0.0501	0.0496	100	99	80-120			1	20

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

(LCS) R3133974-2 05/05/16 10:46 • (LCSD) R3133974-3 05/05/16 10:48										
	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	%	%	%			%	%
Boron,Dissolved	0.0500	0.0402	0.0420	80	84	80-120			4	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

QUALITY CONTROL SUMMARY

L832422-01,02,03,04,05,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133940-3 05/02/16 09:16				
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) 100			62.0-128	

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

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

(LCS) R3133940-1 05/02/16 08:06 • (LCSD) R3133940-2 05/02/16 08:29										
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	6.52	6.40	119	116	67.0-132			1.76	20
(S) a,a,a-Trifluorotoluene(FID)				100	100	62.0-128				

L832421-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832421-03 05/02/16 11:15 • (MS) R3133940-4 05/02/16 11:38 • (MSD) R3133940-5 05/02/16 12:01												
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	U	5.33	6.04	97.0	110	1	50.0-143			12.4	20
(S) a,a,a-Trifluorotoluene(FID)					99.8	100		62.0-128				

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

QUALITY CONTROL SUMMARY

L832422-21

ONE LAB. NATIONWIDE. 

Method Blank (MB)

(MB) R3133744-3 05/03/16 05:55

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	0.00173		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
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
Tetrachloroethene	U		0.000372	0.00100

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Cp

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

QUALITY CONTROL SUMMARY

L832422-21

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133744-3 05/03/16 05:55

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
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	103			90.0-115
(S) Dibromofluoromethane	102			79.0-121
(S) 4-Bromofluorobenzene	96.1			80.1-120

Cp

Tc

Ss

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Sr

Qc

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Sc

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

(LCS) R3133744-1 05/03/16 04:38 • (LCSD) R3133744-2 05/03/16 04:58

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	0.184	0.179	147	143	28.7-175			2.68	20.9
Benzene	0.0250	0.0248	0.0250	99.3	100	73.0-122			0.780	20
Bromodichloromethane	0.0250	0.0240	0.0235	95.9	94.0	75.5-121			1.96	20
Bromoform	0.0250	0.0236	0.0248	94.3	99.4	71.5-131			5.20	20
Bromomethane	0.0250	0.0192	0.0192	76.6	77.0	22.4-187			0.460	20
n-Butylbenzene	0.0250	0.0234	0.0237	93.8	94.7	75.9-134			1.04	20
sec-Butylbenzene	0.0250	0.0228	0.0239	91.2	95.6	80.6-126			4.74	20
Carbon disulfide	0.0250	0.0210	0.0219	84.0	87.4	53.0-134			3.96	20
Carbon tetrachloride	0.0250	0.0230	0.0242	92.1	96.7	70.9-129			4.89	20
Chlorobenzene	0.0250	0.0235	0.0243	93.9	97.2	79.7-122			3.50	20
Chlorodibromomethane	0.0250	0.0234	0.0241	93.5	96.6	78.2-124			3.18	20
Chloroethane	0.0250	0.0212	0.0213	84.6	85.2	41.2-153			0.620	20
Chloroform	0.0250	0.0241	0.0246	96.3	98.3	73.2-125			2.05	20
Chloromethane	0.0250	0.0246	0.0251	98.6	101	55.8-134			1.94	20
1,2-Dibromoethane	0.0250	0.0235	0.0238	94.0	95.3	79.8-122			1.40	20
1,1-Dichloroethane	0.0250	0.0260	0.0262	104	105	71.7-127			0.930	20
1,2-Dichloroethane	0.0250	0.0243	0.0238	97.0	95.2	65.3-126			1.90	20

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

QUALITY CONTROL SUMMARY

L832422-21

ONE LAB. NATIONWIDE.



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

(LCS) R3133744-1 05/03/16 04:38 • (LCSD) R3133744-2 05/03/16 04:58

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 %
1,1-Dichloroethene	0.0250	0.0223	0.0226	89.4	90.4	59.9-137			1.14	20
cis-1,2-Dichloroethene	0.0250	0.0241	0.0246	96.3	98.3	77.3-122			2.08	20
trans-1,2-Dichloroethene	0.0250	0.0238	0.0243	95.2	97.4	72.6-125			2.24	20
1,2-Dichloropropane	0.0250	0.0267	0.0262	107	105	77.4-125			1.97	20
cis-1,3-Dichloropropene	0.0250	0.0258	0.0253	103	101	77.7-124			1.84	20
trans-1,3-Dichloropropene	0.0250	0.0254	0.0251	101	100	73.5-127			1.25	20
Ethylbenzene	0.0250	0.0229	0.0236	91.6	94.5	80.9-121			3.13	20
2-Hexanone	0.125	0.138	0.139	110	111	59.4-151			0.950	20
Isopropylbenzene	0.0250	0.0220	0.0231	88.2	92.2	81.6-124			4.46	20
p-Isopropyltoluene	0.0250	0.0226	0.0238	90.4	95.3	77.6-129			5.30	20
2-Butanone (MEK)	0.125	0.182	0.174	146	139	46.4-155			4.43	20
Methylene Chloride	0.0250	0.0240	0.0242	96.1	96.7	69.5-120			0.680	20
4-Methyl-2-pentanone (MIBK)	0.125	0.147	0.143	118	114	63.3-138			3.12	20
Naphthalene	0.0250	0.0229	0.0229	91.4	91.8	69.7-134			0.390	20
n-Propylbenzene	0.0250	0.0231	0.0240	92.4	95.9	81.9-122			3.78	20
Styrene	0.0250	0.0234	0.0242	93.5	96.6	79.9-124			3.28	20
1,1,1-Tetrachloroethane	0.0250	0.0235	0.0243	94.0	97.1	78.5-125			3.28	20
1,1,2,2-Tetrachloroethane	0.0250	0.0239	0.0240	95.8	96.1	79.3-123			0.290	20
Tetrachloroethene	0.0250	0.0226	0.0238	90.2	95.1	73.5-130			5.23	20
Toluene	0.0250	0.0243	0.0239	97.1	95.5	77.9-116			1.68	20
1,1,1-Trichloroethane	0.0250	0.0238	0.0238	95.2	95.3	71.1-129			0.100	20
1,1,2-Trichloroethane	0.0250	0.0237	0.0243	94.7	97.4	81.6-120			2.77	20
Trichloroethene	0.0250	0.0247	0.0246	98.6	98.3	79.5-121			0.320	20
1,2,4-Trimethylbenzene	0.0250	0.0228	0.0237	91.0	94.8	79.0-122			4.03	20
1,3,5-Trimethylbenzene	0.0250	0.0225	0.0236	90.1	94.3	81.0-123			4.62	20
Vinyl chloride	0.0250	0.0218	0.0223	87.3	89.2	61.5-134			2.13	20
Xylenes, Total	0.0750	0.0686	0.0714	91.5	95.1	79.2-122			3.94	20
o-Xylene	0.0250	0.0230	0.0239	91.9	95.4	79.1-123			3.77	20
m&p-Xylenes	0.0500	0.0456	0.0475	91.2	95.0	78.5-122			4.02	20
(S) Toluene-d8				102	103	90.0-115				
(S) Dibromofluoromethane				102	102	79.0-121				
(S) 4-Bromofluorobenzene				94.6	99.1	80.1-120				

1Cp

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

QUALITY CONTROL SUMMARY

L832422-21

ONE LAB. NATIONWIDE. 

L832409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-01 05/03/16 08:15 • (MS) R3133744-4 05/03/16 08:53 • (MSD) R3133744-5 05/03/16 09:12

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	%	%		%			%	%
Acetone	0.125	U	0.0812	0.0847	64.9	67.8	1	25.0-156			4.24	21.5
Benzene	0.0250	U	0.0196	0.0198	78.3	79.1	1	58.6-133			1.00	20
Bromodichloromethane	0.0250	U	0.0199	0.0198	79.8	79.4	1	69.2-127			0.490	20
Bromoform	0.0250	U	0.0202	0.0209	80.9	83.8	1	66.3-140			3.45	20
Bromomethane	0.0250	U	0.0133	0.0127	53.1	50.7	1	16.6-183			4.60	20.5
n-Butylbenzene	0.0250	U	0.0195	0.0197	78.2	79.0	1	64.8-145			1.03	20
sec-Butylbenzene	0.0250	U	0.0191	0.0193	76.4	77.0	1	66.8-139			0.860	20
Carbon disulfide	0.0250	U	0.0102	0.0105	40.9	42.0	1	34.9-138			2.66	20
Carbon tetrachloride	0.0250	U	0.0189	0.0191	75.8	76.6	1	60.6-139			1.00	20
Chlorobenzene	0.0250	U	0.0188	0.0189	75.1	75.6	1	70.1-130			0.710	20
Chlorodibromomethane	0.0250	U	0.0197	0.0202	78.8	80.6	1	71.6-132			2.24	20
Chloroethane	0.0250	U	0.0157	0.0153	62.8	61.2	1	33.3-155			2.59	20
Chloroform	0.0250	U	0.0203	0.0204	81.1	81.5	1	66.1-133			0.540	20
Chloromethane	0.0250	U	0.0160	0.0158	63.9	63.1	1	40.7-139			1.13	20
1,2-Dibromoethane	0.0250	U	0.0194	0.0197	77.5	78.7	1	73.8-131			1.62	20
1,1-Dichloroethane	0.0250	U	0.0214	0.0215	85.5	85.9	1	64.0-134			0.490	20
1,2-Dichloroethane	0.0250	U	0.0195	0.0199	78.0	79.5	1	60.7-132			1.89	20
1,1-Dichloroethene	0.0250	U	0.0164	0.0170	65.6	68.0	1	48.8-144			3.50	20
cis-1,2-Dichloroethene	0.0250	U	0.0193	0.0199	77.3	79.4	1	60.6-136			2.71	20
trans-1,2-Dichloroethene	0.0250	U	0.0177	0.0176	70.8	70.5	1	61.0-132			0.400	20
1,2-Dichloropropane	0.0250	U	0.0222	0.0223	88.7	89.1	1	69.7-130			0.430	20
cis-1,3-Dichloropropene	0.0250	U	0.0205	0.0206	81.9	82.4	1	71.1-129			0.560	20
trans-1,3-Dichloropropene	0.0250	U	0.0208	0.0209	83.0	83.7	1	66.3-136			0.780	20
Ethylbenzene	0.0250	U	0.0182	0.0187	72.9	74.8	1	62.7-136			2.57	20
2-Hexanone	0.125	U	0.0974	0.102	77.9	81.7	1	59.4-154			4.66	20.1
Isopropylbenzene	0.0250	U	0.0182	0.0185	72.8	73.8	1	67.4-136			1.32	20
p-Isopropyltoluene	0.0250	U	0.0190	0.0189	75.8	75.7	1	62.8-143			0.190	20
2-Butanone (MEK)	0.125	U	0.119	0.121	95.2	96.7	1	45.0-156			1.62	20.8
Methylene Chloride	0.0250	U	0.0184	0.0182	73.7	72.6	1	61.5-125			1.43	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.128	0.132	102	105	1	60.7-150			2.82	20
Naphthalene	0.0250	U	0.0199	0.0203	79.4	81.3	1	61.8-143			2.28	20
n-Propylbenzene	0.0250	U	0.0189	0.0191	75.5	76.5	1	63.2-139			1.41	20
Styrene	0.0250	U	0.0186	0.0194	74.5	77.4	1	68.2-133			3.81	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0194	0.0199	77.5	79.5	1	70.5-132			2.61	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0213	0.0221	85.1	88.4	1	64.9-145			3.77	20
Tetrachloroethene	0.0250	U	0.0179	0.0182	71.7	72.9	1	57.4-141			1.61	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832422-21

ONE LAB. NATIONWIDE. 

L832409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-01 05/03/16 08:15 • (MS) R3133744-4 05/03/16 08:53 • (MSD) R3133744-5 05/03/16 09:12												
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	%	%		%			%	%
Toluene	0.0250	U	0.0191	0.0192	76.4	76.9	1	67.8-124			0.710	20
1,1,1-Trichloroethane	0.0250	U	0.0202	0.0201	80.6	80.6	1	58.7-134			0.0500	20
1,1,2-Trichloroethane	0.0250	U	0.0205	0.0210	82.1	84.1	1	74.1-130			2.45	20
Trichloroethene	0.0250	U	0.0195	0.0196	78.2	78.4	1	48.9-148			0.270	20
1,2,4-Trimethylbenzene	0.0250	U	0.0184	0.0186	73.4	74.4	1	60.5-137			1.35	20
1,3,5-Trimethylbenzene	0.0250	U	0.0185	0.0187	73.8	74.9	1	67.9-134			1.43	20
Vinyl chloride	0.0250	U	0.0155	0.0153	62.2	61.1	1	44.3-143			1.76	20
Xylenes, Total	0.0750	U	0.0548	0.0557	73.0	74.2	1	65.6-133			1.64	20
o-Xylene	0.0250	U	0.0183	0.0187	73.3	74.8	1	67.1-133			2.12	20
m&p-Xylenes	0.0500	U	0.0365	0.0370	72.9	73.9	1	64.1-133			1.39	20
(S) Toluene-d8					101	102		90.0-115				
(S) Dibromofluoromethane					102	103		79.0-121				
(S) 4-Bromofluorobenzene					95.3	95.7		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

QUALITY CONTROL SUMMARY

L832422-01,03,05,06,07,10,12,13,14,15,16,17,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133780-3 05/03/16 07:17

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	0.00168		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

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Ss

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Cn

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Sr

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

QUALITY CONTROL SUMMARY

L832422-01,03,05,06,07,10,12,13,14,15,16,17,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133780-3 05/03/16 07:17

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	105			79.0-121
(S) 4-Bromofluorobenzene	100			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3133780-1 05/03/16 05:24 • (LCSD) R3133780-2 05/03/16 05:46

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 %
Acetone	0.125	0.166	0.170	133	136	28.7-175			2.45	20.9
Benzene	0.0250	0.0245	0.0256	98.0	103	73.0-122			4.61	20
Bromodichloromethane	0.0250	0.0249	0.0256	99.8	102	75.5-121			2.45	20
Bromoform	0.0250	0.0218	0.0221	87.3	88.3	71.5-131			1.13	20
Bromomethane	0.0250	0.0197	0.0209	78.9	83.7	22.4-187			5.85	20
n-Butylbenzene	0.0250	0.0287	0.0308	115	123	75.9-134			6.91	20
sec-Butylbenzene	0.0250	0.0233	0.0243	93.2	97.0	80.6-126			4.06	20
Carbon disulfide	0.0250	0.0220	0.0231	87.8	92.3	53.0-134			4.94	20
Carbon tetrachloride	0.0250	0.0218	0.0224	87.2	89.6	70.9-129			2.71	20
Chlorobenzene	0.0250	0.0235	0.0235	94.1	94.0	79.7-122			0.0600	20
Chlorodibromomethane	0.0250	0.0223	0.0229	89.2	91.5	78.2-124			2.47	20
Chloroethane	0.0250	0.0259	0.0274	103	110	41.2-153			5.94	20
Chloroform	0.0250	0.0250	0.0263	100	105	73.2-125			4.86	20
Chloromethane	0.0250	0.0228	0.0243	91.0	97.2	55.8-134			6.62	20
1,2-Dibromoethane	0.0250	0.0239	0.0241	95.6	96.3	79.8-122			0.710	20
1,1-Dichloroethane	0.0250	0.0253	0.0271	101	108	71.7-127			6.90	20

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

QUALITY CONTROL SUMMARY

L832422-01,03,05,06,07,10,12,13,14,15,16,17,19,20

ONE LAB. NATIONWIDE.



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

(LCS) R3133780-1 05/03/16 05:24 • (LCSD) R3133780-2 05/03/16 05:46

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 %
1,2-Dichloroethane	0.0250	0.0261	0.0285	104	114	65.3-126			9.07	20
1,1-Dichloroethene	0.0250	0.0249	0.0267	99.5	107	59.9-137			7.15	20
cis-1,2-Dichloroethene	0.0250	0.0229	0.0239	91.5	95.8	77.3-122			4.54	20
trans-1,2-Dichloroethene	0.0250	0.0225	0.0242	90.1	96.8	72.6-125			7.21	20
1,2-Dichloropropane	0.0250	0.0259	0.0274	104	110	77.4-125			5.61	20
cis-1,3-Dichloropropene	0.0250	0.0265	0.0277	106	111	77.7-124			4.56	20
trans-1,3-Dichloropropene	0.0250	0.0289	0.0302	116	121	73.5-127			4.51	20
Ethylbenzene	0.0250	0.0233	0.0236	93.3	94.3	80.9-121			1.09	20
2-Hexanone	0.125	0.142	0.156	114	125	59.4-151			9.16	20
Isopropylbenzene	0.0250	0.0235	0.0237	94.2	94.8	81.6-124			0.650	20
p-Isopropyltoluene	0.0250	0.0233	0.0236	93.0	94.3	77.6-129			1.30	20
2-Butanone (MEK)	0.125	0.172	0.186	138	149	46.4-155			7.68	20
Methylene Chloride	0.0250	0.0250	0.0260	99.8	104	69.5-120			4.14	20
4-Methyl-2-pentanone (MIBK)	0.125	0.152	0.165	121	132	63.3-138			8.10	20
Methyl tert-butyl ether	0.0250	0.0255	0.0270	102	108	70.1-125			5.87	20
Naphthalene	0.0250	0.0249	0.0267	99.7	107	69.7-134			6.95	20
n-Propylbenzene	0.0250	0.0243	0.0245	97.4	98.0	81.9-122			0.590	20
Styrene	0.0250	0.0239	0.0236	95.5	94.6	79.9-124			0.980	20
1,1,1-Tetrachloroethane	0.0250	0.0221	0.0227	88.3	90.8	78.5-125			2.83	20
1,1,2,2-Tetrachloroethane	0.0250	0.0263	0.0270	105	108	79.3-123			2.57	20
Tetrachloroethene	0.0250	0.0202	0.0209	80.7	83.6	73.5-130			3.53	20
Toluene	0.0250	0.0243	0.0253	97.3	101	77.9-116			4.04	20
1,1,1-Trichloroethane	0.0250	0.0225	0.0239	89.9	95.5	71.1-129			6.04	20
1,1,2-Trichloroethane	0.0250	0.0237	0.0245	94.9	97.9	81.6-120			3.06	20
Trichloroethene	0.0250	0.0215	0.0228	86.1	91.3	79.5-121			5.84	20
1,2,4-Trimethylbenzene	0.0250	0.0231	0.0230	92.3	92.2	79.0-122			0.170	20
1,3,5-Trimethylbenzene	0.0250	0.0235	0.0235	94.2	94.1	81.0-123			0.0700	20
Vinyl chloride	0.0250	0.0225	0.0239	89.9	95.6	61.5-134			6.12	20
Xylenes, Total	0.0750	0.0703	0.0702	93.7	93.7	79.2-122			0.0500	20
o-Xylene	0.0250	0.0232	0.0233	92.7	93.2	79.1-123			0.520	20
m&p-Xylenes	0.0500	0.0471	0.0469	94.2	93.9	78.5-122			0.330	20
(S) Toluene-d8				105	104	90.0-115				
(S) Dibromofluoromethane				103	105	79.0-121				
(S) 4-Bromofluorobenzene				101	97.9	80.1-120				

Cp

Tc

Ss

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Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832422-01,03,05,06,07,10,12,13,14,15,16,17,19,20

ONE LAB. NATIONWIDE.



L832422-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832422-20 05/03/16 11:07 • (MS) R3133780-4 05/03/16 11:30 • (MSD) R3133780-5 05/03/16 11:52

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	%	%		%			%	%
Acetone	0.125	U	0.0802	0.0787	64.1	63.0	1	25.0-156			1.83	21.5
Benzene	0.0250	0.0664	0.0764	0.0777	39.9	45.1	1	58.6-133	J6	J6	1.66	20
Bromodichloromethane	0.0250	U	0.0231	0.0230	92.4	91.9	1	69.2-127			0.560	20
Bromoform	0.0250	U	0.0206	0.0198	82.4	79.3	1	66.3-140			3.89	20
Bromomethane	0.0250	U	0.00657	0.00708	26.3	28.3	1	16.6-183			7.55	20.5
n-Butylbenzene	0.0250	0.000427	0.0273	0.0270	108	106	1	64.8-145			1.22	20
sec-Butylbenzene	0.0250	0.00151	0.0228	0.0224	85.2	83.6	1	66.8-139			1.73	20
Carbon disulfide	0.0250	U	0.0119	0.0118	47.7	47.0	1	34.9-138			1.40	20
Carbon tetrachloride	0.0250	U	0.0199	0.0189	79.5	75.5	1	60.6-139			5.21	20
Chlorobenzene	0.0250	U	0.0207	0.0200	82.7	80.1	1	70.1-130			3.17	20
Chlorodibromomethane	0.0250	U	0.0204	0.0204	81.4	81.6	1	71.6-132			0.300	20
Chloroethane	0.0250	U	0.0211	0.0200	84.5	79.9	1	33.3-155			5.56	20
Chloroform	0.0250	U	0.0242	0.0232	96.9	92.9	1	66.1-133			4.27	20
Chloromethane	0.0250	U	0.0157	0.0155	62.8	61.8	1	40.7-139			1.52	20
1,2-Dibromoethane	0.0250	U	0.0215	0.0212	86.0	84.8	1	73.8-131			1.35	20
1,1-Dichloroethane	0.0250	U	0.0235	0.0227	93.9	90.8	1	64.0-134			3.36	20
1,2-Dichloroethane	0.0250	U	0.0244	0.0237	97.7	94.9	1	60.7-132			2.99	20
1,1-Dichloroethene	0.0250	U	0.0204	0.0199	81.8	79.7	1	48.8-144			2.52	20
cis-1,2-Dichloroethene	0.0250	U	0.0202	0.0198	80.9	79.1	1	60.6-136			2.30	20
trans-1,2-Dichloroethene	0.0250	U	0.0180	0.0174	72.1	69.4	1	61.0-132			3.74	20
1,2-Dichloropropane	0.0250	U	0.0244	0.0239	97.5	95.5	1	69.7-130			2.06	20
cis-1,3-Dichloropropene	0.0250	U	0.0236	0.0230	94.5	92.1	1	71.1-129			2.59	20
trans-1,3-Dichloropropene	0.0250	U	0.0269	0.0260	107	104	1	66.3-136			3.40	20
Ethylbenzene	0.0250	0.00176	0.0219	0.0214	80.6	78.7	1	62.7-136			2.14	20
2-Hexanone	0.125	U	0.123	0.120	98.3	96.1	1	59.4-154			2.28	20.1
Isopropylbenzene	0.0250	0.00564	0.0256	0.0255	79.7	79.5	1	67.4-136			0.170	20
p-Isopropyltoluene	0.0250	U	0.0209	0.0208	83.8	83.2	1	62.8-143			0.750	20
2-Butanone (MEK)	0.125	U	0.139	0.136	111	109	1	45.0-156			2.25	20.8
Methylene Chloride	0.0250	U	0.0211	0.0204	84.3	81.4	1	61.5-125			3.48	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.152	0.148	122	118	1	60.7-150			2.94	20
Methyl tert-butyl ether	0.0250	0.119	0.140	0.143	84.3	96.6	1	61.4-136			2.17	20
Naphthalene	0.0250	U	0.0253	0.0252	101	101	1	61.8-143			0.390	20
n-Propylbenzene	0.0250	0.00597	0.0267	0.0264	82.8	81.9	1	63.2-139			0.890	20
Styrene	0.0250	U	0.0218	0.0212	87.3	84.9	1	68.2-133			2.70	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0204	0.0200	81.8	80.0	1	70.5-132			2.24	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0253	0.0251	101	101	1	64.9-145			0.570	20

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Cp

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

QUALITY CONTROL SUMMARY

L832422-01,03,05,06,07,10,12,13,14,15,16,17,19,20

ONE LAB. NATIONWIDE.



L832422-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832422-20 05/03/16 11:07 • (MS) R3133780-4 05/03/16 11:30 • (MSD) R3133780-5 05/03/16 11:52

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 %
Tetrachloroethene	0.0250	U	0.0165	0.0165	66.1	66.2	1	57.4-141			0.110	20
Toluene	0.0250	U	0.0221	0.0216	88.3	86.5	1	67.8-124			2.05	20
1,1,1-Trichloroethane	0.0250	U	0.0205	0.0202	81.9	80.7	1	58.7-134			1.46	20
1,1,2-Trichloroethane	0.0250	U	0.0235	0.0229	94.1	91.4	1	74.1-130			2.86	20
Trichloroethene	0.0250	U	0.0183	0.0178	73.1	71.0	1	48.9-148			2.92	20
1,2,4-Trimethylbenzene	0.0250	U	0.0202	0.0200	80.8	80.0	1	60.5-137			0.950	20
1,3,5-Trimethylbenzene	0.0250	U	0.0207	0.0205	82.8	81.9	1	67.9-134			1.13	20
Vinyl chloride	0.0250	U	0.0166	0.0164	66.4	65.4	1	44.3-143			1.42	20
Xylenes, Total	0.0750	U	0.0619	0.0597	82.6	79.5	1	65.6-133			3.75	20
o-Xylene	0.0250	U	0.0204	0.0198	81.7	79.2	1	67.1-133			3.09	20
m&p-Xylenes	0.0500	U	0.0415	0.0399	83.0	79.7	1	64.1-133			4.08	20
(S) Toluene-d8					105	107		90.0-115				
(S) Dibromofluoromethane					107	106		79.0-121				
(S) 4-Bromofluorobenzene					98.4	99.4		80.1-120				

1Cp

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5Sr

6Qc

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

QUALITY CONTROL SUMMARY

L832422-01,07,14,19,21

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134515-3 05/06/16 05:04

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
(S) Toluene-d8	99.6			90.0-115
(S) Dibromofluoromethane	116			79.0-121
(S) 4-Bromofluorobenzene	82.7			80.1-120

Cp

Tc

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Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134515-1 05/06/16 03:39 • (LCSD) R3134515-2 05/06/16 04:01

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 %
Benzene	0.0250	0.0282	0.0277	113	111	73.0-122			1.85	20
Methyl tert-butyl ether	0.0250	0.0250	0.0247	100	98.6	70.1-125			1.48	20
(S) Toluene-d8				101	101	90.0-115				
(S) Dibromofluoromethane				118	114	79.0-121				
(S) 4-Bromofluorobenzene				85.9	84.3	80.1-120				

L832600-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832600-02 05/06/16 07:35 • (MS) R3134515-4 05/06/16 06:31 • (MSD) R3134515-5 05/06/16 06:52

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 %
Benzene	0.0250	0.00546	0.0315	0.0302	104	99.0	1	58.6-133			4.31	20
Methyl tert-butyl ether	0.0250	ND	0.0249	0.0243	99.6	97.2	1	61.4-136			2.41	20
(S) Toluene-d8					103	100		90.0-115				
(S) Dibromofluoromethane					116	115		79.0-121				
(S) 4-Bromofluorobenzene					87.3	86.4		80.1-120				

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

QUALITY CONTROL SUMMARY

L832422-02,04,08,09,11,18

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134382-3 05/05/16 18:21

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

QUALITY CONTROL SUMMARY

L832422-02,04,08,09,11,18

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134382-3 05/05/16 18:21

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	98.3			90.0-115
(S) Dibromofluoromethane	102			79.0-121
(S) 4-Bromofluorobenzene	89.2			80.1-120

Cp

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Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134382-1 05/05/16 16:55 • (LCSD) R3134382-2 05/05/16 17:12

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	0.121	0.115	96.9	92.2	28.7-175			5.04	20.9
Benzene	0.0250	0.0262	0.0230	105	92.0	73.0-122			13.2	20
Bromodichloromethane	0.0250	0.0268	0.0238	107	95.3	75.5-121			11.9	20
Bromoform	0.0250	0.0283	0.0248	113	99.3	71.5-131			12.9	20
Bromomethane	0.0250	0.0341	0.0297	136	119	22.4-187			13.6	20
n-Butylbenzene	0.0250	0.0259	0.0225	103	89.9	75.9-134			14.1	20
sec-Butylbenzene	0.0250	0.0254	0.0226	101	90.5	80.6-126			11.4	20
Carbon disulfide	0.0250	0.0295	0.0252	118	101	53.0-134			15.9	20
Carbon tetrachloride	0.0250	0.0262	0.0228	105	91.1	70.9-129			13.9	20
Chlorobenzene	0.0250	0.0258	0.0231	103	92.5	79.7-122			10.7	20
Chlorodibromomethane	0.0250	0.0267	0.0239	107	95.8	78.2-124			10.7	20
Chloroethane	0.0250	0.0356	0.0312	142	125	41.2-153			13.2	20
Chloroform	0.0250	0.0258	0.0228	103	91.2	73.2-125			12.5	20
Chloromethane	0.0250	0.0312	0.0274	125	109	55.8-134			13.1	20
1,2-Dibromoethane	0.0250	0.0270	0.0234	108	93.5	79.8-122			14.3	20
1,1-Dichloroethane	0.0250	0.0272	0.0240	109	95.9	71.7-127			12.5	20

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

QUALITY CONTROL SUMMARY

L832422-02,04,08,09,11,18

ONE LAB. NATIONWIDE.



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

(LCS) R3134382-1 05/05/16 16:55 • (LCSD) R3134382-2 05/05/16 17:12

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	0.0255	0.0226	102	90.4	65.3-126			12.2	20
1,1-Dichloroethene	0.0250	0.0304	0.0259	121	103	59.9-137			16.0	20
cis-1,2-Dichloroethene	0.0250	0.0254	0.0224	101	89.6	77.3-122			12.3	20
trans-1,2-Dichloroethene	0.0250	0.0258	0.0226	103	90.5	72.6-125			12.9	20
1,2-Dichloropropane	0.0250	0.0287	0.0257	115	103	77.4-125			11.2	20
cis-1,3-Dichloropropene	0.0250	0.0283	0.0248	113	99.1	77.7-124			13.4	20
trans-1,3-Dichloropropene	0.0250	0.0281	0.0244	113	97.6	73.5-127			14.2	20
Ethylbenzene	0.0250	0.0265	0.0235	106	93.9	80.9-121			11.9	20
2-Hexanone	0.125	0.150	0.124	120	99.3	59.4-151			18.9	20
Isopropylbenzene	0.0250	0.0259	0.0229	104	91.8	81.6-124			12.2	20
p-Isopropyltoluene	0.0250	0.0257	0.0230	103	92.1	77.6-129			10.8	20
2-Butanone (MEK)	0.125	0.150	0.131	120	104	46.4-155			14.0	20
Methylene Chloride	0.0250	0.0241	0.0220	96.5	88.2	69.5-120			8.94	20
4-Methyl-2-pentanone (MIBK)	0.125	0.172	0.142	138	114	63.3-138			19.1	20
Methyl tert-butyl ether	0.0250	0.0240	0.0222	96.0	88.8	70.1-125			7.79	20
Naphthalene	0.0250	0.0246	0.0222	98.4	88.7	69.7-134			10.4	20
n-Propylbenzene	0.0250	0.0260	0.0230	104	92.2	81.9-122			12.2	20
Styrene	0.0250	0.0253	0.0231	101	92.2	79.9-124			9.40	20
1,1,1,2-Tetrachloroethane	0.0250	0.0264	0.0242	106	97.0	78.5-125			8.66	20
1,1,2,2-Tetrachloroethane	0.0250	0.0243	0.0212	97.3	85.0	79.3-123			13.5	20
Tetrachloroethene	0.0250	0.0283	0.0245	113	97.9	73.5-130			14.4	20
Toluene	0.0250	0.0265	0.0229	106	91.5	77.9-116			14.6	20
1,1,1-Trichloroethane	0.0250	0.0262	0.0226	105	90.6	71.1-129			14.5	20
1,1,2-Trichloroethane	0.0250	0.0257	0.0227	103	90.7	81.6-120			12.4	20
Trichloroethene	0.0250	0.0276	0.0239	111	95.4	79.5-121			14.7	20
1,2,4-Trimethylbenzene	0.0250	0.0241	0.0219	96.6	87.5	79.0-122			9.91	20
1,3,5-Trimethylbenzene	0.0250	0.0247	0.0222	98.9	88.9	81.0-123			10.7	20
Vinyl chloride	0.0250	0.0312	0.0268	125	107	61.5-134			15.0	20
Xylenes, Total	0.0750	0.0780	0.0696	104	92.8	79.2-122			11.4	20
o-Xylene	0.0250	0.0257	0.0233	103	93.3	79.1-123			9.59	20
m&p-Xylenes	0.0500	0.0523	0.0463	105	92.5	78.5-122			12.3	20
(S) Toluene-d8				98.4	98.6	90.0-115				
(S) Dibromofluoromethane				98.0	98.8	79.0-121				
(S) 4-Bromofluorobenzene				87.1	88.4	80.1-120				

1Cp

2Tc

3Ss

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

QUALITY CONTROL SUMMARY

L832422-02,04,08,09,11,18

ONE LAB. NATIONWIDE.



L832422-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832422-02 05/05/16 19:30 • (MS) R3134382-4 05/05/16 18:38 • (MSD) R3134382-5 05/05/16 18:56

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	%	%		%			%	%
Acetone	0.125	U	0.0622	0.0489	49.7	39.1	1	25.0-156		J3	23.9	21.5
Benzene	0.0250	0.0707	0.0858	0.0897	60.4	75.9	1	58.6-133			4.44	20
Bromodichloromethane	0.0250	U	0.0231	0.0226	92.3	90.6	1	69.2-127			1.93	20
Bromoform	0.0250	U	0.0254	0.0250	101	100	1	66.3-140			1.35	20
Bromomethane	0.0250	U	0.0181	0.0204	72.5	81.6	1	16.6-183			11.8	20.5
n-Butylbenzene	0.0250	0.000558	0.0212	0.0210	82.7	81.9	1	64.8-145			0.960	20
sec-Butylbenzene	0.0250	0.0344	0.0511	0.0550	66.9	82.7	1	66.8-139			7.42	20
Carbon disulfide	0.0250	0.00110	0.0160	0.0180	59.7	67.8	1	34.9-138			11.8	20
Carbon tetrachloride	0.0250	U	0.0199	0.0212	79.5	85.0	1	60.6-139			6.62	20
Chlorobenzene	0.0250	U	0.0214	0.0211	85.5	84.5	1	70.1-130			1.23	20
Chlorodibromomethane	0.0250	U	0.0234	0.0227	93.4	90.7	1	71.6-132			2.91	20
Chloroethane	0.0250	U	0.0246	0.0268	98.4	107	1	33.3-155			8.48	20
Chloroform	0.0250	U	0.0215	0.0222	85.9	88.7	1	66.1-133			3.13	20
Chloromethane	0.0250	U	0.0175	0.0194	70.1	77.5	1	40.7-139			9.98	20
1,2-Dibromoethane	0.0250	U	0.0227	0.0216	90.8	86.5	1	73.8-131			4.76	20
1,1-Dichloroethane	0.0250	U	0.0217	0.0221	86.6	88.6	1	64.0-134			2.22	20
1,2-Dichloroethane	0.0250	U	0.0215	0.0210	85.9	84.1	1	60.7-132			2.07	20
1,1-Dichloroethene	0.0250	U	0.0214	0.0232	85.6	92.7	1	48.8-144			7.95	20
cis-1,2-Dichloroethene	0.0250	U	0.0200	0.0214	80.1	85.5	1	60.6-136			6.58	20
trans-1,2-Dichloroethene	0.0250	U	0.0183	0.0200	73.1	79.9	1	61.0-132			8.85	20
1,2-Dichloropropane	0.0250	U	0.0238	0.0242	95.2	96.7	1	69.7-130			1.54	20
cis-1,3-Dichloropropene	0.0250	U	0.0232	0.0221	92.9	88.5	1	71.1-129			4.86	20
trans-1,3-Dichloropropene	0.0250	U	0.0236	0.0222	94.5	88.8	1	66.3-136			6.27	20
Ethylbenzene	0.0250	0.00108	0.0222	0.0223	84.4	84.9	1	62.7-136			0.570	20
2-Hexanone	0.125	U	0.109	0.0984	87.5	78.7	1	59.4-154			10.5	20.1
Isopropylbenzene	0.0250	0.0535	0.0700	0.0740	65.6	81.7	1	67.4-136	J6		5.59	20
p-Isopropyltoluene	0.0250	U	0.0213	0.0222	85.2	88.6	1	62.8-143			3.94	20
2-Butanone (MEK)	0.125	U	0.135	0.121	108	96.6	1	45.0-156			11.5	20.8
Methylene Chloride	0.0250	U	0.0194	0.0207	77.4	82.8	1	61.5-125			6.74	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.157	0.156	126	125	1	60.7-150			0.490	20
Methyl tert-butyl ether	0.0250	0.00130	0.0229	0.0232	86.5	87.8	1	61.4-136			1.35	20
Naphthalene	0.0250	U	0.0228	0.0211	91.1	84.2	1	61.8-143			7.84	20
n-Propylbenzene	0.0250	0.00447	0.0253	0.0261	83.5	86.4	1	63.2-139			2.78	20
Styrene	0.0250	U	0.0213	0.0213	85.4	85.2	1	68.2-133			0.270	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0235	0.0236	94.0	94.5	1	70.5-132			0.490	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0235	0.0233	94.1	93.4	1	64.9-145			0.780	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832422

DATE/TIME:  
05/17/16 20:14

PAGE:  
92 of 99

WG870074

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

QUALITY CONTROL SUMMARY

L832422-02,04,08,09,11,18

ONE LAB. NATIONWIDE.



L832422-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832422-02 05/05/16 19:30 • (MS) R3134382-4 05/05/16 18:38 • (MSD) R3134382-5 05/05/16 18:56												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0209	0.0202	83.7	80.6	1	57.4-141			3.81	20
Toluene	0.0250	U	0.0210	0.0214	84.1	85.7	1	67.8-124			1.81	20
1,1,1-Trichloroethane	0.0250	U	0.0207	0.0221	82.8	88.4	1	58.7-134			6.54	20
1,1,2-Trichloroethane	0.0250	U	0.0302	0.0297	121	119	1	74.1-130			1.53	20
Trichloroethene	0.0250	U	0.0206	0.0205	82.3	82.1	1	48.9-148			0.270	20
1,2,4-Trimethylbenzene	0.0250	U	0.0206	0.0211	82.5	84.6	1	60.5-137			2.53	20
1,3,5-Trimethylbenzene	0.0250	U	0.0204	0.0210	81.8	84.0	1	67.9-134			2.69	20
Vinyl chloride	0.0250	U	0.0198	0.0220	79.1	88.0	1	44.3-143			10.7	20
Xylenes, Total	0.0750	U	0.0638	0.0637	85.0	84.9	1	65.6-133			0.0800	20
o-Xylene	0.0250	U	0.0214	0.0217	85.5	86.7	1	67.1-133			1.32	20
m&p-Xylenes	0.0500	U	0.0424	0.0420	84.7	84.1	1	64.1-133			0.790	20
(S) Toluene-d8					103	106		90.0-115				
(S) Dibromofluoromethane					101	103		79.0-121				
(S) 4-Bromofluorobenzene					89.7	92.1		80.1-120				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

WG869249

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832422-01,02,03,04,05,06,07,08,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133524-1 05/03/16 11:29				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	102			50.0-150

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

(LCS) R3133524-2 05/03/16 11:46 • (LCSD) R3133524-3 05/03/16 12:02									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD
Analyte	mg/l	mg/l	mg/l	%	%	%			RPD Limits
TPH (GC/FID) High Fraction	1.50	1.89	1.61	126	107	50.0-150			15.8 20
(S) o-Terphenyl				103	106	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 Sample Detection Limit.
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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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


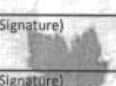
A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



<b>Company Name/Address:</b> <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		<b>Billing Information:</b> <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		<b>Analysis / Container / Preservative</b> DRO - 40ml Amb-HCl-BT GRO - 40ml Amb-HCl V8260 - 40ml Amb-HCl Tot/Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500ml HDPE-HNO3 Cyanide (CN) - 250ml HDPE Amb-NaOH Cations-Total Ca, K, Na - 500ml HDPE-HNO3 Anions- Chloride, Fluoride, Sulfate- 125ml HDPE-NoPres Nitrate/Nitrite (NO2NO3) - 250ml HDPE-H2SO4 TDS - 250ml HDPE-NoPres Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V										<b>Chain of Custody</b> Page <u>1</u> of <u>3</u>  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# <u>L832422</u> <b>D003</b> Acctnum: TRCATX Template: T111397 Prelogin: P549625 TSR: <b>Chris McCord</b> Cooler: Shipped Via: Rem./Contaminant Sample # (lab only)					
<b>Report to:</b> jspeer@trcsolutions.com		<b>Email To:</b> jspeer@trcsolutions.com		<b>Project Description:</b> <u>REST Spring 2016 - Team HCTH</u> <b>City/State Collected:</b> <u>Artesia, NM</u> <b>Lab Project #</b> TRCATX-REST SPRING <b>P.O. #</b> <b>Date Results Needed</b> Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes No. of Cntrs															
<b>Phone:</b> 512-684-3170 <b>Fax:</b>		<b>Client Project #</b>		<b>Site/Facility ID #</b> <u>REST - Navajo- Artesia</u> <b>Rush? (Lab MUST Be Notified)</b> <input type="checkbox"/> Same Day ..... 200% <input type="checkbox"/> Next Day ..... 100% <input type="checkbox"/> Two Day ..... 50% <input type="checkbox"/> Three Day ..... 25% <b>Immediately</b> Packed on ice <u>N</u> <u>Y</u> <input checked="" type="checkbox"/>															
<b>Collected by (print):</b> <u>Sweet Ude + HMI Team</u> <b>Collected by (signature):</b> <u>Sweet Ude</u>		<b>Sample ID</b> MW-103 MW-104 EB-REST-02 DUP-REST-02 MW-126B KWB-1A KWB-6 KWB-10R RW-#18A Trip Blank-REST-02		<b>Comp (Grab)</b> GW		<b>Matrix *</b> GW		<b>Depth</b> 4/28/16 945 12 4/28/16 1050 12 4/28/16 1105 12 4/28/16 900 12 4/28/16 1020 12 4/28/16 1220 11 4/28/16 925 10 4/28/16 1125 10 4/28/16 1315 7 4/28/16 — 1		<b>Date</b> 4/28/16		<b>Time</b> 945 12 1050 12 1105 12 900 12 1020 12 1220 11 925 10 1125 10 1315 7 — 1		<b>No. of Cntrs</b> 12 12 12 12 12 11 10 10 7 1		pH _____ Temp _____ Flow _____ Other _____		<b>Hold #</b> Condition: (lab use only) COC Seal Intact: <u>Y</u> <u>N</u> <u>NA</u> pH Checked: <u>12.712</u> NCF:	
<b>Relinquished by: (Signature)</b> <u>Sweet Ude</u>		<b>Date:</b> 4/28/16		<b>Time:</b> 1415		<b>Received by: (Signature)</b> 		<b>Samples returned via:</b> <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>		<b>Temp:</b> 3.1 °C <b>Bottles Received:</b> 227		<b>Date:</b> 4/29/16 <b>Time:</b> 900		<b>Condition:</b> (lab use only) COC Seal Intact: <u>Y</u> <u>N</u> <u>NA</u> pH Checked: <u>12.712</u> NCF:					

67449490429, 636101842998, 2987  
 67449490429, 636101842998, 2987

Company Name/Address: <b>TRC Solutions - Austin, TX</b>  505 E. Huntland Dr, Ste 250 Austin, TX 78752				Billing Information: <b>Accounts Payable</b> <b>21 Griffin Road North</b> <b>Windsor, CT 06095</b>				Analysis / Container / Preservative											
Report to: jspeer@trcsolutions.com				Email To: jspeer@trcsolutions.com															
Project Description: <b>REST Spring 2016 - Team H CJH</b>				City/State Collected: <b>Artesia, NM</b>															
Phone: 512-684-3170 Fax:				Client Project # Lab Project # <b>TRCATX-REST SPRING</b>															
Collected by (print): <i>Scott Ude + HMI Team</i>				Site/Facility ID # <b>REST - Navajo- Artesia</b>															
Collected by (signature): <i>Scott Ude</i>				Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day ..... 200% <input type="checkbox"/> Next Day ..... 100% <input type="checkbox"/> Two Day ..... 50% <input type="checkbox"/> Three Day ..... 25%				Date Results Needed  Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes				No. of Cntrs							
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>																			
Sample ID	Comp.	Grab?	Matrix *	Depth	Date	Time		DRO - 40mlAmb-HCl-BT	GRO - 40mlAmb-HCl	V8260 - 40mlAmb-HCl	Tot./Diss. As,Ba,Cr,Fe,Pb,Mn,Se - 500mlHDPE-HNO3	Cyanide (CN) - 250mlHDPEAmb-NaOH	Cations-Total Ca, K, Na - 500mlHDPE-HNO3	Anions- Chloride, Fluoride, Sulfate - 125mlHDPE-NoPres	Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	Tot/Diss. As,Ba,Cd,Co,Cr,Fe,Hg,Mn,Ni,Pb,Se,U,V		
MW-40			GW		4/28/16	1230	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-98					4/28/16	1140	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-93					4/28/16	825	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-23					4/28/16	915	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-138					4/28/16	1005	13	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-137					4/28/16	1100	13	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-42					4/28/16	1205	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-41					4/28/16	1110	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-106					4/28/16	915	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MW-101					4/28/16	825	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			

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

Remarks: **Log all metals by 6020. Dissolved metals are field filtered.**

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Condition: (lab use only)
<i>Scott Ude</i>	4/28/16	1415	[Signature]	Temp: °C Bottles Received: 3.1 227	Jw7 (initials)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date: Time: 4/29/16 900	COC Seal Intact: Y ___ N ___ NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	pH Checked: NCF:	L2, 712

Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		Billing Information: <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		Chain of Custody	
Report to: jspeer@trcsolutions.com		Email To: jspeer@trcsolutions.com		Page 3 of 3	
Project Description: <b>REST Spring 2016 - Team G CTH</b>		City/State Collected: <b>Artesia, NM</b>		Escalation	
Phone: 512-684-3170 Fax:		Client Project #		L# <b>L832422</b>	
Collected by (print): <b>Scott Ude + HMI Team</b>		Site/Facility ID # <b>REST - Navajo- Artesia</b>		Table #	
Collected by (signature): <b>Scott Ude</b>		Rush? (Lab MUST Be Notified)		Acctnum: TRCATX	
Immediately Packed on Ice <b>N</b> <b>Y</b> <input checked="" type="checkbox"/>		Date Results Needed		Template: <b>T111394</b>	
Sample ID		Comp/Grab		Prelimin: P549622	
Matrix *		Depth		TSR: <b>Chris McCord</b>	
Date		Time		Cooler:	
No. of Cntrs				Shipped Via:	
DRO - 40mlAmb-HCl-BT		GRO - 40mlAmb-HCl		Item/Contaminant	
V8260 - 40mlAmb-HCl				Sample # (lab only)	
Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500mlHDPE-HNO3				21	
Cyanide (CN) - 250mlHDPEAmb-NaOH					
Cations-Total Ca, K, Na - 500mlHDPE-HNO3					
Anions- Chloride, Fluoride, Sulfate- 125mlHDPE-NoPres					
Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4					
TDS - 250mlHDPE-NoPres					
Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V					
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other		pH		Temp	
Remarks: <b>Log all metals by 6020. Dissolved metals are field filtered.</b>		Flow		Other	
Relinquished by: (Signature) <b>Scott Ude</b>		Date: <b>4/28/16</b>		Time: <b>1415</b>	
Relinquished by: (Signature)		Date:		Time:	
Relinquished by: (Signature)		Date:		Time:	
Received by: (Signature)		Received by: (Signature)		Received by: (Signature)	
Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Temp: <b>3.1</b> °C		Bottles Received: <b>227</b>	
Condition: (lab use only)		Date: <b>4/29/16</b>		Time: <b>9:00</b>	
COC Seal Intact: <b>Y</b> <b>N</b> <b>NA</b>		pH Checked:		NCF:	



## TRC Solutions - Austin, TX

Sample Delivery Group: L832435  
Samples Received: 04/29/2016  
Project Number: 249545.0000.0000 000  
Description: REST Spring 2016  
Site: REST - NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

Entire Report Reviewed By:



Mark W. Beasley  
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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<b><sup>4</sup>Cn: Case Narrative</b>	<b>8</b>
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MW-129   L832435-09	26
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Metals (ICPMS) by Method 6020	60
Volatile Organic Compounds (GC) by Method 8015D/GRO	67
Volatile Organic Compounds (GC/MS) by Method 8260B	69
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	81
<b><sup>7</sup>Gl: Glossary of Terms</b>	<b>82</b>
<b><sup>8</sup>Al: Accreditations &amp; Locations</b>	<b>83</b>
<b><sup>9</sup>Sc: Chain of Custody</b>	<b>84</b>



# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-48 L832435-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 15:25

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869085	1	05/03/16 05:16	05/03/16 06:19	JM
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:30	JDG
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 10:44	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	5	05/02/16 16:48	05/06/16 05:02	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	25	05/02/16 18:59	05/02/16 18:59	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868979	20	05/03/16 17:13	05/03/16 17:13	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG869976	50	05/04/16 22:10	05/04/16 22:10	LRL
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:35	05/06/16 05:35	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 17:13	05/09/16 17:13	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 17:29	05/09/16 17:29	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-130 L832435-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 17:30

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869085	1	05/03/16 05:16	05/03/16 06:19	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:10	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:33	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/04/16 20:30	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/02/16 19:24	05/02/16 19:24	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868979	1	05/03/16 17:31	05/03/16 17:31	DAH
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:36	05/06/16 05:36	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 15:22	05/09/16 15:22	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 15:54	05/09/16 15:54	CM

MW-67 L832435-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 15:30

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869085	1	05/03/16 05:16	05/03/16 06:19	JM
Mercury by Method 7470A	WG868781	1	04/30/16 11:12	05/02/16 10:31	NJB
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:23	NJB
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:13	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:35	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 09:04	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 11:19	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	5	05/02/16 16:48	05/06/16 05:20	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	5	05/02/16 19:49	05/02/16 19:49	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	10	05/04/16 05:27	05/04/16 05:27	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:43	05/06/16 05:43	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 16:26	05/09/16 16:26	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 16:57	05/09/16 16:57	CM
Wet Chemistry by Method 9056A	WG871228	10	05/10/16 21:49	05/10/16 21:49	SAM
Wet Chemistry by Method D 7511-09e2	WG871518	10	05/10/16 21:51	05/10/16 21:51	NJM

MW-94 L832435-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 14:40

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869085	1	05/03/16 05:16	05/03/16 06:19	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:15	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:42	JDG

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SDG:

L832435

DATE/TIME:

05/18/16 14:35

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-94 L832435-04 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 14:40	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/04/16 22:20	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	50	05/02/16 20:14	05/02/16 20:14	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	50	05/04/16 05:50	05/04/16 05:50	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:44	05/06/16 05:44	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 18:17	05/09/16 18:17	CM
Wet Chemistry by Method 9056A	WG869673	100	05/09/16 18:33	05/09/16 18:33	CM
Wet Chemistry by Method 9056A	WG871228	10	05/10/16 22:04	05/10/16 22:04	SAM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## MW-95 L832435-05 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 16:25	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869085	1	05/03/16 05:16	05/03/16 06:19	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:18	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:45	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/04/16 22:39	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/02/16 20:38	05/02/16 20:38	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 06:13	05/04/16 06:13	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:45	05/06/16 05:45	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 18:49	05/09/16 18:49	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 19:05	05/09/16 19:05	CM

## RW-7R L832435-06 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 17:15	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869085	1	05/03/16 05:16	05/03/16 06:19	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:21	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:47	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/04/16 22:57	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/02/16 23:05	05/02/16 23:05	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 06:35	05/04/16 06:35	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:46	05/06/16 05:46	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 19:21	05/09/16 19:21	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 19:36	05/09/16 19:36	CM

## MW-126A L832435-07 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 18:15	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869085	1	05/03/16 05:16	05/03/16 06:19	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:23	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:49	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/04/16 23:16	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/02/16 23:30	05/02/16 23:30	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 06:58	05/04/16 06:58	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:48	05/06/16 05:48	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 19:52	05/09/16 19:52	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 20:08	05/09/16 20:08	CM

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-127 L832435-08 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 17:20

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869085	1	05/03/16 05:16	05/03/16 06:19	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:26	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:51	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/04/16 23:34	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/02/16 23:54	05/02/16 23:54	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 07:21	05/04/16 07:21	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870327	50	05/06/16 01:11	05/06/16 01:11	LRL
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:47	05/06/16 05:47	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 21:12	05/09/16 21:12	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 20:24	05/09/16 20:24	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-129 L832435-09 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 16:25

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:29	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:54	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/04/16 23:52	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/03/16 00:19	05/03/16 00:19	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 07:44	05/04/16 07:44	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870327	50	05/06/16 01:32	05/06/16 01:32	LRL
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:54	05/06/16 05:54	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 21:28	05/09/16 21:28	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 21:44	05/09/16 21:44	CM

MW-131 L832435-10 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 15:35

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:32	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:56	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 00:11	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/03/16 00:44	05/03/16 00:44	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 08:06	05/04/16 08:06	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870327	100	05/06/16 01:53	05/06/16 01:53	LRL
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:55	05/06/16 05:55	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 22:00	05/09/16 22:00	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 22:16	05/09/16 22:16	CM

MW-134 L832435-11 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 18:20

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:34	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 16:21	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 00:29	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/03/16 01:09	05/03/16 01:09	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 08:29	05/04/16 08:29	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870327	1	05/06/16 00:09	05/06/16 00:09	LRL

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-134 L832435-11 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 18:20

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:56	05/06/16 05:56	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 22:32	05/09/16 22:32	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 22:48	05/09/16 22:48	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

EB-REST-03 L832435-12 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 18:45

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869123	1	05/05/16 13:16	05/07/16 03:42	JDG
Metals (ICPMS) by Method 6020	WG869293	1	05/04/16 22:27	05/09/16 10:06	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 00:47	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/03/16 01:34	05/03/16 01:34	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 08:52	05/04/16 08:52	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 05:57	05/06/16 05:57	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/10/16 03:02	05/10/16 03:02	CM

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

DUP-REST-03 L832435-13 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 15:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:45	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 17:01	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 01:06	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869043	1	05/03/16 01:59	05/03/16 01:59	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 09:15	05/04/16 09:15	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 06:01	05/06/16 06:01	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/09/16 23:04	05/09/16 23:04	CM
Wet Chemistry by Method 9056A	WG869673	50	05/09/16 23:19	05/09/16 23:19	CM

KWB-7 L832435-14 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 14:50

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Mercury by Method 7470A	WG868781	1	04/30/16 11:12	05/02/16 10:34	NJB
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:25	NJB
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:48	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 17:03	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 09:09	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 11:24	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 01:24	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 09:37	05/04/16 09:37	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 06:02	05/06/16 06:02	ASK
Wet Chemistry by Method 9056A	WG869673	1	05/10/16 00:07	05/10/16 00:07	CM
Wet Chemistry by Method 9056A	WG869673	50	05/10/16 00:23	05/10/16 00:23	CM
Wet Chemistry by Method D 7511-09e2	WG871518	1	05/10/16 21:54	05/10/16 21:54	NJM

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



RA-313 L832435-15 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 14:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 17:10	JDG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 10:00	05/04/16 10:00	BMB
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 06:07	05/06/16 06:07	ASK
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 11:53	05/10/16 11:53	CM
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 09:09	05/16/16 09:09	CM
Wet Chemistry by Method 9056A	WG871015	10	05/16/16 19:37	05/16/16 19:37	CSU

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

MW-64 L832435-16 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 12:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869816	1	05/04/16 17:40	05/04/16 18:17	MMF
Metals (ICPMS) by Method 6020	WG869123	5	05/05/16 13:16	05/07/16 03:50	JDG
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 17:13	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	5	05/02/16 16:48	05/06/16 05:39	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870480	50	05/06/16 16:48	05/06/16 16:48	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	50	05/04/16 10:23	05/04/16 10:23	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870327	1000	05/06/16 02:13	05/06/16 02:13	LRL
Wet Chemistry by Method 353.2	WG870054	10	05/06/16 06:08	05/06/16 06:08	ASK
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 19:51	05/16/16 19:51	CSU
Wet Chemistry by Method 9056A	WG871015	25	05/16/16 09:36	05/16/16 09:36	CM
Wet Chemistry by Method 9056A	WG871783	1	05/15/16 15:39	05/15/16 15:39	CM



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.

Mark W. Beasley  
Technical Service Representative

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





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2950		2.82	10.0	10.0	1	05/03/2016 06:19	WG869085

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:35	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	1110		2.60	1.00	50.0	50	05/09/2016 17:29	WG869673
Fluoride	1.45		0.00990	0.100	0.100	1	05/09/2016 17:13	WG869673
Sulfate	20.5		0.0774	5.00	5.00	1	05/09/2016 17:13	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0125		0.00125	0.00200	0.0100	5	05/07/2016 16:30	WG869293
Arsenic,Dissolved	0.00857	J	0.00125	0.00200	0.0100	5	05/09/2016 10:44	WG870075
Barium	2.77		0.00180	0.00500	0.0250	5	05/07/2016 16:30	WG869293
Barium,Dissolved	2.64		0.00180	0.00500	0.0250	5	05/09/2016 10:44	WG870075
Calcium	234		0.230	1.00	5.00	5	05/07/2016 16:30	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:30	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 10:44	WG870075
Iron	0.177	J	0.0750	0.100	0.500	5	05/07/2016 16:30	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 10:44	WG870075
Lead	0.00371	J	0.00120	0.00200	0.0100	5	05/07/2016 16:30	WG869293
Lead,Dissolved	0.00134	J	0.00120	0.00200	0.0100	5	05/09/2016 10:44	WG870075
Manganese	0.390		0.00125	0.00500	0.0250	5	05/07/2016 16:30	WG869293
Manganese,Dissolved	0.402		0.00125	0.00500	0.0250	5	05/09/2016 10:44	WG870075
Potassium	1.80	J	0.185	1.00	5.00	5	05/07/2016 16:30	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:30	WG869293
Selenium,Dissolved	0.00321	J	0.00190	0.00200	0.0100	5	05/09/2016 10:44	WG870075
Sodium	314		0.550	1.00	5.00	5	05/07/2016 16:30	WG869293

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	23.3		0.785	0.100	2.50	25	05/02/2016 18:59	WG869043
(S) a,a,q-Trifluorotoluene(FID)	94.1				62.0-128		05/02/2016 18:59	WG869043

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.200	0.0500	1.00	20	05/03/2016 17:13	WG868979
Benzene	7.17		0.0166	0.00100	0.0500	50	05/04/2016 22:10	WG869976
Bromodichloromethane	U		0.00760	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Bromoform	U		0.00938	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Bromomethane	U		0.0173	0.00500	0.100	20	05/03/2016 17:13	WG868979
n-Butylbenzene	U		0.00722	0.00100	0.0200	20	05/03/2016 17:13	WG868979
sec-Butylbenzene	0.00987	J	0.00730	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Carbon disulfide	U		0.00550	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Carbon tetrachloride	U		0.00758	0.00100	0.0200	20	05/03/2016 17:13	WG868979



Collected date/time: 04/27/16 15:25

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00696	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Chlorodibromomethane	U		0.00654	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Chloroethane	U		0.00906	0.00500	0.100	20	05/03/2016 17:13	WG868979
Chloroform	U		0.00648	0.00500	0.100	20	05/03/2016 17:13	WG868979
Chloromethane	U		0.00552	0.00250	0.0500	20	05/03/2016 17:13	WG868979
1,2-Dibromoethane	U		0.00762	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,1-Dichloroethane	U		0.00518	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,2-Dichloroethane	U		0.00722	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,1-Dichloroethene	U		0.00796	0.00100	0.0200	20	05/03/2016 17:13	WG868979
cis-1,2-Dichloroethene	U		0.00520	0.00100	0.0200	20	05/03/2016 17:13	WG868979
trans-1,2-Dichloroethene	U		0.00792	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,2-Dichloropropane	U		0.00612	0.00100	0.0200	20	05/03/2016 17:13	WG868979
cis-1,3-Dichloropropene	U		0.00836	0.00100	0.0200	20	05/03/2016 17:13	WG868979
trans-1,3-Dichloropropene	U		0.00838	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Ethylbenzene	0.790		0.00768	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Isopropylbenzene	0.0670		0.00652	0.00100	0.0200	20	05/03/2016 17:13	WG868979
p-Isopropyltoluene	U		0.00700	0.00100	0.0200	20	05/03/2016 17:13	WG868979
2-Butanone (MEK)	U		0.0786	0.0100	0.200	20	05/03/2016 17:13	WG868979
2-Hexanone	U		0.0764	0.0100	0.200	20	05/03/2016 17:13	WG868979
Methylene Chloride	U		0.0200	0.00500	0.100	20	05/03/2016 17:13	WG868979
4-Methyl-2-pentanone (MIBK)	U		0.0428	0.0100	0.200	20	05/03/2016 17:13	WG868979
Methyl tert-butyl ether	0.326		0.00734	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Naphthalene	0.101		0.0200	0.00500	0.100	20	05/03/2016 17:13	WG868979
n-Propylbenzene	0.0983		0.00698	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Styrene	U		0.00614	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,1,1,2-Tetrachloroethane	U		0.00770	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,1,2,2-Tetrachloroethane	U		0.00260	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Tetrachloroethene	U		0.00744	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Toluene	0.214		0.0156	0.00500	0.100	20	05/03/2016 17:13	WG868979
1,1,1-Trichloroethane	U		0.00638	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,1,2-Trichloroethane	U		0.00766	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Trichloroethene	U		0.00796	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,2,4-Trimethylbenzene	0.310		0.00746	0.00100	0.0200	20	05/03/2016 17:13	WG868979
1,3,5-Trimethylbenzene	0.0223		0.00774	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Vinyl chloride	U		0.00518	0.00100	0.0200	20	05/03/2016 17:13	WG868979
o-Xylene	0.0788		0.00682	0.00100	0.0200	20	05/03/2016 17:13	WG868979
m&p-Xylene	0.671		0.0144	0.00100	0.0200	20	05/03/2016 17:13	WG868979
Xylenes, Total	0.750		0.0212	0.00300	0.0600	20	05/03/2016 17:13	WG868979
(S) Toluene-d8	105				90.0-115		05/03/2016 17:13	WG868979
(S) Toluene-d8	106				90.0-115		05/04/2016 22:10	WG869976
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 22:10	WG869976
(S) Dibromofluoromethane	103				79.0-121		05/03/2016 17:13	WG868979
(S) 4-Bromofluorobenzene	106				80.1-120		05/03/2016 17:13	WG868979
(S) 4-Bromofluorobenzene	104				80.1-120		05/04/2016 22:10	WG869976

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	15.3		0.124	0.100	0.500	5	05/06/2016 05:02	WG869251
(S) o-Terphenyl	125				50.0-150		05/06/2016 05:02	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2570		2.82	10.0	10.0	1	05/03/2016 06:19	WG869085

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	3.82	J6	0.197	0.100	1.00	10	05/06/2016 05:36	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	293		2.60	1.00	50.0	50	05/09/2016 15:54	WG869673
Fluoride	0.907		0.00990	0.100	0.100	1	05/09/2016 15:22	WG869673
Sulfate	1030		3.87	5.00	250	50	05/09/2016 15:54	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00449	J	0.00125	0.00200	0.0100	5	05/07/2016 16:33	WG869293
Arsenic,Dissolved	0.00450	J	0.00125	0.00200	0.0100	5	05/07/2016 03:10	WG869123
Barium	0.0228	J	0.00180	0.00500	0.0250	5	05/07/2016 16:33	WG869293
Barium,Dissolved	0.0198	J	0.00180	0.00500	0.0250	5	05/07/2016 03:10	WG869123
Calcium	281		0.230	1.00	5.00	5	05/07/2016 16:33	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:33	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:10	WG869123
Iron	0.451	J	0.0750	0.100	0.500	5	05/07/2016 16:33	WG869293
Iron,Dissolved	0.116	J	0.0750	0.100	0.500	5	05/07/2016 03:10	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 16:33	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:10	WG869123
Manganese	0.105		0.00125	0.00500	0.0250	5	05/07/2016 16:33	WG869293
Manganese,Dissolved	0.103		0.00125	0.00500	0.0250	5	05/07/2016 03:10	WG869123
Potassium	0.870	J	0.185	1.00	5.00	5	05/07/2016 16:33	WG869293
Selenium	0.00575	J	0.00190	0.00200	0.0100	5	05/07/2016 16:33	WG869293
Selenium,Dissolved	0.0126		0.00190	0.00200	0.0100	5	05/07/2016 03:10	WG869123
Sodium	324		0.550	1.00	5.00	5	05/07/2016 16:33	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/02/2016 19:24	WG869043
(S) a,a,a-Trifluorotoluene(FID)	98.8				62.0-128		05/02/2016 19:24	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/03/2016 17:31	WG868979
Benzene	U		0.000331	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Bromoform	U		0.000469	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Bromomethane	U		0.000866	0.00500	0.00500	1	05/03/2016 17:31	WG868979
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/03/2016 17:31	WG868979
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/03/2016 17:31	WG868979



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Chloroethane	U		0.000453	0.00500	0.00500	1	05/03/2016 17:31	WG868979
Chloroform	U		0.000324	0.00500	0.00500	1	05/03/2016 17:31	WG868979
Chloromethane	U		0.000276	0.00250	0.00250	1	05/03/2016 17:31	WG868979
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 17:31	WG868979
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/03/2016 17:31	WG868979
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/03/2016 17:31	WG868979
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/03/2016 17:31	WG868979
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/03/2016 17:31	WG868979
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/03/2016 17:31	WG868979
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/03/2016 17:31	WG868979
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/03/2016 17:31	WG868979
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/03/2016 17:31	WG868979
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/03/2016 17:31	WG868979
Methyl tert-butyl ether	0.000538	U	0.000367	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Naphthalene	U		0.00100	0.00500	0.00500	1	05/03/2016 17:31	WG868979
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Styrene	U		0.000307	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Toluene	U		0.000780	0.00500	0.00500	1	05/03/2016 17:31	WG868979
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/03/2016 17:31	WG868979
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/03/2016 17:31	WG868979
o-Xylene	U		0.000341	0.00100	0.00100	1	05/03/2016 17:31	WG868979
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/03/2016 17:31	WG868979
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/03/2016 17:31	WG868979
(S) Toluene-d8	106				90.0-115		05/03/2016 17:31	WG868979
(S) Dibromofluoromethane	105				79.0-121		05/03/2016 17:31	WG868979
(S) 4-Bromofluorobenzene	109				80.1-120		05/03/2016 17:31	WG868979

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.08		0.0247	0.100	0.100	1	05/04/2016 20:30	WG869251
(S) o-Terphenyl	111				50.0-150		05/04/2016 20:30	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1790		2.82	10.0	10.0	1	05/03/2016 06:19	WG869085

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:43	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	312		2.60	1.00	50.0	50	05/09/2016 16:57	WG869673
Fluoride	0.548		0.00990	0.100	0.100	1	05/09/2016 16:26	WG869673
Sulfate	281		0.774	5.00	50.0	10	05/10/2016 21:49	WG871228

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	0.0440	J	0.0120	0.00500	0.0500	10	05/10/2016 21:51	WG871518

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/02/2016 10:31	WG868781
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:23	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0101		0.00125	0.00200	0.0100	5	05/07/2016 16:35	WG869293
Arsenic,Dissolved	0.0110		0.00125	0.00200	0.0100	5	05/07/2016 03:13	WG869123
Barium	0.229		0.00180	0.00500	0.0250	5	05/07/2016 16:35	WG869293
Barium,Dissolved	0.231		0.00180	0.00500	0.0250	5	05/07/2016 03:13	WG869123
Boron	0.471		0.0150	0.0200	0.200	10	05/07/2016 09:04	WG870589
Boron,Dissolved	0.458		0.0150	0.0200	0.200	10	05/09/2016 11:19	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/07/2016 16:35	WG869293
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/07/2016 03:13	WG869123
Calcium	202		0.230	1.00	5.00	5	05/07/2016 16:35	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:35	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:13	WG869123
Cobalt	U		0.00130	0.00200	0.0100	5	05/07/2016 16:35	WG869293
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/07/2016 03:13	WG869123
Iron	U		0.0750	0.100	0.500	5	05/07/2016 16:35	WG869293
Iron,Dissolved	0.156	J	0.0750	0.100	0.500	5	05/07/2016 03:13	WG869123
Lead	0.00135	J	0.00120	0.00200	0.0100	5	05/07/2016 16:35	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:13	WG869123
Manganese	0.117		0.00125	0.00500	0.0250	5	05/07/2016 16:35	WG869293
Manganese,Dissolved	0.133		0.00125	0.00500	0.0250	5	05/07/2016 03:13	WG869123
Nickel	U		0.00175	0.00200	0.0100	5	05/07/2016 16:35	WG869293
Nickel,Dissolved	0.00267	J	0.00175	0.00200	0.0100	5	05/07/2016 03:13	WG869123
Potassium	0.427	J	0.185	1.00	5.00	5	05/07/2016 16:35	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:35	WG869293
Selenium,Dissolved	0.00609	J	0.00190	0.00200	0.0100	5	05/07/2016 03:13	WG869123
Sodium	218		0.550	1.00	5.00	5	05/07/2016 16:35	WG869293



## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/07/2016 16:35	WG869293
Uranium,Dissolved	U		0.00165	0.0100	0.0500	5	05/07/2016 03:13	WG869123
Vanadium	0.00139	J	0.000900	0.00500	0.0250	5	05/07/2016 16:35	WG869293
Vanadium,Dissolved	0.00283	J	0.000900	0.00500	0.0250	5	05/07/2016 03:13	WG869123

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.29		0.157	0.100	0.500	5	05/02/2016 19:49	WG869043
(S) a,a,a-Trifluorotoluene(FID)	94.1				62.0-128		05/02/2016 19:49	WG869043

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.100	0.0500	0.500	10	05/04/2016 05:27	WG868983
Benzene	0.223		0.00331	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Bromoform	U		0.00469	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Bromomethane	U		0.00866	0.00500	0.0500	10	05/04/2016 05:27	WG868983
n-Butylbenzene	U		0.00361	0.00100	0.0100	10	05/04/2016 05:27	WG868983
sec-Butylbenzene	0.00769	J	0.00365	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Carbon disulfide	0.00300	J	0.00275	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Chloroethane	U		0.00453	0.00500	0.0500	10	05/04/2016 05:27	WG868983
Chloroform	U		0.00324	0.00500	0.0500	10	05/04/2016 05:27	WG868983
Chloromethane	U		0.00276	0.00250	0.0250	10	05/04/2016 05:27	WG868983
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/04/2016 05:27	WG868983
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/04/2016 05:27	WG868983
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/04/2016 05:27	WG868983
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/04/2016 05:27	WG868983
cis-1,2-Dichloroethene	0.00527	J	0.00260	0.00100	0.0100	10	05/04/2016 05:27	WG868983
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/04/2016 05:27	WG868983
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/04/2016 05:27	WG868983
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/04/2016 05:27	WG868983
trans-1,3-Dichloropropene	U	J4	0.00419	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Ethylbenzene	0.00869	J	0.00384	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Isopropylbenzene	0.0321		0.00326	0.00100	0.0100	10	05/04/2016 05:27	WG868983
p-Isopropyltoluene	U		0.00350	0.00100	0.0100	10	05/04/2016 05:27	WG868983
2-Butanone (MEK)	U	J4	0.0393	0.0100	0.100	10	05/04/2016 05:27	WG868983
2-Hexanone	U		0.0382	0.0100	0.100	10	05/04/2016 05:27	WG868983
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/04/2016 05:27	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/04/2016 05:27	WG868983
Methyl tert-butyl ether	0.359		0.00367	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Naphthalene	U		0.0100	0.00500	0.0500	10	05/04/2016 05:27	WG868983
n-Propylbenzene	0.0120		0.00349	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Styrene	U		0.00307	0.00100	0.0100	10	05/04/2016 05:27	WG868983
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/04/2016 05:27	WG868983
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Toluene	U		0.00780	0.00500	0.0500	10	05/04/2016 05:27	WG868983
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/04/2016 05:27	WG868983
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/04/2016 05:27	WG868983

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/27/16 15:30

L832435

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

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
1,2,4-Trimethylbenzene	U		0.00373	0.00100	0.0100	10	05/04/2016 05:27	WG868983
1,3,5-Trimethylbenzene	U		0.00387	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/04/2016 05:27	WG868983
o-Xylene	U		0.00341	0.00100	0.0100	10	05/04/2016 05:27	WG868983
m&p-Xylene	U		0.00719	0.00100	0.0100	10	05/04/2016 05:27	WG868983
Xylenes, Total	U		0.0106	0.00300	0.0300	10	05/04/2016 05:27	WG868983
(S) Toluene-d8	106				90.0-115		05/04/2016 05:27	WG868983
(S) Dibromofluoromethane	107				79.0-121		05/04/2016 05:27	WG868983
(S) 4-Bromofluorobenzene	99.9				80.1-120		05/04/2016 05:27	WG868983

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	11.1		0.124	0.100	0.500	5	05/06/2016 05:20	WG869251
(S) o-Terphenyl	117				50.0-150		05/06/2016 05:20	WG869251

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2980		2.82	10.0	10.0	1	05/03/2016 06:19	WG869085

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:44	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	217		5.19	1.00	100	100	05/09/2016 18:33	WG869673
Fluoride	1.02		0.00990	0.100	0.100	1	05/09/2016 18:17	WG869673
Sulfate	199		0.774	5.00	50.0	10	05/10/2016 22:04	WG871228

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0286		0.00125	0.00200	0.0100	5	05/07/2016 16:42	WG869293
Arsenic,Dissolved	0.0163		0.00125	0.00200	0.0100	5	05/07/2016 03:15	WG869123
Barium	0.353		0.00180	0.00500	0.0250	5	05/07/2016 16:42	WG869293
Barium,Dissolved	0.356		0.00180	0.00500	0.0250	5	05/07/2016 03:15	WG869123
Calcium	124		0.230	1.00	5.00	5	05/07/2016 16:42	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:42	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:15	WG869123
Iron	U		0.0750	0.100	0.500	5	05/07/2016 16:42	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 03:15	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 16:42	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:15	WG869123
Manganese	0.00666	J	0.00125	0.00500	0.0250	5	05/07/2016 16:42	WG869293
Manganese,Dissolved	0.00601	J	0.00125	0.00500	0.0250	5	05/07/2016 03:15	WG869123
Potassium	0.189	J	0.185	1.00	5.00	5	05/07/2016 16:42	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:42	WG869293
Selenium,Dissolved	0.0334		0.00190	0.00200	0.0100	5	05/07/2016 03:15	WG869123
Sodium	532		0.550	1.00	5.00	5	05/07/2016 16:42	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	7.91		1.57	0.100	5.00	50	05/02/2016 20:14	WG869043
(S) a,a,a-Trifluorotoluene(FID)	96.1				62.0-128		05/02/2016 20:14	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.500	0.0500	2.50	50	05/04/2016 05:50	WG868983
Benzene	0.417		0.0166	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Bromodichloromethane	U		0.0190	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Bromoform	U		0.0234	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Bromomethane	U		0.0433	0.00500	0.250	50	05/04/2016 05:50	WG868983
n-Butylbenzene	0.0379	J	0.0180	0.00100	0.0500	50	05/04/2016 05:50	WG868983
sec-Butylbenzene	0.0403	J	0.0182	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Carbon disulfide	0.0155	J	0.0138	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Carbon tetrachloride	U		0.0190	0.00100	0.0500	50	05/04/2016 05:50	WG868983





Collected date/time: 04/27/16 14:40

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.0174	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Chlorodibromomethane	U		0.0164	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Chloroethane	U		0.0226	0.00500	0.250	50	05/04/2016 05:50	WG868983
Chloroform	U		0.0162	0.00500	0.250	50	05/04/2016 05:50	WG868983
Chloromethane	U		0.0138	0.00250	0.125	50	05/04/2016 05:50	WG868983
1,2-Dibromoethane	U		0.0190	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,1-Dichloroethane	U		0.0130	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,2-Dichloroethane	U		0.0180	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,1-Dichloroethene	U		0.0199	0.00100	0.0500	50	05/04/2016 05:50	WG868983
cis-1,2-Dichloroethene	0.0149	J	0.0130	0.00100	0.0500	50	05/04/2016 05:50	WG868983
trans-1,2-Dichloroethene	U		0.0198	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,2-Dichloropropane	U		0.0153	0.00100	0.0500	50	05/04/2016 05:50	WG868983
cis-1,3-Dichloropropene	U		0.0209	0.00100	0.0500	50	05/04/2016 05:50	WG868983
trans-1,3-Dichloropropene	U	J4	0.0210	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Ethylbenzene	0.553		0.0192	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Isopropylbenzene	0.0776		0.0163	0.00100	0.0500	50	05/04/2016 05:50	WG868983
p-Isopropyltoluene	U		0.0175	0.00100	0.0500	50	05/04/2016 05:50	WG868983
2-Butanone (MEK)	U	J4	0.196	0.0100	0.500	50	05/04/2016 05:50	WG868983
2-Hexanone	U		0.191	0.0100	0.500	50	05/04/2016 05:50	WG868983
Methylene Chloride	U		0.0500	0.00500	0.250	50	05/04/2016 05:50	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.107	0.0100	0.500	50	05/04/2016 05:50	WG868983
Methyl tert-butyl ether	0.621		0.0184	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Naphthalene	0.228	J	0.0500	0.00500	0.250	50	05/04/2016 05:50	WG868983
n-Propylbenzene	0.120		0.0174	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Styrene	U		0.0154	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,1,1,2-Tetrachloroethane	U		0.0192	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,1,2,2-Tetrachloroethane	U		0.00650	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Tetrachloroethene	U		0.0186	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Toluene	0.687		0.0390	0.00500	0.250	50	05/04/2016 05:50	WG868983
1,1,1-Trichloroethane	U		0.0160	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,1,2-Trichloroethane	U		0.0192	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Trichloroethene	U		0.0199	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,2,4-Trimethylbenzene	0.489		0.0186	0.00100	0.0500	50	05/04/2016 05:50	WG868983
1,3,5-Trimethylbenzene	0.100		0.0194	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Vinyl chloride	U		0.0130	0.00100	0.0500	50	05/04/2016 05:50	WG868983
o-Xylene	0.387		0.0170	0.00100	0.0500	50	05/04/2016 05:50	WG868983
m&p-Xylene	0.228		0.0360	0.00100	0.0500	50	05/04/2016 05:50	WG868983
Xylenes, Total	0.615		0.0530	0.00300	0.150	50	05/04/2016 05:50	WG868983
(S) Toluene-d8	108				90.0-115		05/04/2016 05:50	WG868983
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 05:50	WG868983
(S) 4-Bromofluorobenzene	102				80.1-120		05/04/2016 05:50	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.69		0.0247	0.100	0.100	1	05/04/2016 22:20	WG869251
(S) o-Terphenyl	45.6	J2			50.0-150		05/04/2016 22:20	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1670		2.82	10.0	10.0	1	05/03/2016 06:19	WG869085

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:45	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	280		2.60	1.00	50.0	50	05/09/2016 19:05	WG869673
Fluoride	0.805		0.00990	0.100	0.100	1	05/09/2016 18:49	WG869673
Sulfate	326		3.87	5.00	250	50	05/09/2016 19:05	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00175	J	0.00125	0.00200	0.0100	5	05/07/2016 16:45	WG869293
Arsenic,Dissolved	0.00164	J	0.00125	0.00200	0.0100	5	05/07/2016 03:18	WG869123
Barium	0.0736		0.00180	0.00500	0.0250	5	05/07/2016 16:45	WG869293
Barium,Dissolved	0.0732		0.00180	0.00500	0.0250	5	05/07/2016 03:18	WG869123
Calcium	191		0.230	1.00	5.00	5	05/07/2016 16:45	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:45	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:18	WG869123
Iron	U		0.0750	0.100	0.500	5	05/07/2016 16:45	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 03:18	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 16:45	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:18	WG869123
Manganese	0.0214	J	0.00125	0.00500	0.0250	5	05/07/2016 16:45	WG869293
Manganese,Dissolved	0.0269		0.00125	0.00500	0.0250	5	05/07/2016 03:18	WG869123
Potassium	0.518	J	0.185	1.00	5.00	5	05/07/2016 16:45	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:45	WG869293
Selenium,Dissolved	0.00486	J	0.00190	0.00200	0.0100	5	05/07/2016 03:18	WG869123
Sodium	180		0.550	1.00	5.00	5	05/07/2016 16:45	WG869293

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.129		0.0314	0.100	0.100	1	05/02/2016 20:38	WG869043
(S) a,a,q-Trifluorotoluene(FID)	100				62.0-128		05/02/2016 20:38	WG869043

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 06:13	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 06:13	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 06:13	WG868983
sec-Butylbenzene	0.00330		0.000365	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Carbon disulfide	0.000427	J	0.000275	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 06:13	WG868983



Collected date/time: 04/27/16 16:25

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 06:13	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 06:13	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 06:13	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:13	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 06:13	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 06:13	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 06:13	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Isopropylbenzene	0.0101		0.000326	0.00100	0.00100	1	05/04/2016 06:13	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 06:13	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 06:13	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 06:13	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 06:13	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 06:13	WG868983
Methyl tert-butyl ether	0.000379	J	0.000367	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 06:13	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 06:13	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 06:13	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 06:13	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 06:13	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 06:13	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 06:13	WG868983
(S) Toluene-d8	106				90.0-115		05/04/2016 06:13	WG868983
(S) Dibromofluoromethane	107				79.0-121		05/04/2016 06:13	WG868983
(S) 4-Bromofluorobenzene	99.9				80.1-120		05/04/2016 06:13	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.06		0.0247	0.100	0.100	1	05/04/2016 22:39	WG869251
(S) o-Terphenyl	113				50.0-150		05/04/2016 22:39	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	878		2.82	10.0	10.0	1	05/03/2016 06:19	WG869085

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:46	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	186		2.60	1.00	50.0	50	05/09/2016 19:36	WG869673
Fluoride	0.651		0.00990	0.100	0.100	1	05/09/2016 19:21	WG869673
Sulfate	624		3.87	5.00	250	50	05/09/2016 19:36	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0154		0.00125	0.00200	0.0100	5	05/07/2016 16:47	WG869293
Arsenic,Dissolved	0.0136		0.00125	0.00200	0.0100	5	05/07/2016 03:21	WG869123
Barium	0.0293		0.00180	0.00500	0.0250	5	05/07/2016 16:47	WG869293
Barium,Dissolved	0.0303		0.00180	0.00500	0.0250	5	05/07/2016 03:21	WG869123
Calcium	262		0.230	1.00	5.00	5	05/07/2016 16:47	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:47	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:21	WG869123
Iron	1.09		0.0750	0.100	0.500	5	05/07/2016 16:47	WG869293
Iron,Dissolved	0.509		0.0750	0.100	0.500	5	05/07/2016 03:21	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 16:47	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:21	WG869123
Manganese	1.22		0.00125	0.00500	0.0250	5	05/07/2016 16:47	WG869293
Manganese,Dissolved	1.25		0.00125	0.00500	0.0250	5	05/07/2016 03:21	WG869123
Potassium	0.651	J	0.185	1.00	5.00	5	05/07/2016 16:47	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:47	WG869293
Selenium,Dissolved	0.00396	J	0.00190	0.00200	0.0100	5	05/07/2016 03:21	WG869123
Sodium	110		0.550	1.00	5.00	5	05/07/2016 16:47	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.0588	J	0.0314	0.100	0.100	1	05/02/2016 23:05	WG869043
(S) a,a,q-Trifluorotoluene(FID)	97.3				62.0-128		05/02/2016 23:05	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 06:35	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 06:35	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 06:35	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Carbon disulfide	0.000326	J	0.000275	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 06:35	WG868983



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 06:35	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 06:35	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 06:35	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:35	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 06:35	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 06:35	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 06:35	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 06:35	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 06:35	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 06:35	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 06:35	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 06:35	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 06:35	WG868983
Methyl tert-butyl ether	0.0687		0.000367	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 06:35	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 06:35	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 06:35	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 06:35	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 06:35	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 06:35	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 06:35	WG868983
(S) Toluene-d8	106				90.0-115		05/04/2016 06:35	WG868983
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 06:35	WG868983
(S) 4-Bromofluorobenzene	98.6				80.1-120		05/04/2016 06:35	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.97		0.0247	0.100	0.100	1	05/04/2016 22:57	WG869251
(S) o-Terphenyl	108				50.0-150		05/04/2016 22:57	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2360		2.82	10.0	10.0	1	05/03/2016 06:19	WG869085

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.258	J	0.197	0.100	1.00	10	05/06/2016 05:48	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	245		2.60	1.00	50.0	50	05/09/2016 20:08	WG869673
Fluoride	1.02		0.00990	0.100	0.100	1	05/09/2016 19:52	WG869673
Sulfate	1270		3.87	5.00	250	50	05/09/2016 20:08	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00222	J	0.00125	0.00200	0.0100	5	05/07/2016 16:49	WG869293
Arsenic,Dissolved	0.00221	J	0.00125	0.00200	0.0100	5	05/07/2016 03:23	WG869123
Barium	0.0174	J	0.00180	0.00500	0.0250	5	05/07/2016 16:49	WG869293
Barium,Dissolved	0.0178	J	0.00180	0.00500	0.0250	5	05/07/2016 03:23	WG869123
Calcium	342		0.230	1.00	5.00	5	05/07/2016 16:49	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:49	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:23	WG869123
Iron	0.803		0.0750	0.100	0.500	5	05/07/2016 16:49	WG869293
Iron,Dissolved	0.714		0.0750	0.100	0.500	5	05/07/2016 03:23	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 16:49	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:23	WG869123
Manganese	0.797		0.00125	0.00500	0.0250	5	05/07/2016 16:49	WG869293
Manganese,Dissolved	0.820		0.00125	0.00500	0.0250	5	05/07/2016 03:23	WG869123
Potassium	0.465	J	0.185	1.00	5.00	5	05/07/2016 16:49	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:49	WG869293
Selenium,Dissolved	0.00299	J	0.00190	0.00200	0.0100	5	05/07/2016 03:23	WG869123
Sodium	124		0.550	1.00	5.00	5	05/07/2016 16:49	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.202		0.0314	0.100	0.100	1	05/02/2016 23:30	WG869043
(S) a,a,a-Trifluorotoluene(FID)	94.3				62.0-128		05/02/2016 23:30	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 06:58	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 06:58	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 06:58	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 06:58	WG868983



Collected date/time: 04/27/16 18:15

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 06:58	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 06:58	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 06:58	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:58	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 06:58	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 06:58	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 06:58	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Isopropylbenzene	0.000495	J	0.000326	0.00100	0.00100	1	05/04/2016 06:58	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 06:58	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 06:58	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 06:58	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 06:58	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 06:58	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 06:58	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 06:58	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 06:58	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 06:58	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 06:58	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 06:58	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 06:58	WG868983
(S) Toluene-d8	105				90.0-115		05/04/2016 06:58	WG868983
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 06:58	WG868983
(S) 4-Bromofluorobenzene	99.3				80.1-120		05/04/2016 06:58	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.751		0.0247	0.100	0.100	1	05/04/2016 23:16	WG869251
(S) o-Terphenyl	110				50.0-150		05/04/2016 23:16	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1910		2.82	10.0	10.0	1	05/03/2016 06:19	WG869085

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:47	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	245		2.60	1.00	50.0	50	05/09/2016 20:24	WG869673
Fluoride	1.10		0.00990	0.100	0.100	1	05/09/2016 21:12	WG869673
Sulfate	552		3.87	5.00	250	50	05/09/2016 20:24	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00535	J	0.00125	0.00200	0.0100	5	05/07/2016 16:51	WG869293
Arsenic,Dissolved	0.00441	J	0.00125	0.00200	0.0100	5	05/07/2016 03:26	WG869123
Barium	0.137		0.00180	0.00500	0.0250	5	05/07/2016 16:51	WG869293
Barium,Dissolved	0.115		0.00180	0.00500	0.0250	5	05/07/2016 03:26	WG869123
Calcium	244		0.230	1.00	5.00	5	05/07/2016 16:51	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:51	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:26	WG869123
Iron	0.357	J	0.0750	0.100	0.500	5	05/07/2016 16:51	WG869293
Iron,Dissolved	0.258	J	0.0750	0.100	0.500	5	05/07/2016 03:26	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 16:51	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:26	WG869123
Manganese	0.103		0.00125	0.00500	0.0250	5	05/07/2016 16:51	WG869293
Manganese,Dissolved	0.103		0.00125	0.00500	0.0250	5	05/07/2016 03:26	WG869123
Potassium	0.335	J	0.185	1.00	5.00	5	05/07/2016 16:51	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:51	WG869293
Selenium,Dissolved	0.00298	J	0.00190	0.00200	0.0100	5	05/07/2016 03:26	WG869123
Sodium	153		0.550	1.00	5.00	5	05/07/2016 16:51	WG869293

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	6.40		0.0314	0.100	0.100	1	05/02/2016 23:54	WG869043
(S) a,a,a-Trifluorotoluene(FID)	94.2				62.0-128		05/02/2016 23:54	WG869043

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 07:21	WG868983
Benzene	2.01		0.0166	0.00100	0.0500	50	05/06/2016 01:11	WG870327
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 07:21	WG868983
n-Butylbenzene	0.00229		0.000361	0.00100	0.00100	1	05/04/2016 07:21	WG868983
sec-Butylbenzene	0.00334		0.000365	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Carbon disulfide	0.000424	J	0.000275	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 07:21	WG868983





Collected date/time: 04/27/16 17:20

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 07:21	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 07:21	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 07:21	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:21	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 07:21	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 07:21	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 07:21	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Ethylbenzene	0.348		0.0192	0.00100	0.0500	50	05/06/2016 01:11	WG870327
Isopropylbenzene	0.0198		0.000326	0.00100	0.00100	1	05/04/2016 07:21	WG868983
p-Isopropyltoluene	0.00153		0.000350	0.00100	0.00100	1	05/04/2016 07:21	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 07:21	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 07:21	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 07:21	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 07:21	WG868983
Methyl tert-butyl ether	0.629		0.0184	0.00100	0.0500	50	05/06/2016 01:11	WG870327
Naphthalene	0.0425		0.00100	0.00500	0.00500	1	05/04/2016 07:21	WG868983
n-Propylbenzene	0.0325		0.000349	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Toluene	0.287		0.0390	0.00500	0.250	50	05/06/2016 01:11	WG870327
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,2,4-Trimethylbenzene	0.0941		0.000373	0.00100	0.00100	1	05/04/2016 07:21	WG868983
1,3,5-Trimethylbenzene	0.00632		0.000387	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 07:21	WG868983
o-Xylene	0.0375		0.000341	0.00100	0.00100	1	05/04/2016 07:21	WG868983
m&p-Xylene	0.112		0.000719	0.00100	0.00100	1	05/04/2016 07:21	WG868983
Xylenes, Total	0.149		0.00106	0.00300	0.00300	1	05/04/2016 07:21	WG868983
(S) Toluene-d8	105				90.0-115		05/04/2016 07:21	WG868983
(S) Toluene-d8	102				90.0-115		05/06/2016 01:11	WG870327
(S) Dibromofluoromethane	90.7				79.0-121		05/06/2016 01:11	WG870327
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 07:21	WG868983
(S) 4-Bromofluorobenzene	98.5				80.1-120		05/04/2016 07:21	WG868983
(S) 4-Bromofluorobenzene	102				80.1-120		05/06/2016 01:11	WG870327

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.43		0.0247	0.100	0.100	1	05/04/2016 23:34	WG869251
(S) o-Terphenyl	99.1				50.0-150		05/04/2016 23:34	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1520		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:54	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	300		2.60	1.00	50.0	50	05/09/2016 21:44	WG869673
Fluoride	1.10		0.00990	0.100	0.100	1	05/09/2016 21:28	WG869673
Sulfate	44.1		0.0774	5.00	5.00	1	05/09/2016 21:28	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0272		0.00125	0.00200	0.0100	5	05/07/2016 16:54	WG869293
Arsenic,Dissolved	0.0256		0.00125	0.00200	0.0100	5	05/07/2016 03:29	WG869123
Barium	0.593		0.00180	0.00500	0.0250	5	05/07/2016 16:54	WG869293
Barium,Dissolved	0.614		0.00180	0.00500	0.0250	5	05/07/2016 03:29	WG869123
Calcium	170		0.230	1.00	5.00	5	05/07/2016 16:54	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:54	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:29	WG869123
Iron	5.49		0.0750	0.100	0.500	5	05/07/2016 16:54	WG869293
Iron,Dissolved	5.58		0.0750	0.100	0.500	5	05/07/2016 03:29	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 16:54	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:29	WG869123
Manganese	1.10		0.00125	0.00500	0.0250	5	05/07/2016 16:54	WG869293
Manganese,Dissolved	1.17		0.00125	0.00500	0.0250	5	05/07/2016 03:29	WG869123
Potassium	0.331	J	0.185	1.00	5.00	5	05/07/2016 16:54	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:54	WG869293
Selenium,Dissolved	0.00253	J	0.00190	0.00200	0.0100	5	05/07/2016 03:29	WG869123
Sodium	210		0.550	1.00	5.00	5	05/07/2016 16:54	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	2.70		0.0314	0.100	0.100	1	05/03/2016 00:19	WG869043
(S) a,a,a-Trifluorotoluene(FID)	96.7				62.0-128		05/03/2016 00:19	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 07:44	WG868983
Benzene	U		0.0166	0.00100	0.0500	50	05/06/2016 01:32	WG870327
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 07:44	WG868983
n-Butylbenzene	0.000444	J	0.000361	0.00100	0.00100	1	05/04/2016 07:44	WG868983
sec-Butylbenzene	0.00103		0.000365	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Carbon disulfide	0.000295	J	0.000275	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 07:44	WG868983



Collected date/time: 04/27/16 16:25

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 07:44	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 07:44	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 07:44	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:44	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 07:44	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 07:44	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 07:44	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Ethylbenzene	U		0.0192	0.00100	0.0500	50	05/06/2016 01:32	WG870327
Isopropylbenzene	0.00172		0.000326	0.00100	0.00100	1	05/04/2016 07:44	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 07:44	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 07:44	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 07:44	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 07:44	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 07:44	WG868983
Methyl tert-butyl ether	4.59		0.0184	0.00100	0.0500	50	05/06/2016 01:32	WG870327
Naphthalene	0.00534		0.00100	0.00500	0.00500	1	05/04/2016 07:44	WG868983
n-Propylbenzene	0.000863	IJ	0.000349	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Toluene	U		0.0390	0.00500	0.250	50	05/06/2016 01:32	WG870327
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,2,4-Trimethylbenzene	0.00382		0.000373	0.00100	0.00100	1	05/04/2016 07:44	WG868983
1,3,5-Trimethylbenzene	0.000880	IJ	0.000387	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 07:44	WG868983
o-Xylene	0.000796	IJ	0.000341	0.00100	0.00100	1	05/04/2016 07:44	WG868983
m&p-Xylene	0.00199		0.000719	0.00100	0.00100	1	05/04/2016 07:44	WG868983
Xylenes, Total	0.00278	IJ	0.00106	0.00300	0.00300	1	05/04/2016 07:44	WG868983
(S) Toluene-d8	105				90.0-115		05/04/2016 07:44	WG868983
(S) Toluene-d8	102				90.0-115		05/06/2016 01:32	WG870327
(S) Dibromofluoromethane	90.8				79.0-121		05/06/2016 01:32	WG870327
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 07:44	WG868983
(S) 4-Bromofluorobenzene	98.3				80.1-120		05/04/2016 07:44	WG868983
(S) 4-Bromofluorobenzene	100				80.1-120		05/06/2016 01:32	WG870327

## Sample Narrative:

8260B L832435-09 WG870327: Non-target and target compounds too high to run at a lower dilution.

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.68		0.0247	0.100	0.100	1	05/04/2016 23:52	WG869251
(S) o-Terphenyl	103				50.0-150		05/04/2016 23:52	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1250		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 05:55	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	288		2.60	1.00	50.0	50	05/09/2016 22:16	WG869673
Fluoride	0.774		0.00990	0.100	0.100	1	05/09/2016 22:00	WG869673
Sulfate	9.49		0.0774	5.00	5.00	1	05/09/2016 22:00	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0222		0.00125	0.00200	0.0100	5	05/07/2016 16:56	WG869293
Arsenic,Dissolved	0.0218		0.00125	0.00200	0.0100	5	05/07/2016 03:32	WG869123
Barium	2.67		0.00180	0.00500	0.0250	5	05/07/2016 16:56	WG869293
Barium,Dissolved	2.76		0.00180	0.00500	0.0250	5	05/07/2016 03:32	WG869123
Calcium	158		0.230	1.00	5.00	5	05/07/2016 16:56	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:56	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:32	WG869123
Iron	1.46		0.0750	0.100	0.500	5	05/07/2016 16:56	WG869293
Iron,Dissolved	1.46		0.0750	0.100	0.500	5	05/07/2016 03:32	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 16:56	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:32	WG869123
Manganese	0.305		0.00125	0.00500	0.0250	5	05/07/2016 16:56	WG869293
Manganese,Dissolved	0.322		0.00125	0.00500	0.0250	5	05/07/2016 03:32	WG869123
Potassium	0.238	J	0.185	1.00	5.00	5	05/07/2016 16:56	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 16:56	WG869293
Selenium,Dissolved	0.00271	J	0.00190	0.00200	0.0100	5	05/07/2016 03:32	WG869123
Sodium	167		0.550	1.00	5.00	5	05/07/2016 16:56	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	9.16		0.0314	0.100	0.100	1	05/03/2016 00:44	WG869043
(S) a,a,q-Trifluorotoluene(FID)	95.5				62.0-128		05/03/2016 00:44	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 08:06	WG868983
Benzene	2.42		0.0331	0.00100	0.100	100	05/06/2016 01:53	WG870327
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 08:06	WG868983
n-Butylbenzene	0.00308		0.000361	0.00100	0.00100	1	05/04/2016 08:06	WG868983
sec-Butylbenzene	0.00318		0.000365	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 08:06	WG868983



Collected date/time: 04/27/16 15:35

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 08:06	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 08:06	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 08:06	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 08:06	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 08:06	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 08:06	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 08:06	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Ethylbenzene	0.0535		0.000384	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Isopropylbenzene	0.0183		0.000326	0.00100	0.00100	1	05/04/2016 08:06	WG868983
p-Isopropyltoluene	0.000697	J	0.000350	0.00100	0.00100	1	05/04/2016 08:06	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 08:06	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 08:06	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 08:06	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 08:06	WG868983
Methyl tert-butyl ether	3.69		0.0367	0.00100	0.100	100	05/06/2016 01:53	WG870327
Naphthalene	0.0353		0.00100	0.00500	0.00500	1	05/04/2016 08:06	WG868983
n-Propylbenzene	0.0315		0.000349	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Toluene	0.142		0.000780	0.00500	0.00500	1	05/04/2016 08:06	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,2,4-Trimethylbenzene	0.0212		0.000373	0.00100	0.00100	1	05/04/2016 08:06	WG868983
1,3,5-Trimethylbenzene	0.00562		0.000387	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 08:06	WG868983
o-Xylene	0.0370		0.000341	0.00100	0.00100	1	05/04/2016 08:06	WG868983
m&p-Xylene	0.0513		0.000719	0.00100	0.00100	1	05/04/2016 08:06	WG868983
Xylenes, Total	0.0883		0.00106	0.00300	0.00300	1	05/04/2016 08:06	WG868983
(S) Toluene-d8	104				90.0-115		05/04/2016 08:06	WG868983
(S) Toluene-d8	102				90.0-115		05/06/2016 01:53	WG870327
(S) Dibromofluoromethane	88.7				79.0-121		05/06/2016 01:53	WG870327
(S) Dibromofluoromethane	101				79.0-121		05/04/2016 08:06	WG868983
(S) 4-Bromofluorobenzene	101				80.1-120		05/04/2016 08:06	WG868983
(S) 4-Bromofluorobenzene	99.9				80.1-120		05/06/2016 01:53	WG870327

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2.12		0.0247	0.100	0.100	1	05/05/2016 00:11	WG869251
(S) o-Terphenyl	103				50.0-150		05/05/2016 00:11	WG869251

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4560		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	2.79		0.197	0.100	1.00	10	05/06/2016 05:56	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	498		2.60	1.00	50.0	50	05/09/2016 22:48	WG869673
Fluoride	1.24		0.00990	0.100	0.100	1	05/09/2016 22:32	WG869673
Sulfate	2800		3.87	5.00	250	50	05/09/2016 22:48	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00566	J	0.00125	0.00200	0.0100	5	05/07/2016 16:21	WG869293
Arsenic,Dissolved	0.00551	J	0.00125	0.00200	0.0100	5	05/07/2016 03:34	WG869123
Barium	0.0112	J	0.00180	0.00500	0.0250	5	05/07/2016 16:21	WG869293
Barium,Dissolved	0.0107	J	0.00180	0.00500	0.0250	5	05/07/2016 03:34	WG869123
Calcium	576	V	0.230	1.00	5.00	5	05/07/2016 16:21	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 16:21	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:34	WG869123
Iron	U		0.0750	0.100	0.500	5	05/07/2016 16:21	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 03:34	WG869123
Lead	0.00131	J	0.00120	0.00200	0.0100	5	05/07/2016 16:21	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:34	WG869123
Manganese	0.0102	J	0.00125	0.00500	0.0250	5	05/07/2016 16:21	WG869293
Manganese,Dissolved	0.00802	J	0.00125	0.00500	0.0250	5	05/07/2016 03:34	WG869123
Potassium	1.70	J	0.185	1.00	5.00	5	05/07/2016 16:21	WG869293
Selenium	0.00812	J	0.00190	0.00200	0.0100	5	05/07/2016 16:21	WG869293
Selenium,Dissolved	0.00963	J	0.00190	0.00200	0.0100	5	05/07/2016 03:34	WG869123
Sodium	311	V	0.550	1.00	5.00	5	05/07/2016 16:21	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.0420	J	0.0314	0.100	0.100	1	05/03/2016 01:09	WG869043
(S) a,a,q-Trifluorotoluene(FID)	95.3				62.0-128		05/03/2016 01:09	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 08:29	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/06/2016 00:09	WG870327
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 08:29	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 08:29	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Carbon disulfide	0.000390	J	0.000275	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 08:29	WG868983



Collected date/time: 04/27/16 18:20

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 08:29	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 08:29	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 08:29	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 08:29	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 08:29	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 08:29	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 08:29	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 08:29	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 08:29	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 08:29	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 08:29	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 08:29	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 08:29	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/06/2016 00:09	WG870327
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 08:29	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 08:29	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 08:29	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 08:29	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 08:29	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 08:29	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 08:29	WG868983
(S) Toluene-d8	105				90.0-115		05/04/2016 08:29	WG868983
(S) Toluene-d8	101				90.0-115		05/06/2016 00:09	WG870327
(S) Dibromofluoromethane	91.2				79.0-121		05/06/2016 00:09	WG870327
(S) Dibromofluoromethane	108				79.0-121		05/04/2016 08:29	WG868983
(S) 4-Bromofluorobenzene	97.2				80.1-120		05/04/2016 08:29	WG868983
(S) 4-Bromofluorobenzene	100				80.1-120		05/06/2016 00:09	WG870327

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0971	J	0.0247	0.100	0.100	1	05/05/2016 00:29	WG869251
(S) o-Terphenyl	106				50.0-150		05/05/2016 00:29	WG869251

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	64.0		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U	J6	0.197	0.100	1.00	10	05/06/2016 05:57	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	0.360	J	0.0519	1.00	1.00	1	05/10/2016 03:02	WG869673
Fluoride	U		0.00990	0.100	0.100	1	05/10/2016 03:02	WG869673
Sulfate	0.227	J	0.0774	5.00	5.00	1	05/10/2016 03:02	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	U		0.000250	0.00200	0.00200	1	05/09/2016 10:06	WG869293
Arsenic,Dissolved	U		0.000250	0.00200	0.00200	1	05/07/2016 03:42	WG869123
Barium	U		0.000360	0.00500	0.00500	1	05/09/2016 10:06	WG869293
Barium,Dissolved	U		0.000360	0.00500	0.00500	1	05/07/2016 03:42	WG869123
Calcium	U		0.0460	1.00	1.00	1	05/09/2016 10:06	WG869293
Chromium	U		0.000540	0.00200	0.00200	1	05/09/2016 10:06	WG869293
Chromium,Dissolved	0.00199	J	0.000540	0.00200	0.00200	1	05/07/2016 03:42	WG869123
Iron	U		0.0150	0.100	0.100	1	05/09/2016 10:06	WG869293
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/07/2016 03:42	WG869123
Lead	0.000280	J	0.000240	0.00200	0.00200	1	05/09/2016 10:06	WG869293
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/07/2016 03:42	WG869123
Manganese	0.000321	J	0.000250	0.00500	0.00500	1	05/09/2016 10:06	WG869293
Manganese,Dissolved	0.000923	J	0.000250	0.00500	0.00500	1	05/07/2016 03:42	WG869123
Potassium	U		0.0370	1.00	1.00	1	05/09/2016 10:06	WG869293
Selenium	U		0.000380	0.00200	0.00200	1	05/09/2016 10:06	WG869293
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/07/2016 03:42	WG869123
Sodium	0.169	J	0.110	1.00	1.00	1	05/09/2016 10:06	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 01:34	WG869043
(S) a,a,a-Trifluorotoluene(FID)	97.9				62.0-128		05/03/2016 01:34	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 08:52	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 08:52	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 08:52	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 08:52	WG868983





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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 08:52	WG868983
Chloroform	0.000745	J	0.000324	0.00500	0.00500	1	05/04/2016 08:52	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 08:52	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 08:52	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 08:52	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 08:52	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 08:52	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 08:52	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 08:52	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 08:52	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 08:52	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 08:52	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 08:52	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 08:52	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 08:52	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 08:52	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 08:52	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 08:52	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 08:52	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 08:52	WG868983
(S) Toluene-d8	106				90.0-115		05/04/2016 08:52	WG868983
(S) Dibromofluoromethane	107				79.0-121		05/04/2016 08:52	WG868983
(S) 4-Bromofluorobenzene	98.5				80.1-120		05/04/2016 08:52	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	0.100	1	05/05/2016 00:47	WG869251
(S) o-Terphenyl	99.7				50.0-150		05/05/2016 00:47	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4910		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	2.73		0.197	0.100	1.00	10	05/06/2016 06:01	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	497		2.60	1.00	50.0	50	05/09/2016 23:19	WG869673
Fluoride	1.24		0.00990	0.100	0.100	1	05/09/2016 23:04	WG869673
Sulfate	2780		3.87	5.00	250	50	05/09/2016 23:19	WG869673

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00555	J	0.00125	0.00200	0.0100	5	05/07/2016 17:01	WG869293
Arsenic,Dissolved	0.00504	J	0.00125	0.00200	0.0100	5	05/07/2016 03:45	WG869123
Barium	0.00895	J	0.00180	0.00500	0.0250	5	05/07/2016 17:01	WG869293
Barium,Dissolved	0.00916	J	0.00180	0.00500	0.0250	5	05/07/2016 03:45	WG869123
Calcium	565		0.230	1.00	5.00	5	05/07/2016 17:01	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 17:01	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:45	WG869123
Iron	0.0767	J	0.0750	0.100	0.500	5	05/07/2016 17:01	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 03:45	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 17:01	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:45	WG869123
Manganese	0.0110	J	0.00125	0.00500	0.0250	5	05/07/2016 17:01	WG869293
Manganese,Dissolved	0.00888	J	0.00125	0.00500	0.0250	5	05/07/2016 03:45	WG869123
Potassium	1.69	J	0.185	1.00	5.00	5	05/07/2016 17:01	WG869293
Selenium	0.00711	J	0.00190	0.00200	0.0100	5	05/07/2016 17:01	WG869293
Selenium,Dissolved	0.00888	J	0.00190	0.00200	0.0100	5	05/07/2016 03:45	WG869123
Sodium	303		0.550	1.00	5.00	5	05/07/2016 17:01	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 01:59	WG869043
(S) a,a,a-Trifluorotoluene(FID)	96.4				62.0-128		05/03/2016 01:59	WG869043

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 09:15	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 09:15	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 09:15	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 09:15	WG868983



Collected date/time: 04/27/16 15:00

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 09:15	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 09:15	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 09:15	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:15	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 09:15	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 09:15	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 09:15	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 09:15	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 09:15	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 09:15	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 09:15	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 09:15	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 09:15	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 09:15	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 09:15	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 09:15	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 09:15	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 09:15	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 09:15	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 09:15	WG868983
(S) Toluene-d8	106				90.0-115		05/04/2016 09:15	WG868983
(S) Dibromofluoromethane	108				79.0-121		05/04/2016 09:15	WG868983
(S) 4-Bromofluorobenzene	99.5				80.1-120		05/04/2016 09:15	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0774	J	0.0247	0.100	0.100	1	05/05/2016 01:06	WG869251
(S) o-Terphenyl	104				50.0-150		05/05/2016 01:06	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2830		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 06:02	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	281		2.60	1.00	50.0	50	05/10/2016 00:23	WG869673
Fluoride	0.917		0.00990	0.100	0.100	1	05/10/2016 00:07	WG869673
Sulfate	953		3.87	5.00	250	50	05/10/2016 00:23	WG869673

## Wet Chemistry by Method D 7511-09e2

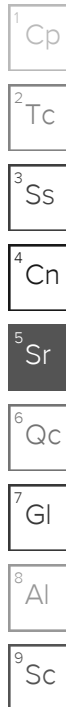
Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	0.00500	J P1	0.00120	0.00500	0.00500	1	05/10/2016 21:54	WG871518

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/02/2016 10:34	WG868781
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:25	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0104		0.00125	0.00200	0.0100	5	05/07/2016 17:03	WG869293
Arsenic,Dissolved	0.00997	J	0.00125	0.00200	0.0100	5	05/07/2016 03:48	WG869123
Barium	0.0550		0.00180	0.00500	0.0250	5	05/07/2016 17:03	WG869293
Barium,Dissolved	0.0544		0.00180	0.00500	0.0250	5	05/07/2016 03:48	WG869123
Boron	0.503		0.0150	0.0200	0.200	10	05/07/2016 09:09	WG870589
Boron,Dissolved	0.472		0.0150	0.0200	0.200	10	05/09/2016 11:24	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/07/2016 17:03	WG869293
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/07/2016 03:48	WG869123
Calcium	325		0.230	1.00	5.00	5	05/07/2016 17:03	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 17:03	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:48	WG869123
Cobalt	0.00739	J	0.00130	0.00200	0.0100	5	05/07/2016 17:03	WG869293
Cobalt,Dissolved	0.00568	J	0.00130	0.00200	0.0100	5	05/07/2016 03:48	WG869123
Iron	1.42		0.0750	0.100	0.500	5	05/07/2016 17:03	WG869293
Iron,Dissolved	1.40		0.0750	0.100	0.500	5	05/07/2016 03:48	WG869123
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 17:03	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:48	WG869123
Manganese	3.48		0.00125	0.00500	0.0250	5	05/07/2016 17:03	WG869293
Manganese,Dissolved	3.66		0.00125	0.00500	0.0250	5	05/07/2016 03:48	WG869123
Nickel	0.0121		0.00175	0.00200	0.0100	5	05/07/2016 17:03	WG869293
Nickel,Dissolved	0.00777	J	0.00175	0.00200	0.0100	5	05/07/2016 03:48	WG869123
Potassium	0.236	J	0.185	1.00	5.00	5	05/07/2016 17:03	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 17:03	WG869293
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 03:48	WG869123
Sodium	248		0.550	1.00	5.00	5	05/07/2016 17:03	WG869293





Collected date/time: 04/27/16 14:50

L832435

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.00299	J	0.00165	0.0100	0.0500	5	05/07/2016 17:03	WG869293
Uranium,Dissolved	0.00299	J	0.00165	0.0100	0.0500	5	05/07/2016 03:48	WG869123
Vanadium	0.00196	J	0.000900	0.00500	0.0250	5	05/07/2016 17:03	WG869293
Vanadium,Dissolved	0.00229	J	0.000900	0.00500	0.0250	5	05/07/2016 03:48	WG869123

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 09:37	WG868983
Benzene	0.0365		0.000331	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 09:37	WG868983
n-Butylbenzene	0.00365		0.000361	0.00100	0.00100	1	05/04/2016 09:37	WG868983
sec-Butylbenzene	0.00607		0.000365	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 09:37	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 09:37	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 09:37	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:37	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 09:37	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 09:37	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 09:37	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Ethylbenzene	0.0248		0.000384	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Isopropylbenzene	0.0140		0.000326	0.00100	0.00100	1	05/04/2016 09:37	WG868983
p-Isopropyltoluene	0.000952	J	0.000350	0.00100	0.00100	1	05/04/2016 09:37	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 09:37	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 09:37	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 09:37	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 09:37	WG868983
Methyl tert-butyl ether	0.0104		0.000367	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Naphthalene	0.0141		0.00100	0.00500	0.00500	1	05/04/2016 09:37	WG868983
n-Propylbenzene	0.0193		0.000349	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 09:37	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,2,4-Trimethylbenzene	0.0482		0.000373	0.00100	0.00100	1	05/04/2016 09:37	WG868983
1,3,5-Trimethylbenzene	0.00903		0.000387	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 09:37	WG868983
o-Xylene	0.00167		0.000341	0.00100	0.00100	1	05/04/2016 09:37	WG868983
m&p-Xylene	0.0218		0.000719	0.00100	0.00100	1	05/04/2016 09:37	WG868983
Xylenes, Total	0.0235		0.00106	0.00300	0.00300	1	05/04/2016 09:37	WG868983
(S) Toluene-d8	105				90.0-115		05/04/2016 09:37	WG868983

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



Collected date/time: 04/27/16 14:50

L832435

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

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 09:37	WG868983
(S) 4-Bromofluorobenzene	99.1				80.1-120		05/04/2016 09:37	WG868983

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	1.22		0.0247	0.100	0.100	1	05/05/2016 01:24	WG869251
(S) o-Terphenyl	109				50.0-150		05/05/2016 01:24	WG869251

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	881		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.680	J	0.197	0.100	1.00	10	05/06/2016 06:07	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	17.6		0.0519	1.00	1.00	1	05/16/2016 09:09	WG871015
Fluoride	0.893		0.00990	0.100	0.100	1	05/10/2016 11:53	WG869679
Sulfate	501		0.774	5.00	50.0	10	05/16/2016 19:37	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Calcium	175		0.230	1.00	5.00	5	05/07/2016 17:10	WG869293
Potassium	1.02	J	0.185	1.00	5.00	5	05/07/2016 17:10	WG869293
Sodium	17.3		0.550	1.00	5.00	5	05/07/2016 17:10	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 10:00	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 10:00	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 10:00	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 10:00	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 10:00	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 10:00	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:00	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 10:00	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 10:00	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 10:00	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 10:00	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 10:00	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 10:00	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 10:00	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 10:00	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 10:00	WG868983



Collected date/time: 04/27/16 14:00

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 10:00	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 10:00	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 10:00	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 10:00	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 10:00	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 10:00	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 10:00	WG868983
(S) Toluene-d8	107				90.0-115		05/04/2016 10:00	WG868983
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 10:00	WG868983
(S) 4-Bromofluorobenzene	99.8				80.1-120		05/04/2016 10:00	WG868983

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





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1510		2.82	10.0	10.0	1	05/04/2016 18:17	WG869816

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 06:08	WG870054

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	379		1.30	1.00	25.0	25	05/16/2016 09:36	WG871015
Fluoride	1.08		0.00990	0.100	0.100	1	05/16/2016 19:51	WG871015
Sulfate	39.9		0.0774	5.00	5.00	1	05/15/2016 15:39	WG871783

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0333		0.00125	0.00200	0.0100	5	05/07/2016 17:13	WG869293
Arsenic,Dissolved	0.0321		0.00125	0.00200	0.0100	5	05/07/2016 03:50	WG869123
Barium	2.26		0.00180	0.00500	0.0250	5	05/07/2016 17:13	WG869293
Barium,Dissolved	2.24		0.00180	0.00500	0.0250	5	05/07/2016 03:50	WG869123
Calcium	109		0.230	1.00	5.00	5	05/07/2016 17:13	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 17:13	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 03:50	WG869123
Iron	U		0.0750	0.100	0.500	5	05/07/2016 17:13	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 03:50	WG869123
Lead	0.00187	J	0.00120	0.00200	0.0100	5	05/07/2016 17:13	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 03:50	WG869123
Manganese	0.0599		0.00125	0.00500	0.0250	5	05/07/2016 17:13	WG869293
Manganese,Dissolved	0.0624		0.00125	0.00500	0.0250	5	05/07/2016 03:50	WG869123
Potassium	0.754	J	0.185	1.00	5.00	5	05/07/2016 17:13	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 17:13	WG869293
Selenium,Dissolved	0.00232	J	0.00190	0.00200	0.0100	5	05/07/2016 03:50	WG869123
Sodium	396		0.550	1.00	5.00	5	05/07/2016 17:13	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	136		1.57	0.100	5.00	50	05/06/2016 16:48	WG870480
(S) a,a,a-Trifluorotoluene(FID)	99.5				62.0-128		05/06/2016 16:48	WG870480

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.500	0.0500	2.50	50	05/04/2016 10:23	WG868983
Benzene	25.3		0.331	0.00100	1.00	1000	05/06/2016 02:13	WG870327
Bromodichloromethane	U		0.0190	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Bromoform	U		0.0234	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Bromomethane	U		0.0433	0.00500	0.250	50	05/04/2016 10:23	WG868983
n-Butylbenzene	U		0.0180	0.00100	0.0500	50	05/04/2016 10:23	WG868983
sec-Butylbenzene	U		0.0182	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Carbon disulfide	U		0.0138	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Carbon tetrachloride	U		0.0190	0.00100	0.0500	50	05/04/2016 10:23	WG868983



Collected date/time: 04/28/16 12:00

L832435

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.0174	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Chlorodibromomethane	U		0.0164	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Chloroethane	U		0.0226	0.00500	0.250	50	05/04/2016 10:23	WG868983
Chloroform	U		0.0162	0.00500	0.250	50	05/04/2016 10:23	WG868983
Chloromethane	U		0.0138	0.00250	0.125	50	05/04/2016 10:23	WG868983
1,2-Dibromoethane	U		0.0190	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,1-Dichloroethane	U		0.0130	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,2-Dichloroethane	U		0.0180	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,1-Dichloroethene	U		0.0199	0.00100	0.0500	50	05/04/2016 10:23	WG868983
cis-1,2-Dichloroethene	U		0.0130	0.00100	0.0500	50	05/04/2016 10:23	WG868983
trans-1,2-Dichloroethene	U		0.0198	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,2-Dichloropropane	U		0.0153	0.00100	0.0500	50	05/04/2016 10:23	WG868983
cis-1,3-Dichloropropene	U		0.0209	0.00100	0.0500	50	05/04/2016 10:23	WG868983
trans-1,3-Dichloropropene	U	J4	0.0210	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Ethylbenzene	3.11		0.0192	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Isopropylbenzene	0.0817		0.0163	0.00100	0.0500	50	05/04/2016 10:23	WG868983
p-Isopropyltoluene	U		0.0175	0.00100	0.0500	50	05/04/2016 10:23	WG868983
2-Butanone (MEK)	U	J4	0.196	0.0100	0.500	50	05/04/2016 10:23	WG868983
2-Hexanone	U		0.191	0.0100	0.500	50	05/04/2016 10:23	WG868983
Methylene Chloride	U		0.0500	0.00500	0.250	50	05/04/2016 10:23	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.107	0.0100	0.500	50	05/04/2016 10:23	WG868983
Methyl tert-butyl ether	0.666		0.0184	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Naphthalene	0.195	J	0.0500	0.00500	0.250	50	05/04/2016 10:23	WG868983
n-Propylbenzene	0.122		0.0174	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Styrene	U		0.0154	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,1,1,2-Tetrachloroethane	U		0.0192	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,1,2,2-Tetrachloroethane	U		0.00650	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Tetrachloroethene	U		0.0186	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Toluene	18.8		0.780	0.00500	5.00	1000	05/06/2016 02:13	WG870327
1,1,1-Trichloroethane	U		0.0160	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,1,2-Trichloroethane	U		0.0192	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Trichloroethene	U		0.0199	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,2,4-Trimethylbenzene	0.666		0.0186	0.00100	0.0500	50	05/04/2016 10:23	WG868983
1,3,5-Trimethylbenzene	0.140		0.0194	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Vinyl chloride	U		0.0130	0.00100	0.0500	50	05/04/2016 10:23	WG868983
o-Xylene	2.44		0.0170	0.00100	0.0500	50	05/04/2016 10:23	WG868983
m&p-Xylene	5.26		0.0360	0.00100	0.0500	50	05/04/2016 10:23	WG868983
Xylenes, Total	7.70		0.0530	0.00300	0.150	50	05/04/2016 10:23	WG868983
(S) Toluene-d8	106				90.0-115		05/04/2016 10:23	WG868983
(S) Toluene-d8	102				90.0-115		05/06/2016 02:13	WG870327
(S) Dibromofluoromethane	89.5				79.0-121		05/06/2016 02:13	WG870327
(S) Dibromofluoromethane	100				79.0-121		05/04/2016 10:23	WG868983
(S) 4-Bromofluorobenzene	97.2				80.1-120		05/04/2016 10:23	WG868983
(S) 4-Bromofluorobenzene	99.8				80.1-120		05/06/2016 02:13	WG870327

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	12.3		0.124	0.100	0.500	5	05/06/2016 05:39	WG869251
(S) o-Terphenyl	117				50.0-150		05/06/2016 05:39	WG869251

WG869085

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133452-1 05/03/16 06:19

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

L832409-26 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-26 05/03/16 06:19 • (DUP) R3133452-4 05/03/16 06:19

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	5180	4970	1	4.04		5

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

(LCS) R3133452-2 05/03/16 06:19 • (LCSD) R3133452-3 05/03/16 06:19

	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	8170	8580	92.8	97.5	85.0-115			4.90	5

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

WG869087

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832435-09,10,11,12,13,14,15

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133461-1 05/03/16 06:51

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

L832435-09 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-09 05/03/16 06:51 • (DUP) R3133461-4 05/03/16 06:51

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1520	1540	1	1.47		5

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

(LCS) R3133461-2 05/03/16 06:51 • (LCSD) R3133461-3 05/03/16 06:51

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 %
Dissolved Solids	8800	8430	8730	95.8	99.2	85.0-115			3.50	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832435-16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134195-1 05/04/16 18:17

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

L832422-21 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-21 05/04/16 18:17 • (DUP) R3134195-4 05/04/16 18:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3050	3020	1	0.824		5

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

(LCS) R3134195-2 05/04/16 18:17 • (LCSD) R3134195-3 05/04/16 18:17

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 %
Dissolved Solids	8800	8450	8500	96.0	96.6	85.0-115			0.590	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134229-1 05/06/16 05:27

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

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L832422-20 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-20 05/06/16 05:32 • (DUP) R3134229-4 05/06/16 05:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.197	ND	10	25.0	J P1	20

L832435-07 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-07 05/06/16 05:48 • (DUP) R3134229-6 05/06/16 05:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.258	ND	10	2.00	J	20

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

(LCS) R3134229-2 05/06/16 05:28 • (LCSD) R3134229-3 05/06/16 05:29

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 %
Nitrate-Nitrite	5.00	4.98	5.01	100	100	90.0-110			1.00	20

L832435-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-02 05/06/16 05:36 • (MS) R3134229-5 05/06/16 05:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	0.500	3.82	8.04	84.3	10	90.0-110	J6

WG870054

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



L832435-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-12 05/06/16 05:57 • (MS) R3134229-7 05/06/16 05:59 • (MSD) R3134229-8 05/06/16 06:00

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 %
Nitrate-Nitrite	0.500	U	4.43	4.16	86.0	80.7	10	90.0-110	J6	J6	6.19	20

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

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08,09,10,11,12,13,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135221-1 05/09/16 12:11				
	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

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

L832435-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-02 05/09/16 15:22 • (DUP) R3135221-4 05/09/16 15:38						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.907	0.903	1	1		15

L832435-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-02 05/09/16 15:54 • (DUP) R3135221-5 05/09/16 16:10						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	293	280	50	5		15
Sulfate	1030	1030	50	1		15

L832409-10 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-10 05/10/16 01:59 • (DUP) R3135221-7 05/10/16 02:15						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	421	417	20	1		15
Fluoride	1.28	1.15	20	11	J	15
Sulfate	355	350	20	1		15

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

(LCS) R3135221-2 05/09/16 12:27 • (LCSD) R3135221-3 05/09/16 12:43									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD
Analyte	mg/l	mg/l	mg/l	%	%	%			%
Chloride	40.0	39.1	39.3	98	98	80-120			0
Fluoride	8.00	7.86	7.94	98	99	80-120			1

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08,09,10,11,12,13,14

ONE LAB. NATIONWIDE.



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

(LCS) R3135221-2 05/09/16 12:27 • (LCSD) R3135221-3 05/09/16 12:43										
	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	%	%	%			%	%
Sulfate	40.0	38.7	39.4	97	98	80-120			2	15

L832435-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-03 05/09/16 16:26 • (MS) R3135221-6 05/09/16 16:42							
	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	0.548	5.43	98	1	80-120	

L832435-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-12 05/10/16 03:02 • (MS) R3135221-8 05/10/16 03:18 • (MSD) R3135221-9 05/10/16 03:34												
	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	0.360	51.2	51.2	102	102	1	80-120			0	15
Fluoride	5.00	U	5.00	5.03	100	101	1	80-120			1	15
Sulfate	50.0	0.227	50.3	50.4	100	100	1	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869679

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-15

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135625-1 05/10/16 10:22

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0099	0.100

L832435-15 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-15 05/10/16 11:53 • (DUP) R3135625-4 05/10/16 12:11

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.893	0.943	1	5		15

L832453-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-03 05/10/16 18:48 • (DUP) R3135625-6 05/10/16 19:36

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.108	0.109	1	1		15

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

(LCS) R3135625-2 05/10/16 10:38 • (LCSD) R3135625-3 05/10/16 10:54

	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	%	%	%			%	%
Fluoride	8.00	7.64	7.65	95	96	80-120			0	15

L832450-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832450-02 05/10/16 15:37 • (MS) R3135625-5 05/10/16 15:53

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	5.00	1.96	6.01	81	1	80-120	

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

WG869679

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-15

ONE LAB. NATIONWIDE.



L832453-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832453-01 05/10/16 18:16 • (MS) R3135625-7 05/10/16 20:24 • (MSD) R3135625-8 05/10/16 20:40

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	%	%		%			%	%
Fluoride	5.00	0.158	5.05	5.07	98	98	1	80-120			0	15

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

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3137141-1 05/16/16 07:45

	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

L832409-13 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-13 05/16/16 10:03 • (DUP) R3137141-5 05/16/16 10:43

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	126	134	50	7		15
Fluoride	U	0.000	50	0		15
Sulfate	2520	2340	50	7		15

L832603-21 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-21 05/16/16 15:52 • (DUP) R3137141-6 05/16/16 16:05

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.294	0.506	1	53	J3	15

L832603-21 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-21 05/16/16 16:19 • (DUP) R3137141-7 05/16/16 16:32

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	199	39.2	50	134	J P1	15
Sulfate	1090	190	50	141	J P1	15

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

(LCS) R3137141-2 05/16/16 07:59 • (LCSD) R3137141-3 05/16/16 08:12

	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	39.7	39.8	99	100	80-120			0	15
Fluoride	8.00	7.85	7.87	98	98	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-15,16

ONE LAB. NATIONWIDE.



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

(LCS) R3137141-2 05/16/16 07:59 • (LCSD) R3137141-3 05/16/16 08:12										
	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	%	%	%			%	%
Sulfate	40.0	39.9	40.1	100	100	80-120			0	15

L832435-15 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-15 05/16/16 09:09 • (MS) R3137141-4 05/16/16 09:23							
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	17.6	66.6	98	1	80-120	
Fluoride	5.00	0.982	5.50	90	1	80-120	

L832603-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-22 05/16/16 17:10 • (MS) R3137141-8 05/16/16 17:23 • (MSD) R3137141-9 05/16/16 17:36												
	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	U	51.9	52.1	104	104	1	80-120			0	15
Fluoride	5.00	U	5.22	5.16	104	103	1	80-120			1	15
Sulfate	50.0	U	50.1	50.2	100	100	1	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG871228

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135448-1 05/10/16 11:38

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

L832435-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-04 05/10/16 22:04 • (DUP) R3135448-4 05/10/16 22:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	199	215	10	8		15

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

(LCS) R3135448-2 05/10/16 11:52 • (LCSD) R3135448-3 05/10/16 12:07

	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	39.1	39.2	98	98	80-120			0	15

L832654-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832654-01 05/11/16 01:06 • (MS) R3135448-5 05/11/16 01:20 • (MSD) R3135448-6 05/11/16 01:35

	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	%	%		%			%	%
Sulfate	50.0	19.9	68.7	69.0	98	98	1	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136840-1 05/15/16 08:29

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

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

L832453-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-02 05/15/16 18:32 • (DUP) R3136840-5 05/15/16 18:46

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	121	119	10	1		15

L832453-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-03 05/15/16 20:13 • (DUP) R3136840-8 05/15/16 20:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	128	125	10	2		15

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

(LCS) R3136840-2 05/15/16 08:44 • (LCSD) R3136840-3 05/15/16 08:58

	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	%	%	%			%	%
Sulfate	40.0	39.8	39.7	99	99	80-120			0	15

L832435-16 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-16 05/15/16 15:39 • (MS) R3136840-4 05/15/16 15:53

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Sulfate	50.0	39.9	88.8	98	1	80-120	

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832435-16

ONE LAB. NATIONWIDE.



L832453-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832453-01 05/15/16 19:01 • (MS) R3136840-6 05/15/16 19:15 • (MSD) R3136840-7 05/15/16 19:58

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	%	%		%			%	%
Sulfate	50.0	153	625	625	94	94	10	80-120			0	15

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

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WG871518

Wet Chemistry by Method D 7511-09e2

QUALITY CONTROL SUMMARY

L832435-03,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136170-1 05/10/16 20:39

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.0012	0.00500

L832409-16 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-16 05/10/16 21:15 • (DUP) R3136170-4 05/10/16 21:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	U	0.000	1	0		20

L832435-14 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-14 05/10/16 21:54 • (DUP) R3136170-6 05/10/16 21:57

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	0.00500	0.00400	1	22	J P1	20

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

(LCS) R3136170-2 05/10/16 20:42 • (LCSD) R3136170-3 05/10/16 20:45

	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	0.0970	0.0980	97	98	86-114			1	20

L832409-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-17 05/10/16 21:24 • (MS) R3136170-10 05/10/16 22:19 • (MSD) R3136170-11 05/10/16 22:22

	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	%	%		%			%	%
Cyanide	0.100	0.0230	0.113	0.117	90	94	1	64-136			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG868781

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832435-03,14



Method Blank (MB)

(MB) R3133034-1 05/02/16 09:18

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL 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) R3133034-6 05/02/16 14:06 • (LCSD) R3133034-7 05/02/16 14:09

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 %
Mercury	0.00300	0.00346	0.00324	115	108	80-120			7	20

L832388-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832388-01 05/02/16 09:27 • (MS) R3133034-4 05/02/16 09:30 • (MSD) R3133034-5 05/02/16 09:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	ND	0.00302	0.00280	101	93	1	75-125			8	20

WG869207

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832435-03,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133626-1 05/04/16 12:07				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury,Dissolved	U		0.000049	0.000200

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

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

(LCS) R3133626-2 05/04/16 12:09 • (LCSD) R3133626-3 05/04/16 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	%	%	%			%	%
Mercury,Dissolved	0.00300	0.00284	0.00263	95	88	80-120			7	20

L832603-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-17 05/04/16 12:13 • (MS) R3133626-4 05/04/16 12:16 • (MSD) R3133626-5 05/04/16 12:18												
	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,Dissolved	0.00300	U	0.00254	0.00254	85	85	1	75-125			0	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832435-02,03,04,05,06,07,08,09,10,11,12,13,14,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134619-1 05/07/16 02:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	0.0221		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	U		0.00025	0.00500
Nickel,Dissolved	U		0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	0.000257		0.00018	0.00500

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

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

(LCS) R3134619-2 05/07/16 02:40 • (LCSD) R3134619-3 05/07/16 02:43

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 %
Arsenic,Dissolved	0.0500	0.0482	0.0496	96	99	80-120			3	20
Barium,Dissolved	0.0500	0.0494	0.0487	99	97	80-120			1	20
Cadmium,Dissolved	0.0500	0.0496	0.0513	99	103	80-120			3	20
Chromium,Dissolved	0.0500	0.0490	0.0490	98	98	80-120			0	20
Cobalt,Dissolved	0.0500	0.0496	0.0499	99	100	80-120			0	20
Iron,Dissolved	5.00	4.78	4.82	96	96	80-120			1	20
Lead,Dissolved	0.0500	0.0491	0.0499	98	100	80-120			2	20
Manganese,Dissolved	0.0500	0.0492	0.0491	98	98	80-120			0	20
Nickel,Dissolved	0.0500	0.0489	0.0501	98	100	80-120			2	20
Selenium,Dissolved	0.0500	0.0482	0.0482	96	96	80-120			0	20
Uranium,Dissolved	0.0500	0.0495	0.0500	99	100	80-120			1	20
Vanadium,Dissolved	0.0500	0.0480	0.0489	96	98	80-120			2	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832435-02,03,04,05,06,07,08,09,10,11,12,13,14,16

ONE LAB. NATIONWIDE.



L832409-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-25 05/07/16 02:46 • (MS) R3134619-5 05/07/16 02:51 • (MSD) R3134619-6 05/07/16 02:54

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	%	%		%			%	%
Arsenic,Dissolved	0.0100	0.00741	0.0242	0.0123	34	10	5	75-125	J6	J3 J6	65	20
Barium,Dissolved	0.0100	0.0650	0.105	0.122	81	115	5	75-125			15	20
Cadmium,Dissolved	0.0100	U	0.0465	0.0537	93	107	5	75-125			14	20
Chromium,Dissolved	0.0100	U	0.0434	0.0503	87	101	5	75-125			15	20
Cobalt,Dissolved	0.0100	U	0.0439	0.0498	88	100	5	75-125			12	20
Iron,Dissolved	1.00	U	4.41	5.39	88	108	5	75-125			20	20
Lead,Dissolved	0.0100	0.00386	0.0479	0.0534	88	99	5	75-125			11	20
Manganese,Dissolved	0.0100	0.00359	0.0451	0.0551	83	103	5	75-125			20	20
Nickel,Dissolved	0.0100	U	0.0425	0.0474	85	95	5	75-125			11	20
Selenium,Dissolved	0.0100	0.596	0.0371	0.0348	0	0	5	75-125	V	V	6	20
Uranium,Dissolved	0.0100	U	0.0490	0.0518	98	104	5	75-125			6	20
Vanadium,Dissolved	0.0100	0.00116	0.0458	0.0512	89	100	5	75-125			11	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134752-1 05/07/16 16:13

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
Cadmium	U		0.00016	0.00100
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.000495		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
Uranium	U		0.00033	0.0100
Vanadium	0.000202		0.00018	0.00500

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) R3134752-2 05/07/16 16:16 • (LCSD) R3134752-3 05/07/16 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 %
Arsenic	0.0500	0.0508	0.0519	102	104	80-120			2	20
Barium	0.0500	0.0493	0.0483	99	97	80-120			2	20
Cadmium	0.0500	0.0543	0.0552	109	110	80-120			2	20
Calcium	5.00	4.99	5.19	100	104	80-120			4	20
Chromium	0.0500	0.0512	0.0507	102	101	80-120			1	20
Cobalt	0.0500	0.0534	0.0533	107	107	80-120			0	20
Iron	5.00	4.94	4.90	99	98	80-120			1	20
Lead	0.0500	0.0510	0.0497	102	99	80-120			3	20
Manganese	0.0500	0.0495	0.0499	99	100	80-120			1	20
Nickel	0.0500	0.0531	0.0531	106	106	80-120			0	20
Potassium	5.00	4.95	4.85	99	97	80-120			2	20
Selenium	0.0500	0.0499	0.0484	100	97	80-120			3	20
Sodium	5.00	5.39	5.23	108	105	80-120			3	20
Uranium	0.0500	0.0515	0.0500	103	100	80-120			3	20
Vanadium	0.0500	0.0506	0.0497	101	99	80-120			2	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



L832435-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-11 05/07/16 16:21 • (MS) R3134752-5 05/07/16 16:25 • (MSD) R3134752-6 05/07/16 16:28

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	%	%		%			%	%
Arsenic	0.0100	0.00566	0.0566	0.0568	102	102	5	75-125			0	20
Barium	0.0100	0.0112	0.0635	0.0633	105	104	5	75-125			0	20
Cadmium	0.0100	U	0.0518	0.0535	104	107	5	75-125			3	20
Calcium	1.00	576	573	598	0	440	5	75-125	√	√	4	20
Chromium	0.0100	U	0.0503	0.0513	101	103	5	75-125			2	20
Cobalt	0.0100	U	0.0511	0.0519	102	104	5	75-125			2	20
Potassium	1.00	1.70	6.67	6.73	99	101	5	75-125			1	20
Iron	1.00	U	4.83	4.95	97	99	5	75-125			2	20
Lead	0.0100	0.00131	0.0502	0.0510	98	99	5	75-125			2	20
Manganese	0.0100	0.0102	0.0578	0.0581	95	96	5	75-125			1	20
Nickel	0.0100	U	0.0509	0.0528	102	106	5	75-125			4	20
Selenium	0.0100	0.00812	0.0571	0.0578	98	99	5	75-125			1	20
Sodium	1.00	311	311	318	0	134	5	75-125	√	√	2	20
Uranium	0.0100	0.0459	0.0951	0.0961	98	100	5	75-125			1	20
Vanadium	0.0100	0.0201	0.0698	0.0707	99	101	5	75-125			1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832435-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134963-1 05/09/16 10:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	0.0259		0.015	0.100
Lead,Dissolved	0.000687		0.00024	0.00200
Manganese,Dissolved	0.0003		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

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

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

(LCS) R3134963-2 05/09/16 10:30 • (LCSD) R3134963-3 05/09/16 10:33

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,Dissolved	0.0500	0.0512	0.0534	102	107	80-120			4	20
Barium,Dissolved	0.0500	0.0517	0.0524	103	105	80-120			1	20
Chromium,Dissolved	0.0500	0.0534	0.0550	107	110	80-120			3	20
Iron,Dissolved	5.00	5.23	5.38	105	108	80-120			3	20
Lead,Dissolved	0.0500	0.0524	0.0538	105	108	80-120			3	20
Manganese,Dissolved	0.0500	0.0518	0.0526	104	105	80-120			1	20
Selenium,Dissolved	0.0500	0.0506	0.0519	101	104	80-120			2	20

L832447-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832447-01 05/09/16 10:35 • (MS) R3134963-5 05/09/16 10:40 • (MSD) R3134963-6 05/09/16 10:42

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,Dissolved	0.0100	0.00646	0.0536	0.0585	94	104	5	75-125			9	20
Barium,Dissolved	0.0100	0.0161	0.0606	0.0636	89	95	5	75-125			5	20
Chromium,Dissolved	0.0100	U	0.0489	0.0497	98	99	5	75-125			2	20
Iron,Dissolved	1.00	U	4.68	5.46	94	109	5	75-125			15	20
Lead,Dissolved	0.0100	U	0.0486	0.0513	97	103	5	75-125			5	20
Manganese,Dissolved	0.0100	0.319	0.326	0.350	14	63	5	75-125	<u>V</u>	<u>V</u>	7	20
Selenium,Dissolved	0.0100	0.00234	0.0506	0.0560	96	107	5	75-125			10	20

ACCOUNT:  
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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832435-03,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134666-1 05/07/16 08:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.0015	0.0200

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

(LCS) R3134666-2 05/07/16 08:35 • (LCSD) R3134666-3 05/07/16 08:40

	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	%	%	%			%	%
Boron	0.0500	0.0478	0.0491	96	98	80-120			3	20

L832450-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-04 05/07/16 08:45 • (MS) R3134666-5 05/07/16 08:54 • (MSD) R3134666-6 05/07/16 08:59

	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	%	%		%			%	%
Boron	0.00500	0.689	0.704	0.712	31	47	10	75-125	<u>V</u>	<u>V</u>	1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870591

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832435-03,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134973-1 05/09/16 10:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0015	0.0200

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

(LCS) R3134973-2 05/09/16 10:50 • (LCSD) R3134973-3 05/09/16 10:55

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 %
Boron,Dissolved	0.0500	0.0484	0.0502	97	100	80-120			4	20

L832468-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832468-01 05/09/16 11:00 • (MS) R3134973-5 05/09/16 11:09 • (MSD) R3134973-6 05/09/16 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 %
Boron,Dissolved	0.00500	0.596	0.642	0.644	92	95	10	75-125			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832435

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05/19/16 14:35

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WG869043

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

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08,09,10,11,12,13

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133562-5 05/02/16 11:18				
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)	96.3			62.0-128

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

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

(LCS) R3133562-3 05/02/16 10:04 • (LCSD) R3133562-4 05/02/16 10:29										
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	5.94	6.09	108	111	67.0-132			2.59	20
(S) a,a,a-Trifluorotoluene(FID)				107	106	62.0-128				

L832212-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832212-01 05/02/16 13:29 • (MS) R3133562-8 05/02/16 14:58 • (MSD) R3133562-9 05/02/16 15:23												
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	6.30	5.53	115	100	1	50.0-143			13.1	20
(S) a,a,a-Trifluorotoluene(FID)					111	115		62.0-128				

ACCOUNT:  
TRC Solutions - Austin, TX

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WG870480

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

QUALITY CONTROL SUMMARY

L832435-16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134535-3 05/06/16 12:44				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID) 102			62.0-128	

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

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

(LCS) R3134535-1 05/06/16 11:36 • (LCSD) R3134535-2 05/06/16 11:58										
	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	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	4.85	5.03	88.1	91.4	67.0-132			3.65	20
(S) a,a,a-Trifluorotoluene(FID)				101	101	62.0-128				

L833378-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L833378-01 05/06/16 17:11 • (MS) R3134535-4 05/06/16 17:34 • (MSD) R3134535-5 05/06/16 17:57												
	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	%	%		%			%	%
TPH (GC/FID) Low Fraction	5.50	0.322	5.51	5.84	94.4	100	1	50.0-143			5.77	20
(S) a,a,a-Trifluorotoluene(FID)					101	101		62.0-128				

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

QUALITY CONTROL SUMMARY

L832435-01.02

ONE LAB. NATIONWIDE. 

Method Blank (MB)

(MB) R3133363-3 05/03/16 10:15

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

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

QUALITY CONTROL SUMMARY

L832435-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133363-3 05/03/16 10:15

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	105			90.0-115
(S) Dibromofluoromethane	103			79.0-121
(S) 4-Bromofluorobenzene	106			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3133363-1 05/03/16 09:06 • (LCSD) R3133363-2 05/03/16 09:23

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	0.161	0.153	129	122	28.7-175			5.36	20.9
Benzene	0.0250	0.0239	0.0229	95.7	91.5	73.0-122			4.44	20
Bromodichloromethane	0.0250	0.0242	0.0236	96.9	94.3	75.5-121			2.73	20
Bromoform	0.0250	0.0244	0.0249	97.5	99.6	71.5-131			2.08	20
Bromomethane	0.0250	0.0259	0.0260	104	104	22.4-187			0.490	20
n-Butylbenzene	0.0250	0.0243	0.0227	97.3	90.9	75.9-134			6.77	20
sec-Butylbenzene	0.0250	0.0257	0.0252	103	101	80.6-126			1.98	20
Carbon disulfide	0.0250	0.0227	0.0222	90.6	88.6	53.0-134			2.28	20
Carbon tetrachloride	0.0250	0.0229	0.0220	91.5	87.8	70.9-129			4.09	20
Chlorobenzene	0.0250	0.0245	0.0240	97.9	95.9	79.7-122			2.04	20
Chlorodibromomethane	0.0250	0.0242	0.0243	96.9	97.0	78.2-124			0.130	20
Chloroethane	0.0250	0.0255	0.0250	102	99.9	41.2-153			2.23	20
Chloroform	0.0250	0.0245	0.0238	98.0	95.2	73.2-125			2.84	20
Chloromethane	0.0250	0.0238	0.0232	95.1	92.9	55.8-134			2.39	20
1,2-Dibromoethane	0.0250	0.0234	0.0226	93.7	90.6	79.8-122			3.37	20
1,1-Dichloroethane	0.0250	0.0243	0.0236	97.1	94.5	71.7-127			2.72	20

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

QUALITY CONTROL SUMMARY

L832435-01.02

ONE LAB. NATIONWIDE.



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

(LCS) R3133363-1 05/03/16 09:06 • (LCSD) R3133363-2 05/03/16 09:23

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	0.0232	0.0225	92.9	89.8	65.3-126			3.40	20
1,1-Dichloroethene	0.0250	0.0256	0.0241	102	96.6	59.9-137			5.64	20
cis-1,2-Dichloroethene	0.0250	0.0248	0.0244	99.2	97.5	77.3-122			1.74	20
trans-1,2-Dichloroethene	0.0250	0.0254	0.0247	102	98.8	72.6-125			2.73	20
1,2-Dichloropropane	0.0250	0.0240	0.0237	95.9	95.0	77.4-125			0.910	20
cis-1,3-Dichloropropene	0.0250	0.0242	0.0233	96.9	93.0	77.7-124			4.13	20
trans-1,3-Dichloropropene	0.0250	0.0236	0.0230	94.6	92.0	73.5-127			2.78	20
Ethylbenzene	0.0250	0.0248	0.0239	99.3	95.8	80.9-121			3.59	20
2-Hexanone	0.125	0.121	0.114	97.2	91.4	59.4-151			6.14	20
Isopropylbenzene	0.0250	0.0258	0.0253	103	101	81.6-124			1.60	20
p-Isopropyltoluene	0.0250	0.0263	0.0259	105	104	77.6-129			1.34	20
2-Butanone (MEK)	0.125	0.111	0.101	89.2	80.8	46.4-155			9.85	20
Methylene Chloride	0.0250	0.0246	0.0246	98.5	98.5	69.5-120			0.0600	20
4-Methyl-2-pentanone (MIBK)	0.125	0.125	0.119	99.7	95.3	63.3-138			4.45	20
Methyl tert-butyl ether	0.0250	0.0235	0.0234	94.0	93.6	70.1-125			0.460	20
Naphthalene	0.0250	0.0256	0.0248	102	99.4	69.7-134			2.82	20
n-Propylbenzene	0.0250	0.0259	0.0255	104	102	81.9-122			1.59	20
Styrene	0.0250	0.0249	0.0254	99.5	102	79.9-124			2.00	20
1,1,1,2-Tetrachloroethane	0.0250	0.0237	0.0241	94.6	96.3	78.5-125			1.77	20
1,1,2,2-Tetrachloroethane	0.0250	0.0249	0.0248	99.8	99.2	79.3-123			0.550	20
Tetrachloroethene	0.0250	0.0259	0.0245	103	97.9	73.5-130			5.53	20
Toluene	0.0250	0.0247	0.0240	98.8	96.1	77.9-116			2.83	20
1,1,1-Trichloroethane	0.0250	0.0263	0.0253	105	101	71.1-129			3.86	20
1,1,2-Trichloroethane	0.0250	0.0233	0.0227	93.0	90.7	81.6-120			2.54	20
Trichloroethene	0.0250	0.0255	0.0241	102	96.2	79.5-121			5.87	20
1,2,4-Trimethylbenzene	0.0250	0.0256	0.0257	102	103	79.0-122			0.520	20
1,3,5-Trimethylbenzene	0.0250	0.0251	0.0250	100	100	81.0-123			0.310	20
Vinyl chloride	0.0250	0.0265	0.0256	106	103	61.5-134			3.45	20
Xylenes, Total	0.0750	0.0753	0.0737	100	98.2	79.2-122			2.22	20
o-Xylene	0.0250	0.0249	0.0245	99.6	98.1	79.1-123			1.59	20
m&p-Xylenes	0.0500	0.0504	0.0492	101	98.3	78.5-122			2.54	20
(S) Toluene-d8				106	108	90.0-115				
(S) Dibromofluoromethane				101	104	79.0-121				
(S) 4-Bromofluorobenzene				102	105	80.1-120				

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

WG68979

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

QUALITY CONTROL SUMMARY

L832435-01,02



L832429-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832429-02 05/03/16 12:20 • (MS) R3133363-4 05/03/16 11:11 • (MSD) R3133363-5 05/03/16 11:28

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	%	%		%			%	%
Acetone	0.125	ND	0.0689	0.0683	55.1	54.6	1	25.0-156			0.830	21.5
Benzene	0.0250	ND	0.0207	0.0211	82.8	84.3	1	58.6-133			1.74	20
Bromodichloromethane	0.0250	ND	0.0230	0.0239	92.0	95.7	1	69.2-127			4.02	20
Bromoform	0.0250	ND	0.0225	0.0237	90.0	94.7	1	66.3-140			5.12	20
Bromomethane	0.0250	ND	0.0177	0.0202	70.7	80.6	1	16.6-183			13.1	20.5
n-Butylbenzene	0.0250	ND	0.0224	0.0229	89.8	91.4	1	64.8-145			1.85	20
sec-Butylbenzene	0.0250	ND	0.0235	0.0247	94.2	98.7	1	66.8-139			4.77	20
Carbon disulfide	0.0250	ND	0.0116	0.0127	46.5	50.8	1	34.9-138			8.90	20
Carbon tetrachloride	0.0250	ND	0.0199	0.0214	79.7	85.7	1	60.6-139			7.21	20
Chlorobenzene	0.0250	ND	0.0222	0.0224	88.8	89.7	1	70.1-130			0.980	20
Chlorodibromomethane	0.0250	ND	0.0229	0.0230	91.5	91.9	1	71.6-132			0.470	20
Chloroethane	0.0250	ND	0.0186	0.0207	74.5	82.9	1	33.3-155			10.6	20
Chloroform	0.0250	ND	0.0222	0.0232	89.0	92.8	1	66.1-133			4.15	20
Chloromethane	0.0250	ND	0.0155	0.0173	62.0	69.1	1	40.7-139			10.8	20
1,2-Dibromoethane	0.0250	ND	0.0208	0.0209	83.1	83.5	1	73.8-131			0.490	20
1,1-Dichloroethane	0.0250	ND	0.0220	0.0225	88.1	90.1	1	64.0-134			2.22	20
1,2-Dichloroethane	0.0250	ND	0.0209	0.0214	83.7	85.7	1	60.7-132			2.45	20
1,1-Dichloroethene	0.0250	ND	0.0199	0.0210	79.7	83.9	1	48.8-144			5.19	20
cis-1,2-Dichloroethene	0.0250	0.00629	0.0270	0.0279	82.6	86.4	1	60.6-136			3.45	20
trans-1,2-Dichloroethene	0.0250	ND	0.0198	0.0210	79.2	84.1	1	61.0-132			5.95	20
1,2-Dichloropropane	0.0250	0.00130	0.0220	0.0227	82.6	85.6	1	69.7-130			3.33	20
cis-1,3-Dichloropropene	0.0250	ND	0.0222	0.0223	88.9	89.2	1	71.1-129			0.310	20
trans-1,3-Dichloropropene	0.0250	ND	0.0222	0.0222	86.5	86.4	1	66.3-136			0.0900	20
Ethylbenzene	0.0250	ND	0.0218	0.0222	87.3	88.8	1	62.7-136			1.73	20
2-Hexanone	0.125	ND	0.0883	0.0883	70.6	70.7	1	59.4-154			0.0500	20.1
Isopropylbenzene	0.0250	ND	0.0233	0.0242	93.2	96.7	1	67.4-136			3.63	20
p-Isopropyltoluene	0.0250	ND	0.0237	0.0250	94.7	100	1	62.8-143			5.46	20
2-Butanone (MEK)	0.125	ND	0.0721	0.0700	57.7	56.0	1	45.0-156			3.04	20.8
Methylene Chloride	0.0250	ND	0.0206	0.0227	82.5	90.9	1	61.5-125			9.64	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.111	0.117	88.5	93.9	1	60.7-150			5.93	20
Methyl tert-butyl ether	0.0250	ND	0.0217	0.0232	86.8	93.0	1	61.4-136			6.86	20
Naphthalene	0.0250	ND	0.0233	0.0245	93.4	98.1	1	61.8-143			4.92	20
n-Propylbenzene	0.0250	ND	0.0235	0.0244	94.1	97.4	1	63.2-139			3.47	20
Styrene	0.0250	ND	0.0229	0.0236	91.5	94.4	1	68.2-133			3.17	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0220	0.0234	88.2	93.6	1	70.5-132			6.00	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0232	0.0246	92.8	98.5	1	64.9-145			6.06	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832435-01.02

ONE LAB. NATIONWIDE.



L832429-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832429-02 05/03/16 12:20 • (MS) R3133363-4 05/03/16 11:11 • (MSD) R3133363-5 05/03/16 11:28

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	%	%		%			%	%
Tetrachloroethene	0.0250	0.0680	0.0862	0.0813	72.8	53.3	1	57.4-141		J6	5.81	20
Toluene	0.0250	ND	0.0215	0.0224	86.1	89.6	1	67.8-124			4.09	20
1,1,1-Trichloroethane	0.0250	ND	0.0234	0.0251	93.7	100	1	58.7-134			6.78	20
1,1,2-Trichloroethane	0.0250	ND	0.0221	0.0221	88.2	88.4	1	74.1-130			0.190	20
Trichloroethene	0.0250	0.00680	0.0277	0.0272	83.5	81.8	1	48.9-148			1.62	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0230	0.0245	92.0	97.9	1	60.5-137			6.23	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0229	0.0239	91.4	95.8	1	67.9-134			4.62	20
Vinyl chloride	0.0250	ND	0.0185	0.0205	74.1	81.9	1	44.3-143			9.91	20
Xylenes, Total	0.0750	ND	0.0667	0.0682	88.9	91.0	1	65.6-133			2.30	20
o-Xylene	0.0250	ND	0.0223	0.0232	89.3	92.7	1	67.1-133			3.68	20
m&p-Xylenes	0.0500	ND	0.0443	0.0451	88.7	90.1	1	64.1-133			1.60	20
(S) Toluene-d8					106	110		90.0-115				
(S) Dibromofluoromethane					101	104		79.0-121				
(S) 4-Bromofluorobenzene					103	105		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

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

QUALITY CONTROL SUMMARY

L832435-03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134082-3 05/04/16 03:33

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

1

Cp

2

Tc

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Ss

4

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

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832435-03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134082-3 05/04/16 03:33

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	105			90.0-115
(S) Dibromofluoromethane	107			79.0-121
(S) 4-Bromofluorobenzene	102			80.1-120

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3134082-1 05/04/16 01:39 • (LCSD) R3134082-2 05/04/16 02:02

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	0.192	0.179	153	144	28.7-175			6.59	20.9
Benzene	0.0250	0.0274	0.0262	109	105	73.0-122			4.31	20
Bromodichloromethane	0.0250	0.0274	0.0264	110	106	75.5-121			3.92	20
Bromoform	0.0250	0.0231	0.0218	92.3	87.2	71.5-131			5.65	20
Bromomethane	0.0250	0.0101	0.00963	40.2	38.5	22.4-187			4.27	20
n-Butylbenzene	0.0250	0.0325	0.0315	130	126	75.9-134			3.09	20
sec-Butylbenzene	0.0250	0.0253	0.0250	101	99.9	80.6-126			1.27	20
Carbon disulfide	0.0250	0.0266	0.0255	107	102	53.0-134			4.36	20
Carbon tetrachloride	0.0250	0.0243	0.0232	97.3	92.9	70.9-129			4.62	20
Chlorobenzene	0.0250	0.0250	0.0245	100	97.9	79.7-122			2.23	20
Chlorodibromomethane	0.0250	0.0235	0.0231	94.0	92.6	78.2-124			1.57	20
Chloroethane	0.0250	0.0290	0.0280	116	112	41.2-153			3.68	20
Chloroform	0.0250	0.0277	0.0264	111	106	73.2-125			4.72	20
Chloromethane	0.0250	0.0240	0.0235	95.9	94.0	55.8-134			2.01	20
1,2-Dibromoethane	0.0250	0.0254	0.0246	102	98.4	79.8-122			3.16	20
1,1-Dichloroethane	0.0250	0.0288	0.0273	115	109	71.7-127			5.42	20

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

QUALITY CONTROL SUMMARY

L832435-03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



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

(LCS) R3134082-1 05/04/16 01:39 • (LCSD) R3134082-2 05/04/16 02:02

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	0.0298	0.0279	119	112	65.3-126			6.43	20
1,1-Dichloroethene	0.0250	0.0285	0.0274	114	110	59.9-137			3.86	20
cis-1,2-Dichloroethene	0.0250	0.0252	0.0239	101	95.8	77.3-122			5.25	20
trans-1,2-Dichloroethene	0.0250	0.0255	0.0244	102	97.4	72.6-125			4.67	20
1,2-Dichloropropane	0.0250	0.0292	0.0265	117	106	77.4-125			9.53	20
cis-1,3-Dichloropropene	0.0250	0.0296	0.0273	118	109	77.7-124			7.88	20
trans-1,3-Dichloropropene	0.0250	0.0326	0.0304	130	121	73.5-127	J4		7.06	20
Ethylbenzene	0.0250	0.0250	0.0248	100	99.1	80.9-121			1.00	20
2-Hexanone	0.125	0.156	0.151	125	121	59.4-151			3.38	20
Isopropylbenzene	0.0250	0.0249	0.0244	99.7	97.5	81.6-124			2.22	20
p-Isopropyltoluene	0.0250	0.0249	0.0245	99.6	97.9	77.6-129			1.75	20
2-Butanone (MEK)	0.125	0.197	0.186	158	149	46.4-155	J4		5.77	20
Methylene Chloride	0.0250	0.0264	0.0252	106	101	69.5-120			4.44	20
4-Methyl-2-pentanone (MIBK)	0.125	0.166	0.155	133	124	63.3-138			6.98	20
Methyl tert-butyl ether	0.0250	0.0284	0.0269	114	108	70.1-125			5.45	20
Naphthalene	0.0250	0.0265	0.0263	106	105	69.7-134			0.840	20
n-Propylbenzene	0.0250	0.0262	0.0255	105	102	81.9-122			2.81	20
Styrene	0.0250	0.0256	0.0252	102	101	79.9-124			1.44	20
1,1,1,2-Tetrachloroethane	0.0250	0.0235	0.0229	94.1	91.5	78.5-125			2.82	20
1,1,2,2-Tetrachloroethane	0.0250	0.0277	0.0265	111	106	79.3-123			4.49	20
Tetrachloroethene	0.0250	0.0217	0.0214	86.9	85.7	73.5-130			1.42	20
Toluene	0.0250	0.0268	0.0254	107	101	77.9-116			5.47	20
1,1,1-Trichloroethane	0.0250	0.0248	0.0239	99.1	95.4	71.1-129			3.79	20
1,1,2-Trichloroethane	0.0250	0.0255	0.0242	102	96.9	81.6-120			5.03	20
Trichloroethene	0.0250	0.0244	0.0225	97.6	90.0	79.5-121			8.10	20
1,2,4-Trimethylbenzene	0.0250	0.0242	0.0239	96.9	95.7	79.0-122			1.27	20
1,3,5-Trimethylbenzene	0.0250	0.0249	0.0244	99.4	97.5	81.0-123			1.93	20
Vinyl chloride	0.0250	0.0260	0.0249	104	99.8	61.5-134			4.03	20
Xylenes, Total	0.0750	0.0748	0.0729	99.7	97.2	79.2-122			2.57	20
o-Xylene	0.0250	0.0245	0.0238	98.1	95.4	79.1-123			2.79	20
m&p-Xylenes	0.0500	0.0503	0.0490	101	98.1	78.5-122			2.47	20
(S) Toluene-d8				106	104	90.0-115				
(S) Dibromofluoromethane				105	104	79.0-121				
(S) 4-Bromofluorobenzene				99.4	98.3	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832435-03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



L832450-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-02 05/04/16 05:04 • (MS) R3134082-4 05/04/16 03:56 • (MSD) R3134082-5 05/04/16 04:19

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	%	%		%			%	%
Acetone	0.125	U	0.0915	0.0815	73.2	65.2	1	25.0-156			11.6	21.5
Benzene	0.0250	U	0.0254	0.0224	102	89.6	1	58.6-133			12.6	20
Bromodichloromethane	0.0250	U	0.0252	0.0226	101	90.3	1	69.2-127			10.9	20
Bromoform	0.0250	U	0.0217	0.0203	86.7	81.2	1	66.3-140			6.58	20
Bromomethane	0.0250	U	0.00939	0.00842	37.5	33.7	1	16.6-183			10.9	20.5
n-Butylbenzene	0.0250	U	0.0308	0.0275	123	110	1	64.8-145			11.6	20
sec-Butylbenzene	0.0250	U	0.0241	0.0214	96.2	85.7	1	66.8-139			11.6	20
Carbon disulfide	0.0250	U	0.0214	0.0187	85.5	74.7	1	34.9-138			13.4	20
Carbon tetrachloride	0.0250	U	0.0222	0.0198	88.9	79.2	1	60.6-139			11.5	20
Chlorobenzene	0.0250	U	0.0235	0.0210	94.1	84.1	1	70.1-130			11.2	20
Chlorodibromomethane	0.0250	U	0.0228	0.0199	91.3	79.5	1	71.6-132			13.9	20
Chloroethane	0.0250	U	0.0259	0.0242	104	97.0	1	33.3-155			6.64	20
Chloroform	0.0250	U	0.0265	0.0236	106	94.3	1	66.1-133			11.6	20
Chloromethane	0.0250	U	0.0204	0.0187	81.5	74.7	1	40.7-139			8.68	20
1,2-Dibromoethane	0.0250	U	0.0240	0.0212	96.1	84.8	1	73.8-131			12.5	20
1,1-Dichloroethane	0.0250	U	0.0268	0.0237	107	94.9	1	64.0-134			12.3	20
1,2-Dichloroethane	0.0250	0.000526	0.0287	0.0254	113	99.6	1	60.7-132			12.2	20
1,1-Dichloroethene	0.0250	U	0.0262	0.0227	105	90.9	1	48.8-144			14.1	20
cis-1,2-Dichloroethene	0.0250	U	0.0235	0.0207	93.8	82.8	1	60.6-136			12.5	20
trans-1,2-Dichloroethene	0.0250	U	0.0229	0.0206	91.6	82.2	1	61.0-132			10.7	20
1,2-Dichloropropane	0.0250	U	0.0262	0.0239	105	95.5	1	69.7-130			9.33	20
cis-1,3-Dichloropropene	0.0250	U	0.0259	0.0235	104	94.0	1	71.1-129			9.73	20
trans-1,3-Dichloropropene	0.0250	U	0.0292	0.0263	117	105	1	66.3-136			10.6	20
Ethylbenzene	0.0250	U	0.0234	0.0205	93.5	81.8	1	62.7-136			13.3	20
2-Hexanone	0.125	U	0.131	0.119	105	94.9	1	59.4-154			9.85	20.1
Isopropylbenzene	0.0250	U	0.0238	0.0210	95.1	84.0	1	67.4-136			12.4	20
p-Isopropyltoluene	0.0250	U	0.0238	0.0209	95.2	83.8	1	62.8-143			12.8	20
2-Butanone (MEK)	0.125	U	0.140	0.129	112	103	1	45.0-156			8.09	20.8
Methylene Chloride	0.0250	U	0.0244	0.0218	97.5	87.2	1	61.5-125			11.1	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.160	0.147	128	118	1	60.7-150			8.41	20
Methyl tert-butyl ether	0.0250	0.322	0.301	0.289	0.000	0.000	1	61.4-136	E V	E V	3.96	20
Naphthalene	0.0250	U	0.0258	0.0242	103	96.9	1	61.8-143			6.13	20
n-Propylbenzene	0.0250	U	0.0246	0.0218	98.6	87.2	1	63.2-139			12.3	20
Styrene	0.0250	U	0.0216	0.0187	86.6	75.0	1	68.2-133			14.4	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0227	0.0200	90.7	79.8	1	70.5-132			12.7	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0277	0.0246	111	98.3	1	64.9-145			12.1	20

- <sup>1</sup>Cp
- <sup>2</sup>Tc
- <sup>3</sup>Ss
- <sup>4</sup>Cn
- <sup>5</sup>Sr
- <sup>6</sup>Qc
- <sup>7</sup>Gl
- <sup>8</sup>Al
- <sup>9</sup>Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832435-03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NATIONWIDE.



L832450-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-02 05/04/16 05:04 • (MS) R3134082-4 05/04/16 03:56 • (MSD) R3134082-5 05/04/16 04:19												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0202	0.0182	80.6	72.9	1	57.4-141			10.1	20
Toluene	0.0250	U	0.0243	0.0219	97.2	87.7	1	67.8-124			10.3	20
1,1,1-Trichloroethane	0.0250	U	0.0236	0.0210	94.5	83.8	1	58.7-134			11.9	20
1,1,2-Trichloroethane	0.0250	U	0.0245	0.0217	98.2	86.8	1	74.1-130			12.3	20
Trichloroethene	0.0250	U	0.0212	0.0190	84.9	76.2	1	48.9-148			10.8	20
1,2,4-Trimethylbenzene	0.0250	U	0.0232	0.0205	92.7	82.0	1	60.5-137			12.3	20
1,3,5-Trimethylbenzene	0.0250	U	0.0236	0.0209	94.6	83.7	1	67.9-134			12.2	20
Vinyl chloride	0.0250	U	0.0216	0.0194	86.3	77.5	1	44.3-143			10.8	20
Xylenes, Total	0.0750	U	0.0702	0.0622	93.6	82.9	1	65.6-133			12.1	20
o-Xylene	0.0250	U	0.0231	0.0206	92.6	82.5	1	67.1-133			11.5	20
m&p-Xylenes	0.0500	U	0.0470	0.0415	94.1	83.0	1	64.1-133			12.4	20
(S) Toluene-d8					104	105		90.0-115				
(S) Dibromofluoromethane					108	106		79.0-121				
(S) 4-Bromofluorobenzene					100	99.0		80.1-120				

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

WG69976

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

QUALITY CONTROL SUMMARY

L832435-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133943-3 05/04/16 18:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
(S) Toluene-d8	107			90.0-115
(S) Dibromofluoromethane	108			79.0-121
(S) 4-Bromofluorobenzene	104			80.1-120

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

(LCS) R3133943-1 05/04/16 17:49 • (LCSD) R3133943-2 05/04/16 18:06

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 %
Benzene	0.0250	0.0241	0.0247	96.4	99.0	73.0-122			2.60	20
(S) Toluene-d8				106	108	90.0-115				
(S) Dibromofluoromethane				103	105	79.0-121				
(S) 4-Bromofluorobenzene				98.6	101	80.1-120				

L832423-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832423-02 05/04/16 21:01 • (MS) R3133943-4 05/04/16 19:35 • (MSD) R3133943-5 05/04/16 19:52

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 %
Benzene	0.0250	U	0.0243	0.0228	97.4	91.1	1	58.6-133			6.61	20
(S) Toluene-d8					110	106		90.0-115				
(S) Dibromofluoromethane					106	103		79.0-121				
(S) 4-Bromofluorobenzene					103	102		80.1-120				

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832435

DATE/TIME:  
05/19/16 14:35

PAGE:  
79 of 86

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG870327

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

QUALITY CONTROL SUMMARY

L832435-08,09,10,11,16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134327-3 05/05/16 21:30				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Benzene	U		0.000331	0.00100
Ethylbenzene	U		0.000384	0.00100
Methyl tert-butyl ether	U		0.000367	0.00100
Toluene	U		0.000780	0.00500
(S) Toluene-d8	101			90.0-115
(S) Dibromofluoromethane	90.6			79.0-121
(S) 4-Bromofluorobenzene	101			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134327-1 05/05/16 20:07 • (LCSD) R3134327-2 05/05/16 20:27										
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	%	%	%			%	%
Benzene	0.0250	0.0206	0.0204	82.3	81.7	73.0-122			0.770	20
Ethylbenzene	0.0250	0.0253	0.0248	101	99.3	80.9-121			1.80	20
Methyl tert-butyl ether	0.0250	0.0198	0.0205	79.3	81.9	70.1-125			3.31	20
Toluene	0.0250	0.0233	0.0233	93.2	93.2	77.9-116			0.0100	20
(S) Toluene-d8				102	103	90.0-115				
(S) Dibromofluoromethane				89.9	89.6	79.0-121				
(S) 4-Bromofluorobenzene				102	100	80.1-120				

L832435-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-11 05/06/16 00:09 • (MS) R3134327-4 05/05/16 23:07 • (MSD) R3134327-5 05/05/16 23:28												
	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	%	%		%			%	%
Benzene	0.0250	U	0.0176	0.0176	70.4	70.3	1	58.6-133			0.170	20
Ethylbenzene	0.0250	U	0.0226	0.0224	90.5	89.5	1	62.7-136			1.11	20
Methyl tert-butyl ether	0.0250	U	0.0175	0.0173	69.9	69.3	1	61.4-136			0.850	20
Toluene	0.0250	U	0.0206	0.0206	82.5	82.3	1	67.8-124			0.280	20
(S) Toluene-d8					102	102		90.0-115				
(S) Dibromofluoromethane					88.4	89.0		79.0-121				
(S) 4-Bromofluorobenzene					101	101		80.1-120				

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832435

DATE/TIME:  
05/19/16 14:35

PAGE:  
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WG869251

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832435-01,02,03,04,05,06,07,08,09,10,11,12,13,14,16



Method Blank (MB)

(MB) R3133569-1 05/03/16 13:27

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	116			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 Sample Detection Limit.
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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



Company Name/Address:

TRC Solutions - Austin, TX

505 E. Huntland Dr, Ste 250

Austin, TX 78752

Billing Information:

Accounts Payable

21 Griffin Road North

Windsor, CT 06095

Report to:

jspeer@trcsolutions.com

Email To:

jspeer@trcsolutions.com

Project Description:

REST Spring 2016 - Team H CJH

City/State Collected:

Artesia, NM

Phone:

512-684-3170

Client Project #

Lab Project #

TRCATX-REST SPRING

Collected by (print):

Scott Ude + HMI Team

Site/Facility ID #

REST - Navajo- Artesia

P.O. #

Collected by (signature):

Scott Ude

Rush? (Lab MUST Be Notified)

Same Day

Next Day

Two Day

Three Day

200%

100%

50%

25%

Date Results Needed

Email? No Yes

FAX? No Yes

No. of Cntrs

Immediately

Packed on Ice

N Y

Analysis / Container / Preservative

DRO - 40mlAmb-HCl-BT

GRO - 40mlAmb-HCl

V8260 - 40mlAmb-HCl

Tot/Diss. As,Ba,Cr,Fe,Pb,Mn,Se - 500mlHDPE-HNO3

Cyanide (CN) - 250mlHDPEAmb-NaOH

Cations-Total Ca, K, Na - 500mlHDPE-HNO3

Anions- Chloride, Fluoride, Sulfate- 125mlHDPE-NoPres

Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4

TDS - 250mlHDPE-NoPres

Tot/Diss. As,Ba,Cd,Cr,Co,Fe,Hg,Mn,Ni,Pb,Se,U,V

Chain of Custody

Page 1 of 2

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#

832435

A182

Accnum: TRCATX

Template: T111397

Prelogin: P549625

TSR: Chris McCord

Cooler:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	DRO - 40mlAmb-HCl-BT	GRO - 40mlAmb-HCl	V8260 - 40mlAmb-HCl	Tot/Diss. As,Ba,Cr,Fe,Pb,Mn,Se - 500mlHDPE-HNO3	Cyanide (CN) - 250mlHDPEAmb-NaOH	Cations-Total Ca, K, Na - 500mlHDPE-HNO3	Anions- Chloride, Fluoride, Sulfate- 125mlHDPE-NoPres	Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	Tot/Diss. As,Ba,Cd,Cr,Co,Fe,Hg,Mn,Ni,Pb,Se,U,V	Item/Contaminant	Sample # (lab only)
MW-48		GW		4/27/16	1525	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		01
MW-130				4/27/16	1730	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		02
MW-67				4/27/16	1530	13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		03
MW-94				4/27/16	1440	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		04
MW-95				4/27/16	1625	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		05
RW-7				4/27/16	1715	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		06
MW-126A				4/27/16	1815	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		07
MW-127				4/27/16	1720	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		08
MW-129				4/27/16	1625	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		09
MW-131				4/27/16	1535	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		10

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

671101282173

671101282194

Remarks: Log all metals by 6020. Dissolved metals are field filtered.

Relinquished by: (Signature)

4/28/16

0900

Received by: (Signature)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐

Temp: °C Bottles Received: 3.1 163

Date: 4/29/16 Time: 0900

Condition: (lab use only)

COC Seal Intact: Y N NA

pH Checked: NCF: ✓

[illegible]

Jeremy W. Watkins

ESC Lab Sciences  
Non-Conformance Form

Login #: L832435	Client: TRCATX	Date: 4/29/16	Evaluated by: Nikki
------------------	----------------	---------------	---------------------

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	If Broken Container:
Parameter(s) past holding time	x Login Clarification Needed	
Improper temperature	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
Improper preservation	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
Broken container	Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments:

1. Did not receive KWB7 @ 1450. Did receive KW8 @ 1450. Logged per COC
2. Received MW-64 4/28/16 @ 1200. (not sure which Rest Spring project it goes with)

Client informed by:	Call	Email	Voice Mail	Date:	Time:
TSR Initials:CM	Client Contact:				

Login Instructions:

1. Log per COC.
2. MW-64 can be logged with this COC under TRCATX-REST SPRING. Log for DROLVI, GRO, V8260, Tot/Diss. Short metals list, CAG, KG, NAG, CHLORIDE, FLUORIDE, SULFATE, NO2NO3 and TDS.

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

## TRC Solutions - Austin, TX

Sample Delivery Group: L832447  
Samples Received: 04/29/2016  
Project Number: 249545.0000.0000 000  
Description: TMD Spring 2016  
Site: TMD - NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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.



<b><sup>1</sup>Cp: Cover Page</b>	<b>1</b>
<b><sup>2</sup>Tc: Table of Contents</b>	<b>2</b>
<b><sup>3</sup>Ss: Sample Summary</b>	<b>3</b>
<b><sup>4</sup>Cn: Case Narrative</b>	<b>4</b>
<b><sup>5</sup>Sr: Sample Results</b>	<b>5</b>
MW-25    L832447-01	5
MW-27    L832447-02	7
MW-89    L832447-03	9
MW-26    L832447-04	11
<b><sup>6</sup>Qc: Quality Control Summary</b>	<b>13</b>
Gravimetric Analysis by Method 2540 C-2011	13
Wet Chemistry by Method 353.2	15
Wet Chemistry by Method 9056A	17
Metals (ICPMS) by Method 6020	21
Volatile Organic Compounds (GC/MS) by Method 8260B	24
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<b><sup>7</sup>Gl: Glossary of Terms</b>	<b>30</b>
<b><sup>8</sup>Al: Accreditations &amp; Locations</b>	<b>31</b>
<b><sup>9</sup>Sc: Chain of Custody</b>	<b>32</b>





# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-25 L832447-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 14:30

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 17:15	JDG
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 10:35	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG868891	1	05/01/16 11:50	05/02/16 11:36	TRF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 10:46	05/04/16 10:46	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:11	05/05/16 15:11	DR
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 12:42	05/10/16 12:42	CM
Wet Chemistry by Method 9056A	WG869679	100	05/10/16 12:58	05/10/16 12:58	CM
Wet Chemistry by Method 9056A	WG871783	100	05/15/16 23:05	05/15/16 23:05	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

MW-27 L832447-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 17:30

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 17:17	JDG
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 10:47	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG868891	1	05/01/16 11:50	05/02/16 03:15	TRF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 11:09	05/04/16 11:09	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:13	05/05/16 15:13	DR
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 13:45	05/10/16 13:45	CM
Wet Chemistry by Method 9056A	WG869679	50	05/10/16 14:01	05/10/16 14:01	CM
Wet Chemistry by Method 9056A	WG871783	50	05/15/16 16:22	05/15/16 16:22	CM

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-89 L832447-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 16:40

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869087	1	05/03/16 06:22	05/03/16 06:51	JM
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 17:20	JDG
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 10:49	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG868891	1	05/01/16 11:50	05/02/16 03:34	TRF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 11:31	05/04/16 11:31	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:14	05/05/16 15:14	DR
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 14:17	05/10/16 14:17	CM
Wet Chemistry by Method 9056A	WG869679	50	05/10/16 14:33	05/10/16 14:33	CM
Wet Chemistry by Method 9056A	WG871783	50	05/15/16 16:36	05/15/16 16:36	CM

MW-26 L832447-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 15:50

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869293	5	05/04/16 22:27	05/07/16 17:22	JDG
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 10:56	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG868891	1	05/01/16 11:50	05/02/16 03:52	TRF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 11:54	05/04/16 11:54	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:15	05/05/16 15:15	DR
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 14:49	05/10/16 14:49	CM
Wet Chemistry by Method 9056A	WG869679	100	05/10/16 15:05	05/10/16 15:05	CM
Wet Chemistry by Method 9056A	WG871783	100	05/15/16 17:20	05/15/16 17:20	CM

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

249545.0000.0000 000

SDG:

L832447

DATE/TIME:

05/16/16 15:13

PAGE:

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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

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	11800		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.125	P1	0.0197	0.100	0.100	1	05/05/2016 15:11	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	4130		5.19	1.00	100	100	05/10/2016 12:58	WG869679
Fluoride	1.13		0.00990	0.100	0.100	1	05/10/2016 12:42	WG869679
Sulfate	4100		7.74	5.00	500	100	05/15/2016 23:05	WG871783

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00582	J	0.00125	0.00200	0.0100	5	05/07/2016 17:15	WG869293
Arsenic,Dissolved	0.00646	J	0.00125	0.00200	0.0100	5	05/09/2016 10:35	WG870075
Barium	0.0148	J	0.00180	0.00500	0.0250	5	05/07/2016 17:15	WG869293
Barium,Dissolved	0.0161	J	0.00180	0.00500	0.0250	5	05/09/2016 10:35	WG870075
Calcium	647		0.230	1.00	5.00	5	05/07/2016 17:15	WG869293
Chromium	0.00332	J	0.00270	0.00200	0.0100	5	05/07/2016 17:15	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 10:35	WG870075
Iron	U		0.0750	0.100	0.500	5	05/07/2016 17:15	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 10:35	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 17:15	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 10:35	WG870075
Manganese	0.889		0.00125	0.00500	0.0250	5	05/07/2016 17:15	WG869293
Manganese,Dissolved	0.319	V	0.00125	0.00500	0.0250	5	05/09/2016 10:35	WG870075
Potassium	6.61		0.185	1.00	5.00	5	05/07/2016 17:15	WG869293
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 17:15	WG869293
Selenium,Dissolved	0.00234	J	0.00190	0.00200	0.0100	5	05/09/2016 10:35	WG870075
Sodium	2670		0.550	1.00	5.00	5	05/07/2016 17:15	WG869293

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 10:46	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 10:46	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 10:46	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 10:46	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 10:46	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 10:46	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 10:46	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 10:46	WG868983



Collected date/time: 04/27/16 14:30

L832447

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 10:46	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:46	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 10:46	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 10:46	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 10:46	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 10:46	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 10:46	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 10:46	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 10:46	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 10:46	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 10:46	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 10:46	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 10:46	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 10:46	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 10:46	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 10:46	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 10:46	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:46	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 10:46	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 10:46	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 10:46	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 10:46	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 10:46	WG868983
(S) Toluene-d8	104				90.0-115		05/04/2016 10:46	WG868983
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 10:46	WG868983
(S) 4-Bromofluorobenzene	96.8				80.1-120		05/04/2016 10:46	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.348		0.0247	0.100	0.100	1	05/02/2016 11:36	WG868891
(S) o-Terphenyl	106				50.0-150		05/02/2016 11:36	WG868891



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3150		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.687		0.0197	0.100	0.100	1	05/05/2016 15:13	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	234		2.60	1.00	50.0	50	05/10/2016 14:01	WG869679
Fluoride	1.19		0.00990	0.100	0.100	1	05/10/2016 13:45	WG869679
Sulfate	3950		3.87	5.00	250	50	05/15/2016 16:22	WG871783

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00228	J	0.00125	0.00200	0.0100	5	05/07/2016 17:17	WG869293
Arsenic,Dissolved	0.00249	J	0.00125	0.00200	0.0100	5	05/09/2016 10:47	WG870075
Barium	0.0179	J	0.00180	0.00500	0.0250	5	05/07/2016 17:17	WG869293
Barium,Dissolved	0.0185	J	0.00180	0.00500	0.0250	5	05/09/2016 10:47	WG870075
Calcium	470		0.230	1.00	5.00	5	05/07/2016 17:17	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 17:17	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 10:47	WG870075
Iron	U		0.0750	0.100	0.500	5	05/07/2016 17:17	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 10:47	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 17:17	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 10:47	WG870075
Manganese	0.0186	J	0.00125	0.00500	0.0250	5	05/07/2016 17:17	WG869293
Manganese,Dissolved	0.0164	J	0.00125	0.00500	0.0250	5	05/09/2016 10:47	WG870075
Potassium	9.36		0.185	1.00	5.00	5	05/07/2016 17:17	WG869293
Selenium	0.0127		0.00190	0.00200	0.0100	5	05/07/2016 17:17	WG869293
Selenium,Dissolved	0.0132		0.00190	0.00200	0.0100	5	05/09/2016 10:47	WG870075
Sodium	156		0.550	1.00	5.00	5	05/07/2016 17:17	WG869293

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 11:09	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 11:09	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 11:09	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 11:09	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 11:09	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 11:09	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 11:09	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 11:09	WG868983



Collected date/time: 04/27/16 17:30

L832447

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 11:09	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:09	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 11:09	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 11:09	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 11:09	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 11:09	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 11:09	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 11:09	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 11:09	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 11:09	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 11:09	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 11:09	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 11:09	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 11:09	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 11:09	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 11:09	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 11:09	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:09	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 11:09	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 11:09	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 11:09	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 11:09	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 11:09	WG868983
(S) Toluene-d8	106				90.0-115		05/04/2016 11:09	WG868983
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 11:09	WG868983
(S) 4-Bromofluorobenzene	97.9				80.1-120		05/04/2016 11:09	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.134		0.0247	0.100	0.100	1	05/02/2016 03:15	WG868891
(S) o-Terphenyl	114				50.0-150		05/02/2016 03:15	WG868891



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3640		2.82	10.0	10.0	1	05/03/2016 06:51	WG869087

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.64		0.0197	0.100	0.100	1	05/05/2016 15:14	WG870055

## Wet Chemistry by Method 9056A

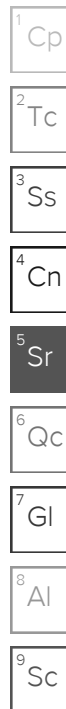
Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	399		2.60	1.00	50.0	50	05/10/2016 14:33	WG869679
Fluoride	3.58		0.00990	0.100	0.100	1	05/10/2016 14:17	WG869679
Sulfate	1490		3.87	5.00	250	50	05/15/2016 16:36	WG871783

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00839	J	0.00125	0.00200	0.0100	5	05/07/2016 17:20	WG869293
Arsenic,Dissolved	0.00780	J	0.00125	0.00200	0.0100	5	05/09/2016 10:49	WG870075
Barium	0.0155	J	0.00180	0.00500	0.0250	5	05/07/2016 17:20	WG869293
Barium,Dissolved	0.0143	J	0.00180	0.00500	0.0250	5	05/09/2016 10:49	WG870075
Calcium	556		0.230	1.00	5.00	5	05/07/2016 17:20	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 17:20	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 10:49	WG870075
Iron	0.228	J	0.0750	0.100	0.500	5	05/07/2016 17:20	WG869293
Iron,Dissolved	0.165	J	0.0750	0.100	0.500	5	05/09/2016 10:49	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 17:20	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 10:49	WG870075
Manganese	0.0788		0.00125	0.00500	0.0250	5	05/07/2016 17:20	WG869293
Manganese,Dissolved	0.0917		0.00125	0.00500	0.0250	5	05/09/2016 10:49	WG870075
Potassium	12.0		0.185	1.00	5.00	5	05/07/2016 17:20	WG869293
Selenium	0.0311		0.00190	0.00200	0.0100	5	05/07/2016 17:20	WG869293
Selenium,Dissolved	0.0332		0.00190	0.00200	0.0100	5	05/09/2016 10:49	WG870075
Sodium	299		0.550	1.00	5.00	5	05/07/2016 17:20	WG869293

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 11:31	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 11:31	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 11:31	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 11:31	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 11:31	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 11:31	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 11:31	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 11:31	WG868983





Collected date/time: 04/27/16 16:40

L832447

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 11:31	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:31	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 11:31	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 11:31	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 11:31	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 11:31	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 11:31	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 11:31	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 11:31	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 11:31	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 11:31	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 11:31	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 11:31	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 11:31	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 11:31	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 11:31	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 11:31	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:31	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 11:31	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 11:31	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 11:31	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 11:31	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 11:31	WG868983
(S) Toluene-d8	105				90.0-115		05/04/2016 11:31	WG868983
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 11:31	WG868983
(S) 4-Bromofluorobenzene	101				80.1-120		05/04/2016 11:31	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.38		0.0247	0.100	0.100	1	05/02/2016 03:34	WG868891
(S) o-Terphenyl	114				50.0-150		05/02/2016 03:34	WG868891





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	8730		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.301		0.0197	0.100	0.100	1	05/05/2016 15:15	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1260		5.19	1.00	100	100	05/10/2016 15:05	WG869679
Fluoride	1.86		0.00990	0.100	0.100	1	05/10/2016 14:49	WG869679
Sulfate	4520		7.74	5.00	500	100	05/15/2016 17:20	WG871783

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00384	J	0.00125	0.00200	0.0100	5	05/07/2016 17:22	WG869293
Arsenic,Dissolved	0.00363	J	0.00125	0.00200	0.0100	5	05/09/2016 10:56	WG870075
Barium	0.0101	J	0.00180	0.00500	0.0250	5	05/07/2016 17:22	WG869293
Barium,Dissolved	0.00913	J	0.00180	0.00500	0.0250	5	05/09/2016 10:56	WG870075
Calcium	725		0.230	1.00	5.00	5	05/07/2016 17:22	WG869293
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 17:22	WG869293
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 10:56	WG870075
Iron	U		0.0750	0.100	0.500	5	05/07/2016 17:22	WG869293
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 10:56	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 17:22	WG869293
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 10:56	WG870075
Manganese	0.847		0.00125	0.00500	0.0250	5	05/07/2016 17:22	WG869293
Manganese,Dissolved	0.534		0.00125	0.00500	0.0250	5	05/09/2016 10:56	WG870075
Potassium	5.75		0.185	1.00	5.00	5	05/07/2016 17:22	WG869293
Selenium	0.0194		0.00190	0.00200	0.0100	5	05/07/2016 17:22	WG869293
Selenium,Dissolved	0.0186		0.00190	0.00200	0.0100	5	05/09/2016 10:56	WG870075
Sodium	695		0.550	1.00	5.00	5	05/07/2016 17:22	WG869293

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 11:54	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 11:54	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 11:54	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 11:54	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 11:54	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 11:54	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 11:54	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 11:54	WG868983



Collected date/time: 04/27/16 15:50

L832447

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 11:54	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:54	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 11:54	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 11:54	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 11:54	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 11:54	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 11:54	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 11:54	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 11:54	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 11:54	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 11:54	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 11:54	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 11:54	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 11:54	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 11:54	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 11:54	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 11:54	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:54	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 11:54	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 11:54	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 11:54	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 11:54	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 11:54	WG868983
(S) Toluene-d8	107				90.0-115		05/04/2016 11:54	WG868983
(S) Dibromofluoromethane	109				79.0-121		05/04/2016 11:54	WG868983
(S) 4-Bromofluorobenzene	97.0				80.1-120		05/04/2016 11:54	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.103		0.0247	0.100	0.100	1	05/02/2016 03:52	WG868891
(S) o-Terphenyl	109				50.0-150		05/02/2016 03:52	WG868891

WG869087

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832447-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133461-1 05/03/16 06:51

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

L832435-09 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-09 05/03/16 06:51 • (DUP) R3133461-4 05/03/16 06:51

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1520	1540	1	1.47		5

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

(LCS) R3133461-2 05/03/16 06:51 • (LCSD) R3133461-3 05/03/16 06:51

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 %
Dissolved Solids	8800	8430	8730	95.8	99.2	85.0-115			3.50	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869534

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832447-04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133743-1 05/03/16 18:57				
	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

L832447-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832447-04 05/03/16 18:57 • (DUP) R3133743-4 05/03/16 18:57						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	8730	8710	1	0.229		5

L832887-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832887-01 05/03/16 18:57 • (DUP) R3133743-5 05/03/16 18:57						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1720	1710	1	0.583		5

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

(LCS) R3133743-2 05/03/16 18:57 • (LCSD) R3133743-3 05/03/16 18:57										
	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	8700	8720	98.9	99.1	85.0-115			0.230	5

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832447

DATE/TIME:  
05/16/16 15:13

PAGE:  
14 of 32

WG870055

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134124-1 05/05/16 15:06

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

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

L832447-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832447-01 05/05/16 15:11 • (DUP) R3134124-4 05/05/16 15:12

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.125	ND	1	30.0	J P1	20

L832460-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832460-01 05/05/16 15:26 • (DUP) R3134124-6 05/05/16 15:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.0420	ND	1	13.0	J	20

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

(LCS) R3134124-2 05/05/16 15:08 • (LCSD) R3134124-3 05/05/16 15:09

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 %
Nitrate-Nitrite	5.00	5.11	5.04	102	101	90.0-110			1.00	20

L832447-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L832447-04 05/05/16 15:15 • (MS) R3134124-5 05/05/16 15:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.301	5.82	110	1	90.0-110	

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



L832460-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-07 05/05/16 15:37 • (MS) R3134124-7 05/05/16 15:38 • (MSD) R3134124-8 05/05/16 15:39

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	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0400	4.48	4.51	89.0	89.0	1	90.0-110	J6	J6	1.00	20

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

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135625-1 05/10/16 10:22				
	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

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

L832435-15 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-15 05/10/16 11:53 • (DUP) R3135625-4 05/10/16 12:11						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	17.2	17.3	1	1		15
Fluoride	0.893	0.943	1	5		15

L832453-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-03 05/10/16 18:48 • (DUP) R3135625-6 05/10/16 19:36						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	13.4	13.4	1	0		15
Fluoride	0.108	0.109	1	1		15

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

(LCS) R3135625-2 05/10/16 10:38 • (LCSD) R3135625-3 05/10/16 10:54										
	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	39.0	39.1	98	98	80-120			0	15
Fluoride	8.00	7.64	7.65	95	96	80-120			0	15

L832450-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832450-02 05/10/16 15:37 • (MS) R3135625-5 05/10/16 15:53							
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	5.00	1.96	6.01	81	1	80-120	

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



L832453-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832453-01 05/10/16 18:16 • (MS) R3135625-7 05/10/16 20:24 • (MSD) R3135625-8 05/10/16 20:40

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	50.0	6.47	56.7	57.0	101	101	1	80-120			0	15
Fluoride	5.00	0.158	5.05	5.07	98	98	1	80-120			0	15

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136840-1 05/15/16 08:29

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

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

L832453-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-02 05/15/16 18:32 • (DUP) R3136840-5 05/15/16 18:46

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	121	119	10	1		15

L832453-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-03 05/15/16 20:13 • (DUP) R3136840-8 05/15/16 20:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	128	125	10	2		15

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

(LCS) R3136840-2 05/15/16 08:44 • (LCSD) R3136840-3 05/15/16 08:58

	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	%	%	%			%	%
Sulfate	40.0	39.8	39.7	99	99	80-120			0	15

L832435-16 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-16 05/15/16 15:39 • (MS) R3136840-4 05/15/16 15:53

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Sulfate	50.0	39.9	88.8	98	1	80-120	

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



L832453-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832453-01 05/15/16 19:01 • (MS) R3136840-6 05/15/16 19:15 • (MSD) R3136840-7 05/15/16 19:58

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	%	%		%			%	%
Sulfate	50.0	153	625	625	94	94	10	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134752-1 05/07/16 16:13

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	0.000495		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134752-2 05/07/16 16:16 • (LCSD) R3134752-3 05/07/16 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 %
Arsenic	0.0500	0.0508	0.0519	102	104	80-120			2	20
Barium	0.0500	0.0493	0.0483	99	97	80-120			2	20
Calcium	5.00	4.99	5.19	100	104	80-120			4	20
Chromium	0.0500	0.0512	0.0507	102	101	80-120			1	20
Iron	5.00	4.94	4.90	99	98	80-120			1	20
Lead	0.0500	0.0510	0.0497	102	99	80-120			3	20
Manganese	0.0500	0.0495	0.0499	99	100	80-120			1	20
Potassium	5.00	4.95	4.85	99	97	80-120			2	20
Selenium	0.0500	0.0499	0.0484	100	97	80-120			3	20
Sodium	5.00	5.39	5.23	108	105	80-120			3	20

L832435-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-11 05/07/16 16:21 • (MS) R3134752-5 05/07/16 16:25 • (MSD) R3134752-6 05/07/16 16:28

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	0.0100	0.00566	0.0566	0.0568	102	102	5	75-125			0	20
Barium	0.0100	0.0112	0.0635	0.0633	105	104	5	75-125			0	20
Calcium	1.00	576	573	598	0	440	5	75-125	✓	✓	4	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



L832435-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-11 05/07/16 16:21 • (MS) R3134752-5 05/07/16 16:25 • (MSD) R3134752-6 05/07/16 16:28

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	%	%		%			%	%
Chromium	0.0100	U	0.0503	0.0513	101	103	5	75-125			2	20
Potassium	1.00	1.70	6.67	6.73	99	101	5	75-125			1	20
Iron	1.00	U	4.83	4.95	97	99	5	75-125			2	20
Lead	0.0100	0.00131	0.0502	0.0510	98	99	5	75-125			2	20
Manganese	0.0100	0.0102	0.0578	0.0581	95	96	5	75-125			1	20
Selenium	0.0100	0.00812	0.0571	0.0578	98	99	5	75-125			1	20
Sodium	1.00	311	311	318	0	134	5	75-125	<u>V</u>	<u>V</u>	2	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134963-1 05/09/16 10:28				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	0.0259		0.015	0.100
Lead,Dissolved	0.000687		0.00024	0.00200
Manganese,Dissolved	0.0003		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3134963-2 05/09/16 10:30 • (LCSD) R3134963-3 05/09/16 10:33										
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,Dissolved	0.0500	0.0512	0.0534	102	107	80-120			4	20
Barium,Dissolved	0.0500	0.0517	0.0524	103	105	80-120			1	20
Chromium,Dissolved	0.0500	0.0534	0.0550	107	110	80-120			3	20
Iron,Dissolved	5.00	5.23	5.38	105	108	80-120			3	20
Lead,Dissolved	0.0500	0.0524	0.0538	105	108	80-120			3	20
Manganese,Dissolved	0.0500	0.0518	0.0526	104	105	80-120			1	20
Selenium,Dissolved	0.0500	0.0506	0.0519	101	104	80-120			2	20

L832447-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832447-01 05/09/16 10:35 • (MS) R3134963-5 05/09/16 10:40 • (MSD) R3134963-6 05/09/16 10:42

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,Dissolved	0.0100	0.00646	0.0536	0.0585	94	104	5	75-125			9	20
Barium,Dissolved	0.0100	0.0161	0.0606	0.0636	89	95	5	75-125			5	20
Chromium,Dissolved	0.0100	U	0.0489	0.0497	98	99	5	75-125			2	20
Iron,Dissolved	1.00	U	4.68	5.46	94	109	5	75-125			15	20
Lead,Dissolved	0.0100	U	0.0486	0.0513	97	103	5	75-125			5	20
Manganese,Dissolved	0.0100	0.319	0.326	0.350	14	63	5	75-125	<u>V</u>	<u>V</u>	7	20
Selenium,Dissolved	0.0100	0.00234	0.0506	0.0560	96	107	5	75-125			10	20

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

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134082-3 05/04/16 03:33

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

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

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134082-3 05/04/16 03:33

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	105			90.0-115
(S) Dibromofluoromethane	107			79.0-121
(S) 4-Bromofluorobenzene	102			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134082-1 05/04/16 01:39 • (LCSD) R3134082-2 05/04/16 02:02

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	0.192	0.179	153	144	28.7-175			6.59	20.9
Benzene	0.0250	0.0274	0.0262	109	105	73.0-122			4.31	20
Bromodichloromethane	0.0250	0.0274	0.0264	110	106	75.5-121			3.92	20
Bromoform	0.0250	0.0231	0.0218	92.3	87.2	71.5-131			5.65	20
Bromomethane	0.0250	0.0101	0.00963	40.2	38.5	22.4-187			4.27	20
n-Butylbenzene	0.0250	0.0325	0.0315	130	126	75.9-134			3.09	20
sec-Butylbenzene	0.0250	0.0253	0.0250	101	99.9	80.6-126			1.27	20
Carbon disulfide	0.0250	0.0266	0.0255	107	102	53.0-134			4.36	20
Carbon tetrachloride	0.0250	0.0243	0.0232	97.3	92.9	70.9-129			4.62	20
Chlorobenzene	0.0250	0.0250	0.0245	100	97.9	79.7-122			2.23	20
Chlorodibromomethane	0.0250	0.0235	0.0231	94.0	92.6	78.2-124			1.57	20
Chloroethane	0.0250	0.0290	0.0280	116	112	41.2-153			3.68	20
Chloroform	0.0250	0.0277	0.0264	111	106	73.2-125			4.72	20
Chloromethane	0.0250	0.0240	0.0235	95.9	94.0	55.8-134			2.01	20
1,2-Dibromoethane	0.0250	0.0254	0.0246	102	98.4	79.8-122			3.16	20
1,1-Dichloroethane	0.0250	0.0288	0.0273	115	109	71.7-127			5.42	20

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832447

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05/16/16 15:13

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WG868983

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

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



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

(LCS) R3134082-1 05/04/16 01:39 • (LCSD) R3134082-2 05/04/16 02:02

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	0.0298	0.0279	119	112	65.3-126			6.43	20
1,1-Dichloroethene	0.0250	0.0285	0.0274	114	110	59.9-137			3.86	20
cis-1,2-Dichloroethene	0.0250	0.0252	0.0239	101	95.8	77.3-122			5.25	20
trans-1,2-Dichloroethene	0.0250	0.0255	0.0244	102	97.4	72.6-125			4.67	20
1,2-Dichloropropane	0.0250	0.0292	0.0265	117	106	77.4-125			9.53	20
cis-1,3-Dichloropropene	0.0250	0.0296	0.0273	118	109	77.7-124			7.88	20
trans-1,3-Dichloropropene	0.0250	0.0326	0.0304	130	121	73.5-127	J4		7.06	20
Ethylbenzene	0.0250	0.0250	0.0248	100	99.1	80.9-121			1.00	20
2-Hexanone	0.125	0.156	0.151	125	121	59.4-151			3.38	20
Isopropylbenzene	0.0250	0.0249	0.0244	99.7	97.5	81.6-124			2.22	20
p-Isopropyltoluene	0.0250	0.0249	0.0245	99.6	97.9	77.6-129			1.75	20
2-Butanone (MEK)	0.125	0.197	0.186	158	149	46.4-155	J4		5.77	20
Methylene Chloride	0.0250	0.0264	0.0252	106	101	69.5-120			4.44	20
4-Methyl-2-pentanone (MIBK)	0.125	0.166	0.155	133	124	63.3-138			6.98	20
Methyl tert-butyl ether	0.0250	0.0284	0.0269	114	108	70.1-125			5.45	20
Naphthalene	0.0250	0.0265	0.0263	106	105	69.7-134			0.840	20
n-Propylbenzene	0.0250	0.0262	0.0255	105	102	81.9-122			2.81	20
Styrene	0.0250	0.0256	0.0252	102	101	79.9-124			1.44	20
1,1,1,2-Tetrachloroethane	0.0250	0.0235	0.0229	94.1	91.5	78.5-125			2.82	20
1,1,2,2-Tetrachloroethane	0.0250	0.0277	0.0265	111	106	79.3-123			4.49	20
Tetrachloroethene	0.0250	0.0217	0.0214	86.9	85.7	73.5-130			1.42	20
Toluene	0.0250	0.0268	0.0254	107	101	77.9-116			5.47	20
1,1,1-Trichloroethane	0.0250	0.0248	0.0239	99.1	95.4	71.1-129			3.79	20
1,1,2-Trichloroethane	0.0250	0.0255	0.0242	102	96.9	81.6-120			5.03	20
Trichloroethene	0.0250	0.0244	0.0225	97.6	90.0	79.5-121			8.10	20
1,2,4-Trimethylbenzene	0.0250	0.0242	0.0239	96.9	95.7	79.0-122			1.27	20
1,3,5-Trimethylbenzene	0.0250	0.0249	0.0244	99.4	97.5	81.0-123			1.93	20
Vinyl chloride	0.0250	0.0260	0.0249	104	99.8	61.5-134			4.03	20
Xylenes, Total	0.0750	0.0748	0.0729	99.7	97.2	79.2-122			2.57	20
o-Xylene	0.0250	0.0245	0.0238	98.1	95.4	79.1-123			2.79	20
m&p-Xylenes	0.0500	0.0503	0.0490	101	98.1	78.5-122			2.47	20
(S) Toluene-d8				106	104	90.0-115				
(S) Dibromofluoromethane				105	104	79.0-121				
(S) 4-Bromofluorobenzene				99.4	98.3	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
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WG68983

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

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



L832450-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-02 05/04/16 05:04 • (MS) R3134082-4 05/04/16 03:56 • (MSD) R3134082-5 05/04/16 04:19

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	%	%		%			%	%
Acetone	0.125	U	0.0915	0.0815	73.2	65.2	1	25.0-156			11.6	21.5
Benzene	0.0250	U	0.0254	0.0224	102	89.6	1	58.6-133			12.6	20
Bromodichloromethane	0.0250	U	0.0252	0.0226	101	90.3	1	69.2-127			10.9	20
Bromoform	0.0250	U	0.0217	0.0203	86.7	81.2	1	66.3-140			6.58	20
Bromomethane	0.0250	U	0.00939	0.00842	37.5	33.7	1	16.6-183			10.9	20.5
n-Butylbenzene	0.0250	U	0.0308	0.0275	123	110	1	64.8-145			11.6	20
sec-Butylbenzene	0.0250	U	0.0241	0.0214	96.2	85.7	1	66.8-139			11.6	20
Carbon disulfide	0.0250	U	0.0214	0.0187	85.5	74.7	1	34.9-138			13.4	20
Carbon tetrachloride	0.0250	U	0.0222	0.0198	88.9	79.2	1	60.6-139			11.5	20
Chlorobenzene	0.0250	U	0.0235	0.0210	94.1	84.1	1	70.1-130			11.2	20
Chlorodibromomethane	0.0250	U	0.0228	0.0199	91.3	79.5	1	71.6-132			13.9	20
Chloroethane	0.0250	U	0.0259	0.0242	104	97.0	1	33.3-155			6.64	20
Chloroform	0.0250	U	0.0265	0.0236	106	94.3	1	66.1-133			11.6	20
Chloromethane	0.0250	U	0.0204	0.0187	81.5	74.7	1	40.7-139			8.68	20
1,2-Dibromoethane	0.0250	U	0.0240	0.0212	96.1	84.8	1	73.8-131			12.5	20
1,1-Dichloroethane	0.0250	U	0.0268	0.0237	107	94.9	1	64.0-134			12.3	20
1,2-Dichloroethane	0.0250	0.000526	0.0287	0.0254	113	99.6	1	60.7-132			12.2	20
1,1-Dichloroethene	0.0250	U	0.0262	0.0227	105	90.9	1	48.8-144			14.1	20
cis-1,2-Dichloroethene	0.0250	U	0.0235	0.0207	93.8	82.8	1	60.6-136			12.5	20
trans-1,2-Dichloroethene	0.0250	U	0.0229	0.0206	91.6	82.2	1	61.0-132			10.7	20
1,2-Dichloropropane	0.0250	U	0.0262	0.0239	105	95.5	1	69.7-130			9.33	20
cis-1,3-Dichloropropene	0.0250	U	0.0259	0.0235	104	94.0	1	71.1-129			9.73	20
trans-1,3-Dichloropropene	0.0250	U	0.0292	0.0263	117	105	1	66.3-136			10.6	20
Ethylbenzene	0.0250	U	0.0234	0.0205	93.5	81.8	1	62.7-136			13.3	20
2-Hexanone	0.125	U	0.131	0.119	105	94.9	1	59.4-154			9.85	20.1
Isopropylbenzene	0.0250	U	0.0238	0.0210	95.1	84.0	1	67.4-136			12.4	20
p-Isopropyltoluene	0.0250	U	0.0238	0.0209	95.2	83.8	1	62.8-143			12.8	20
2-Butanone (MEK)	0.125	U	0.140	0.129	112	103	1	45.0-156			8.09	20.8
Methylene Chloride	0.0250	U	0.0244	0.0218	97.5	87.2	1	61.5-125			11.1	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.160	0.147	128	118	1	60.7-150			8.41	20
Methyl tert-butyl ether	0.0250	0.322	0.301	0.289	0.000	0.000	1	61.4-136	E V	E V	3.96	20
Naphthalene	0.0250	U	0.0258	0.0242	103	96.9	1	61.8-143			6.13	20
n-Propylbenzene	0.0250	U	0.0246	0.0218	98.6	87.2	1	63.2-139			12.3	20
Styrene	0.0250	U	0.0216	0.0187	86.6	75.0	1	68.2-133			14.4	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0227	0.0200	90.7	79.8	1	70.5-132			12.7	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0277	0.0246	111	98.3	1	64.9-145			12.1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



L832450-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-02 05/04/16 05:04 • (MS) R3134082-4 05/04/16 03:56 • (MSD) R3134082-5 05/04/16 04:19												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0202	0.0182	80.6	72.9	1	57.4-141			10.1	20
Toluene	0.0250	U	0.0243	0.0219	97.2	87.7	1	67.8-124			10.3	20
1,1,1-Trichloroethane	0.0250	U	0.0236	0.0210	94.5	83.8	1	58.7-134			11.9	20
1,1,2-Trichloroethane	0.0250	U	0.0245	0.0217	98.2	86.8	1	74.1-130			12.3	20
Trichloroethene	0.0250	U	0.0212	0.0190	84.9	76.2	1	48.9-148			10.8	20
1,2,4-Trimethylbenzene	0.0250	U	0.0232	0.0205	92.7	82.0	1	60.5-137			12.3	20
1,3,5-Trimethylbenzene	0.0250	U	0.0236	0.0209	94.6	83.7	1	67.9-134			12.2	20
Vinyl chloride	0.0250	U	0.0216	0.0194	86.3	77.5	1	44.3-143			10.8	20
Xylenes, Total	0.0750	U	0.0702	0.0622	93.6	82.9	1	65.6-133			12.1	20
o-Xylene	0.0250	U	0.0231	0.0206	92.6	82.5	1	67.1-133			11.5	20
m&p-Xylenes	0.0500	U	0.0470	0.0415	94.1	83.0	1	64.1-133			12.4	20
(S) Toluene-d8					104	105		90.0-115				
(S) Dibromofluoromethane					108	106		79.0-121				
(S) 4-Bromofluorobenzene					100	99.0		80.1-120				

1

Cp

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Tc

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Sr

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Qc

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WG868891

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832447-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3132892-1 05/01/16 20:54				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	110			50.0-150

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

(LCS) R3132892-2 05/01/16 21:12 • (LCSD) R3132892-3 05/01/16 21:30									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD
Analyte	mg/l	mg/l	mg/l	%	%	%			RPD Limits
TPH (GC/FID) High Fraction	1.50	1.69	1.60	112	107	50.0-150			5.02 20
(S) o-Terphenyl				115	114	50.0-150			

1Cp

2Tc

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4Cn

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## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Sample Detection Limit.
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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> GI<sup>8</sup> Al<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752				Billing Information: <b>Accounts Payable</b> <b>21 Griffin Road North</b> <b>Windsor, CT 06095</b>				Analysis / Container / Preservative DRO - 40mlAmb-HCl-BT GRO - 40mlAmb-HCl V8260 - 40mlAmb-HCl Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500mlHDPE-HNO3 Cyanide (CN) - 250mlHDPEAmb-NaOH Cations-Total Ca, K, Na - 500mlHDPE-HNO3 Anions- Chloride, Fluoride, Sulfate-1125mlHDPE-NoPres Nitrate/Nitrite (NO2/NO3) - 250mlHDPE-H2SO4 TDS - 250mlHDPE-NoPres				Chain of Custody 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# <b>L832447</b> <b>B203</b> Acctnum: TRCATX Template: T111389 Prelogin: P549617 TSR: <b>Chris McCord</b> Cooler: Shipped Via:			
Report to: jspeer@trcsolutions.com				Email To: jspeer@trcsolutions.com				City/State Collected: <b>Artesia, NM</b>							
Project Description: <b>TMD Spring 2016 -Team F-CTH</b>				Client Project # Lab Project # <b>TRCATX-TMD SPRING</b>				P.O. #							
Phone: 512-684-3170 Fax:		Site/Facility ID # <b>TMD - Navajo- Artesia</b>		Rush? (Lab MUST Be Notified) Same Day .....200% Next Day .....100% Two Day .....50% Three Day .....25%		Date Results Needed Email? ___ No ___ Yes FAX? ___ No ___ Yes		No. of Cntrs		Immediately Packed on Ice N ___ Y <input checked="" type="checkbox"/>					
Collected by (print): <b>Scott Ude + Matt Tamm</b>		Collected by (signature): <b>Scott Ude</b>		Sample ID <b>MW-25</b> <b>MW-27</b> <b>MW-89</b> <b>MW-26</b>		Comp. Grab <b>GW</b>		Matrix * <b>GW</b>		Depth <b>4/27/16 1430 10</b> <b>4/27/16 1730</b> <b>4/27/16 1640</b> <b>4/27/16 1550</b>					
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other															
Remarks: <b>Log all metals by 6020. Dissolved metals are field filtered.</b>															
Relinquished by: (Signature) <b>Scott Ude</b>				Date: <b>4/28/16</b>		Time: <b>0900</b>		Received by: (Signature) <b>[Signature]</b>							
Relinquished by: (Signature)				Date:		Time:		Received by: (Signature)							
Relinquished by: (Signature)				Date:		Time:		Received by: (Signature)							
Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>				Condition: (lab use only) <b>JWT</b>				Temp: °C <b>3.1 40</b>							
COC Seal Intact: ___ Y ___ N ___ NA				pH _____ Temp _____ Flow _____ Other _____				Hold #							
pH Checked:				NCF:				Date: <b>4/29/16</b> Time: <b>0900</b>							

## TRC Solutions - Austin, TX

Sample Delivery Group: L832450  
Samples Received: 04/29/2016  
Project Number: 249545.0000.0000 000  
Description: TMD Spring 2016  
Site: TMD NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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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<b><sup>2</sup>Tc: Table of Contents</b>	<b>2</b>
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<b><sup>4</sup>Cn: Case Narrative</b>	<b>5</b>
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NP-1    L832450-02	8
MW-68   L832450-03	10
MW-71   L832450-04	12
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<b><sup>6</sup>Qc: Quality Control Summary</b>	<b>16</b>
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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-20 L832450-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 11:35

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869816	1	05/04/16 17:40	05/04/16 18:17	MMF
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 04:34	JDG
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 10:58	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG868891	1	05/01/16 11:50	05/02/16 04:10	TRF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 12:17	05/04/16 12:17	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:21	05/05/16 15:21	DR
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 15:21	05/10/16 15:21	CM
Wet Chemistry by Method 9056A	WG869679	50	05/10/16 16:41	05/10/16 16:41	CM
Wet Chemistry by Method 9056A	WG871783	50	05/15/16 17:34	05/15/16 17:34	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

NP-1 L832450-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 10:45

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869816	1	05/04/16 17:40	05/04/16 18:17	MMF
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 04:36	JDG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868983	1	05/04/16 05:04	05/04/16 05:04	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870327	10	05/06/16 02:34	05/06/16 02:34	LRL
Wet Chemistry by Method 353.2	WG870487	10	05/09/16 15:35	05/09/16 15:35	DR
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 15:37	05/10/16 15:37	CM
Wet Chemistry by Method 9056A	WG869679	50	05/10/16 16:57	05/10/16 16:57	CM
Wet Chemistry by Method 9056A	WG871783	50	05/15/16 17:49	05/15/16 17:49	CM

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-68 L832450-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 09:50

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869816	1	05/04/16 17:40	05/04/16 18:17	MMF
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 04:39	JDG
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:01	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG868891	1	05/01/16 11:50	05/02/16 04:28	TRF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG869310	1	05/03/16 00:26	05/03/16 00:26	DAH
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:23	05/05/16 15:23	DR
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 17:12	05/10/16 17:12	CM
Wet Chemistry by Method 9056A	WG869679	50	05/10/16 17:28	05/10/16 17:28	CM
Wet Chemistry by Method 9056A	WG871783	50	05/15/16 18:03	05/15/16 18:03	CM

MW-71 L832450-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 09:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869816	1	05/04/16 17:40	05/04/16 18:17	MMF
Mercury by Method 7470A	WG869159	1	05/02/16 11:44	05/03/16 10:58	NJB
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:27	NJB
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 04:42	JDG
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:03	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 08:45	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 11:29	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG868891	1	05/01/16 11:50	05/02/16 04:46	TRF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG869310	1	05/03/16 00:45	05/03/16 00:45	DAH
Wet Chemistry by Method 353.2	WG870055	50	05/05/16 15:24	05/05/16 15:24	DR
Wet Chemistry by Method 9012B	WG870326	1	05/06/16 12:26	05/12/16 15:22	DR

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

249545.0000.0000 000

SDG:

L832450

DATE/TIME:

05/16/16 15:20

PAGE:

3 of 48

## SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-71 L832450-04 GW

Collected by  
SU / HM1 TeamCollected date/time  
04/28/16 09:00Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG869679	1	05/10/16 17:44	05/10/16 17:44	CM
Wet Chemistry by Method 9056A	WG869679	100	05/10/16 18:00	05/10/16 18:00	CM
Wet Chemistry by Method 9056A	WG871783	50	05/15/16 18:17	05/15/16 18:17	CM

<sup>1</sup>Cp<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn

TRIP BLANK-TMD-01 L832450-05 GW

Collected by  
SU / HM1 TeamCollected date/time  
04/28/16 00:00Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG869310	1	05/02/16 19:41	05/02/16 19:41	DAH

<sup>5</sup>Sr<sup>6</sup>Qc<sup>7</sup>Gl<sup>8</sup>Al<sup>9</sup>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

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	4850		2.82	10.0	10.0	1	05/04/2016 18:17	WG869816

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	8.09		0.0197	0.100	0.100	1	05/05/2016 15:21	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	515		2.60	1.00	50.0	50	05/10/2016 16:41	WG869679
Fluoride	2.18		0.00990	0.100	0.100	1	05/10/2016 15:21	WG869679
Sulfate	2790		3.87	5.00	250	50	05/15/2016 17:34	WG871783

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00628	J	0.00125	0.00200	0.0100	5	05/07/2016 04:34	WG869289
Arsenic,Dissolved	0.00646	J	0.00125	0.00200	0.0100	5	05/09/2016 10:58	WG870075
Barium	0.0113	J	0.00180	0.00500	0.0250	5	05/07/2016 04:34	WG869289
Barium,Dissolved	0.0112	J	0.00180	0.00500	0.0250	5	05/09/2016 10:58	WG870075
Calcium	594		0.230	1.00	5.00	5	05/07/2016 04:34	WG869289
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 04:34	WG869289
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 10:58	WG870075
Iron	U		0.0750	0.100	0.500	5	05/07/2016 04:34	WG869289
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 10:58	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 04:34	WG869289
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 10:58	WG870075
Manganese	0.00814	J	0.00125	0.00500	0.0250	5	05/07/2016 04:34	WG869289
Manganese,Dissolved	0.00432	J	0.00125	0.00500	0.0250	5	05/09/2016 10:58	WG870075
Potassium	0.370	J	0.185	1.00	5.00	5	05/07/2016 04:34	WG869289
Selenium	0.0305		0.00190	0.00200	0.0100	5	05/07/2016 04:34	WG869289
Selenium,Dissolved	0.0266		0.00190	0.00200	0.0100	5	05/09/2016 10:58	WG870075
Sodium	274		0.550	1.00	5.00	5	05/07/2016 04:34	WG869289

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 12:17	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 12:17	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 12:17	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 12:17	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 12:17	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 12:17	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 12:17	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 12:17	WG868983



Collected date/time: 04/28/16 11:35

L832450

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 12:17	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:17	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 12:17	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 12:17	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 12:17	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 12:17	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 12:17	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 12:17	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 12:17	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 12:17	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 12:17	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 12:17	WG868983
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 12:17	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 12:17	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 12:17	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 12:17	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 12:17	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:17	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 12:17	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 12:17	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 12:17	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 12:17	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 12:17	WG868983
(S) Toluene-d8	108				90.0-115		05/04/2016 12:17	WG868983
(S) Dibromofluoromethane	107				79.0-121		05/04/2016 12:17	WG868983
(S) 4-Bromofluorobenzene	99.2				80.1-120		05/04/2016 12:17	WG868983

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.149		0.0247	0.100	0.100	1	05/02/2016 04:10	WG868891
(S) o-Terphenyl	109				50.0-150		05/02/2016 04:10	WG868891



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4460		2.82	10.0	10.0	1	05/04/2016 18:17	WG869816

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.494	J	0.197	0.100	1.00	10	05/09/2016 15:35	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	391		2.60	1.00	50.0	50	05/10/2016 16:57	WG869679
Fluoride	1.96		0.00990	0.100	0.100	1	05/10/2016 15:37	WG869679
Sulfate	2620		3.87	5.00	250	50	05/15/2016 17:49	WG871783

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Calcium	470		0.230	1.00	5.00	5	05/07/2016 04:36	WG869289
Potassium	3.12	J	0.185	1.00	5.00	5	05/07/2016 04:36	WG869289
Sodium	403		0.550	1.00	5.00	5	05/07/2016 04:36	WG869289

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 05:04	WG868983
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 05:04	WG868983
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 05:04	WG868983
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 05:04	WG868983
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 05:04	WG868983
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 05:04	WG868983
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,2-Dichloroethane	0.000526	J	0.000361	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 05:04	WG868983
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 05:04	WG868983
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 05:04	WG868983
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 05:04	WG868983
trans-1,3-Dichloropropene	U	J4	0.000419	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 05:04	WG868983
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 05:04	WG868983
2-Butanone (MEK)	U	J4	0.00393	0.0100	0.0100	1	05/04/2016 05:04	WG868983
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 05:04	WG868983
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 05:04	WG868983
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 05:04	WG868983

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/28/16 10:45

L832450

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	0.213		0.00367	0.00100	0.0100	10	05/06/2016 02:34	WG870327
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 05:04	WG868983
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 05:04	WG868983
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 05:04	WG868983
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 05:04	WG868983
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 05:04	WG868983
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 05:04	WG868983
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 05:04	WG868983
(S) Toluene-d8	106				90.0-115		05/04/2016 05:04	WG868983
(S) Toluene-d8	102				90.0-115		05/06/2016 02:34	WG870327
(S) Dibromofluoromethane	90.3				79.0-121		05/06/2016 02:34	WG870327
(S) Dibromofluoromethane	107				79.0-121		05/04/2016 05:04	WG868983
(S) 4-Bromofluorobenzene	97.9				80.1-120		05/04/2016 05:04	WG868983
(S) 4-Bromofluorobenzene	98.3				80.1-120		05/06/2016 02:34	WG870327

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2980		2.82	10.0	10.0	1	05/04/2016 18:17	WG869816

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.510		0.0197	0.100	0.100	1	05/05/2016 15:23	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	263		2.60	1.00	50.0	50	05/10/2016 17:28	WG869679
Fluoride	1.75		0.00990	0.100	0.100	1	05/10/2016 17:12	WG869679
Sulfate	1840		3.87	5.00	250	50	05/15/2016 18:03	WG871783

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00314	J	0.00125	0.00200	0.0100	5	05/07/2016 04:39	WG869289
Arsenic,Dissolved	0.00267	J	0.00125	0.00200	0.0100	5	05/09/2016 11:01	WG870075
Barium	0.0133	J	0.00180	0.00500	0.0250	5	05/07/2016 04:39	WG869289
Barium,Dissolved	0.0122	J	0.00180	0.00500	0.0250	5	05/09/2016 11:01	WG870075
Calcium	489		0.230	1.00	5.00	5	05/07/2016 04:39	WG869289
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 04:39	WG869289
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:01	WG870075
Iron	U		0.0750	0.100	0.500	5	05/07/2016 04:39	WG869289
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 11:01	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 04:39	WG869289
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:01	WG870075
Manganese	0.0393		0.00125	0.00500	0.0250	5	05/07/2016 04:39	WG869289
Manganese,Dissolved	0.0388		0.00125	0.00500	0.0250	5	05/09/2016 11:01	WG870075
Potassium	5.58		0.185	1.00	5.00	5	05/07/2016 04:39	WG869289
Selenium	0.00339	J	0.00190	0.00200	0.0100	5	05/07/2016 04:39	WG869289
Selenium,Dissolved	0.00200	J	0.00190	0.00200	0.0100	5	05/09/2016 11:01	WG870075
Sodium	206		0.550	1.00	5.00	5	05/07/2016 04:39	WG869289

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/03/2016 00:26	WG869310
Benzene	U		0.000331	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Bromoform	U		0.000469	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Bromomethane	U		0.000866	0.00500	0.00500	1	05/03/2016 00:26	WG869310
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/03/2016 00:26	WG869310
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Chloroethane	U		0.000453	0.00500	0.00500	1	05/03/2016 00:26	WG869310
Chloroform	U		0.000324	0.00500	0.00500	1	05/03/2016 00:26	WG869310
Chloromethane	U		0.000276	0.00250	0.00250	1	05/03/2016 00:26	WG869310
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/03/2016 00:26	WG869310
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/03/2016 00:26	WG869310





Collected date/time: 04/28/16 09:50

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/03/2016 00:26	WG869310
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 00:26	WG869310
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/03/2016 00:26	WG869310
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/03/2016 00:26	WG869310
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/03/2016 00:26	WG869310
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/03/2016 00:26	WG869310
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/03/2016 00:26	WG869310
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/03/2016 00:26	WG869310
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/03/2016 00:26	WG869310
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/03/2016 00:26	WG869310
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/03/2016 00:26	WG869310
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/03/2016 00:26	WG869310
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Naphthalene	U		0.00100	0.00500	0.00500	1	05/03/2016 00:26	WG869310
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Styrene	U		0.000307	0.00100	0.00100	1	05/03/2016 00:26	WG869310
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/03/2016 00:26	WG869310
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Toluene	U		0.000780	0.00500	0.00500	1	05/03/2016 00:26	WG869310
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/03/2016 00:26	WG869310
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 00:26	WG869310
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/03/2016 00:26	WG869310
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/03/2016 00:26	WG869310
o-Xylene	U		0.000341	0.00100	0.00100	1	05/03/2016 00:26	WG869310
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/03/2016 00:26	WG869310
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/03/2016 00:26	WG869310
(S) Toluene-d8	103				90.0-115		05/03/2016 00:26	WG869310
(S) Dibromofluoromethane	102				79.0-121		05/03/2016 00:26	WG869310
(S) 4-Bromofluorobenzene	97.0				80.1-120		05/03/2016 00:26	WG869310

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.162		0.0247	0.100	0.100	1	05/02/2016 04:28	WG868891
(S) o-Terphenyl	106				50.0-150		05/02/2016 04:28	WG868891



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5450		2.82	10.0	10.0	1	05/04/2016 18:17	WG869816

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	45.6		0.985	0.100	5.00	50	05/05/2016 15:24	WG870055

## Wet Chemistry by Method 9012B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Cyanide	U		0.00180	0.00500	0.00500	1	05/12/2016 15:22	WG870326

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	907		5.19	1.00	100	100	05/10/2016 18:00	WG869679
Fluoride	1.62		0.00990	0.100	0.100	1	05/10/2016 17:44	WG869679
Sulfate	2890		3.87	5.00	250	50	05/15/2016 18:17	WG871783

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/03/2016 10:58	WG869159
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:27	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00436	J	0.00125	0.00200	0.0100	5	05/07/2016 04:42	WG869289
Arsenic,Dissolved	0.00436	J	0.00125	0.00200	0.0100	5	05/09/2016 11:03	WG870075
Barium	0.0103	J	0.00180	0.00500	0.0250	5	05/07/2016 04:42	WG869289
Barium,Dissolved	0.00939	J	0.00180	0.00500	0.0250	5	05/09/2016 11:03	WG870075
Boron	0.689	V	0.0150	0.0200	0.200	10	05/07/2016 08:45	WG870589
Boron,Dissolved	0.649		0.0150	0.0200	0.200	10	05/09/2016 11:29	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/07/2016 04:42	WG869289
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/09/2016 11:03	WG870075
Calcium	669		0.230	1.00	5.00	5	05/07/2016 04:42	WG869289
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 04:42	WG869289
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:03	WG870075
Cobalt	U		0.00130	0.00200	0.0100	5	05/07/2016 04:42	WG869289
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/09/2016 11:03	WG870075
Iron	U		0.0750	0.100	0.500	5	05/07/2016 04:42	WG869289
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 11:03	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 04:42	WG869289
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:03	WG870075
Manganese	U		0.00125	0.00500	0.0250	5	05/07/2016 04:42	WG869289
Manganese,Dissolved	U		0.00125	0.00500	0.0250	5	05/09/2016 11:03	WG870075
Nickel	U		0.00175	0.00200	0.0100	5	05/07/2016 04:42	WG869289
Nickel,Dissolved	U		0.00175	0.00200	0.0100	5	05/09/2016 11:03	WG870075
Potassium	3.72	J	0.185	1.00	5.00	5	05/07/2016 04:42	WG869289
Selenium	0.0370		0.00190	0.00200	0.0100	5	05/07/2016 04:42	WG869289
Selenium,Dissolved	0.0345		0.00190	0.00200	0.0100	5	05/09/2016 11:03	WG870075
Sodium	502		0.550	1.00	5.00	5	05/07/2016 04:42	WG869289



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## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.0605		0.00165	0.0100	0.0500	5	05/07/2016 04:42	WG869289
Uranium,Dissolved	0.0588		0.00165	0.0100	0.0500	5	05/09/2016 11:03	WG870075
Vanadium	0.0257		0.000900	0.00500	0.0250	5	05/07/2016 04:42	WG869289
Vanadium,Dissolved	0.0244	J	0.000900	0.00500	0.0250	5	05/09/2016 11:03	WG870075

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/03/2016 00:45	WG869310
Benzene	U		0.000331	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Bromoform	U		0.000469	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Bromomethane	U		0.000866	0.00500	0.00500	1	05/03/2016 00:45	WG869310
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/03/2016 00:45	WG869310
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Chloroethane	U		0.000453	0.00500	0.00500	1	05/03/2016 00:45	WG869310
Chloroform	U		0.000324	0.00500	0.00500	1	05/03/2016 00:45	WG869310
Chloromethane	U		0.000276	0.00250	0.00250	1	05/03/2016 00:45	WG869310
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 00:45	WG869310
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/03/2016 00:45	WG869310
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/03/2016 00:45	WG869310
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/03/2016 00:45	WG869310
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/03/2016 00:45	WG869310
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/03/2016 00:45	WG869310
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/03/2016 00:45	WG869310
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/03/2016 00:45	WG869310
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/03/2016 00:45	WG869310
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/03/2016 00:45	WG869310
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Naphthalene	U		0.00100	0.00500	0.00500	1	05/03/2016 00:45	WG869310
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Styrene	U		0.000307	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Toluene	U		0.000780	0.00500	0.00500	1	05/03/2016 00:45	WG869310
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/03/2016 00:45	WG869310
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/03/2016 00:45	WG869310
o-Xylene	U		0.000341	0.00100	0.00100	1	05/03/2016 00:45	WG869310
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/03/2016 00:45	WG869310
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/03/2016 00:45	WG869310
(S) Toluene-d8	102				90.0-115		05/03/2016 00:45	WG869310

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



Collected date/time: 04/28/16 09:00

L832450

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
(S) Dibromofluoromethane	102				79.0-121		05/03/2016 00:45	WG869310
(S) 4-Bromofluorobenzene	98.0				80.1-120		05/03/2016 00:45	WG869310

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0252	J	0.0247	0.100	0.100	1	05/02/2016 04:46	WG868891
(S) o-Terphenyl	100				50.0-150		05/02/2016 04:46	WG868891

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/02/2016 19:41	WG869310
Benzene	U		0.000331	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Bromoform	U		0.000469	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Bromomethane	U		0.000866	0.00500	0.00500	1	05/02/2016 19:41	WG869310
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/02/2016 19:41	WG869310
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Chloroethane	U		0.000453	0.00500	0.00500	1	05/02/2016 19:41	WG869310
Chloroform	U		0.000324	0.00500	0.00500	1	05/02/2016 19:41	WG869310
Chloromethane	U		0.000276	0.00250	0.00250	1	05/02/2016 19:41	WG869310
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/02/2016 19:41	WG869310
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/02/2016 19:41	WG869310
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/02/2016 19:41	WG869310
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/02/2016 19:41	WG869310
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/02/2016 19:41	WG869310
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/02/2016 19:41	WG869310
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/02/2016 19:41	WG869310
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/02/2016 19:41	WG869310
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/02/2016 19:41	WG869310
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/02/2016 19:41	WG869310
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Naphthalene	U		0.00100	0.00500	0.00500	1	05/02/2016 19:41	WG869310
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Styrene	U		0.000307	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Toluene	U		0.000780	0.00500	0.00500	1	05/02/2016 19:41	WG869310
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/02/2016 19:41	WG869310
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/02/2016 19:41	WG869310
o-Xylene	U		0.000341	0.00100	0.00100	1	05/02/2016 19:41	WG869310
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/02/2016 19:41	WG869310
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/02/2016 19:41	WG869310
(S) Toluene-d8	101				90.0-115		05/02/2016 19:41	WG869310
(S) Dibromofluoromethane	99.8				79.0-121		05/02/2016 19:41	WG869310
(S) 4-Bromofluorobenzene	98.1				80.1-120		05/02/2016 19:41	WG869310

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

WG869816

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832450-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134195-1 05/04/16 18:17

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

L832422-21 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-21 05/04/16 18:17 • (DUP) R3134195-4 05/04/16 18:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3050	3020	1	0.824		5

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

(LCS) R3134195-2 05/04/16 18:17 • (LCSD) R3134195-3 05/04/16 18:17

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 %
Dissolved Solids	8800	8450	8500	96.0	96.6	85.0-115			0.590	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832450-01,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134124-1 05/05/16 15:06

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

L832447-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832447-01 05/05/16 15:11 • (DUP) R3134124-4 05/05/16 15:12

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.125	ND	1	30.0	J P1	20

L832460-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832460-01 05/05/16 15:26 • (DUP) R3134124-6 05/05/16 15:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.0420	ND	1	13.0	J	20

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

(LCS) R3134124-2 05/05/16 15:08 • (LCSD) R3134124-3 05/05/16 15:09

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 %
Nitrate-Nitrite	5.00	5.11	5.04	102	101	90.0-110			1.00	20

L832447-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L832447-04 05/05/16 15:15 • (MS) R3134124-5 05/05/16 15:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.301	5.82	110	1	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832450-01,03,04

ONE LAB. NATIONWIDE.



L832460-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-07 05/05/16 15:37 • (MS) R3134124-7 05/05/16 15:38 • (MSD) R3134124-8 05/05/16 15:39

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	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0400	4.48	4.51	89.0	89.0	1	90.0-110	J6	J6	1.00	20

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

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832450-02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135143-5 05/09/16 15:16

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

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

L832409-26 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-26 05/09/16 15:25 • (DUP) R3135143-8 05/09/16 15:31

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.377	ND	10	2.00	J	20

L832603-23 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-23 05/09/16 16:14 • (DUP) R3135143-10 05/09/16 16:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.0480	ND	1	143	J P1	20

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

(LCS) R3135143-6 05/09/16 15:17 • (LCSD) R3135143-7 05/09/16 15:18

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 %
Nitrate-Nitrite	5.00	4.74	4.74	95.0	95.0	90.0-110			0.000	20

L832603-22 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-22 05/09/16 16:11 • (MS) R3135143-9 05/09/16 16:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.0770	4.50	88.0	1	90.0-110	J6

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832450-02

ONE LAB. NATIONWIDE.



L832603-26 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-26 05/09/16 16:24 • (MS) R3135143-11 05/09/16 16:25 • (MSD) R3135143-12 05/09/16 16:26

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 %
Nitrate-Nitrite	5.00	0.0650	0.407	0.393	7.00	7.00	1	90.0-110	J6	J6	4.00	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 9012B

QUALITY CONTROL SUMMARY

L832450-04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136186-1 05/12/16 15:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	0.00294	J	0.00180	0.00500

L832450-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832450-04 05/12/16 15:22 • (DUP) R3136186-4 05/12/16 15:23

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

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

(LCS) R3136186-2 05/12/16 15:18 • (LCSD) R3136186-3 05/12/16 15:19

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 %
Cyanide	0.100	0.0916	0.104	92.0	104	90.0-110			13.0	20

L832460-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-08 05/12/16 15:24 • (MS) R3136186-5 05/12/16 15:25 • (MSD) R3136186-6 05/12/16 15:26

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 %
Cyanide	0.200	U	0.00566	0.178	3.00	89.0	1	90.0-110	J6	J3 J6	188	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832450-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135625-1 05/10/16 10:22				
	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

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

L832435-15 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-15 05/10/16 11:53 • (DUP) R3135625-4 05/10/16 12:11						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	17.2	17.3	1	1		15
Fluoride	0.893	0.943	1	5		15

L832453-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-03 05/10/16 18:48 • (DUP) R3135625-6 05/10/16 19:36						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	13.4	13.4	1	0		15
Fluoride	0.108	0.109	1	1		15

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

(LCS) R3135625-2 05/10/16 10:38 • (LCSD) R3135625-3 05/10/16 10:54										
	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	39.0	39.1	98	98	80-120			0	15
Fluoride	8.00	7.64	7.65	95	96	80-120			0	15

L832450-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832450-02 05/10/16 15:37 • (MS) R3135625-5 05/10/16 15:53							
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	5.00	1.96	6.01	81	1	80-120	

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832450-01,02,03,04

ONE LAB. NATIONWIDE.



L832453-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832453-01 05/10/16 18:16 • (MS) R3135625-7 05/10/16 20:24 • (MSD) R3135625-8 05/10/16 20:40

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	%	%		%			%	%
Chloride	50.0	6.47	56.7	57.0	101	101	1	80-120			0	15
Fluoride	5.00	0.158	5.05	5.07	98	98	1	80-120			0	15

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

ACCOUNT:  
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L832450

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832450-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136840-1 05/15/16 08:29

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

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

L832453-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-02 05/15/16 18:32 • (DUP) R3136840-5 05/15/16 18:46

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	121	119	10	1		15

L832453-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-03 05/15/16 20:13 • (DUP) R3136840-8 05/15/16 20:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	128	125	10	2		15

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

(LCS) R3136840-2 05/15/16 08:44 • (LCSD) R3136840-3 05/15/16 08:58

	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	%	%	%			%	%
Sulfate	40.0	39.8	39.7	99	99	80-120			0	15

L832435-16 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-16 05/15/16 15:39 • (MS) R3136840-4 05/15/16 15:53

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Sulfate	50.0	39.9	88.8	98	1	80-120	

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832450-01,02,03,04

ONE LAB. NATIONWIDE.



L832453-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832453-01 05/15/16 19:01 • (MS) R3136840-6 05/15/16 19:15 • (MSD) R3136840-7 05/15/16 19:58

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	%	%		%			%	%
Sulfate	50.0	153	625	625	94	94	10	80-120			0	15

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

ACCOUNT:  
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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832450-04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133255-1 05/03/16 10:26				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

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

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

(LCS) R3133255-2 05/03/16 10:28 • (LCSD) R3133255-3 05/03/16 10:31										
	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	0.00298	0.00292	99	97	80-120			2	20

L832391-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832391-01 05/03/16 10:40 • (MS) R3133255-4 05/03/16 10:43 • (MSD) R3133255-5 05/03/16 10:46												
	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	0.00307	0.00291	102	97	1	75-125			5	20

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832450-04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133626-1 05/04/16 12:07				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury,Dissolved	U		0.000049	0.000200

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

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

(LCS) R3133626-2 05/04/16 12:09 • (LCSD) R3133626-3 05/04/16 12:11										
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 %
Mercury,Dissolved	0.00300	0.00284	0.00263	95	88	80-120			7	20

L832603-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-17 05/04/16 12:13 • (MS) R3133626-4 05/04/16 12:16 • (MSD) R3133626-5 05/04/16 12:18												
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 %
Mercury,Dissolved	0.00300	U	0.00254	0.00254	85	85	1	75-125			0	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832450-01,02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134620-1 05/07/16 03:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	0.00076		0.00036	0.00500
Cadmium	U		0.00016	0.00100
Calcium	0.1		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	0.0157		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Nickel	0.000446		0.00035	0.00200
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Uranium	U		0.00033	0.0100
Vanadium	0.00102		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3134620-2 05/07/16 04:01 • (LCSD) R3134620-3 05/07/16 04:04

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	0.0526	0.0503	105	101	80-120			4	20
Barium	0.0500	0.0527	0.0506	105	101	80-120			4	20
Cadmium	0.0500	0.0549	0.0523	110	105	80-120			5	20
Calcium	5.00	5.44	5.35	109	107	80-120			2	20
Chromium	0.0500	0.0547	0.0516	109	103	80-120			6	20
Cobalt	0.0500	0.0554	0.0523	111	105	80-120			6	20
Iron	5.00	5.33	5.08	107	102	80-120			5	20
Lead	0.0500	0.0541	0.0520	108	104	80-120			4	20
Manganese	0.0500	0.0541	0.0516	108	103	80-120			5	20
Nickel	0.0500	0.0550	0.0543	110	109	80-120			1	20
Potassium	5.00	5.37	5.14	107	103	80-120			4	20
Selenium	0.0500	0.0542	0.0510	108	102	80-120			6	20
Sodium	5.00	5.57	5.26	111	105	80-120			6	20
Uranium	0.0500	0.0543	0.0522	109	104	80-120			4	20
Vanadium	0.0500	0.0548	0.0516	110	103	80-120			6	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832450-01,02,03,04

ONE LAB. NATIONWIDE.



L832409-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-23 05/07/16 04:07 • (MS) R3134620-5 05/07/16 04:12 • (MSD) R3134620-6 05/07/16 04:15

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	%	%		%			%	%
Arsenic	0.0100	0.00316	0.0614	0.0566	116	107	5	75-125			8	20
Barium	0.0100	3.44	3.70	3.66	519	435	5	75-125	V	V	1	20
Cadmium	0.0100	U	0.0577	0.0550	115	110	5	75-125			5	20
Calcium	1.00	130	143	141	254	214	5	75-125	V	V	1	20
Chromium	0.0100	U	0.0575	0.0564	115	113	5	75-125			2	20
Cobalt	0.0100	U	0.0579	0.0549	116	110	5	75-125			5	20
Potassium	1.00	1.73	7.52	7.37	116	113	5	75-125			2	20
Iron	1.00	0.328	6.10	5.83	115	110	5	75-125			4	20
Lead	0.0100	U	0.0594	0.0565	119	113	5	75-125			5	20
Manganese	0.0100	0.0363	0.0960	0.0924	120	112	5	75-125			4	20
Nickel	0.0100	0.00359	0.0583	0.0540	109	101	5	75-125			8	20
Selenium	0.0100	0.00207	0.0304	0.0538	57	103	5	75-125	J6	J3	56	20
Sodium	1.00	450	479	469	569	380	5	75-125	V	V	2	20
Uranium	0.0100	U	0.0584	0.0575	117	115	5	75-125			2	20
Vanadium	0.0100	0.00763	0.0650	0.0632	115	111	5	75-125			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832450-01,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134963-1 05/09/16 10:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	0.0259		0.015	0.100
Lead,Dissolved	0.000687		0.00024	0.00200
Manganese,Dissolved	0.0003		0.00025	0.00500
Nickel,Dissolved	U		0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	0.000218		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3134963-2 05/09/16 10:30 • (LCSD) R3134963-3 05/09/16 10:33

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,Dissolved	0.0500	0.0512	0.0534	102	107	80-120			4	20
Barium,Dissolved	0.0500	0.0517	0.0524	103	105	80-120			1	20
Cadmium,Dissolved	0.0500	0.0547	0.0572	109	114	80-120			5	20
Chromium,Dissolved	0.0500	0.0534	0.0550	107	110	80-120			3	20
Cobalt,Dissolved	0.0500	0.0554	0.0568	111	114	80-120			2	20
Iron,Dissolved	5.00	5.23	5.38	105	108	80-120			3	20
Lead,Dissolved	0.0500	0.0524	0.0538	105	108	80-120			3	20
Manganese,Dissolved	0.0500	0.0518	0.0526	104	105	80-120			1	20
Nickel,Dissolved	0.0500	0.0553	0.0560	111	112	80-120			1	20
Selenium,Dissolved	0.0500	0.0506	0.0519	101	104	80-120			2	20
Uranium,Dissolved	0.0500	0.0516	0.0530	103	106	80-120			3	20
Vanadium,Dissolved	0.0500	0.0522	0.0541	104	108	80-120			4	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832450-01,03,04

ONE LAB. NATIONWIDE. 

L832447-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832447-01 05/09/16 10:35 • (MS) R3134963-5 05/09/16 10:40 • (MSD) R3134963-6 05/09/16 10:42

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	%	%		%			%	%
Arsenic,Dissolved	0.0100	0.00646	0.0536	0.0585	94	104	5	75-125			9	20
Barium,Dissolved	0.0100	0.0161	0.0606	0.0636	89	95	5	75-125			5	20
Cadmium,Dissolved	0.0100	U	0.0473	0.0523	95	105	5	75-125			10	20
Chromium,Dissolved	0.0100	U	0.0489	0.0497	98	99	5	75-125			2	20
Cobalt,Dissolved	0.0100	U	0.0484	0.0505	97	101	5	75-125			4	20
Iron,Dissolved	1.00	U	4.68	5.46	94	109	5	75-125			15	20
Lead,Dissolved	0.0100	U	0.0486	0.0513	97	103	5	75-125			5	20
Manganese,Dissolved	0.0100	0.319	0.326	0.350	14	63	5	75-125	<u>V</u>	<u>V</u>	7	20
Nickel,Dissolved	0.0100	0.00490	0.0531	0.0509	96	92	5	75-125			4	20
Selenium,Dissolved	0.0100	0.00234	0.0506	0.0560	96	107	5	75-125			10	20
Uranium,Dissolved	0.0100	0.0181	0.0628	0.0668	89	97	5	75-125			6	20
Vanadium,Dissolved	0.0100	0.0109	0.0559	0.0602	90	99	5	75-125			7	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832450-04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134666-1 05/07/16 08:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.0015	0.0200

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

(LCS) R3134666-2 05/07/16 08:35 • (LCSD) R3134666-3 05/07/16 08:40

	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	%	%	%			%	%
Boron	0.0500	0.0478	0.0491	96	98	80-120			3	20

L832450-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-04 05/07/16 08:45 • (MS) R3134666-5 05/07/16 08:54 • (MSD) R3134666-6 05/07/16 08:59

	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	%	%		%			%	%
Boron	0.00500	0.689	0.704	0.712	31	47	10	75-125	<u>V</u>	<u>V</u>	1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870591

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832450-04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134973-1 05/09/16 10:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0015	0.0200

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

(LCS) R3134973-2 05/09/16 10:50 • (LCSD) R3134973-3 05/09/16 10:55

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 %
Boron,Dissolved	0.0500	0.0484	0.0502	97	100	80-120			4	20

L832468-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832468-01 05/09/16 11:00 • (MS) R3134973-5 05/09/16 11:09 • (MSD) R3134973-6 05/09/16 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 %
Boron,Dissolved	0.00500	0.596	0.642	0.644	92	95	10	75-125			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

QUALITY CONTROL SUMMARY

L832450-01.02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134082-3 05/04/16 03:33

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

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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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Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832450

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05/16/16 15:20

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WG68983

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

QUALITY CONTROL SUMMARY

L832450-01.02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134082-3 05/04/16 03:33

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	105			90.0-115
(S) Dibromofluoromethane	107			79.0-121
(S) 4-Bromofluorobenzene	102			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134082-1 05/04/16 01:39 • (LCSD) R3134082-2 05/04/16 02:02

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	0.192	0.179	153	144	28.7-175			6.59	20.9
Benzene	0.0250	0.0274	0.0262	109	105	73.0-122			4.31	20
Bromodichloromethane	0.0250	0.0274	0.0264	110	106	75.5-121			3.92	20
Bromoform	0.0250	0.0231	0.0218	92.3	87.2	71.5-131			5.65	20
Bromomethane	0.0250	0.0101	0.00963	40.2	38.5	22.4-187			4.27	20
n-Butylbenzene	0.0250	0.0325	0.0315	130	126	75.9-134			3.09	20
sec-Butylbenzene	0.0250	0.0253	0.0250	101	99.9	80.6-126			1.27	20
Carbon disulfide	0.0250	0.0266	0.0255	107	102	53.0-134			4.36	20
Carbon tetrachloride	0.0250	0.0243	0.0232	97.3	92.9	70.9-129			4.62	20
Chlorobenzene	0.0250	0.0250	0.0245	100	97.9	79.7-122			2.23	20
Chlorodibromomethane	0.0250	0.0235	0.0231	94.0	92.6	78.2-124			1.57	20
Chloroethane	0.0250	0.0290	0.0280	116	112	41.2-153			3.68	20
Chloroform	0.0250	0.0277	0.0264	111	106	73.2-125			4.72	20
Chloromethane	0.0250	0.0240	0.0235	95.9	94.0	55.8-134			2.01	20
1,2-Dibromoethane	0.0250	0.0254	0.0246	102	98.4	79.8-122			3.16	20
1,1-Dichloroethane	0.0250	0.0288	0.0273	115	109	71.7-127			5.42	20

ACCOUNT:  
TRC Solutions - Austin, TX

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L832450

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

QUALITY CONTROL SUMMARY

L832450-01.02

ONE LAB. NATIONWIDE.



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

(LCS) R3134082-1 05/04/16 01:39 • (LCSD) R3134082-2 05/04/16 02:02

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	0.0298	0.0279	119	112	65.3-126			6.43	20
1,1-Dichloroethene	0.0250	0.0285	0.0274	114	110	59.9-137			3.86	20
cis-1,2-Dichloroethene	0.0250	0.0252	0.0239	101	95.8	77.3-122			5.25	20
trans-1,2-Dichloroethene	0.0250	0.0255	0.0244	102	97.4	72.6-125			4.67	20
1,2-Dichloropropane	0.0250	0.0292	0.0265	117	106	77.4-125			9.53	20
cis-1,3-Dichloropropene	0.0250	0.0296	0.0273	118	109	77.7-124			7.88	20
trans-1,3-Dichloropropene	0.0250	0.0326	0.0304	130	121	73.5-127	J4		7.06	20
Ethylbenzene	0.0250	0.0250	0.0248	100	99.1	80.9-121			1.00	20
2-Hexanone	0.125	0.156	0.151	125	121	59.4-151			3.38	20
Isopropylbenzene	0.0250	0.0249	0.0244	99.7	97.5	81.6-124			2.22	20
p-Isopropyltoluene	0.0250	0.0249	0.0245	99.6	97.9	77.6-129			1.75	20
2-Butanone (MEK)	0.125	0.197	0.186	158	149	46.4-155	J4		5.77	20
Methylene Chloride	0.0250	0.0264	0.0252	106	101	69.5-120			4.44	20
4-Methyl-2-pentanone (MIBK)	0.125	0.166	0.155	133	124	63.3-138			6.98	20
Methyl tert-butyl ether	0.0250	0.0284	0.0269	114	108	70.1-125			5.45	20
Naphthalene	0.0250	0.0265	0.0263	106	105	69.7-134			0.840	20
n-Propylbenzene	0.0250	0.0262	0.0255	105	102	81.9-122			2.81	20
Styrene	0.0250	0.0256	0.0252	102	101	79.9-124			1.44	20
1,1,1,2-Tetrachloroethane	0.0250	0.0235	0.0229	94.1	91.5	78.5-125			2.82	20
1,1,2,2-Tetrachloroethane	0.0250	0.0277	0.0265	111	106	79.3-123			4.49	20
Tetrachloroethene	0.0250	0.0217	0.0214	86.9	85.7	73.5-130			1.42	20
Toluene	0.0250	0.0268	0.0254	107	101	77.9-116			5.47	20
1,1,1-Trichloroethane	0.0250	0.0248	0.0239	99.1	95.4	71.1-129			3.79	20
1,1,2-Trichloroethane	0.0250	0.0255	0.0242	102	96.9	81.6-120			5.03	20
Trichloroethene	0.0250	0.0244	0.0225	97.6	90.0	79.5-121			8.10	20
1,2,4-Trimethylbenzene	0.0250	0.0242	0.0239	96.9	95.7	79.0-122			1.27	20
1,3,5-Trimethylbenzene	0.0250	0.0249	0.0244	99.4	97.5	81.0-123			1.93	20
Vinyl chloride	0.0250	0.0260	0.0249	104	99.8	61.5-134			4.03	20
Xylenes, Total	0.0750	0.0748	0.0729	99.7	97.2	79.2-122			2.57	20
o-Xylene	0.0250	0.0245	0.0238	98.1	95.4	79.1-123			2.79	20
m&p-Xylenes	0.0500	0.0503	0.0490	101	98.1	78.5-122			2.47	20
(S) Toluene-d8				106	104	90.0-115				
(S) Dibromofluoromethane				105	104	79.0-121				
(S) 4-Bromofluorobenzene				99.4	98.3	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

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L832450

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

QUALITY CONTROL SUMMARY

L832450-01,02

ONE LAB. NATIONWIDE.



L832450-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-02 05/04/16 05:04 • (MS) R3134082-4 05/04/16 03:56 • (MSD) R3134082-5 05/04/16 04:19

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	%	%		%			%	%
Acetone	0.125	U	0.0915	0.0815	73.2	65.2	1	25.0-156			11.6	21.5
Benzene	0.0250	U	0.0254	0.0224	102	89.6	1	58.6-133			12.6	20
Bromodichloromethane	0.0250	U	0.0252	0.0226	101	90.3	1	69.2-127			10.9	20
Bromoform	0.0250	U	0.0217	0.0203	86.7	81.2	1	66.3-140			6.58	20
Bromomethane	0.0250	U	0.00939	0.00842	37.5	33.7	1	16.6-183			10.9	20.5
n-Butylbenzene	0.0250	U	0.0308	0.0275	123	110	1	64.8-145			11.6	20
sec-Butylbenzene	0.0250	U	0.0241	0.0214	96.2	85.7	1	66.8-139			11.6	20
Carbon disulfide	0.0250	U	0.0214	0.0187	85.5	74.7	1	34.9-138			13.4	20
Carbon tetrachloride	0.0250	U	0.0222	0.0198	88.9	79.2	1	60.6-139			11.5	20
Chlorobenzene	0.0250	U	0.0235	0.0210	94.1	84.1	1	70.1-130			11.2	20
Chlorodibromomethane	0.0250	U	0.0228	0.0199	91.3	79.5	1	71.6-132			13.9	20
Chloroethane	0.0250	U	0.0259	0.0242	104	97.0	1	33.3-155			6.64	20
Chloroform	0.0250	U	0.0265	0.0236	106	94.3	1	66.1-133			11.6	20
Chloromethane	0.0250	U	0.0204	0.0187	81.5	74.7	1	40.7-139			8.68	20
1,2-Dibromoethane	0.0250	U	0.0240	0.0212	96.1	84.8	1	73.8-131			12.5	20
1,1-Dichloroethane	0.0250	U	0.0268	0.0237	107	94.9	1	64.0-134			12.3	20
1,2-Dichloroethane	0.0250	0.000526	0.0287	0.0254	113	99.6	1	60.7-132			12.2	20
1,1-Dichloroethene	0.0250	U	0.0262	0.0227	105	90.9	1	48.8-144			14.1	20
cis-1,2-Dichloroethene	0.0250	U	0.0235	0.0207	93.8	82.8	1	60.6-136			12.5	20
trans-1,2-Dichloroethene	0.0250	U	0.0229	0.0206	91.6	82.2	1	61.0-132			10.7	20
1,2-Dichloropropane	0.0250	U	0.0262	0.0239	105	95.5	1	69.7-130			9.33	20
cis-1,3-Dichloropropene	0.0250	U	0.0259	0.0235	104	94.0	1	71.1-129			9.73	20
trans-1,3-Dichloropropene	0.0250	U	0.0292	0.0263	117	105	1	66.3-136			10.6	20
Ethylbenzene	0.0250	U	0.0234	0.0205	93.5	81.8	1	62.7-136			13.3	20
2-Hexanone	0.125	U	0.131	0.119	105	94.9	1	59.4-154			9.85	20.1
Isopropylbenzene	0.0250	U	0.0238	0.0210	95.1	84.0	1	67.4-136			12.4	20
p-Isopropyltoluene	0.0250	U	0.0238	0.0209	95.2	83.8	1	62.8-143			12.8	20
2-Butanone (MEK)	0.125	U	0.140	0.129	112	103	1	45.0-156			8.09	20.8
Methylene Chloride	0.0250	U	0.0244	0.0218	97.5	87.2	1	61.5-125			11.1	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.160	0.147	128	118	1	60.7-150			8.41	20
Methyl tert-butyl ether	0.0250	0.322	0.301	0.289	0.000	0.000	1	61.4-136	E V	E V	3.96	20
Naphthalene	0.0250	U	0.0258	0.0242	103	96.9	1	61.8-143			6.13	20
n-Propylbenzene	0.0250	U	0.0246	0.0218	98.6	87.2	1	63.2-139			12.3	20
Styrene	0.0250	U	0.0216	0.0187	86.6	75.0	1	68.2-133			14.4	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0227	0.0200	90.7	79.8	1	70.5-132			12.7	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0277	0.0246	111	98.3	1	64.9-145			12.1	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG868983

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

QUALITY CONTROL SUMMARY

L832450-01.02

ONE LAB. NATIONWIDE. 

L832450-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-02 05/04/16 05:04 • (MS) R3134082-4 05/04/16 03:56 • (MSD) R3134082-5 05/04/16 04:19												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0202	0.0182	80.6	72.9	1	57.4-141			10.1	20
Toluene	0.0250	U	0.0243	0.0219	97.2	87.7	1	67.8-124			10.3	20
1,1,1-Trichloroethane	0.0250	U	0.0236	0.0210	94.5	83.8	1	58.7-134			11.9	20
1,1,2-Trichloroethane	0.0250	U	0.0245	0.0217	98.2	86.8	1	74.1-130			12.3	20
Trichloroethene	0.0250	U	0.0212	0.0190	84.9	76.2	1	48.9-148			10.8	20
1,2,4-Trimethylbenzene	0.0250	U	0.0232	0.0205	92.7	82.0	1	60.5-137			12.3	20
1,3,5-Trimethylbenzene	0.0250	U	0.0236	0.0209	94.6	83.7	1	67.9-134			12.2	20
Vinyl chloride	0.0250	U	0.0216	0.0194	86.3	77.5	1	44.3-143			10.8	20
Xylenes, Total	0.0750	U	0.0702	0.0622	93.6	82.9	1	65.6-133			12.1	20
o-Xylene	0.0250	U	0.0231	0.0206	92.6	82.5	1	67.1-133			11.5	20
m&p-Xylenes	0.0500	U	0.0470	0.0415	94.1	83.0	1	64.1-133			12.4	20
(S) Toluene-d8					104	105		90.0-115				
(S) Dibromofluoromethane					108	106		79.0-121				
(S) 4-Bromofluorobenzene					100	99.0		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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L832450

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

QUALITY CONTROL SUMMARY

L832450-03,04,05

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133312-3 05/02/16 17:59

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

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

WG869310

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

QUALITY CONTROL SUMMARY

L832450-03,04,05

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133312-3 05/02/16 17:59

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	98.9			79.0-121
(S) 4-Bromofluorobenzene	99.6			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3133312-1 05/02/16 16:43 • (LCSD) R3133312-2 05/02/16 17:02

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	0.161	0.176	129	141	28.7-175			8.63	20.9
Benzene	0.0250	0.0254	0.0250	102	100	73.0-122			1.59	20
Bromodichloromethane	0.0250	0.0240	0.0238	96.0	95.1	75.5-121			0.990	20
Bromoform	0.0250	0.0241	0.0244	96.4	97.6	71.5-131			1.28	20
Bromomethane	0.0250	0.0213	0.0205	85.2	81.9	22.4-187			3.89	20
n-Butylbenzene	0.0250	0.0245	0.0242	97.9	96.8	75.9-134			1.12	20
sec-Butylbenzene	0.0250	0.0240	0.0235	96.1	94.1	80.6-126			2.13	20
Carbon disulfide	0.0250	0.0232	0.0226	92.8	90.2	53.0-134			2.75	20
Carbon tetrachloride	0.0250	0.0244	0.0239	97.4	95.6	70.9-129			1.89	20
Chlorobenzene	0.0250	0.0243	0.0241	97.1	96.3	79.7-122			0.790	20
Chlorodibromomethane	0.0250	0.0239	0.0237	95.5	94.9	78.2-124			0.600	20
Chloroethane	0.0250	0.0231	0.0221	92.5	88.3	41.2-153			4.67	20
Chloroform	0.0250	0.0248	0.0243	99.1	97.2	73.2-125			1.87	20
Chloromethane	0.0250	0.0266	0.0263	106	105	55.8-134			0.910	20
1,2-Dibromoethane	0.0250	0.0237	0.0237	94.7	94.8	79.8-122			0.140	20
1,1-Dichloroethane	0.0250	0.0263	0.0260	105	104	71.7-127			1.09	20

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

QUALITY CONTROL SUMMARY

L832450-03,04,05

ONE LAB. NATIONWIDE.



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

(LCS) R3133312-1 05/02/16 16:43 • (LCSD) R3133312-2 05/02/16 17:02

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	0.0237	0.0235	94.7	93.9	65.3-126			0.820	20
1,1-Dichloroethene	0.0250	0.0235	0.0227	93.9	91.0	59.9-137			3.18	20
cis-1,2-Dichloroethene	0.0250	0.0251	0.0247	100	98.8	77.3-122			1.63	20
trans-1,2-Dichloroethene	0.0250	0.0252	0.0243	101	97.3	72.6-125			3.42	20
1,2-Dichloropropane	0.0250	0.0269	0.0266	108	107	77.4-125			1.09	20
cis-1,3-Dichloropropene	0.0250	0.0259	0.0256	104	102	77.7-124			1.33	20
trans-1,3-Dichloropropene	0.0250	0.0256	0.0253	102	101	73.5-127			0.990	20
Ethylbenzene	0.0250	0.0237	0.0236	94.8	94.5	80.9-121			0.360	20
2-Hexanone	0.125	0.129	0.137	103	109	59.4-151			5.52	20
Isopropylbenzene	0.0250	0.0231	0.0228	92.5	91.0	81.6-124			1.57	20
p-Isopropyltoluene	0.0250	0.0242	0.0237	96.8	94.7	77.6-129			2.17	20
2-Butanone (MEK)	0.125	0.159	0.169	128	135	46.4-155			5.83	20
Methylene Chloride	0.0250	0.0233	0.0231	93.4	92.4	69.5-120			1.06	20
4-Methyl-2-pentanone (MIBK)	0.125	0.140	0.143	112	114	63.3-138			2.25	20
Methyl tert-butyl ether	0.0250	0.0247	0.0246	98.9	98.3	70.1-125			0.600	20
Naphthalene	0.0250	0.0225	0.0231	89.9	92.5	69.7-134			2.81	20
n-Propylbenzene	0.0250	0.0241	0.0237	96.2	95.0	81.9-122			1.29	20
Styrene	0.0250	0.0237	0.0239	94.8	95.8	79.9-124			1.01	20
1,1,1,2-Tetrachloroethane	0.0250	0.0240	0.0239	96.0	95.6	78.5-125			0.370	20
1,1,2,2-Tetrachloroethane	0.0250	0.0239	0.0242	95.6	96.6	79.3-123			1.06	20
Tetrachloroethene	0.0250	0.0245	0.0238	98.2	95.1	73.5-130			3.11	20
Toluene	0.0250	0.0247	0.0245	98.7	97.9	77.9-116			0.820	20
1,1,1-Trichloroethane	0.0250	0.0245	0.0240	97.8	96.0	71.1-129			1.92	20
1,1,2-Trichloroethane	0.0250	0.0243	0.0239	97.3	95.6	81.6-120			1.75	20
Trichloroethene	0.0250	0.0254	0.0251	102	100	79.5-121			1.14	20
1,2,4-Trimethylbenzene	0.0250	0.0239	0.0237	95.5	94.6	79.0-122			0.880	20
1,3,5-Trimethylbenzene	0.0250	0.0237	0.0234	94.8	93.7	81.0-123			1.09	20
Vinyl chloride	0.0250	0.0239	0.0233	95.7	93.2	61.5-134			2.69	20
Xylenes, Total	0.0750	0.0718	0.0712	95.8	94.9	79.2-122			0.900	20
o-Xylene	0.0250	0.0239	0.0239	95.8	95.5	79.1-123			0.350	20
m&p-Xylenes	0.0500	0.0479	0.0473	95.7	94.6	78.5-122			1.18	20
(S) Toluene-d8				102	102	90.0-115				
(S) Dibromofluoromethane				102	99.6	79.0-121				
(S) 4-Bromofluorobenzene				96.3	96.2	80.1-120				

Cp

Tc

Ss

Cn

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Qc

Gl

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

QUALITY CONTROL SUMMARY

L832450-03,04,05

ONE LAB. NATIONWIDE.



L832458-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832458-05 05/02/16 20:00 • (MS) R3133312-4 05/02/16 18:44 • (MSD) R3133312-5 05/02/16 19:03

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	%	%		%			%	%
Acetone	0.125	ND	0.0660	0.0835	52.8	66.8	1	25.0-156		J3	23.5	21.5
Benzene	0.0250	0.00228	0.0197	0.0228	69.7	81.9	1	58.6-133			14.4	20
Bromodichloromethane	0.0250	ND	0.0190	0.0216	76.1	86.3	1	69.2-127			12.5	20
Bromoform	0.0250	ND	0.0189	0.0217	75.5	86.9	1	66.3-140			14.1	20
Bromomethane	0.0250	ND	0.0111	0.0128	44.4	51.3	1	16.6-183			14.4	20.5
n-Butylbenzene	0.0250	ND	0.0196	0.0217	78.5	86.9	1	64.8-145			10.2	20
sec-Butylbenzene	0.0250	ND	0.0184	0.0203	73.8	81.3	1	66.8-139			9.74	20
Carbon disulfide	0.0250	ND	0.00815	0.00941	32.6	37.7	1	34.9-138	J6		14.4	20
Carbon tetrachloride	0.0250	ND	0.0182	0.0206	72.7	82.5	1	60.6-139			12.6	20
Chlorobenzene	0.0250	ND	0.0181	0.0201	72.6	80.5	1	70.1-130			10.3	20
Chlorodibromomethane	0.0250	ND	0.0187	0.0206	75.0	82.5	1	71.6-132			9.57	20
Chloroethane	0.0250	ND	0.0135	0.0157	53.8	62.6	1	33.3-155			15.1	20
Chloroform	0.0250	ND	0.0197	0.0225	78.9	90.1	1	66.1-133			13.3	20
Chloromethane	0.0250	ND	0.0134	0.0154	53.4	61.5	1	40.7-139			14.0	20
1,2-Dibromoethane	0.0250	ND	0.0176	0.0202	70.4	80.7	1	73.8-131	J6		13.6	20
1,1-Dichloroethane	0.0250	ND	0.0201	0.0230	80.3	92.0	1	64.0-134			13.5	20
1,2-Dichloroethane	0.0250	ND	0.0175	0.0205	70.1	82.0	1	60.7-132			15.7	20
1,1-Dichloroethene	0.0250	ND	0.0153	0.0177	61.3	70.7	1	48.8-144			14.3	20
cis-1,2-Dichloroethene	0.0250	ND	0.0188	0.0213	75.1	85.1	1	60.6-136			12.5	20
trans-1,2-Dichloroethene	0.0250	ND	0.0162	0.0184	64.8	73.6	1	61.0-132			12.8	20
1,2-Dichloropropane	0.0250	ND	0.0214	0.0239	85.4	95.7	1	69.7-130			11.3	20
cis-1,3-Dichloropropene	0.0250	ND	0.0191	0.0222	76.4	89.0	1	71.1-129			15.2	20
trans-1,3-Dichloropropene	0.0250	ND	0.0190	0.0224	76.1	89.7	1	66.3-136			16.5	20
Ethylbenzene	0.0250	ND	0.0178	0.0195	71.4	78.1	1	62.7-136			9.04	20
2-Hexanone	0.125	ND	0.0846	0.106	67.7	84.9	1	59.4-154	J3		22.5	20.1
Isopropylbenzene	0.0250	ND	0.0178	0.0196	71.3	78.2	1	67.4-136			9.22	20
p-Isopropyltoluene	0.0250	ND	0.0184	0.0202	73.4	80.9	1	62.8-143			9.70	20
2-Butanone (MEK)	0.125	ND	0.107	0.135	85.5	108	1	45.0-156	J3		23.4	20.8
Methylene Chloride	0.0250	ND	0.0169	0.0191	67.5	76.4	1	61.5-125			12.5	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.117	0.141	93.3	113	1	60.7-150			19.0	20
Methyl tert-butyl ether	0.0250	ND	0.0190	0.0224	76.1	89.5	1	61.4-136			16.2	20
Naphthalene	0.0250	ND	0.0187	0.0224	74.9	89.5	1	61.8-143			17.7	20
n-Propylbenzene	0.0250	ND	0.0183	0.0203	73.4	81.0	1	63.2-139			9.92	20
Styrene	0.0250	ND	0.0186	0.0200	74.3	80.1	1	68.2-133			7.58	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0189	0.0210	75.5	84.0	1	70.5-132			10.7	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0189	0.0225	75.8	90.1	1	64.9-145			17.3	20

1

Cp

2

Tc

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Ss

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Cn

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Sr

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

QUALITY CONTROL SUMMARY

L832450-03,04,05

ONE LAB. NATIONWIDE. 

L832458-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832458-05 05/02/16 20:00 • (MS) R3133312-4 05/02/16 18:44 • (MSD) R3133312-5 05/02/16 19:03												
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	%	%		%			%	%
Tetrachloroethene	0.0250	ND	0.0168	0.0184	67.1	73.7	1	57.4-141			9.43	20
Toluene	0.0250	ND	0.0189	0.0207	75.6	82.9	1	67.8-124			9.26	20
1,1,1-Trichloroethane	0.0250	ND	0.0187	0.0215	74.9	85.9	1	58.7-134			13.6	20
1,1,2-Trichloroethane	0.0250	ND	0.0244	0.0274	97.4	109	1	74.1-130			11.6	20
Trichloroethene	0.0250	ND	0.0189	0.0211	75.5	84.3	1	48.9-148			11.0	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0180	0.0196	71.9	78.6	1	60.5-137			8.85	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0184	0.0200	71.1	77.7	1	67.9-134			8.69	20
Vinyl chloride	0.0250	ND	0.0131	0.0152	52.6	60.8	1	44.3-143			14.4	20
Xylenes, Total	0.0750	ND	0.0535	0.0590	71.3	78.7	1	65.6-133			9.90	20
o-Xylene	0.0250	ND	0.0181	0.0199	72.5	79.6	1	67.1-133			9.22	20
m&p-Xylenes	0.0500	ND	0.0353	0.0391	70.7	78.3	1	64.1-133			10.3	20
(S) Toluene-d8					104	103		90.0-115				
(S) Dibromofluoromethane					99.1	103		79.0-121				
(S) 4-Bromofluorobenzene					94.8	94.1		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870327

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

QUALITY CONTROL SUMMARY

L832450-02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134327-3 05/05/16 21:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Methyl tert-butyl ether	U		0.000367	0.00100
(S) Toluene-d8	101			90.0-115
(S) Dibromofluoromethane	90.6			79.0-121
(S) 4-Bromofluorobenzene	101			80.1-120

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

(LCS) R3134327-1 05/05/16 20:07 • (LCSD) R3134327-2 05/05/16 20:27

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 %
Methyl tert-butyl ether	0.0250	0.0198	0.0205	79.3	81.9	70.1-125			3.31	20
(S) Toluene-d8				102	103	90.0-115				
(S) Dibromofluoromethane				89.9	89.6	79.0-121				
(S) 4-Bromofluorobenzene				102	100	80.1-120				

L832435-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832435-11 05/06/16 00:09 • (MS) R3134327-4 05/05/16 23:07 • (MSD) R3134327-5 05/05/16 23:28

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 %
Methyl tert-butyl ether	0.0250	U	0.0175	0.0173	69.9	69.3	1	61.4-136			0.850	20
(S) Toluene-d8					102	102		90.0-115				
(S) Dibromofluoromethane					88.4	89.0		79.0-121				
(S) 4-Bromofluorobenzene					101	101		80.1-120				

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Cp

Tc

Ss

Cn

Sr

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Gl

Al

Sc

WG868891

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832450-01,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3132892-1 05/01/16 20:54

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	110			50.0-150

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

(LCS) R3132892-2 05/01/16 21:12 • (LCSD) R3132892-3 05/01/16 21:30

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	1.69	1.60	112	107	50.0-150			5.02	20
(S) o-Terphenyl				115	114	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Sample Detection Limit.
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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> GI

<sup>8</sup> Al

<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752				Billing Information: <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095				Analysis / Container / Preservative												Chain of Custody  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: jspeer@trcsolutions.com				Email To: jspeer@trcsolutions.com				<div style="display: flex; justify-content: space-between;"> <div>DRO - 40ml/Amb-HCl-BT</div> <div>GRO - 40ml/Amb-HCl</div> <div>V8260 - 40ml/Amb-HCl</div> <div>Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500mlHDPE-HNO3</div> <div>Cyanide (CN) - 250mlHDPEAmb-NaOH</div> <div>Cations-Total Ca, K, Na - 500mlHDPE-HNO3</div> <div>Anions- Chloride, Fluoride, Sulfate-1125mlHDPE-NoPres</div> <div>Nitrate/Nitrite (NO2/NO3) - 250mlHDPE-H2SO4</div> <div>TDS - 250mlHDPE-NoPres</div> <div>Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V</div> </div>													
Project <b>TMD Spring 2016 - Team F CJH</b>				City/State Collected: <b>Artesia, NM</b>																	
Description: <b>TMD Spring 2016 - Team F CJH</b>				Lab Project # <b>TRCATX-TMD SPRING</b>				<div style="display: flex; justify-content: space-between;"> <div>12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859</div> <div>             L# <b>L832450</b>  <b>G070</b> </div> </div>													
Phone: 512-684-3170 Fax:				Client Project # <b>TMD - Navajo- Artesia</b>																	
Collected by (print): <b>Scott Ude + HMI Team</b>				Site/Facility ID # <b>TMD - Navajo- Artesia</b>				Acctnum: TRCATX Template: T111389 Prelogin: P549617 TSR: <b>Chris McCord</b> Cooler: Shipped Via:													
Collected by (signature): <b>Scott Ude</b>				Rush? (Lab MUST Be Notified) Same Day ..... 200% Next Day ..... 100% Two Day ..... 50% Three Day ..... 25%																	
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				Date Results Needed Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes				No. of Cntrs													
Sample ID				Date																	
Matrix *				Time				Rem./Contaminant													
Depth				Date																	
Trip Blank-TMD-01				Date				Sample # (lab only)													
Date				Date																	
Date				Date				pH _____ Temp _____ Flow _____ Other _____													
Date				Date																	
Date				Date				Hold #													
Date				Date																	
Date				Date				Condition: (lab use only)													
Date				Date																	
Date				Date				COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA													
Date				Date																	
Date				Date				pH Checked:													
Date				Date																	
Date				Date				NCF:													
Date				Date																	
Date				Date				Condition: (lab use only)													
Date				Date																	
Date				Date				COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA													
Date				Date																	
Date				Date				pH Checked:													
Date				Date																	
Date				Date				NCF:													
Date				Date																	
Date				Date				Condition: (lab use only)													
Date				Date																	
Date				Date				COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA													
Date				Date																	
Date				Date				pH Checked:													
Date				Date																	
Date				Date				NCF:													
Date				Date																	
Date				Date				Condition: (lab use only)													
Date				Date																	
Date				Date				COC Seal Intact:													

## TRC Solutions - Austin, TX

Sample Delivery Group: L832460  
Samples Received: 04/29/2016  
Project Number: 249545.0000.0000 000  
Description: TEL Spring 2016  
Site: TEL - NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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.



## TEL-3 L832460-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 10:30

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/05/16 21:28	LAT
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/06/16 13:35	LAT
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 04:44	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	5	05/02/16 21:06	05/04/16 14:32	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870384	1	05/06/16 01:40	05/06/16 01:40	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	25	05/04/16 08:24	05/04/16 08:24	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:26	05/05/16 15:26	DR
Wet Chemistry by Method 9056A	WG869680	20	05/09/16 17:22	05/09/16 17:22	CM
Wet Chemistry by Method 9056A	WG871228	1	05/10/16 22:42	05/10/16 22:42	SAM
Wet Chemistry by Method 9056A	WG871228	10	05/11/16 09:08	05/11/16 09:08	SAM

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

## EB-TEL-01 L832460-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 10:45

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869245	1	05/03/16 10:57	05/07/16 11:39	LAT
Metals (ICPMS) by Method 6020	WG869289	1	05/04/16 12:26	05/07/16 04:47	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 06:29	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 04:50	05/05/16 04:50	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 08:03	05/04/16 08:03	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:29	05/05/16 15:29	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 04:20	05/09/16 04:20	CM

## TEL-2 L832460-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 09:40

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/05/16 21:34	LAT
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/06/16 13:58	LAT
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 04:50	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	20	05/02/16 21:06	05/05/16 22:15	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870384	1	05/06/16 02:03	05/06/16 02:03	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870445	1	05/06/16 12:15	05/06/16 12:15	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870646	20	05/07/16 03:10	05/07/16 03:10	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:34	05/05/16 15:34	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 04:51	05/09/16 04:51	CM
Wet Chemistry by Method 9056A	WG869680	20	05/09/16 17:38	05/09/16 17:38	CM

## TRIP BLANK-TEL-01 L832460-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 00:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 07:21	05/04/16 07:21	BMB

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



TEL-1 L832460-05 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 08:55

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/05/16 21:42	LAT
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/06/16 14:01	LAT
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 04:52	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 16:59	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 05:55	05/05/16 05:55	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 09:06	05/04/16 09:06	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:35	05/05/16 15:35	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 05:22	05/09/16 05:22	CM
Wet Chemistry by Method 9056A	WG869680	50	05/09/16 05:37	05/09/16 05:37	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

TEL-4 L832460-06 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 07:55

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/05/16 21:44	LAT
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/06/16 14:03	LAT
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 04:55	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 17:16	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870384	1	05/06/16 02:26	05/06/16 02:26	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	10	05/04/16 09:27	05/04/16 09:27	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:36	05/05/16 15:36	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 05:53	05/09/16 05:53	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 06:08	05/09/16 06:08	CM

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

DUP-TEL-01 L832460-07 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 10:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/05/16 21:47	LAT
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/06/16 14:06	LAT
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 05:03	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 17:33	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870384	1	05/06/16 02:49	05/06/16 02:49	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	10	05/04/16 09:48	05/04/16 09:48	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:37	05/05/16 15:37	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 06:54	05/09/16 06:54	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 07:10	05/09/16 07:10	CM

MW-49 L832460-08 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 10:10

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Mercury by Method 7470A	WG869159	1	05/02/16 11:44	05/03/16 11:01	NJB
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:34	NJB
Metals (ICPMS) by Method 6020	WG869245	10	05/03/16 10:57	05/11/16 11:55	JDG
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/05/16 21:50	LAT
Metals (ICPMS) by Method 6020	WG869245	5	05/03/16 10:57	05/06/16 14:09	LAT
Metals (ICPMS) by Method 6020	WG869289	5	05/04/16 12:26	05/07/16 05:06	JDG

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

249545.0000.0000 000

SDG:

L832460

DATE/TIME:

05/12/16 18:43

PAGE:

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## SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-49 L832460-08 GW

Collected by  
SU / HM1 TeamCollected date/time  
04/28/16 10:10Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 09:14	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 17:49	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870384	1	05/06/16 03:12	05/06/16 03:12	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	20	05/04/16 10:09	05/04/16 10:09	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:40	05/05/16 15:40	DR
Wet Chemistry by Method 9012B	WG870326	1	05/06/16 12:26	05/12/16 15:24	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 07:25	05/09/16 07:25	CM
Wet Chemistry by Method 9056A	WG869680	20	05/09/16 17:53	05/09/16 17:53	CM

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

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

249545.0000.0000 000

SDG:

L832460

DATE/TIME:

05/12/16 18:43

PAGE:

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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

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2900		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0420	J	0.0197	0.100	0.100	1	05/05/2016 15:26	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	585		0.519	1.00	10.0	10	05/11/2016 09:08	WG871228
Fluoride	2.71		0.00990	0.100	0.100	1	05/10/2016 22:42	WG871228
Sulfate	622		1.55	5.00	100	20	05/09/2016 17:22	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00876	J	0.00125	0.00200	0.0100	5	05/07/2016 04:44	WG869289
Arsenic,Dissolved	0.00979	J	0.00125	0.00200	0.0100	5	05/05/2016 21:28	WG869245
Barium	0.0208	J	0.00180	0.00500	0.0250	5	05/07/2016 04:44	WG869289
Barium,Dissolved	0.0234	J	0.00180	0.00500	0.0250	5	05/06/2016 13:35	WG869245
Calcium	473		0.230	1.00	5.00	5	05/07/2016 04:44	WG869289
Chromium	0.0269		0.00270	0.00200	0.0100	5	05/07/2016 04:44	WG869289
Chromium,Dissolved	0.00350	J	0.00270	0.00200	0.0100	5	05/05/2016 21:28	WG869245
Iron	0.171	J	0.0750	0.100	0.500	5	05/07/2016 04:44	WG869289
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 21:28	WG869245
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 04:44	WG869289
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 21:28	WG869245
Manganese	0.00661	J	0.00125	0.00500	0.0250	5	05/07/2016 04:44	WG869289
Manganese,Dissolved	0.00813	J	0.00125	0.00500	0.0250	5	05/05/2016 21:28	WG869245
Potassium	7.31		0.185	1.00	5.00	5	05/07/2016 04:44	WG869289
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 04:44	WG869289
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 21:28	WG869245
Sodium	364		0.550	1.00	5.00	5	05/07/2016 04:44	WG869289

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	1.05		0.0314	0.100	0.100	1	05/06/2016 01:40	WG870384
(S) a,a,q-Trifluorotoluene(FID)	92.2				62.0-128		05/06/2016 01:40	WG870384

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.250	0.0500	1.25	25	05/04/2016 08:24	WG868987
Benzene	0.317		0.00828	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Bromodichloromethane	U		0.00950	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Bromoform	U		0.0117	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Bromomethane	U		0.0216	0.00500	0.125	25	05/04/2016 08:24	WG868987
n-Butylbenzene	U		0.00902	0.00100	0.0250	25	05/04/2016 08:24	WG868987
sec-Butylbenzene	0.0108	J	0.00912	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Carbon disulfide	U		0.00688	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Carbon tetrachloride	U		0.00948	0.00100	0.0250	25	05/04/2016 08:24	WG868987



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00870	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Chlorodibromomethane	U		0.00818	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Chloroethane	U		0.0113	0.00500	0.125	25	05/04/2016 08:24	WG868987
Chloroform	U		0.00810	0.00500	0.125	25	05/04/2016 08:24	WG868987
Chloromethane	U		0.00690	0.00250	0.0625	25	05/04/2016 08:24	WG868987
1,2-Dibromoethane	U		0.00952	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,1-Dichloroethane	U		0.00648	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,2-Dichloroethane	U		0.00902	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,1-Dichloroethene	U		0.00995	0.00100	0.0250	25	05/04/2016 08:24	WG868987
cis-1,2-Dichloroethene	U		0.00650	0.00100	0.0250	25	05/04/2016 08:24	WG868987
trans-1,2-Dichloroethene	U		0.00990	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,2-Dichloropropane	U		0.00765	0.00100	0.0250	25	05/04/2016 08:24	WG868987
cis-1,3-Dichloropropene	U		0.0104	0.00100	0.0250	25	05/04/2016 08:24	WG868987
trans-1,3-Dichloropropene	U		0.0105	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Ethylbenzene	U		0.00960	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Isopropylbenzene	0.0593		0.00815	0.00100	0.0250	25	05/04/2016 08:24	WG868987
p-Isopropyltoluene	U		0.00875	0.00100	0.0250	25	05/04/2016 08:24	WG868987
2-Butanone (MEK)	U		0.0982	0.0100	0.250	25	05/04/2016 08:24	WG868987
2-Hexanone	U		0.0955	0.0100	0.250	25	05/04/2016 08:24	WG868987
Methylene Chloride	U		0.0250	0.00500	0.125	25	05/04/2016 08:24	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.0535	0.0100	0.250	25	05/04/2016 08:24	WG868987
Methyl tert-butyl ether	0.0445		0.00918	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Naphthalene	U		0.0250	0.00500	0.125	25	05/04/2016 08:24	WG868987
n-Propylbenzene	U		0.00872	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Styrene	U		0.00768	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,1,1,2-Tetrachloroethane	U		0.00962	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,1,2,2-Tetrachloroethane	U		0.00325	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Tetrachloroethene	U		0.00930	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Toluene	U		0.0195	0.00500	0.125	25	05/04/2016 08:24	WG868987
1,1,1-Trichloroethane	U		0.00798	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,1,2-Trichloroethane	U		0.00958	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Trichloroethene	U		0.00995	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,2,4-Trimethylbenzene	0.0128	U	0.00932	0.00100	0.0250	25	05/04/2016 08:24	WG868987
1,3,5-Trimethylbenzene	U		0.00968	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Vinyl chloride	U		0.00648	0.00100	0.0250	25	05/04/2016 08:24	WG868987
o-Xylene	U		0.00852	0.00100	0.0250	25	05/04/2016 08:24	WG868987
m&p-Xylene	U		0.0180	0.00100	0.0250	25	05/04/2016 08:24	WG868987
Xylenes, Total	U		0.0265	0.00300	0.0750	25	05/04/2016 08:24	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 08:24	WG868987
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 08:24	WG868987
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 08:24	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	14.1		0.124	0.100	0.500	5	05/04/2016 14:32	WG869259
(S) o-Terphenyl	121				50.0-150		05/04/2016 14:32	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	U		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.114		0.0197	0.100	0.100	1	05/05/2016 15:29	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	0.0574	J	0.0519	1.00	1.00	1	05/09/2016 04:20	WG869680
Fluoride	U		0.00990	0.100	0.100	1	05/09/2016 04:20	WG869680
Sulfate	U		0.0774	5.00	5.00	1	05/09/2016 04:20	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	U		0.000250	0.00200	0.00200	1	05/07/2016 04:47	WG869289
Arsenic,Dissolved	U		0.000250	0.00200	0.00200	1	05/07/2016 11:39	WG869245
Barium	U		0.000360	0.00500	0.00500	1	05/07/2016 04:47	WG869289
Barium,Dissolved	U		0.000360	0.00500	0.00500	1	05/07/2016 11:39	WG869245
Calcium	U		0.0460	1.00	1.00	1	05/07/2016 04:47	WG869289
Chromium	U		0.000540	0.00200	0.00200	1	05/07/2016 04:47	WG869289
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/07/2016 11:39	WG869245
Iron	U		0.0150	0.100	0.100	1	05/07/2016 04:47	WG869289
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/07/2016 11:39	WG869245
Lead	U		0.000240	0.00200	0.00200	1	05/07/2016 04:47	WG869289
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/07/2016 11:39	WG869245
Manganese	U		0.000250	0.00500	0.00500	1	05/07/2016 04:47	WG869289
Manganese,Dissolved	0.000433	J	0.000250	0.00500	0.00500	1	05/07/2016 11:39	WG869245
Potassium	U		0.0370	1.00	1.00	1	05/07/2016 04:47	WG869289
Selenium	U		0.000380	0.00200	0.00200	1	05/07/2016 04:47	WG869289
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/07/2016 11:39	WG869245
Sodium	0.193	J	0.110	1.00	1.00	1	05/07/2016 04:47	WG869289

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/05/2016 04:50	WG869044
(S) a,a,q-Trifluorotoluene(FID)	99.4				62.0-128		05/05/2016 04:50	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U	J3	0.0100	0.0500	0.0500	1	05/04/2016 08:03	WG868987
Benzene	U	J3	0.000331	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Bromodichloromethane	U	J3	0.000380	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Bromoform	U	J3	0.000469	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Bromomethane	U	J3	0.000866	0.00500	0.00500	1	05/04/2016 08:03	WG868987
n-Butylbenzene	U	J3	0.000361	0.00100	0.00100	1	05/04/2016 08:03	WG868987
sec-Butylbenzene	U	J3	0.000365	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Carbon disulfide	U	J3	0.000275	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Carbon tetrachloride	U	J3	0.000379	0.00100	0.00100	1	05/04/2016 08:03	WG868987



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U	<u>J3</u>	0.000348	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Chlorodibromomethane	U	<u>J3</u>	0.000327	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Chloroethane	U	<u>J3</u>	0.000453	0.00500	0.00500	1	05/04/2016 08:03	WG868987
Chloroform	0.000943	<u>J J3</u>	0.000324	0.00500	0.00500	1	05/04/2016 08:03	WG868987
Chloromethane	U	<u>J3</u>	0.000276	0.00250	0.00250	1	05/04/2016 08:03	WG868987
1,2-Dibromoethane	U	<u>J3</u>	0.000381	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,1-Dichloroethane	U	<u>J3</u>	0.000259	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,2-Dichloroethane	U	<u>J3</u>	0.000361	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,1-Dichloroethene	U	<u>J3</u>	0.000398	0.00100	0.00100	1	05/04/2016 08:03	WG868987
cis-1,2-Dichloroethene	U	<u>J3</u>	0.000260	0.00100	0.00100	1	05/04/2016 08:03	WG868987
trans-1,2-Dichloroethene	U	<u>J3</u>	0.000396	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,2-Dichloropropane	U	<u>J3</u>	0.000306	0.00100	0.00100	1	05/04/2016 08:03	WG868987
cis-1,3-Dichloropropene	U	<u>J3</u>	0.000418	0.00100	0.00100	1	05/04/2016 08:03	WG868987
trans-1,3-Dichloropropene	U	<u>J3</u>	0.000419	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Ethylbenzene	U	<u>J3</u>	0.000384	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Isopropylbenzene	U	<u>J3</u>	0.000326	0.00100	0.00100	1	05/04/2016 08:03	WG868987
p-Isopropyltoluene	U	<u>J3</u>	0.000350	0.00100	0.00100	1	05/04/2016 08:03	WG868987
2-Butanone (MEK)	U	<u>J3</u>	0.00393	0.0100	0.0100	1	05/04/2016 08:03	WG868987
2-Hexanone	U	<u>J3</u>	0.00382	0.0100	0.0100	1	05/04/2016 08:03	WG868987
Methylene Chloride	U	<u>J3</u>	0.00100	0.00500	0.00500	1	05/04/2016 08:03	WG868987
4-Methyl-2-pentanone (MIBK)	U	<u>J3</u>	0.00214	0.0100	0.0100	1	05/04/2016 08:03	WG868987
Methyl tert-butyl ether	U	<u>J3</u>	0.000367	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Naphthalene	U	<u>J3</u>	0.00100	0.00500	0.00500	1	05/04/2016 08:03	WG868987
n-Propylbenzene	U	<u>J3</u>	0.000349	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Styrene	U	<u>J3</u>	0.000307	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,1,1,2-Tetrachloroethane	U	<u>J3</u>	0.000385	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,1,2,2-Tetrachloroethane	U	<u>J3</u>	0.000130	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Tetrachloroethene	U	<u>J3</u>	0.000372	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Toluene	U	<u>J3</u>	0.000780	0.00500	0.00500	1	05/04/2016 08:03	WG868987
1,1,1-Trichloroethane	U	<u>J3</u>	0.000319	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,1,2-Trichloroethane	U	<u>J3</u>	0.000383	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Trichloroethene	U	<u>J3</u>	0.000398	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,2,4-Trimethylbenzene	U	<u>J3</u>	0.000373	0.00100	0.00100	1	05/04/2016 08:03	WG868987
1,3,5-Trimethylbenzene	U	<u>J3</u>	0.000387	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Vinyl chloride	U	<u>J3</u>	0.000259	0.00100	0.00100	1	05/04/2016 08:03	WG868987
o-Xylene	U	<u>J3</u>	0.000341	0.00100	0.00100	1	05/04/2016 08:03	WG868987
m&p-Xylene	U	<u>J3</u>	0.000719	0.00100	0.00100	1	05/04/2016 08:03	WG868987
Xylenes, Total	U	<u>J3</u>	0.00106	0.00300	0.00300	1	05/04/2016 08:03	WG868987
(S) Toluene-d8	104				90.0-115		05/04/2016 08:03	WG868987
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 08:03	WG868987
(S) 4-Bromofluorobenzene	104				80.1-120		05/04/2016 08:03	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.165		0.0247	0.100	0.100	1	05/04/2016 06:29	WG869259
(S) o-Terphenyl	104				50.0-150		05/04/2016 06:29	WG869259





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2720		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0460	J	0.0197	0.100	0.100	1	05/05/2016 15:34	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	344		1.04	1.00	20.0	20	05/09/2016 17:38	WG869680
Fluoride	1.08		0.00990	0.100	0.100	1	05/09/2016 04:51	WG869680
Sulfate	825		1.55	5.00	100	20	05/09/2016 17:38	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0101		0.00125	0.00200	0.0100	5	05/07/2016 04:50	WG869289
Arsenic,Dissolved	0.0120		0.00125	0.00200	0.0100	5	05/05/2016 21:34	WG869245
Barium	0.127		0.00180	0.00500	0.0250	5	05/07/2016 04:50	WG869289
Barium,Dissolved	0.0483		0.00180	0.00500	0.0250	5	05/06/2016 13:58	WG869245
Calcium	224		0.230	1.00	5.00	5	05/07/2016 04:50	WG869289
Chromium	0.00303	J	0.00270	0.00200	0.0100	5	05/07/2016 04:50	WG869289
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 21:34	WG869245
Iron	U		0.0750	0.100	0.500	5	05/07/2016 04:50	WG869289
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 21:34	WG869245
Lead	0.00131	J	0.00120	0.00200	0.0100	5	05/07/2016 04:50	WG869289
Lead,Dissolved	0.00137	J	0.00120	0.00200	0.0100	5	05/05/2016 21:34	WG869245
Manganese	0.0212	J	0.00125	0.00500	0.0250	5	05/07/2016 04:50	WG869289
Manganese,Dissolved	0.0224	J	0.00125	0.00500	0.0250	5	05/05/2016 21:34	WG869245
Potassium	0.954	J	0.185	1.00	5.00	5	05/07/2016 04:50	WG869289
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 04:50	WG869289
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 21:34	WG869245
Sodium	419		0.550	1.00	5.00	5	05/07/2016 04:50	WG869289

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	3.12		0.0314	0.100	0.100	1	05/06/2016 02:03	WG870384
(S) a,a,q-Trifluorotoluene(FID)	91.8				62.0-128		05/06/2016 02:03	WG870384

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/06/2016 12:15	WG870445
Benzene	0.709		0.00662	0.00100	0.0200	20	05/07/2016 03:10	WG870646
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Bromoform	U		0.000469	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Bromomethane	U		0.000866	0.00500	0.00500	1	05/06/2016 12:15	WG870445
n-Butylbenzene	0.00424		0.000361	0.00100	0.00100	1	05/06/2016 12:15	WG870445
sec-Butylbenzene	0.00662		0.000365	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Carbon disulfide	0.00124		0.000275	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/06/2016 12:15	WG870445



Collected date/time: 04/28/16 09:40

L832460

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Chloroethane	U		0.000453	0.00500	0.00500	1	05/06/2016 12:15	WG870445
Chloroform	U		0.000324	0.00500	0.00500	1	05/06/2016 12:15	WG870445
Chloromethane	U		0.000276	0.00250	0.00250	1	05/06/2016 12:15	WG870445
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 12:15	WG870445
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/06/2016 12:15	WG870445
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/06/2016 12:15	WG870445
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/06/2016 12:15	WG870445
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Ethylbenzene	0.00692		0.000384	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Isopropylbenzene	0.0380		0.000326	0.00100	0.00100	1	05/06/2016 12:15	WG870445
p-Isopropyltoluene	0.00438		0.000350	0.00100	0.00100	1	05/06/2016 12:15	WG870445
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/06/2016 12:15	WG870445
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/06/2016 12:15	WG870445
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/06/2016 12:15	WG870445
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/06/2016 12:15	WG870445
Methyl tert-butyl ether	0.0156		0.000367	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Naphthalene	0.00966		0.00100	0.00500	0.00500	1	05/06/2016 12:15	WG870445
n-Propylbenzene	0.0484		0.000349	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Styrene	U		0.000307	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Toluene	0.0243		0.000780	0.00500	0.00500	1	05/06/2016 12:15	WG870445
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,2,4-Trimethylbenzene	0.125		0.000373	0.00100	0.00100	1	05/06/2016 12:15	WG870445
1,3,5-Trimethylbenzene	0.0143		0.000387	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/06/2016 12:15	WG870445
o-Xylene	0.0102		0.000341	0.00100	0.00100	1	05/06/2016 12:15	WG870445
m&p-Xylene	0.136		0.000719	0.00100	0.00100	1	05/06/2016 12:15	WG870445
Xylenes, Total	0.146		0.00106	0.00300	0.00300	1	05/06/2016 12:15	WG870445
(S) Toluene-d8	106				90.0-115		05/06/2016 12:15	WG870445
(S) Toluene-d8	101				90.0-115		05/07/2016 03:10	WG870646
(S) Dibromofluoromethane	97.9				79.0-121		05/07/2016 03:10	WG870646
(S) Dibromofluoromethane	114				79.0-121		05/06/2016 12:15	WG870445
(S) 4-Bromofluorobenzene	100				80.1-120		05/06/2016 12:15	WG870445
(S) 4-Bromofluorobenzene	87.9				80.1-120		05/07/2016 03:10	WG870646

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	18.1		0.494	0.100	2.00	20	05/05/2016 22:15	WG869259
(S) o-Terphenyl	130	J7			50.0-150		05/05/2016 22:15	WG869259



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 07:21	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 07:21	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 07:21	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 07:21	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 07:21	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 07:21	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:21	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 07:21	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 07:21	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 07:21	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 07:21	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 07:21	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 07:21	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 07:21	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 07:21	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 07:21	WG868987
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 07:21	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 07:21	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 07:21	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 07:21	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 07:21	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 07:21	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 07:21	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 07:21	WG868987
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 07:21	WG868987
(S) 4-Bromofluorobenzene	106				80.1-120		05/04/2016 07:21	WG868987

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2570		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0380	J	0.0197	0.100	0.100	1	05/05/2016 15:35	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	113		2.60	1.00	50.0	50	05/09/2016 05:37	WG869680
Fluoride	3.00		0.00990	0.100	0.100	1	05/09/2016 05:22	WG869680
Sulfate	1510		3.87	5.00	250	50	05/09/2016 05:37	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00407	J	0.00125	0.00200	0.0100	5	05/07/2016 04:52	WG869289
Arsenic,Dissolved	0.00441	J	0.00125	0.00200	0.0100	5	05/05/2016 21:42	WG869245
Barium	0.0126	J	0.00180	0.00500	0.0250	5	05/07/2016 04:52	WG869289
Barium,Dissolved	0.0119	J	0.00180	0.00500	0.0250	5	05/06/2016 14:01	WG869245
Calcium	389		0.230	1.00	5.00	5	05/07/2016 04:52	WG869289
Chromium	0.0269		0.00270	0.00200	0.0100	5	05/07/2016 04:52	WG869289
Chromium,Dissolved	0.0140		0.00270	0.00200	0.0100	5	05/05/2016 21:42	WG869245
Iron	0.104	J	0.0750	0.100	0.500	5	05/07/2016 04:52	WG869289
Iron,Dissolved	0.0750	J	0.0750	0.100	0.500	5	05/05/2016 21:42	WG869245
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 04:52	WG869289
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 21:42	WG869245
Manganese	0.199		0.00125	0.00500	0.0250	5	05/07/2016 04:52	WG869289
Manganese,Dissolved	0.204		0.00125	0.00500	0.0250	5	05/05/2016 21:42	WG869245
Potassium	1.72	J	0.185	1.00	5.00	5	05/07/2016 04:52	WG869289
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 04:52	WG869289
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 21:42	WG869245
Sodium	373		0.550	1.00	5.00	5	05/07/2016 04:52	WG869289

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.153		0.0314	0.100	0.100	1	05/05/2016 05:55	WG869044
(S) a,a,q-Trifluorotoluene(FID)	99.2				62.0-128		05/05/2016 05:55	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 09:06	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 09:06	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 09:06	WG868987
sec-Butylbenzene	0.00174		0.000365	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 09:06	WG868987



Collected date/time: 04/28/16 08:55

L832460

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 09:06	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 09:06	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 09:06	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:06	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 09:06	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 09:06	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 09:06	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Ethylbenzene	0.000718	U	0.000384	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Isopropylbenzene	0.00136		0.000326	0.00100	0.00100	1	05/04/2016 09:06	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 09:06	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 09:06	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 09:06	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 09:06	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 09:06	WG868987
Methyl tert-butyl ether	0.00229		0.000367	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 09:06	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Toluene	0.000793	U	0.000780	0.00500	0.00500	1	05/04/2016 09:06	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,2,4-Trimethylbenzene	0.000807	U	0.000373	0.00100	0.00100	1	05/04/2016 09:06	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 09:06	WG868987
o-Xylene	0.00160		0.000341	0.00100	0.00100	1	05/04/2016 09:06	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 09:06	WG868987
Xylenes, Total	0.00160	U	0.00106	0.00300	0.00300	1	05/04/2016 09:06	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 09:06	WG868987
(S) Dibromofluoromethane	99.7				79.0-121		05/04/2016 09:06	WG868987
(S) 4-Bromofluorobenzene	101				80.1-120		05/04/2016 09:06	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.51		0.0247	0.100	0.100	1	05/04/2016 16:59	WG869259
(S) o-Terphenyl	125				50.0-150		05/04/2016 16:59	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4260		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0440	J	0.0197	0.100	0.100	1	05/05/2016 15:36	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	524		5.19	1.00	100	100	05/09/2016 06:08	WG869680
Fluoride	1.53		0.00990	0.100	0.100	1	05/09/2016 05:53	WG869680
Sulfate	2070		7.74	5.00	500	100	05/09/2016 06:08	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00710	J	0.00125	0.00200	0.0100	5	05/07/2016 04:55	WG869289
Arsenic,Dissolved	0.00738	J	0.00125	0.00200	0.0100	5	05/05/2016 21:44	WG869245
Barium	0.0247	J	0.00180	0.00500	0.0250	5	05/07/2016 04:55	WG869289
Barium,Dissolved	0.0263		0.00180	0.00500	0.0250	5	05/06/2016 14:03	WG869245
Calcium	410		0.230	1.00	5.00	5	05/07/2016 04:55	WG869289
Chromium	0.282		0.00270	0.00200	0.0100	5	05/07/2016 04:55	WG869289
Chromium,Dissolved	0.0266		0.00270	0.00200	0.0100	5	05/05/2016 21:44	WG869245
Iron	0.331	J	0.0750	0.100	0.500	5	05/07/2016 04:55	WG869289
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 21:44	WG869245
Lead	0.00330	J	0.00120	0.00200	0.0100	5	05/07/2016 04:55	WG869289
Lead,Dissolved	0.00351	J	0.00120	0.00200	0.0100	5	05/05/2016 21:44	WG869245
Manganese	0.751		0.00125	0.00500	0.0250	5	05/07/2016 04:55	WG869289
Manganese,Dissolved	0.776		0.00125	0.00500	0.0250	5	05/05/2016 21:44	WG869245
Potassium	0.666	J	0.185	1.00	5.00	5	05/07/2016 04:55	WG869289
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 04:55	WG869289
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 21:44	WG869245
Sodium	509		0.550	1.00	5.00	5	05/07/2016 04:55	WG869289

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	2.36		0.0314	0.100	0.100	1	05/06/2016 02:26	WG870384
(S) a,a,q-Trifluorotoluene(FID)	88.3				62.0-128		05/06/2016 02:26	WG870384

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.100	0.0500	0.500	10	05/04/2016 09:27	WG868987
Benzene	0.530		0.00331	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Bromoform	U		0.00469	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Bromomethane	U		0.00866	0.00500	0.0500	10	05/04/2016 09:27	WG868987
n-Butylbenzene	0.00421	J	0.00361	0.00100	0.0100	10	05/04/2016 09:27	WG868987
sec-Butylbenzene	0.0161		0.00365	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Carbon disulfide	U		0.00275	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/04/2016 09:27	WG868987



Collected date/time: 04/28/16 07:55

L832460

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Chloroethane	U		0.00453	0.00500	0.0500	10	05/04/2016 09:27	WG868987
Chloroform	U		0.00324	0.00500	0.0500	10	05/04/2016 09:27	WG868987
Chloromethane	U		0.00276	0.00250	0.0250	10	05/04/2016 09:27	WG868987
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/04/2016 09:27	WG868987
cis-1,2-Dichloroethene	U		0.00260	0.00100	0.0100	10	05/04/2016 09:27	WG868987
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/04/2016 09:27	WG868987
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/04/2016 09:27	WG868987
trans-1,3-Dichloropropene	U		0.00419	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Ethylbenzene	0.0160		0.00384	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Isopropylbenzene	0.0745		0.00326	0.00100	0.0100	10	05/04/2016 09:27	WG868987
p-Isopropyltoluene	U		0.00350	0.00100	0.0100	10	05/04/2016 09:27	WG868987
2-Butanone (MEK)	U		0.0393	0.0100	0.100	10	05/04/2016 09:27	WG868987
2-Hexanone	U		0.0382	0.0100	0.100	10	05/04/2016 09:27	WG868987
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/04/2016 09:27	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/04/2016 09:27	WG868987
Methyl tert-butyl ether	0.105		0.00367	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Naphthalene	U		0.0100	0.00500	0.0500	10	05/04/2016 09:27	WG868987
n-Propylbenzene	0.0955		0.00349	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Styrene	U		0.00307	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Toluene	0.0132	U	0.00780	0.00500	0.0500	10	05/04/2016 09:27	WG868987
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,2,4-Trimethylbenzene	0.142		0.00373	0.00100	0.0100	10	05/04/2016 09:27	WG868987
1,3,5-Trimethylbenzene	U		0.00387	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/04/2016 09:27	WG868987
o-Xylene	U		0.00341	0.00100	0.0100	10	05/04/2016 09:27	WG868987
m&p-Xylene	0.142		0.00719	0.00100	0.0100	10	05/04/2016 09:27	WG868987
Xylenes, Total	0.142		0.0106	0.00300	0.0300	10	05/04/2016 09:27	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 09:27	WG868987
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 09:27	WG868987
(S) 4-Bromofluorobenzene	107				80.1-120		05/04/2016 09:27	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	9.13		0.0247	0.100	0.100	1	05/04/2016 17:16	WG869259
(S) o-Terphenyl	110				50.0-150		05/04/2016 17:16	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4040		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0400	J J6	0.0197	0.100	0.100	1	05/05/2016 15:37	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	519		5.19	1.00	100	100	05/09/2016 07:10	WG869680
Fluoride	1.53		0.00990	0.100	0.100	1	05/09/2016 06:54	WG869680
Sulfate	1980		7.74	5.00	500	100	05/09/2016 07:10	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00736	J	0.00125	0.00200	0.0100	5	05/07/2016 05:03	WG869289
Arsenic,Dissolved	0.00836	J	0.00125	0.00200	0.0100	5	05/05/2016 21:47	WG869245
Barium	0.0245	J	0.00180	0.00500	0.0250	5	05/07/2016 05:03	WG869289
Barium,Dissolved	0.0249	J	0.00180	0.00500	0.0250	5	05/06/2016 14:06	WG869245
Calcium	408		0.230	1.00	5.00	5	05/07/2016 05:03	WG869289
Chromium	0.306		0.00270	0.00200	0.0100	5	05/07/2016 05:03	WG869289
Chromium,Dissolved	0.0272		0.00270	0.00200	0.0100	5	05/05/2016 21:47	WG869245
Iron	0.628		0.0750	0.100	0.500	5	05/07/2016 05:03	WG869289
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 21:47	WG869245
Lead	0.00316	J	0.00120	0.00200	0.0100	5	05/07/2016 05:03	WG869289
Lead,Dissolved	0.00377	J	0.00120	0.00200	0.0100	5	05/05/2016 21:47	WG869245
Manganese	0.750		0.00125	0.00500	0.0250	5	05/07/2016 05:03	WG869289
Manganese,Dissolved	0.808		0.00125	0.00500	0.0250	5	05/05/2016 21:47	WG869245
Potassium	0.618	J	0.185	1.00	5.00	5	05/07/2016 05:03	WG869289
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 05:03	WG869289
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 21:47	WG869245
Sodium	515		0.550	1.00	5.00	5	05/07/2016 05:03	WG869289

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	2.65		0.0314	0.100	0.100	1	05/06/2016 02:49	WG870384
(S) a,a,q-Trifluorotoluene(FID)	87.1				62.0-128		05/06/2016 02:49	WG870384

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.100	0.0500	0.500	10	05/04/2016 09:48	WG868987
Benzene	0.557		0.00331	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Bromoform	U		0.00469	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Bromomethane	U		0.00866	0.00500	0.0500	10	05/04/2016 09:48	WG868987
n-Butylbenzene	0.00450	J	0.00361	0.00100	0.0100	10	05/04/2016 09:48	WG868987
sec-Butylbenzene	0.0165		0.00365	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Carbon disulfide	U		0.00275	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/04/2016 09:48	WG868987





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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Chloroethane	U		0.00453	0.00500	0.0500	10	05/04/2016 09:48	WG868987
Chloroform	U		0.00324	0.00500	0.0500	10	05/04/2016 09:48	WG868987
Chloromethane	U		0.00276	0.00250	0.0250	10	05/04/2016 09:48	WG868987
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/04/2016 09:48	WG868987
cis-1,2-Dichloroethene	U		0.00260	0.00100	0.0100	10	05/04/2016 09:48	WG868987
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/04/2016 09:48	WG868987
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/04/2016 09:48	WG868987
trans-1,3-Dichloropropene	U		0.00419	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Ethylbenzene	0.0161		0.00384	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Isopropylbenzene	0.0771		0.00326	0.00100	0.0100	10	05/04/2016 09:48	WG868987
p-Isopropyltoluene	U		0.00350	0.00100	0.0100	10	05/04/2016 09:48	WG868987
2-Butanone (MEK)	U		0.0393	0.0100	0.100	10	05/04/2016 09:48	WG868987
2-Hexanone	U		0.0382	0.0100	0.100	10	05/04/2016 09:48	WG868987
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/04/2016 09:48	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/04/2016 09:48	WG868987
Methyl tert-butyl ether	0.0945		0.00367	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Naphthalene	U		0.0100	0.00500	0.0500	10	05/04/2016 09:48	WG868987
n-Propylbenzene	0.0984		0.00349	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Styrene	U		0.00307	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Toluene	0.0128	U	0.00780	0.00500	0.0500	10	05/04/2016 09:48	WG868987
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,2,4-Trimethylbenzene	0.147		0.00373	0.00100	0.0100	10	05/04/2016 09:48	WG868987
1,3,5-Trimethylbenzene	U		0.00387	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/04/2016 09:48	WG868987
o-Xylene	U		0.00341	0.00100	0.0100	10	05/04/2016 09:48	WG868987
m&p-Xylene	0.147		0.00719	0.00100	0.0100	10	05/04/2016 09:48	WG868987
Xylenes, Total	0.147		0.0106	0.00300	0.0300	10	05/04/2016 09:48	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 09:48	WG868987
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 09:48	WG868987
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 09:48	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.65		0.0247	0.100	0.100	1	05/04/2016 17:33	WG869259
(S) o-Terphenyl	108				50.0-150		05/04/2016 17:33	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Dissolved Solids	2270		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.0580	J	0.0197	0.100	0.100	1	05/05/2016 15:40	WG870055

## Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Cyanide	U	J3 J6	0.00180	0.00500	0.00500	1	05/12/2016 15:24	WG870326

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Chloride	368		1.04	1.00	20.0	20	05/09/2016 17:53	WG869680
Fluoride	1.38		0.00990	0.100	0.100	1	05/09/2016 07:25	WG869680
Sulfate	584		1.55	5.00	100	20	05/09/2016 17:53	WG869680

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/03/2016 11:01	WG869159
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:34	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Arsenic	0.00489	J	0.00125	0.00200	0.0100	5	05/07/2016 05:06	WG869289
Arsenic,Dissolved	0.00578	J	0.00125	0.00200	0.0100	5	05/05/2016 21:50	WG869245
Barium	0.0439		0.00180	0.00500	0.0250	5	05/07/2016 05:06	WG869289
Barium,Dissolved	0.0492		0.00180	0.00500	0.0250	5	05/06/2016 14:09	WG869245
Boron	0.695		0.0150	0.0200	0.200	10	05/07/2016 09:14	WG870589
Boron,Dissolved	0.708		0.0150	0.0200	0.200	10	05/11/2016 11:55	WG869245
Cadmium	U		0.000800	0.00100	0.00500	5	05/07/2016 05:06	WG869289
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/05/2016 21:50	WG869245
Calcium	203		0.230	1.00	5.00	5	05/07/2016 05:06	WG869289
Chromium	U		0.00270	0.00200	0.0100	5	05/07/2016 05:06	WG869289
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 21:50	WG869245
Cobalt	U		0.00130	0.00200	0.0100	5	05/07/2016 05:06	WG869289
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/05/2016 21:50	WG869245
Iron	0.0770	J	0.0750	0.100	0.500	5	05/07/2016 05:06	WG869289
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 21:50	WG869245
Lead	U		0.00120	0.00200	0.0100	5	05/07/2016 05:06	WG869289
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 21:50	WG869245
Manganese	0.269		0.00125	0.00500	0.0250	5	05/07/2016 05:06	WG869289
Manganese,Dissolved	0.300		0.00125	0.00500	0.0250	5	05/05/2016 21:50	WG869245
Nickel	0.00686	J	0.00175	0.00200	0.0100	5	05/07/2016 05:06	WG869289
Nickel,Dissolved	0.00842	J	0.00175	0.00200	0.0100	5	05/05/2016 21:50	WG869245
Potassium	2.19	J	0.185	1.00	5.00	5	05/07/2016 05:06	WG869289
Selenium	U		0.00190	0.00200	0.0100	5	05/07/2016 05:06	WG869289
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 21:50	WG869245
Sodium	347		0.550	1.00	5.00	5	05/07/2016 05:06	WG869289



Collected date/time: 04/28/16 10:10

L832460

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/07/2016 05:06	WG869289
Uranium,Dissolved	U		0.00165	0.0100	0.0500	5	05/05/2016 21:50	WG869245
Vanadium	0.00245	J	0.000900	0.00500	0.0250	5	05/07/2016 05:06	WG869289
Vanadium,Dissolved	0.00123	J	0.000900	0.00500	0.0250	5	05/05/2016 21:50	WG869245

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.75		0.0314	0.100	0.100	1	05/06/2016 03:12	WG870384
(S) a,a,a-Trifluorotoluene(FID)	94.7				62.0-128		05/06/2016 03:12	WG870384

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.200	0.0500	1.00	20	05/04/2016 10:09	WG868987
Benzene	0.196		0.00662	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Bromodichloromethane	U		0.00760	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Bromoform	U		0.00938	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Bromomethane	U		0.0173	0.00500	0.100	20	05/04/2016 10:09	WG868987
n-Butylbenzene	U		0.00722	0.00100	0.0200	20	05/04/2016 10:09	WG868987
sec-Butylbenzene	U		0.00730	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Carbon disulfide	U		0.00550	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Carbon tetrachloride	U		0.00758	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Chlorobenzene	U		0.00696	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Chlorodibromomethane	U		0.00654	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Chloroethane	U		0.00906	0.00500	0.100	20	05/04/2016 10:09	WG868987
Chloroform	U		0.00648	0.00500	0.100	20	05/04/2016 10:09	WG868987
Chloromethane	U		0.00552	0.00250	0.0500	20	05/04/2016 10:09	WG868987
1,2-Dibromoethane	U		0.00762	0.00100	0.0200	20	05/04/2016 10:09	WG868987
1,1-Dichloroethane	U		0.00518	0.00100	0.0200	20	05/04/2016 10:09	WG868987
1,2-Dichloroethane	U		0.00722	0.00100	0.0200	20	05/04/2016 10:09	WG868987
1,1-Dichloroethene	U		0.00796	0.00100	0.0200	20	05/04/2016 10:09	WG868987
cis-1,2-Dichloroethene	U		0.00520	0.00100	0.0200	20	05/04/2016 10:09	WG868987
trans-1,2-Dichloroethene	U		0.00792	0.00100	0.0200	20	05/04/2016 10:09	WG868987
1,2-Dichloropropane	U		0.00612	0.00100	0.0200	20	05/04/2016 10:09	WG868987
cis-1,3-Dichloropropene	U		0.00836	0.00100	0.0200	20	05/04/2016 10:09	WG868987
trans-1,3-Dichloropropene	U		0.00838	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Ethylbenzene	U		0.00768	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Isopropylbenzene	0.0219		0.00652	0.00100	0.0200	20	05/04/2016 10:09	WG868987
p-Isopropyltoluene	U		0.00700	0.00100	0.0200	20	05/04/2016 10:09	WG868987
2-Butanone (MEK)	U		0.0786	0.0100	0.200	20	05/04/2016 10:09	WG868987
2-Hexanone	U		0.0764	0.0100	0.200	20	05/04/2016 10:09	WG868987
Methylene Chloride	U		0.0200	0.00500	0.100	20	05/04/2016 10:09	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.0428	0.0100	0.200	20	05/04/2016 10:09	WG868987
Methyl tert-butyl ether	0.0535		0.00734	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Naphthalene	U		0.0200	0.00500	0.100	20	05/04/2016 10:09	WG868987
n-Propylbenzene	0.0206		0.00698	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Styrene	U		0.00614	0.00100	0.0200	20	05/04/2016 10:09	WG868987
1,1,1,2-Tetrachloroethane	U		0.00770	0.00100	0.0200	20	05/04/2016 10:09	WG868987
1,1,2,2-Tetrachloroethane	U		0.00260	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Tetrachloroethene	U		0.00744	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Toluene	U		0.0156	0.00500	0.100	20	05/04/2016 10:09	WG868987
1,1,1-Trichloroethane	U		0.00638	0.00100	0.0200	20	05/04/2016 10:09	WG868987
1,1,2-Trichloroethane	U		0.00766	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Trichloroethene	U		0.00796	0.00100	0.0200	20	05/04/2016 10:09	WG868987

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/28/16 10:10

L832460

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	0.0305		0.00746	0.00100	0.0200	20	05/04/2016 10:09	WG868987
1,3,5-Trimethylbenzene	U		0.00774	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Vinyl chloride	U		0.00518	0.00100	0.0200	20	05/04/2016 10:09	WG868987
o-Xylene	U		0.00682	0.00100	0.0200	20	05/04/2016 10:09	WG868987
m&p-Xylene	0.0540		0.0144	0.00100	0.0200	20	05/04/2016 10:09	WG868987
Xylenes, Total	0.0540	J	0.0212	0.00300	0.0600	20	05/04/2016 10:09	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 10:09	WG868987
(S) Dibromofluoromethane	102				79.0-121		05/04/2016 10:09	WG868987
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 10:09	WG868987

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.63		0.0247	0.100	0.100	1	05/04/2016 17:49	WG869259
(S) o-Terphenyl	114				50.0-150		05/04/2016 17:49	WG869259

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

WG869818

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134196-1 05/04/16 18:59

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

L832460-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832460-01 05/04/16 18:59 • (DUP) R3134196-4 05/04/16 18:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	2900	2870	1	1.21		5

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

(LCS) R3134196-2 05/04/16 18:59 • (LCSD) R3134196-3 05/04/16 18:59

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 %
Dissolved Solids	8800	8490	8480	96.5	96.4	85.0-115			0.118	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870055

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134124-1 05/05/16 15:06

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL 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

L832447-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832447-01 05/05/16 15:11 • (DUP) R3134124-4 05/05/16 15:12

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.125	ND	1	30.0	J P1	20

L832460-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832460-01 05/05/16 15:26 • (DUP) R3134124-6 05/05/16 15:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.0420	ND	1	13.0	J	20

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

(LCS) R3134124-2 05/05/16 15:08 • (LCSD) R3134124-3 05/05/16 15:09

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 %
Nitrate-Nitrite	5.00	5.11	5.04	102	101	90.0-110			1.00	20

L832447-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L832447-04 05/05/16 15:15 • (MS) R3134124-5 05/05/16 15:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.301	5.82	110	1	90.0-110	

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE. 

L832460-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-07 05/05/16 15:37 • (MS) R3134124-7 05/05/16 15:38 • (MSD) R3134124-8 05/05/16 15:39												
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	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0400	4.48	4.51	89.0	89.0	1	90.0-110	J6	J6	1.00	20

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

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Wet Chemistry by Method 9012B

QUALITY CONTROL SUMMARY

L832460-08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136186-1 05/12/16 15:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	0.00294	J	0.00180	0.00500

L832450-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832450-04 05/12/16 15:22 • (DUP) R3136186-4 05/12/16 15:23

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

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

(LCS) R3136186-2 05/12/16 15:18 • (LCSD) R3136186-3 05/12/16 15:19

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 %
Cyanide	0.100	0.0916	0.104	92.0	104	90.0-110			13.0	20

L832460-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-08 05/12/16 15:24 • (MS) R3136186-5 05/12/16 15:25 • (MSD) R3136186-6 05/12/16 15:26

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 %
Cyanide	0.200	U	0.00566	0.178	3.00	89.0	1	90.0-110	J6	J3 J6	188	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
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WG869680

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135217-1 05/09/16 01:00

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

L832472-06 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-06 05/09/16 14:17 • (DUP) R3135217-7 05/09/16 14:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	0.645	0.660	1	2		15

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

(LCS) R3135217-2 05/09/16 01:15 • (LCSD) R3135217-3 05/09/16 01:31

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 %
Chloride	40.0	39.3	39.2	98	98	80-120			0	15
Fluoride	8.00	7.88	7.88	99	98	80-120			0	15
Sulfate	40.0	39.6	39.6	99	99	80-120			0	15

L832460-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832460-02 05/09/16 04:20 • (MS) R3135217-4 05/09/16 04:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	0.0574	51.5	103	1	80-120	
Fluoride	5.00	U	5.13	103	1	80-120	
Sulfate	50.0	U	52.1	104	1	80-120	

L832462-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832462-06 05/09/16 11:01 • (MS) R3135217-5 05/09/16 11:16 • (MSD) R3135217-6 05/09/16 11:32

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 %
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ACCOUNT:  
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<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

WG869680

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



L832462-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832462-06 05/09/16 11:01 • (MS) R3135217-5 05/09/16 11:16 • (MSD) R3135217-6 05/09/16 11:32												
	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	50.0	0.107	51.1	51.0	102	102	1	80-120			0	15
Fluoride	5.00	U	5.16	5.10	103	102	1	80-120			1	15
Sulfate	50.0	U	51.2	51.5	102	103	1	80-120			1	15

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

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Method Blank (MB)

(MB) R3135448-1 05/10/16 11:38				
	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

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

L832435-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-04 05/10/16 22:04 • (DUP) R3135448-4 05/10/16 22:28						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	150	159	10	6		15
Fluoride	0.780	0.847	10	8	J	15

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

(LCS) R3135448-2 05/10/16 11:52 • (LCSD) R3135448-3 05/10/16 12:07										
	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	38.8	38.9	97	97	80-120			0	15
Fluoride	8.00	7.79	7.79	97	97	80-120			0	15

L832654-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832654-01 05/11/16 01:06 • (MS) R3135448-5 05/11/16 01:20 • (MSD) R3135448-6 05/11/16 01:35												
	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	50.0	6.61	56.5	56.3	100	99	1	80-120			0	15
Fluoride	5.00	0.283	5.14	5.29	97	100	1	80-120			3	15

WG869159

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832460-08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133255-1 05/03/16 10:26				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

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

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

(LCS) R3133255-2 05/03/16 10:28 • (LCSD) R3133255-3 05/03/16 10:31										
	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	0.00298	0.00292	99	97	80-120			2	20

L832391-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832391-01 05/03/16 10:40 • (MS) R3133255-4 05/03/16 10:43 • (MSD) R3133255-5 05/03/16 10:46												
	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	0.00307	0.00291	102	97	1	75-125			5	20

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832460-08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133626-1 05/04/16 12:07				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury,Dissolved	U		0.000049	0.000200

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

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

(LCS) R3133626-2 05/04/16 12:09 • (LCSD) R3133626-3 05/04/16 12:11										
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 %
Mercury,Dissolved	0.00300	0.00284	0.00263	95	88	80-120			7	20

L832603-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-17 05/04/16 12:13 • (MS) R3133626-4 05/04/16 12:16 • (MSD) R3133626-5 05/04/16 12:18												
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 %
Mercury,Dissolved	0.00300	U	0.00254	0.00254	85	85	1	75-125			0	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134386-1 05/05/16 20:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.00079		0.00025	0.00500
Nickel,Dissolved	U		0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	U		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3134488-1 05/06/16 13:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Barium,Dissolved	U		0.00036	0.00500

Method Blank (MB)

(MB) R3135630-1 05/11/16 10:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0015	0.0200

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

(LCS) R3134386-2 05/05/16 20:40 • (LCSD) R3134386-3 05/05/16 20:42

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,Dissolved	0.0500	0.0504	0.0500	101	100	80-120			1	20
Cadmium,Dissolved	0.0500	0.0529	0.0530	106	106	80-120			0	20
Chromium,Dissolved	0.0500	0.0488	0.0496	98	99	80-120			2	20
Cobalt,Dissolved	0.0500	0.0497	0.0511	99	102	80-120			3	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



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

(LCS) R3134386-2 05/05/16 20:40 • (LCSD) R3134386-3 05/05/16 20:42										
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	%	%	%			%	%
Iron,Dissolved	5.00	4.70	4.79	94	96	80-120			2	20
Lead,Dissolved	0.0500	0.0506	0.0506	101	101	80-120			0	20
Manganese,Dissolved	0.0500	0.0485	0.0485	97	97	80-120			0	20
Nickel,Dissolved	0.0500	0.0505	0.0516	101	103	80-120			2	20
Selenium,Dissolved	0.0500	0.0482	0.0502	96	100	80-120			4	20
Uranium,Dissolved	0.0500	0.0505	0.0506	101	101	80-120			0	20
Vanadium,Dissolved	0.0500	0.0476	0.0490	95	98	80-120			3	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134488-2 05/06/16 13:16 • (LCSD) R3134488-3 05/06/16 13:19										
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	%	%	%			%	%
Barium,Dissolved	0.0500	0.0522	0.0509	104	102	80-120			2	20

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

(LCS) R3135630-2 05/11/16 10:30 • (LCSD) R3135630-3 05/11/16 10:35										
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	%	%	%			%	%
Boron,Dissolved	0.0500	0.0465	0.0471	93	94	80-120			1	20

L832409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-01 05/05/16 20:45 • (MS) R3134386-5 05/05/16 20:50 • (MSD) R3134386-6 05/05/16 20:53												
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	%	%		%			%	%
Arsenic,Dissolved	0.0100	U	0.0573	0.0573	115	115	5	75-125			0	20
Cadmium,Dissolved	0.0100	U	0.0565	0.0565	113	113	5	75-125			0	20
Chromium,Dissolved	0.0100	U	0.0550	0.0537	110	107	5	75-125			2	20
Cobalt,Dissolved	0.0100	U	0.0550	0.0531	110	106	5	75-125			3	20
Iron,Dissolved	1.00	U	5.36	5.24	107	105	5	75-125			2	20
Lead,Dissolved	0.0100	U	0.0553	0.0540	111	108	5	75-125			2	20
Manganese,Dissolved	0.0100	0.00200	0.0528	0.0521	102	100	5	75-125			1	20
Nickel,Dissolved	0.0100	0.00196	0.0557	0.0538	107	104	5	75-125			3	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



L832409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-01 05/05/16 20:45 • (MS) R3134386-5 05/05/16 20:50 • (MSD) R3134386-6 05/05/16 20:53												
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	%	%		%			%	%
Selenium,Dissolved	0.0100	0.0141	0.0709	0.0703	114	112	5	75-125			1	20
Uranium,Dissolved	0.0100	0.0264	0.0802	0.0776	108	102	5	75-125			3	20
Vanadium,Dissolved	0.0100	0.0111	0.0658	0.0637	109	105	5	75-125			3	20

L832409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-01 05/11/16 10:40 • (MS) R3135630-5 05/11/16 10:50 • (MSD) R3135630-6 05/11/16 10:55												
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	%	%		%			%	%
Barium,Dissolved	0.00500	0.0125	0.0605	0.0621	96	99	10	75-125			3	20
Boron,Dissolved	0.00500	0.525	0.597	0.593	144	137	10	75-125	<u>V</u>	<u>V</u>	1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134620-1 05/07/16 03:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	0.00076		0.00036	0.00500
Cadmium	U		0.00016	0.00100
Calcium	0.1		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	0.0157		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Nickel	0.000446		0.00035	0.00200
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Uranium	U		0.00033	0.0100
Vanadium	0.00102		0.00018	0.00500

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) R3134620-2 05/07/16 04:01 • (LCSD) R3134620-3 05/07/16 04:04

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	0.0526	0.0503	105	101	80-120			4	20
Barium	0.0500	0.0527	0.0506	105	101	80-120			4	20
Cadmium	0.0500	0.0549	0.0523	110	105	80-120			5	20
Calcium	5.00	5.44	5.35	109	107	80-120			2	20
Chromium	0.0500	0.0547	0.0516	109	103	80-120			6	20
Cobalt	0.0500	0.0554	0.0523	111	105	80-120			6	20
Iron	5.00	5.33	5.08	107	102	80-120			5	20
Lead	0.0500	0.0541	0.0520	108	104	80-120			4	20
Manganese	0.0500	0.0541	0.0516	108	103	80-120			5	20
Nickel	0.0500	0.0550	0.0543	110	109	80-120			1	20
Potassium	5.00	5.37	5.14	107	103	80-120			4	20
Selenium	0.0500	0.0542	0.0510	108	102	80-120			6	20
Sodium	5.00	5.57	5.26	111	105	80-120			6	20
Uranium	0.0500	0.0543	0.0522	109	104	80-120			4	20
Vanadium	0.0500	0.0548	0.0516	110	103	80-120			6	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



L832409-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-23 05/07/16 04:07 • (MS) R3134620-5 05/07/16 04:12 • (MSD) R3134620-6 05/07/16 04:15

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	%	%		%			%	%
Arsenic	0.0100	0.00316	0.0614	0.0566	116	107	5	75-125			8	20
Barium	0.0100	3.44	3.70	3.66	519	435	5	75-125	V	V	1	20
Cadmium	0.0100	U	0.0577	0.0550	115	110	5	75-125			5	20
Calcium	1.00	130	143	141	254	214	5	75-125	V	V	1	20
Chromium	0.0100	U	0.0575	0.0564	115	113	5	75-125			2	20
Cobalt	0.0100	U	0.0579	0.0549	116	110	5	75-125			5	20
Potassium	1.00	1.73	7.52	7.37	116	113	5	75-125			2	20
Iron	1.00	0.328	6.10	5.83	115	110	5	75-125			4	20
Lead	0.0100	U	0.0594	0.0565	119	113	5	75-125			5	20
Manganese	0.0100	0.0363	0.0960	0.0924	120	112	5	75-125			4	20
Nickel	0.0100	0.00359	0.0583	0.0540	109	101	5	75-125			8	20
Selenium	0.0100	0.00207	0.0304	0.0538	57	103	5	75-125	J6	J3	56	20
Sodium	1.00	450	479	469	569	380	5	75-125	V	V	2	20
Uranium	0.0100	U	0.0584	0.0575	117	115	5	75-125			2	20
Vanadium	0.0100	0.00763	0.0650	0.0632	115	111	5	75-125			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832460-08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134666-1 05/07/16 08:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.0015	0.0200

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

(LCS) R3134666-2 05/07/16 08:35 • (LCSD) R3134666-3 05/07/16 08:40

	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	%	%	%			%	%
Boron	0.0500	0.0478	0.0491	96	98	80-120			3	20

L832450-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-04 05/07/16 08:45 • (MS) R3134666-5 05/07/16 08:54 • (MSD) R3134666-6 05/07/16 08:59

	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	%	%		%			%	%
Boron	0.00500	0.689	0.704	0.712	31	47	10	75-125	<u>V</u>	<u>V</u>	1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869044

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

QUALITY CONTROL SUMMARY

L832460-02\_05

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134064-3 05/05/16 03:24				
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)	99.3			62.0-128

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

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

(LCS) R3134064-1 05/05/16 02:19 • (LCSD) R3134064-2 05/05/16 02:41										
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) Low Fraction	5.50	5.96	5.71	108	104	67.0-132			4.20	20
(S) a,a,a-Trifluorotoluene(FID)				101	100	62.0-128				

L832460-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-02 05/05/16 04:50 • (MS) R3134064-4 05/05/16 03:45 • (MSD) R3134064-5 05/05/16 04:07												
	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	%	%		%			%	
TPH (GC/FID) Low Fraction	5.50	U	4.30	4.12	78.2	74.8	1	50.0-143			4.43	20
(S) a,a,a-Trifluorotoluene(FID)					99.3	98.8		62.0-128				

ACCOUNT:  
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WG870384

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

QUALITY CONTROL SUMMARY

L832460-01,03,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134272-3 05/05/16 20:05				
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) 102			62.0-128	

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

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

(LCS) R3134272-1 05/05/16 18:55 • (LCSD) R3134272-2 05/05/16 19:18										
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 %
TPH (GC/FID) Low Fraction	5.50	5.72	5.74	104	104	67.0-132			0.480	20
(S) a,a,a-Trifluorotoluene(FID)				101	101	62.0-128				

L832472-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-09 05/05/16 23:22 • (MS) R3134272-4 05/05/16 22:13 • (MSD) R3134272-5 05/05/16 22:36												
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	2.09	6.24	5.37	75.4	59.6	1	50.0-143			15.0	20
(S) a,a,a-Trifluorotoluene(FID)					99.6	99.7		62.0-128				

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832460-01,02,04,05,06,07,08

ONE LAB. NATIONWIDE. 

Method Blank (MB)

(MB) R3134190-3 05/04/16 05:51

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

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

QUALITY CONTROL SUMMARY

L832460-01,02,04,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134190-3 05/04/16 05:51

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	105			90.0-115
(S) Dibromofluoromethane	104			79.0-121
(S) 4-Bromofluorobenzene	103			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134190-1 05/04/16 04:27 • (LCSD) R3134190-2 05/04/16 04:48

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 %
Acetone	0.125	0.129	0.124	103	99.5	28.7-175			3.50	20.9
Benzene	0.0250	0.0265	0.0276	106	110	73.0-122			4.18	20
Bromodichloromethane	0.0250	0.0268	0.0276	107	110	75.5-121			2.61	20
Bromoform	0.0250	0.0255	0.0260	102	104	71.5-131			2.11	20
Bromomethane	0.0250	0.0336	0.0356	134	142	22.4-187			5.75	20
n-Butylbenzene	0.0250	0.0256	0.0275	102	110	75.9-134			7.09	20
sec-Butylbenzene	0.0250	0.0249	0.0267	99.5	107	80.6-126			7.27	20
Carbon disulfide	0.0250	0.0246	0.0256	98.4	102	53.0-134			3.79	20
Carbon tetrachloride	0.0250	0.0252	0.0264	101	105	70.9-129			4.58	20
Chlorobenzene	0.0250	0.0261	0.0275	104	110	79.7-122			5.41	20
Chlorodibromomethane	0.0250	0.0266	0.0273	107	109	78.2-124			2.43	20
Chloroethane	0.0250	0.0297	0.0309	119	124	41.2-153			3.80	20
Chloroform	0.0250	0.0272	0.0279	109	112	73.2-125			2.81	20
Chloromethane	0.0250	0.0276	0.0289	111	116	55.8-134			4.35	20
1,2-Dibromoethane	0.0250	0.0266	0.0272	106	109	79.8-122			2.26	20
1,1-Dichloroethane	0.0250	0.0269	0.0279	108	112	71.7-127			3.73	20

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

QUALITY CONTROL SUMMARY

L832460-01,02,04,05,06,07,08

ONE LAB. NATIONWIDE.



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

(LCS) R3134190-1 05/04/16 04:27 • (LCSD) R3134190-2 05/04/16 04:48

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 %
1,2-Dichloroethane	0.0250	0.0276	0.0279	110	112	65.3-126			1.25	20
1,1-Dichloroethene	0.0250	0.0250	0.0260	100	104	59.9-137			3.89	20
cis-1,2-Dichloroethene	0.0250	0.0276	0.0282	111	113	77.3-122			2.17	20
trans-1,2-Dichloroethene	0.0250	0.0277	0.0289	111	116	72.6-125			4.39	20
1,2-Dichloropropane	0.0250	0.0264	0.0269	105	108	77.4-125			1.94	20
cis-1,3-Dichloropropene	0.0250	0.0273	0.0281	109	112	77.7-124			2.79	20
trans-1,3-Dichloropropene	0.0250	0.0280	0.0284	112	113	73.5-127			1.11	20
Ethylbenzene	0.0250	0.0250	0.0270	100	108	80.9-121			7.84	20
2-Hexanone	0.125	0.140	0.139	112	111	59.4-151			0.190	20
Isopropylbenzene	0.0250	0.0255	0.0270	102	108	81.6-124			5.79	20
p-Isopropyltoluene	0.0250	0.0256	0.0275	102	110	77.6-129			7.06	20
2-Butanone (MEK)	0.125	0.142	0.140	114	112	46.4-155			2.02	20
Methylene Chloride	0.0250	0.0268	0.0277	107	111	69.5-120			3.15	20
4-Methyl-2-pentanone (MIBK)	0.125	0.138	0.135	110	108	63.3-138			1.89	20
Methyl tert-butyl ether	0.0250	0.0268	0.0269	107	108	70.1-125			0.340	20
Naphthalene	0.0250	0.0242	0.0254	96.8	102	69.7-134			4.75	20
n-Propylbenzene	0.0250	0.0260	0.0276	104	110	81.9-122			5.91	20
Styrene	0.0250	0.0274	0.0289	110	116	79.9-124			5.15	20
1,1,1,2-Tetrachloroethane	0.0250	0.0249	0.0262	99.5	105	78.5-125			5.05	20
1,1,2,2-Tetrachloroethane	0.0250	0.0258	0.0264	103	105	79.3-123			2.10	20
Tetrachloroethene	0.0250	0.0253	0.0269	101	108	73.5-130			6.15	20
Toluene	0.0250	0.0257	0.0267	103	107	77.9-116			3.95	20
1,1,1-Trichloroethane	0.0250	0.0267	0.0280	107	112	71.1-129			4.72	20
1,1,2-Trichloroethane	0.0250	0.0264	0.0271	105	108	81.6-120			2.69	20
Trichloroethene	0.0250	0.0257	0.0269	103	108	79.5-121			4.40	20
1,2,4-Trimethylbenzene	0.0250	0.0252	0.0268	101	107	79.0-122			6.06	20
1,3,5-Trimethylbenzene	0.0250	0.0254	0.0269	101	108	81.0-123			5.96	20
Vinyl chloride	0.0250	0.0276	0.0284	110	114	61.5-134			2.89	20
Xylenes, Total	0.0750	0.0762	0.0806	102	107	79.2-122			5.61	20
o-Xylene	0.0250	0.0255	0.0267	102	107	79.1-123			4.75	20
m&p-Xylenes	0.0500	0.0508	0.0539	102	108	78.5-122			6.03	20
(S) Toluene-d8				106	105	90.0-115				
(S) Dibromofluoromethane				106	105	79.0-121				
(S) 4-Bromofluorobenzene				102	102	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

QUALITY CONTROL SUMMARY

L832460-01,02,04,05,06,07,08

ONE LAB. NATIONWIDE.



L832460-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-02 05/04/16 08:03 • (MS) R3134190-4 05/04/16 06:18 • (MSD) R3134190-5 05/04/16 06:39

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	U	0.0437	0.0610	34.9	48.8	1	25.0-156		J3	33.1	21.5
Benzene	0.0250	U	0.0184	0.0261	73.6	104	1	58.6-133		J3	34.7	20
Bromodichloromethane	0.0250	U	0.0197	0.0268	78.9	107	1	69.2-127		J3	30.5	20
Bromoform	0.0250	U	0.0187	0.0258	74.6	103	1	66.3-140		J3	32.1	20
Bromomethane	0.0250	U	0.0218	0.0317	87.3	127	1	16.6-183		J3	36.8	20.5
n-Butylbenzene	0.0250	U	0.0192	0.0262	76.9	105	1	64.8-145		J3	30.7	20
sec-Butylbenzene	0.0250	U	0.0181	0.0255	72.5	102	1	66.8-139		J3	33.7	20
Carbon disulfide	0.0250	U	0.0147	0.0207	58.9	82.8	1	34.9-138		J3	33.7	20
Carbon tetrachloride	0.0250	U	0.0175	0.0251	70.1	101	1	60.6-139		J3	35.7	20
Chlorobenzene	0.0250	U	0.0192	0.0261	76.6	105	1	70.1-130		J3	30.8	20
Chlorodibromomethane	0.0250	U	0.0197	0.0266	78.8	107	1	71.6-132		J3	29.9	20
Chloroethane	0.0250	U	0.0204	0.0281	81.4	112	1	33.3-155		J3	31.9	20
Chloroform	0.0250	0.000943	0.0198	0.0280	75.5	108	1	66.1-133		J3	34.2	20
Chloromethane	0.0250	U	0.0174	0.0244	69.4	97.5	1	40.7-139		J3	33.7	20
1,2-Dibromoethane	0.0250	U	0.0194	0.0263	77.5	105	1	73.8-131		J3	30.5	20
1,1-Dichloroethane	0.0250	U	0.0189	0.0268	75.4	107	1	64.0-134		J3	34.8	20
1,2-Dichloroethane	0.0250	U	0.0198	0.0276	79.1	111	1	60.7-132		J3	33.1	20
1,1-Dichloroethene	0.0250	U	0.0169	0.0239	67.4	95.4	1	48.8-144		J3	34.4	20
cis-1,2-Dichloroethene	0.0250	U	0.0194	0.0270	77.6	108	1	60.6-136		J3	32.8	20
trans-1,2-Dichloroethene	0.0250	U	0.0189	0.0266	75.5	106	1	61.0-132		J3	33.8	20
1,2-Dichloropropane	0.0250	U	0.0192	0.0261	76.8	104	1	69.7-130		J3	30.3	20
cis-1,3-Dichloropropene	0.0250	U	0.0196	0.0265	78.5	106	1	71.1-129		J3	29.6	20
trans-1,3-Dichloropropene	0.0250	U	0.0203	0.0274	81.2	110	1	66.3-136		J3	29.9	20
Ethylbenzene	0.0250	U	0.0181	0.0252	72.5	101	1	62.7-136		J3	32.6	20
2-Hexanone	0.125	U	0.0817	0.114	65.4	91.3	1	59.4-154		J3	33.2	20.1
Isopropylbenzene	0.0250	U	0.0183	0.0257	73.2	103	1	67.4-136		J3	33.8	20
p-Isopropyltoluene	0.0250	U	0.0187	0.0262	74.9	105	1	62.8-143		J3	33.3	20
2-Butanone (MEK)	0.125	U	0.0709	0.100	56.7	80.2	1	45.0-156		J3	34.3	20.8
Methylene Chloride	0.0250	U	0.0190	0.0264	76.1	106	1	61.5-125		J3	32.7	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.0976	0.135	78.1	108	1	60.7-150		J3	32.5	20
Methyl tert-butyl ether	0.0250	U	0.0194	0.0274	77.4	110	1	61.4-136		J3	34.4	20
Naphthalene	0.0250	U	0.0175	0.0248	70.1	99.2	1	61.8-143		J3	34.4	20
n-Propylbenzene	0.0250	U	0.0189	0.0262	75.7	105	1	63.2-139		J3	32.3	20
Styrene	0.0250	U	0.0202	0.0274	80.7	110	1	68.2-133		J3	30.4	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0185	0.0252	74.0	101	1	70.5-132		J3	30.9	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0194	0.0269	77.7	108	1	64.9-145		J3	32.3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

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

QUALITY CONTROL SUMMARY

L832460-01,02,04,05,06,07,08

ONE LAB. NATIONWIDE. 

L832460-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-02 05/04/16 08:03 • (MS) R3134190-4 05/04/16 06:18 • (MSD) R3134190-5 05/04/16 06:39												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0178	0.0248	71.3	99.2	1	57.4-141		J3	32.7	20
Toluene	0.0250	U	0.0181	0.0250	72.4	100	1	67.8-124		J3	32.1	20
1,1,1-Trichloroethane	0.0250	U	0.0187	0.0272	74.7	109	1	58.7-134		J3	37.2	20
1,1,2-Trichloroethane	0.0250	U	0.0195	0.0267	78.2	107	1	74.1-130		J3	31.1	20
Trichloroethene	0.0250	U	0.0181	0.0252	72.3	101	1	48.9-148		J3	33.0	20
1,2,4-Trimethylbenzene	0.0250	U	0.0184	0.0256	73.7	102	1	60.5-137		J3	32.5	20
1,3,5-Trimethylbenzene	0.0250	U	0.0185	0.0257	73.9	103	1	67.9-134		J3	32.6	20
Vinyl chloride	0.0250	U	0.0179	0.0255	71.6	102	1	44.3-143		J3	35.0	20
Xylenes, Total	0.0750	U	0.0555	0.0760	74.0	101	1	65.6-133		J3	31.2	20
o-Xylene	0.0250	U	0.0185	0.0255	73.9	102	1	67.1-133		J3	31.8	20
m&p-Xylenes	0.0500	U	0.0370	0.0505	74.0	101	1	64.1-133		J3	30.8	20
(S) Toluene-d8					105	105		90.0-115				
(S) Dibromofluoromethane					103	106		79.0-121				
(S) 4-Bromofluorobenzene					101	102		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

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L832460

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WG870445

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

QUALITY CONTROL SUMMARY

L832460-03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134517-2 05/06/16 06:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Acetone	U		0.0100	0.0500
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
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
n-Propylbenzene	U		0.000349	0.00100
Tetrachloroethene	U		0.000372	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

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

QUALITY CONTROL SUMMARY

L832460-03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134517-2 05/06/16 06:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
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-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	104			90.0-115
(S) Dibromofluoromethane	103			79.0-121
(S) 4-Bromofluorobenzene	99.8			80.1-120

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3134517-1 05/06/16 04:59 • (LCSD) R3134517-3 05/06/16 07:41

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 %
Acetone	0.125	0.137	0.125	109	99.9	28.7-175			9.14	20.9
Bromodichloromethane	0.0250	0.0288	0.0252	115	101	75.5-121			13.4	20
Bromoform	0.0250	0.0265	0.0232	106	92.8	71.5-131			13.2	20
Bromomethane	0.0250	0.0370	0.0340	148	136	22.4-187			8.55	20
n-Butylbenzene	0.0250	0.0277	0.0250	111	100	75.9-134			10.1	20
sec-Butylbenzene	0.0250	0.0267	0.0237	107	94.8	80.6-126			11.7	20
Carbon disulfide	0.0250	0.0268	0.0235	107	94.1	53.0-134			13.1	20
Carbon tetrachloride	0.0250	0.0277	0.0247	111	98.6	70.9-129			11.8	20
Chlorobenzene	0.0250	0.0279	0.0244	112	97.8	79.7-122			13.3	20
Chlorodibromomethane	0.0250	0.0280	0.0242	112	96.9	78.2-124			14.4	20
Chloroethane	0.0250	0.0328	0.0300	131	120	41.2-153			9.05	20
Chloroform	0.0250	0.0294	0.0261	118	105	73.2-125			11.8	20
Chloromethane	0.0250	0.0294	0.0268	118	107	55.8-134			9.10	20
1,2-Dibromoethane	0.0250	0.0283	0.0242	113	97.0	79.8-122			15.6	20
1,1-Dichloroethane	0.0250	0.0295	0.0262	118	105	71.7-127			11.7	20
1,2-Dichloroethane	0.0250	0.0298	0.0262	119	105	65.3-126			12.7	20
1,1-Dichloroethene	0.0250	0.0282	0.0251	113	101	59.9-137			11.6	20

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

QUALITY CONTROL SUMMARY

L832460-03

ONE LAB. NATIONWIDE.



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

(LCS) R3134517-1 05/06/16 04:59 • (LCSD) R3134517-3 05/06/16 07:41

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 %
cis-1,2-Dichloroethene	0.0250	0.0295	0.0263	118	105	77.3-122			11.5	20
trans-1,2-Dichloroethene	0.0250	0.0296	0.0265	118	106	72.6-125			11.0	20
1,2-Dichloropropane	0.0250	0.0289	0.0251	116	100	77.4-125			14.2	20
cis-1,3-Dichloropropene	0.0250	0.0294	0.0256	117	102	77.7-124			13.7	20
trans-1,3-Dichloropropene	0.0250	0.0298	0.0261	119	104	73.5-127			13.3	20
Ethylbenzene	0.0250	0.0273	0.0238	109	95.1	80.9-121			13.8	20
2-Hexanone	0.125	0.144	0.130	115	104	59.4-151			10.1	20
Isopropylbenzene	0.0250	0.0272	0.0239	109	95.7	81.6-124			12.7	20
p-Isopropyltoluene	0.0250	0.0272	0.0246	109	98.4	77.6-129			10.3	20
2-Butanone (MEK)	0.125	0.154	0.136	123	109	46.4-155			12.1	20
Methylene Chloride	0.0250	0.0290	0.0253	116	101	69.5-120			13.3	20
4-Methyl-2-pentanone (MIBK)	0.125	0.147	0.128	117	103	63.3-138			13.5	20
Methyl tert-butyl ether	0.0250	0.0287	0.0255	115	102	70.1-125			12.0	20
Naphthalene	0.0250	0.0265	0.0229	106	91.8	69.7-134			14.3	20
n-Propylbenzene	0.0250	0.0275	0.0246	110	98.6	81.9-122			11.0	20
Styrene	0.0250	0.0285	0.0253	114	101	79.9-124			12.2	20
1,1,1-Tetrachloroethane	0.0250	0.0269	0.0232	108	93.0	78.5-125			14.6	20
1,1,2,2-Tetrachloroethane	0.0250	0.0267	0.0238	107	95.3	79.3-123			11.5	20
Tetrachloroethene	0.0250	0.0274	0.0238	110	95.4	73.5-130			14.0	20
Toluene	0.0250	0.0278	0.0241	111	96.6	77.9-116			13.9	20
1,1,1-Trichloroethane	0.0250	0.0293	0.0260	117	104	71.1-129			12.0	20
1,1,2-Trichloroethane	0.0250	0.0280	0.0240	112	96.2	81.6-120			15.2	20
Trichloroethene	0.0250	0.0291	0.0247	116	98.9	79.5-121			16.1	20
1,2,4-Trimethylbenzene	0.0250	0.0263	0.0239	105	95.5	79.0-122			9.81	20
1,3,5-Trimethylbenzene	0.0250	0.0270	0.0240	108	96.0	81.0-123			11.8	20
Vinyl chloride	0.0250	0.0300	0.0274	120	110	61.5-134			9.04	20
Xylenes, Total	0.0750	0.0816	0.0716	109	95.5	79.2-122			13.1	20
o-Xylene	0.0250	0.0271	0.0236	108	94.4	79.1-123			13.8	20
m&p-Xylenes	0.0500	0.0545	0.0480	109	96.0	78.5-122			12.8	20
(S) Toluene-d8				105	105	90.0-115				
(S) Dibromofluoromethane				106	109	79.0-121				
(S) 4-Bromofluorobenzene				97.8	100	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832460-03

ONE LAB. NATIONWIDE. 

L832643-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832643-09 05/06/16 12:57 • (MS) R3134517-4 05/06/16 08:20 • (MSD) R3134517-5 05/06/16 08:40

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	%	%		%			%	%
Acetone	0.125	U	0.0583	0.0525	46.7	42.0	1	25.0-156			10.5	21.5
Bromodichloromethane	0.0250	U	0.0240	0.0219	95.9	87.6	1	69.2-127			9.08	20
Bromoform	0.0250	0.00207	0.0240	0.0220	87.9	79.8	1	66.3-140			8.69	20
Bromomethane	0.0250	U	0.0288	0.0254	115	102	1	16.6-183			12.4	20.5
n-Butylbenzene	0.0250	U	0.0236	0.0212	94.2	84.9	1	64.8-145			10.5	20
sec-Butylbenzene	0.0250	U	0.0225	0.0200	90.2	80.0	1	66.8-139			12.0	20
Carbon disulfide	0.0250	U	0.0187	0.0162	74.9	64.6	1	34.9-138			14.7	20
Carbon tetrachloride	0.0250	U	0.0229	0.0205	91.7	81.8	1	60.6-139			11.4	20
Chlorobenzene	0.0250	U	0.0231	0.0209	92.4	83.7	1	70.1-130			9.88	20
Chlorodibromomethane	0.0250	U	0.0235	0.0214	93.9	85.4	1	71.6-132			9.43	20
Chloroethane	0.0250	U	0.0264	0.0225	106	89.8	1	33.3-155			16.2	20
Chloroform	0.0250	U	0.0250	0.0221	99.9	88.5	1	66.1-133			12.1	20
Chloromethane	0.0250	U	0.0229	0.0198	91.8	79.1	1	40.7-139			14.8	20
1,2-Dibromoethane	0.0250	U	0.0230	0.0215	91.9	86.0	1	73.8-131			6.64	20
1,1-Dichloroethane	0.0250	U	0.0247	0.0217	98.6	86.9	1	64.0-134			12.6	20
1,2-Dichloroethane	0.0250	U	0.0250	0.0225	100	89.9	1	60.7-132			10.9	20
1,1-Dichloroethene	0.0250	U	0.0223	0.0190	89.3	76.0	1	48.8-144			16.1	20
cis-1,2-Dichloroethene	0.0250	U	0.0244	0.0216	97.6	86.2	1	60.6-136			12.4	20
trans-1,2-Dichloroethene	0.0250	U	0.0202	0.0142	80.9	56.8	1	61.0-132		J3 J6	35.0	20
1,2-Dichloropropane	0.0250	U	0.0239	0.0217	95.8	86.6	1	69.7-130			10.1	20
cis-1,3-Dichloropropene	0.0250	U	0.0194	0.0118	77.8	47.0	1	71.1-129		J3 J6	49.3	20
trans-1,3-Dichloropropene	0.0250	U	0.0150	0.00499	60.1	20.0	1	66.3-136	J6	J3 J6	100	20
Ethylbenzene	0.0250	U	0.0222	0.0200	88.7	80.1	1	62.7-136			10.2	20
2-Hexanone	0.125	U	0.0996	0.0973	79.7	77.8	1	59.4-154			2.36	20.1
Isopropylbenzene	0.0250	U	0.0225	0.0201	90.0	80.5	1	67.4-136			11.1	20
p-Isopropyltoluene	0.0250	U	0.0233	0.0206	93.2	82.4	1	62.8-143			12.3	20
2-Butanone (MEK)	0.125	U	0.0921	0.0882	73.7	70.5	1	45.0-156			4.40	20.8
Methylene Chloride	0.0250	U	0.0239	0.0210	95.5	83.9	1	61.5-125			13.0	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.122	0.116	97.4	93.1	1	60.7-150			4.52	20
Methyl tert-butyl ether	0.0250	U	0.0243	0.0223	97.4	89.2	1	61.4-136			8.72	20
Naphthalene	0.0250	U	0.0221	0.0207	88.5	82.9	1	61.8-143			6.54	20
n-Propylbenzene	0.0250	U	0.0233	0.0207	93.3	83.0	1	63.2-139			11.7	20
Styrene	0.0250	U	0.00390	0.00126	15.6	5.02	1	68.2-133	J6	J3 J6	103	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0223	0.0202	89.2	80.7	1	70.5-132			9.96	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0236	0.0218	94.4	87.1	1	64.9-145			8.07	20
Tetrachloroethene	0.0250	U	0.0220	0.0199	87.9	79.5	1	57.4-141			10.1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832460-03

ONE LAB. NATIONWIDE. 

L832643-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832643-09 05/06/16 12:57 • (MS) R3134517-4 05/06/16 08:20 • (MSD) R3134517-5 05/06/16 08:40												
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	%	%		%			%	%
Toluene	0.0250	U	0.0223	0.0201	89.3	80.5	1	67.8-124			10.3	20
1,1,1-Trichloroethane	0.0250	U	0.0242	0.0215	96.6	86.1	1	58.7-134			11.6	20
1,1,2-Trichloroethane	0.0250	U	0.0236	0.0218	94.2	87.4	1	74.1-130			7.54	20
Trichloroethene	0.0250	U	0.0223	0.0202	89.2	80.7	1	48.9-148			10.1	20
1,2,4-Trimethylbenzene	0.0250	0.000580	0.0227	0.0200	88.6	77.9	1	60.5-137			12.6	20
1,3,5-Trimethylbenzene	0.0250	U	0.0223	0.0194	89.2	77.4	1	67.9-134			14.1	20
Vinyl chloride	0.0250	U	0.0225	0.0172	89.9	68.8	1	44.3-143		J3	26.6	20
Xylenes, Total	0.0750	U	0.0672	0.0602	89.6	80.3	1	65.6-133			11.0	20
o-Xylene	0.0250	U	0.0223	0.0198	89.2	79.4	1	67.1-133			11.7	20
m&p-Xylenes	0.0500	U	0.0449	0.0404	89.8	80.7	1	64.1-133			10.6	20
(S) Toluene-d8					105	104		90.0-115				
(S) Dibromofluoromethane					108	107		79.0-121				
(S) 4-Bromofluorobenzene					101	100		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832460-03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134703-3 05/07/16 01:08				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Benzene	U		0.000331	0.00100
(S) Toluene-d8	100			90.0-115
(S) Dibromofluoromethane	98.1			79.0-121
(S) 4-Bromofluorobenzene	89.0			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) R3134703-1 05/06/16 23:26 • (LCSD) R3134703-2 05/06/16 23:46										
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	%	%	%			%	%
Benzene	0.0250	0.0245	0.0245	97.8	98.0	73.0-122			0.220	20
(S) Toluene-d8				98.1	99.2	90.0-115				
(S) Dibromofluoromethane				99.3	98.6	79.0-121				
(S) 4-Bromofluorobenzene				85.7	88.0	80.1-120				

L832643-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(S) L832643-09 05/07/16 02:50 • (MS) R3134703-4 05/07/16 01:29 • (MSD) R3134703-5 05/07/16 01:49												
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 %
Benzene	0.0250	U	0.0240	0.0241	96.0	96.3	1	58.6-133			0.360	20
(S) Toluene-d8					99.6	98.7		90.0-115				
(S) Dibromofluoromethane					101	99.8		79.0-121				
(S) 4-Bromofluorobenzene					86.4	86.4		80.1-120				

ACCOUNT:  
TRC Solutions - Austin, TX

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Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832460-01,02,03,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133525-1 05/03/16 13:09				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	108			50.0-150

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

(LCS) R3133525-2 05/03/16 13:25 • (LCSD) R3133525-3 05/03/16 13:42										
	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	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.75	1.71	117	114	50.0-150			2.53	20
(S) o-Terphenyl				108	104	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832460

DATE/TIME:  
05/12/16 18:43

PAGE:  
51 of 54



## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Sample Detection Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> GI<sup>8</sup> Al<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



<b>Company Name/Address:</b> <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		<b>Billing Information:</b> <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		<b>Analysis / Container / Preservative</b>										<b>Chain of Custody</b> Page <u>1</u> of <u>1</u>			
<b>Report to:</b> jspeer@trcsolutions.com		<b>Email To:</b> jspeer@trcsolutions.com												 <b>ESC</b> 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: 615-758-5959			
<b>Project Description:</b> <b>TEL Spring 2016 - Team GCH</b>		<b>City/State Collected:</b> Artesia, NM												<b>L#</b> <u>832460</u> <b>G071</b>			
<b>Phone:</b> 512-684-3170 <b>Fax:</b>		<b>Client Project #</b>		<b>Lab Project #</b> TRCATX-TEL SPRING										<b>Acctnum:</b> TRCATX <b>Template:</b> T111395 <b>Prelogin:</b> P549623 <b>TSR:</b> Chris McCord <b>Cooler:</b> <b>Shipped Via:</b>			
<b>Collected by (print):</b> Scott Ude + HMI Team		<b>Site/Facility ID #</b> TEL - Navajo- Artesia		<b>P.O. #</b>										<b>Rem./Contaminant</b>			
<b>Collected by (signature):</b> Scott Ude		<b>Rush? (Lab MUST Be Notified)</b> Same Day ..... 200% Next Day ..... 100% Two Day ..... 50% Three Day ..... 25%		<b>Date Results Needed</b> Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes										<b>Sample # (lab only)</b>			
<b>Immediately Packed on Ice</b> N <input type="checkbox"/> Y <input checked="" type="checkbox"/>																	
<b>Sample ID</b>	<b>Comp/Grab</b>	<b>Matrix *</b>	<b>Depth</b>	<b>Date</b>	<b>Time</b>	<b>No. of Cntrs</b>	<b>DRO - 40ml Amb-HCl-BT</b>	<b>GRO - 40ml Amb-HCl</b>	<b>V8260 - 40ml Amb-HCl</b>	<b>Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500ml HDPE-HNO3</b>	<b>Cyanide (CN) - 250ml HDPE Amb-NaOH</b>	<b>Cations-Total Ca, K, Na - 500ml HDPE-HNO3</b>	<b>Anions- Chloride, Fluoride, Sulfate- 125ml HDPE-NoPres</b>	<b>Nitrate/Nitrite (NO2/NO3) - 250ml HDPE-H2SO4</b>	<b>TDS - 250ml HDPE-NoPres</b>	<b>Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V</b>	
TEL-3		GW		4/28/16	1030	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	01
EB-TEL-01				4/28/16	1045	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	02
TEL-2				4/28/16	940	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	03
Trip Blank-TEL-01				4/28/16	-	1			✓								04
TEL-1				4/28/16	855	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	05
TEL-4				4/28/16	755	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	06
DUP-TEL-01				4/28/16	1000	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	07
MW-49	✓	✓		4/28/16	1010	13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	08
<b>* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other</b>																	
<b>Remarks: Log all metals by 6020. Dissolved metals are field filtered.</b>																	
<b>Relinquished by: (Signature)</b> Scott Ude		<b>Date:</b> 4/28/16		<b>Time:</b> 1415		<b>Received by: (Signature)</b>		<b>Samples returned via:</b> <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>		<b>Temp:</b> 3.1 °C <b>Bottles Received:</b> 84		<b>Condition:</b> (lab use only) <u>Sw7</u>		<b>COC Seal Intact:</b> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		<b>pH Checked:</b> <u>12, &gt;12</u>	
<b>Relinquished by: (Signature)</b>		<b>Date:</b>		<b>Time:</b>		<b>Received by: (Signature)</b>		<b>Temp:</b>		<b>Bottles Received:</b>		<b>Condition:</b>		<b>COC Seal Intact:</b>		<b>pH Checked:</b>	
<b>Relinquished by: (Signature)</b>		<b>Date:</b>		<b>Time:</b>		<b>Received for lab by: (Signature)</b>		<b>Date:</b> 4/29/16		<b>Time:</b> 0950		<b>Condition:</b>		<b>COC Seal Intact:</b>		<b>pH Checked:</b>	

## TRC Solutions - Austin, TX

Sample Delivery Group: L832462  
Samples Received: 04/29/2016  
Project Number: 249545.0000.0000 000  
Description: NCL Spring 2016  
Site: NCL - NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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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<b><sup>4</sup>Cn: Case Narrative</b>	<b>5</b>
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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-56 L832462-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 12:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 18:43	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:05	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 18:06	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 10:31	05/04/16 10:31	BMB
Wet Chemistry by Method 353.2	WG870055	1	05/05/16 15:41	05/05/16 15:41	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 07:56	05/09/16 07:56	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 08:12	05/09/16 08:12	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

NCL-34A L832462-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 08:25

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 18:59	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:08	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	20	05/02/16 21:06	05/05/16 22:31	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	50	05/04/16 10:52	05/04/16 10:52	BMB
Wet Chemistry by Method 353.2	WG870487	10	05/09/16 15:36	05/09/16 15:36	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 08:27	05/09/16 08:27	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 08:42	05/09/16 08:42	CM

MW-108 L832462-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 09:25

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869818	1	05/04/16 18:18	05/04/16 18:59	MMF
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 19:02	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:10	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 18:40	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	50	05/04/16 11:13	05/04/16 11:13	BMB
Wet Chemistry by Method 353.2	WG870487	10	05/09/16 15:37	05/09/16 15:37	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 09:44	05/09/16 09:44	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 08:58	05/09/16 08:58	CM

NCL-31 L832462-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 10:40

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869819	1	05/05/16 03:04	05/05/16 04:22	JM
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 19:05	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:12	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 18:56	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 11:34	05/04/16 11:34	BMB
Wet Chemistry by Method 353.2	WG870487	10	05/09/16 15:38	05/09/16 15:38	DR
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 09:59	05/09/16 09:59	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 10:15	05/09/16 10:15	CM

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

249545.0000.0000 000

SDG:

L832462

DATE/TIME:

05/10/16 14:20

PAGE:

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## SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NCL-32 L832462-05 GW

Collected by  
SU / HM1 TeamCollected date/time  
04/28/16 11:40Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869819	1	05/05/16 03:04	05/05/16 04:22	JM
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 19:07	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:15	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 19:13	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 11:55	05/04/16 11:55	BMB
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 06:44	05/06/16 06:44	ASK
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 10:30	05/09/16 10:30	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 10:46	05/09/16 10:46	CM

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

EB-NCL-01 L832462-06 GW

Collected by  
SU / HM1 TeamCollected date/time  
04/28/16 12:20Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869819	1	05/05/16 03:04	05/05/16 04:22	JM
Metals (ICPMS) by Method 6020	WG869321	1	05/02/16 21:41	05/06/16 19:10	ST
Metals (ICPMS) by Method 6020	WG870075	1	05/05/16 17:34	05/09/16 11:38	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 19:30	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 12:16	05/04/16 12:16	BMB
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 06:45	05/06/16 06:45	ASK
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 11:01	05/09/16 11:01	CM

NCL-44 L832462-07 GW

Collected by  
SU / HM1 TeamCollected date/time  
04/28/16 13:00Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869819	1	05/05/16 03:04	05/05/16 04:22	JM
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 19:13	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:24	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 20:53	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 12:37	05/04/16 12:37	BMB
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 06:46	05/06/16 06:46	ASK
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 14:02	05/09/16 14:02	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 11:47	05/09/16 11:47	CM





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

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3790		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.76		0.0197	0.100	0.100	1	05/05/2016 15:41	WG870055

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	403		5.19	1.00	100	100	05/09/2016 08:12	WG869680
Fluoride	1.10		0.00990	0.100	0.100	1	05/09/2016 07:56	WG869680
Sulfate	1970		7.74	5.00	500	100	05/09/2016 08:12	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00777	J	0.00125	0.00200	0.0100	5	05/06/2016 18:43	WG869321
Arsenic,Dissolved	0.00737	J	0.00125	0.00200	0.0100	5	05/09/2016 11:05	WG870075
Barium	0.0203	J	0.00180	0.00500	0.0250	5	05/06/2016 18:43	WG869321
Barium,Dissolved	0.0158	J	0.00180	0.00500	0.0250	5	05/09/2016 11:05	WG870075
Calcium	559	V	0.230	1.00	5.00	5	05/06/2016 18:43	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 18:43	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:05	WG870075
Iron	U		0.0750	0.100	0.500	5	05/06/2016 18:43	WG869321
Iron,Dissolved	0.112	J	0.0750	0.100	0.500	5	05/09/2016 11:05	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 18:43	WG869321
Lead,Dissolved	0.00132	J	0.00120	0.00200	0.0100	5	05/09/2016 11:05	WG870075
Manganese	0.373		0.00125	0.00500	0.0250	5	05/06/2016 18:43	WG869321
Manganese,Dissolved	0.331		0.00125	0.00500	0.0250	5	05/09/2016 11:05	WG870075
Potassium	2.32	J O1	0.185	1.00	5.00	5	05/06/2016 18:43	WG869321
Selenium	0.00381	J	0.00190	0.00200	0.0100	5	05/06/2016 18:43	WG869321
Selenium,Dissolved	0.00369	J	0.00190	0.00200	0.0100	5	05/09/2016 11:05	WG870075
Sodium	379	V	0.550	1.00	5.00	5	05/06/2016 18:43	WG869321

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 10:31	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 10:31	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 10:31	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 10:31	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 10:31	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 10:31	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 10:31	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 10:31	WG868987



Collected date/time: 04/28/16 12:00

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 10:31	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:31	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 10:31	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 10:31	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 10:31	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 10:31	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 10:31	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 10:31	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 10:31	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 10:31	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 10:31	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 10:31	WG868987
Methyl tert-butyl ether	0.0160		0.000367	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 10:31	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 10:31	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 10:31	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 10:31	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 10:31	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:31	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 10:31	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 10:31	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 10:31	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 10:31	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 10:31	WG868987
(S) Toluene-d8	106				90.0-115		05/04/2016 10:31	WG868987
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 10:31	WG868987
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 10:31	WG868987

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.07		0.0247	0.100	0.100	1	05/04/2016 18:06	WG869259
(S) o-Terphenyl	109				50.0-150		05/04/2016 18:06	WG869259

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1540		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.265	J	0.197	0.100	1.00	10	05/09/2016 15:36	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	416		5.19	1.00	100	100	05/09/2016 08:42	WG869680
Fluoride	1.31		0.00990	0.100	0.100	1	05/09/2016 08:27	WG869680
Sulfate	82.2		0.0774	5.00	5.00	1	05/09/2016 08:27	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00184	J	0.00125	0.00200	0.0100	5	05/06/2016 18:59	WG869321
Arsenic,Dissolved	U		0.00125	0.00200	0.0100	5	05/09/2016 11:08	WG870075
Barium	0.854		0.00180	0.00500	0.0250	5	05/06/2016 18:59	WG869321
Barium,Dissolved	0.616		0.00180	0.00500	0.0250	5	05/09/2016 11:08	WG870075
Calcium	347		0.230	1.00	5.00	5	05/06/2016 18:59	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 18:59	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:08	WG870075
Iron	U		0.0750	0.100	0.500	5	05/06/2016 18:59	WG869321
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 11:08	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 18:59	WG869321
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:08	WG870075
Manganese	0.0185	J	0.00125	0.00500	0.0250	5	05/06/2016 18:59	WG869321
Manganese,Dissolved	0.0172	J	0.00125	0.00500	0.0250	5	05/09/2016 11:08	WG870075
Potassium	2.20	J	0.185	1.00	5.00	5	05/06/2016 18:59	WG869321
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 18:59	WG869321
Selenium,Dissolved	0.00268	J	0.00190	0.00200	0.0100	5	05/09/2016 11:08	WG870075
Sodium	140		0.550	1.00	5.00	5	05/06/2016 18:59	WG869321

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.500	0.0500	2.50	50	05/04/2016 10:52	WG868987
Benzene	3.25		0.0166	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Bromodichloromethane	U		0.0190	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Bromoform	U		0.0234	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Bromomethane	U		0.0433	0.00500	0.250	50	05/04/2016 10:52	WG868987
n-Butylbenzene	U		0.0180	0.00100	0.0500	50	05/04/2016 10:52	WG868987
sec-Butylbenzene	0.0190	J	0.0182	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Carbon disulfide	U		0.0138	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Carbon tetrachloride	U		0.0190	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Chlorobenzene	U		0.0174	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Chlorodibromomethane	U		0.0164	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Chloroethane	U		0.0226	0.00500	0.250	50	05/04/2016 10:52	WG868987
Chloroform	U		0.0162	0.00500	0.250	50	05/04/2016 10:52	WG868987
Chloromethane	U		0.0138	0.00250	0.125	50	05/04/2016 10:52	WG868987
1,2-Dibromoethane	U		0.0190	0.00100	0.0500	50	05/04/2016 10:52	WG868987
1,1-Dichloroethane	U		0.0130	0.00100	0.0500	50	05/04/2016 10:52	WG868987



Collected date/time: 04/28/16 08:25

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.0180	0.00100	0.0500	50	05/04/2016 10:52	WG868987
1,1-Dichloroethene	U		0.0199	0.00100	0.0500	50	05/04/2016 10:52	WG868987
cis-1,2-Dichloroethene	U		0.0130	0.00100	0.0500	50	05/04/2016 10:52	WG868987
trans-1,2-Dichloroethene	U		0.0198	0.00100	0.0500	50	05/04/2016 10:52	WG868987
1,2-Dichloropropane	U		0.0153	0.00100	0.0500	50	05/04/2016 10:52	WG868987
cis-1,3-Dichloropropene	U		0.0209	0.00100	0.0500	50	05/04/2016 10:52	WG868987
trans-1,3-Dichloropropene	U		0.0210	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Ethylbenzene	0.0758		0.0192	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Isopropylbenzene	0.100		0.0163	0.00100	0.0500	50	05/04/2016 10:52	WG868987
p-Isopropyltoluene	U		0.0175	0.00100	0.0500	50	05/04/2016 10:52	WG868987
2-Butanone (MEK)	U		0.196	0.0100	0.500	50	05/04/2016 10:52	WG868987
2-Hexanone	U		0.191	0.0100	0.500	50	05/04/2016 10:52	WG868987
Methylene Chloride	U		0.0500	0.00500	0.250	50	05/04/2016 10:52	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.107	0.0100	0.500	50	05/04/2016 10:52	WG868987
Methyl tert-butyl ether	U		0.0184	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Naphthalene	U		0.0500	0.00500	0.250	50	05/04/2016 10:52	WG868987
n-Propylbenzene	0.112		0.0174	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Styrene	U		0.0154	0.00100	0.0500	50	05/04/2016 10:52	WG868987
1,1,1,2-Tetrachloroethane	U		0.0192	0.00100	0.0500	50	05/04/2016 10:52	WG868987
1,1,2,2-Tetrachloroethane	U		0.00650	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Tetrachloroethene	U		0.0186	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Toluene	U		0.0390	0.00500	0.250	50	05/04/2016 10:52	WG868987
1,1,1-Trichloroethane	U		0.0160	0.00100	0.0500	50	05/04/2016 10:52	WG868987
1,1,2-Trichloroethane	U		0.0192	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Trichloroethene	U		0.0199	0.00100	0.0500	50	05/04/2016 10:52	WG868987
1,2,4-Trimethylbenzene	0.102		0.0186	0.00100	0.0500	50	05/04/2016 10:52	WG868987
1,3,5-Trimethylbenzene	U		0.0194	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Vinyl chloride	U		0.0130	0.00100	0.0500	50	05/04/2016 10:52	WG868987
o-Xylene	U		0.0170	0.00100	0.0500	50	05/04/2016 10:52	WG868987
m&p-Xylene	0.188		0.0360	0.00100	0.0500	50	05/04/2016 10:52	WG868987
Xylenes, Total	0.188		0.0530	0.00300	0.150	50	05/04/2016 10:52	WG868987
(S) Toluene-d8	104				90.0-115		05/04/2016 10:52	WG868987
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 10:52	WG868987
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 10:52	WG868987

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	19.2		0.494	0.100	2.00	20	05/05/2016 22:31	WG869259
(S) o-Terphenyl	112	J7			50.0-150		05/05/2016 22:31	WG869259

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 mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2120		2.82	10.0	10.0	1	05/04/2016 18:59	WG869818

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.304	J	0.197	0.100	1.00	10	05/09/2016 15:37	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	79.6		0.0519	1.00	1.00	1	05/09/2016 09:44	WG869680
Fluoride	2.04		0.00990	0.100	0.100	1	05/09/2016 09:44	WG869680
Sulfate	981		7.74	5.00	500	100	05/09/2016 08:58	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00454	J	0.00125	0.00200	0.0100	5	05/06/2016 19:02	WG869321
Arsenic,Dissolved	0.00281	J	0.00125	0.00200	0.0100	5	05/09/2016 11:10	WG870075
Barium	0.0481		0.00180	0.00500	0.0250	5	05/06/2016 19:02	WG869321
Barium,Dissolved	0.0408		0.00180	0.00500	0.0250	5	05/09/2016 11:10	WG870075
Calcium	333		0.230	1.00	5.00	5	05/06/2016 19:02	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 19:02	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:10	WG870075
Iron	0.206	J	0.0750	0.100	0.500	5	05/06/2016 19:02	WG869321
Iron,Dissolved	0.154	J	0.0750	0.100	0.500	5	05/09/2016 11:10	WG870075
Lead	0.00209	J	0.00120	0.00200	0.0100	5	05/06/2016 19:02	WG869321
Lead,Dissolved	0.00173	J	0.00120	0.00200	0.0100	5	05/09/2016 11:10	WG870075
Manganese	0.0501		0.00125	0.00500	0.0250	5	05/06/2016 19:02	WG869321
Manganese,Dissolved	0.0367		0.00125	0.00500	0.0250	5	05/09/2016 11:10	WG870075
Potassium	1.28	J	0.185	1.00	5.00	5	05/06/2016 19:02	WG869321
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 19:02	WG869321
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 11:10	WG870075
Sodium	92.6		0.550	1.00	5.00	5	05/06/2016 19:02	WG869321

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.500	0.0500	2.50	50	05/04/2016 11:13	WG868987
Benzene	0.504		0.0166	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Bromodichloromethane	U		0.0190	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Bromoform	U		0.0234	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Bromomethane	U		0.0433	0.00500	0.250	50	05/04/2016 11:13	WG868987
n-Butylbenzene	U		0.0180	0.00100	0.0500	50	05/04/2016 11:13	WG868987
sec-Butylbenzene	U		0.0182	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Carbon disulfide	U		0.0138	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Carbon tetrachloride	U		0.0190	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Chlorobenzene	U		0.0174	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Chlorodibromomethane	U		0.0164	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Chloroethane	U		0.0226	0.00500	0.250	50	05/04/2016 11:13	WG868987
Chloroform	U		0.0162	0.00500	0.250	50	05/04/2016 11:13	WG868987
Chloromethane	U		0.0138	0.00250	0.125	50	05/04/2016 11:13	WG868987
1,2-Dibromoethane	U		0.0190	0.00100	0.0500	50	05/04/2016 11:13	WG868987
1,1-Dichloroethane	U		0.0130	0.00100	0.0500	50	05/04/2016 11:13	WG868987



Collected date/time: 04/28/16 09:25

L832462

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.0180	0.00100	0.0500	50	05/04/2016 11:13	WG868987
1,1-Dichloroethene	U		0.0199	0.00100	0.0500	50	05/04/2016 11:13	WG868987
cis-1,2-Dichloroethene	U		0.0130	0.00100	0.0500	50	05/04/2016 11:13	WG868987
trans-1,2-Dichloroethene	U		0.0198	0.00100	0.0500	50	05/04/2016 11:13	WG868987
1,2-Dichloropropane	U		0.0153	0.00100	0.0500	50	05/04/2016 11:13	WG868987
cis-1,3-Dichloropropene	U		0.0209	0.00100	0.0500	50	05/04/2016 11:13	WG868987
trans-1,3-Dichloropropene	U		0.0210	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Ethylbenzene	U		0.0192	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Isopropylbenzene	0.0360	U	0.0163	0.00100	0.0500	50	05/04/2016 11:13	WG868987
p-Isopropyltoluene	U		0.0175	0.00100	0.0500	50	05/04/2016 11:13	WG868987
2-Butanone (MEK)	U		0.196	0.0100	0.500	50	05/04/2016 11:13	WG868987
2-Hexanone	U		0.191	0.0100	0.500	50	05/04/2016 11:13	WG868987
Methylene Chloride	U		0.0500	0.00500	0.250	50	05/04/2016 11:13	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.107	0.0100	0.500	50	05/04/2016 11:13	WG868987
Methyl tert-butyl ether	U		0.0184	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Naphthalene	U		0.0500	0.00500	0.250	50	05/04/2016 11:13	WG868987
n-Propylbenzene	0.0380	U	0.0174	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Styrene	U		0.0154	0.00100	0.0500	50	05/04/2016 11:13	WG868987
1,1,1,2-Tetrachloroethane	U		0.0192	0.00100	0.0500	50	05/04/2016 11:13	WG868987
1,1,2,2-Tetrachloroethane	U		0.00650	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Tetrachloroethene	U		0.0186	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Toluene	U		0.0390	0.00500	0.250	50	05/04/2016 11:13	WG868987
1,1,1-Trichloroethane	U		0.0160	0.00100	0.0500	50	05/04/2016 11:13	WG868987
1,1,2-Trichloroethane	U		0.0192	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Trichloroethene	U		0.0199	0.00100	0.0500	50	05/04/2016 11:13	WG868987
1,2,4-Trimethylbenzene	0.0599		0.0186	0.00100	0.0500	50	05/04/2016 11:13	WG868987
1,3,5-Trimethylbenzene	U		0.0194	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Vinyl chloride	U		0.0130	0.00100	0.0500	50	05/04/2016 11:13	WG868987
o-Xylene	U		0.0170	0.00100	0.0500	50	05/04/2016 11:13	WG868987
m&p-Xylene	0.0795		0.0360	0.00100	0.0500	50	05/04/2016 11:13	WG868987
Xylenes, Total	0.0795	U	0.0530	0.00300	0.150	50	05/04/2016 11:13	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 11:13	WG868987
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 11:13	WG868987
(S) 4-Bromofluorobenzene	104				80.1-120		05/04/2016 11:13	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	9.20		0.0247	0.100	0.100	1	05/04/2016 18:40	WG869259
(S) o-Terphenyl	102				50.0-150		05/04/2016 18:40	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3020		2.82	10.0	10.0	1	05/05/2016 04:22	WG869819

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.385	J	0.197	0.100	1.00	10	05/09/2016 15:38	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	78.9		0.0519	1.00	1.00	1	05/09/2016 09:59	WG869680
Fluoride	1.14		0.00990	0.100	0.100	1	05/09/2016 09:59	WG869680
Sulfate	1420		7.74	5.00	500	100	05/09/2016 10:15	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00495	J	0.00125	0.00200	0.0100	5	05/06/2016 19:05	WG869321
Arsenic,Dissolved	0.00599	J	0.00125	0.00200	0.0100	5	05/09/2016 11:12	WG870075
Barium	0.0241	J	0.00180	0.00500	0.0250	5	05/06/2016 19:05	WG869321
Barium,Dissolved	0.0178	J	0.00180	0.00500	0.0250	5	05/09/2016 11:12	WG870075
Calcium	340		0.230	1.00	5.00	5	05/06/2016 19:05	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 19:05	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:12	WG870075
Iron	0.838		0.0750	0.100	0.500	5	05/06/2016 19:05	WG869321
Iron,Dissolved	0.866		0.0750	0.100	0.500	5	05/09/2016 11:12	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 19:05	WG869321
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:12	WG870075
Manganese	1.85		0.00125	0.00500	0.0250	5	05/06/2016 19:05	WG869321
Manganese,Dissolved	1.90		0.00125	0.00500	0.0250	5	05/09/2016 11:12	WG870075
Potassium	0.272	J	0.185	1.00	5.00	5	05/06/2016 19:05	WG869321
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 19:05	WG869321
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 11:12	WG870075
Sodium	109		0.550	1.00	5.00	5	05/06/2016 19:05	WG869321

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 11:34	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 11:34	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 11:34	WG868987
sec-Butylbenzene	0.000595	J	0.000365	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 11:34	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 11:34	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 11:34	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 11:34	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 11:34	WG868987





Collected date/time: 04/28/16 10:40

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 11:34	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:34	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 11:34	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 11:34	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 11:34	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 11:34	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Isopropylbenzene	0.000678	U	0.000326	0.00100	0.00100	1	05/04/2016 11:34	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 11:34	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 11:34	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 11:34	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 11:34	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 11:34	WG868987
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 11:34	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 11:34	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 11:34	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 11:34	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 11:34	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:34	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 11:34	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 11:34	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 11:34	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 11:34	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 11:34	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 11:34	WG868987
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 11:34	WG868987
(S) 4-Bromofluorobenzene	102				80.1-120		05/04/2016 11:34	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.87		0.0247	0.100	0.100	1	05/04/2016 18:56	WG869259
(S) o-Terphenyl	106				50.0-150		05/04/2016 18:56	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2740		2.82	10.0	10.0	1	05/05/2016 04:22	WG869819

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 06:44	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	206		5.19	1.00	100	100	05/09/2016 10:46	WG869680
Fluoride	2.05		0.00990	0.100	0.100	1	05/09/2016 10:30	WG869680
Sulfate	1340		7.74	5.00	500	100	05/09/2016 10:46	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0108		0.00125	0.00200	0.0100	5	05/06/2016 19:07	WG869321
Arsenic,Dissolved	0.00412	J	0.00125	0.00200	0.0100	5	05/09/2016 11:15	WG870075
Barium	0.227		0.00180	0.00500	0.0250	5	05/06/2016 19:07	WG869321
Barium,Dissolved	0.0632		0.00180	0.00500	0.0250	5	05/09/2016 11:15	WG870075
Calcium	697		0.230	1.00	5.00	5	05/06/2016 19:07	WG869321
Chromium	0.0660		0.00270	0.00200	0.0100	5	05/06/2016 19:07	WG869321
Chromium,Dissolved	0.00772	J	0.00270	0.00200	0.0100	5	05/09/2016 11:15	WG870075
Iron	9.75		0.0750	0.100	0.500	5	05/06/2016 19:07	WG869321
Iron,Dissolved	1.65		0.0750	0.100	0.500	5	05/09/2016 11:15	WG870075
Lead	0.0681		0.00120	0.00200	0.0100	5	05/06/2016 19:07	WG869321
Lead,Dissolved	0.00736	J	0.00120	0.00200	0.0100	5	05/09/2016 11:15	WG870075
Manganese	1.77		0.00125	0.00500	0.0250	5	05/06/2016 19:07	WG869321
Manganese,Dissolved	1.32		0.00125	0.00500	0.0250	5	05/09/2016 11:15	WG870075
Potassium	7.60		0.185	1.00	5.00	5	05/06/2016 19:07	WG869321
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 19:07	WG869321
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 11:15	WG870075
Sodium	115		0.550	1.00	5.00	5	05/06/2016 19:07	WG869321

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 11:55	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 11:55	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 11:55	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 11:55	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 11:55	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 11:55	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 11:55	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 11:55	WG868987



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 11:55	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:55	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 11:55	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 11:55	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 11:55	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 11:55	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 11:55	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 11:55	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 11:55	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 11:55	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 11:55	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 11:55	WG868987
Methyl tert-butyl ether	0.000751	U	0.000367	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 11:55	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 11:55	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 11:55	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 11:55	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 11:55	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:55	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 11:55	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 11:55	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 11:55	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 11:55	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 11:55	WG868987
(S) Toluene-d8	104				90.0-115		05/04/2016 11:55	WG868987
(S) Dibromofluoromethane	102				79.0-121		05/04/2016 11:55	WG868987
(S) 4-Bromofluorobenzene	102				80.1-120		05/04/2016 11:55	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4.05		0.0247	0.100	0.100	1	05/04/2016 19:13	WG869259
(S) o-Terphenyl	95.0				50.0-150		05/04/2016 19:13	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	54.0		2.82	10.0	10.0	1	05/05/2016 04:22	WG869819

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 06:45	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	0.107	J	0.0519	1.00	1.00	1	05/09/2016 11:01	WG869680
Fluoride	U		0.00990	0.100	0.100	1	05/09/2016 11:01	WG869680
Sulfate	U		0.0774	5.00	5.00	1	05/09/2016 11:01	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	U		0.000250	0.00200	0.00200	1	05/06/2016 19:10	WG869321
Arsenic,Dissolved	U		0.000250	0.00200	0.00200	1	05/09/2016 11:38	WG870075
Barium	U		0.000360	0.00500	0.00500	1	05/06/2016 19:10	WG869321
Barium,Dissolved	U		0.000360	0.00500	0.00500	1	05/09/2016 11:38	WG870075
Calcium	U		0.0460	1.00	1.00	1	05/06/2016 19:10	WG869321
Chromium	U		0.000540	0.00200	0.00200	1	05/06/2016 19:10	WG869321
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/09/2016 11:38	WG870075
Iron	U		0.0150	0.100	0.100	1	05/06/2016 19:10	WG869321
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/09/2016 11:38	WG870075
Lead	U		0.000240	0.00200	0.00200	1	05/06/2016 19:10	WG869321
Lead,Dissolved	0.000451	J	0.000240	0.00200	0.00200	1	05/09/2016 11:38	WG870075
Manganese	0.00117	J	0.000250	0.00500	0.00500	1	05/06/2016 19:10	WG869321
Manganese,Dissolved	U		0.000250	0.00500	0.00500	1	05/09/2016 11:38	WG870075
Potassium	U		0.0370	1.00	1.00	1	05/06/2016 19:10	WG869321
Selenium	U		0.000380	0.00200	0.00200	1	05/06/2016 19:10	WG869321
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/09/2016 11:38	WG870075
Sodium	0.152	J	0.110	1.00	1.00	1	05/06/2016 19:10	WG869321

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 12:16	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 12:16	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 12:16	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 12:16	WG868987
Chloroform	0.000727	J	0.000324	0.00500	0.00500	1	05/04/2016 12:16	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 12:16	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 12:16	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 12:16	WG868987



Collected date/time: 04/28/16 12:20

L832462

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 12:16	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:16	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 12:16	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 12:16	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 12:16	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 12:16	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 12:16	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 12:16	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 12:16	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 12:16	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 12:16	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 12:16	WG868987
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 12:16	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 12:16	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 12:16	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 12:16	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 12:16	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:16	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 12:16	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 12:16	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 12:16	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 12:16	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 12:16	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 12:16	WG868987
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 12:16	WG868987
(S) 4-Bromofluorobenzene	105				80.1-120		05/04/2016 12:16	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.119		0.0247	0.100	0.100	1	05/04/2016 19:30	WG869259
(S) o-Terphenyl	104				50.0-150		05/04/2016 19:30	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2120		2.82	10.0	10.0	1	05/05/2016 04:22	WG869819

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 06:46	WG870056

## Wet Chemistry by Method 9056A

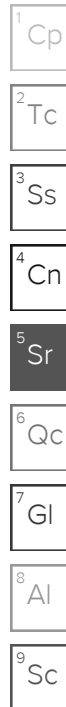
Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	234		5.19	1.00	100	100	05/09/2016 11:47	WG869680
Fluoride	1.59		0.00990	0.100	0.100	1	05/09/2016 14:02	WG869680
Sulfate	965		7.74	5.00	500	100	05/09/2016 11:47	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0459		0.00125	0.00200	0.0100	5	05/06/2016 19:13	WG869321
Arsenic,Dissolved	0.0362		0.00125	0.00200	0.0100	5	05/09/2016 11:24	WG870075
Barium	0.0371		0.00180	0.00500	0.0250	5	05/06/2016 19:13	WG869321
Barium,Dissolved	0.0257		0.00180	0.00500	0.0250	5	05/09/2016 11:24	WG870075
Calcium	414		0.230	1.00	5.00	5	05/06/2016 19:13	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 19:13	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:24	WG870075
Iron	1.82		0.0750	0.100	0.500	5	05/06/2016 19:13	WG869321
Iron,Dissolved	1.33		0.0750	0.100	0.500	5	05/09/2016 11:24	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 19:13	WG869321
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:24	WG870075
Manganese	1.11		0.00125	0.00500	0.0250	5	05/06/2016 19:13	WG869321
Manganese,Dissolved	0.938		0.00125	0.00500	0.0250	5	05/09/2016 11:24	WG870075
Potassium	2.62	J	0.185	1.00	5.00	5	05/06/2016 19:13	WG869321
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 19:13	WG869321
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 11:24	WG870075
Sodium	98.3		0.550	1.00	5.00	5	05/06/2016 19:13	WG869321

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 12:37	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 12:37	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 12:37	WG868987
sec-Butylbenzene	0.00144		0.000365	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 12:37	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 12:37	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 12:37	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 12:37	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 12:37	WG868987





Collected date/time: 04/28/16 13:00

L832462

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 12:37	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:37	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 12:37	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 12:37	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 12:37	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 12:37	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Isopropylbenzene	0.00618		0.000326	0.00100	0.00100	1	05/04/2016 12:37	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 12:37	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 12:37	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 12:37	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 12:37	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 12:37	WG868987
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 12:37	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 12:37	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 12:37	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 12:37	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 12:37	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:37	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 12:37	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 12:37	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 12:37	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 12:37	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 12:37	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 12:37	WG868987
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 12:37	WG868987
(S) 4-Bromofluorobenzene	98.7				80.1-120		05/04/2016 12:37	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7.59		0.0247	0.100	0.100	1	05/04/2016 20:53	WG869259
(S) o-Terphenyl	108				50.0-150		05/04/2016 20:53	WG869259

WG869818

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832462-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134196-1 05/04/16 18:59

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

L832460-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832460-01 05/04/16 18:59 • (DUP) R3134196-4 05/04/16 18:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	2900	2870	1	1.21		5

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

(LCS) R3134196-2 05/04/16 18:59 • (LCSD) R3134196-3 05/04/16 18:59

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 %
Dissolved Solids	8800	8490	8480	96.5	96.4	85.0-115			0.118	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832462-04,05,06,07

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134369-1 05/05/16 04:22

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

L832462-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832462-04 05/05/16 04:22 • (DUP) R3134369-4 05/05/16 04:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3020	3060	1	1.32		5

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

(LCS) R3134369-2 05/05/16 04:22 • (LCSD) R3134369-3 05/05/16 04:22

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 %
Dissolved Solids	8800	8420	8700	95.7	98.9	85.0-115			3.27	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870055

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832462-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134124-1 05/05/16 15:06

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

L832447-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832447-01 05/05/16 15:11 • (DUP) R3134124-4 05/05/16 15:12

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.125	ND	1	30.0	J P1	20

L832460-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832460-01 05/05/16 15:26 • (DUP) R3134124-6 05/05/16 15:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.0420	ND	1	13.0	J	20

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

(LCS) R3134124-2 05/05/16 15:08 • (LCSD) R3134124-3 05/05/16 15:09

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 %
Nitrate-Nitrite	5.00	5.11	5.04	102	101	90.0-110			1.00	20

L832447-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L832447-04 05/05/16 15:15 • (MS) R3134124-5 05/05/16 15:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.301	5.82	110	1	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832462-01

ONE LAB. NATIONWIDE.



L832460-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-07 05/05/16 15:37 • (MS) R3134124-7 05/05/16 15:38 • (MSD) R3134124-8 05/05/16 15:39

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	0.0400	4.48	4.51	89.0	89.0	1	90.0-110	J6	J6	1.00	20

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

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832462-05,06,07

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134255-1 05/06/16 06:40

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

L832468-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832468-03 05/06/16 06:48 • (DUP) R3134255-4 05/06/16 06:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	5.71	5.54	10	3.00		20

L832472-08 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-08 05/06/16 07:09 • (DUP) R3134255-6 05/06/16 07:10

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

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

(LCS) R3134255-2 05/06/16 06:41 • (LCSD) R3134255-3 05/06/16 06:42

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 %
Nitrate-Nitrite	5.00	4.88	4.97	98.0	99.0	90.0-110			2.00	20

L832468-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L832468-05 05/06/16 06:55 • (MS) R3134255-5 05/06/16 06:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	U	4.34	9.00	10	90.0-110	J6

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

WG870056

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832462-05,06,07

ONE LAB. NATIONWIDE.



L832472-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-12 05/06/16 07:14 • (MS) R3134255-7 05/06/16 07:20 • (MSD) R3134255-8 05/06/16 07:21

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 %
Nitrate-Nitrite	5.00	U	4.11	4.15	8.00	8.00	10	90.0-110	J6	J6	1.00	20

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

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QUALITY CONTROL SUMMARY

L832462-02,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135143-5 05/09/16 15:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL 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

L832409-26 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-26 05/09/16 15:25 • (DUP) R3135143-8 05/09/16 15:31

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.377	ND	10	2.00	J	20

L832603-23 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-23 05/09/16 16:14 • (DUP) R3135143-10 05/09/16 16:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.0480	ND	1	143	J P1	20

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

(LCS) R3135143-6 05/09/16 15:17 • (LCSD) R3135143-7 05/09/16 15:18

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 %
Nitrate-Nitrite	5.00	4.74	4.74	95.0	95.0	90.0-110			0.000	20

L832603-22 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-22 05/09/16 16:11 • (MS) R3135143-9 05/09/16 16:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.0770	4.50	88.0	1	90.0-110	J6

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832462-02,03,04

ONE LAB. NATIONWIDE.



L832603-26 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-26 05/09/16 16:24 • (MS) R3135143-11 05/09/16 16:25 • (MSD) R3135143-12 05/09/16 16:26

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 %
Nitrate-Nitrite	5.00	0.0650	0.407	0.393	7.00	7.00	1	90.0-110	J6	J6	4.00	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

WG869680

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135217-1 05/09/16 01:00

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

L832472-06 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-06 05/09/16 14:17 • (DUP) R3135217-7 05/09/16 14:33

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Fluoride	0.645	0.660	1	2		15

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

(LCS) R3135217-2 05/09/16 01:15 • (LCSD) R3135217-3 05/09/16 01:31

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	%	%	%			%	%
Chloride	40.0	39.3	39.2	98	98	80-120			0	15
Fluoride	8.00	7.88	7.88	99	98	80-120			0	15
Sulfate	40.0	39.6	39.6	99	99	80-120			0	15

L832460-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832460-02 05/09/16 04:20 • (MS) R3135217-4 05/09/16 04:36

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	0.0574	51.5	103	1	80-120	
Fluoride	5.00	U	5.13	103	1	80-120	
Sulfate	50.0	U	52.1	104	1	80-120	

L832462-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L832462-06 05/09/16 11:01 • (MS) R3135217-5 05/09/16 11:16

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/l	mg/l	mg/l	%		%	

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Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc



WG869680

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.



L832462-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L832462-06 05/09/16 11:01 • (MS) R3135217-5 05/09/16 11:16

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	0.107	51.1	102	1	80-120	
Fluoride	5.00	U	5.16	103	1	80-120	
Sulfate	50.0	U	51.2	102	1	80-120	

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

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134603-1 05/06/16 18:35

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	0.032		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.000577		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134603-2 05/06/16 18:38 • (LCSD) R3134603-3 05/06/16 18:40

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	0.0515	0.0506	103	101	80-120			2	20
Barium	0.0500	0.0521	0.0514	104	103	80-120			1	20
Calcium	5.00	5.19	5.18	104	104	80-120			0	20
Chromium	0.0500	0.0517	0.0505	103	101	80-120			2	20
Iron	5.00	5.08	4.98	102	100	80-120			2	20
Lead	0.0500	0.0516	0.0520	103	104	80-120			1	20
Manganese	0.0500	0.0517	0.0507	103	101	80-120			2	20
Potassium	5.00	5.11	4.98	102	100	80-120			3	20
Selenium	0.0500	0.0513	0.0505	103	101	80-120			2	20
Sodium	5.00	5.23	5.12	105	102	80-120			2	20

L832462-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832462-01 05/06/16 18:43 • (MS) R3134603-5 05/06/16 18:48 • (MSD) R3134603-6 05/06/16 18:51

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	0.0100	0.00777	0.0644	0.0628	113	110	5	75-125			3	20
Barium	0.0100	0.0203	0.0773	0.0789	114	117	5	75-125			2	20
Calcium	1.00	559	562	555	62	0	5	75-125	√	√	1	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.



L832462-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832462-01 05/06/16 18:43 • (MS) R3134603-5 05/06/16 18:48 • (MSD) R3134603-6 05/06/16 18:51

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	%	%		%			%	%
Chromium	0.0100	U	0.0569	0.0563	114	113	5	75-125			1	20
Potassium	1.00	2.32	7.76	7.88	109	111	5	75-125			2	20
Iron	1.00	U	5.67	5.68	113	114	5	75-125			0	20
Lead	0.0100	U	0.0575	0.0569	115	114	5	75-125			1	20
Manganese	0.0100	0.373	0.426	0.424	105	103	5	75-125			0	20
Selenium	0.0100	0.00381	0.0590	0.0601	110	112	5	75-125			2	20
Sodium	1.00	379	382	384	65	108	5	75-125	<u>V</u>		1	20

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

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134963-1 05/09/16 10:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	0.0259		0.015	0.100
Lead,Dissolved	0.000687		0.00024	0.00200
Manganese,Dissolved	0.0003		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

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) R3134963-2 05/09/16 10:30 • (LCSD) R3134963-3 05/09/16 10:33

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,Dissolved	0.0500	0.0512	0.0534	102	107	80-120			4	20
Barium,Dissolved	0.0500	0.0517	0.0524	103	105	80-120			1	20
Chromium,Dissolved	0.0500	0.0534	0.0550	107	110	80-120			3	20
Iron,Dissolved	5.00	5.23	5.38	105	108	80-120			3	20
Lead,Dissolved	0.0500	0.0524	0.0538	105	108	80-120			3	20
Manganese,Dissolved	0.0500	0.0518	0.0526	104	105	80-120			1	20
Selenium,Dissolved	0.0500	0.0506	0.0519	101	104	80-120			2	20

L832447-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832447-01 05/09/16 10:35 • (MS) R3134963-5 05/09/16 10:40 • (MSD) R3134963-6 05/09/16 10:42

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,Dissolved	0.0100	0.00646	0.0536	0.0585	94	104	5	75-125			9	20
Barium,Dissolved	0.0100	0.0161	0.0606	0.0636	89	95	5	75-125			5	20
Chromium,Dissolved	0.0100	U	0.0489	0.0497	98	99	5	75-125			2	20
Iron,Dissolved	1.00	U	4.68	5.46	94	109	5	75-125			15	20
Lead,Dissolved	0.0100	U	0.0486	0.0513	97	103	5	75-125			5	20
Manganese,Dissolved	0.0100	0.319	0.326	0.350	14	63	5	75-125	<u>V</u>	<u>V</u>	7	20
Selenium,Dissolved	0.0100	0.00234	0.0506	0.0560	96	107	5	75-125			10	20

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

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE. 

Method Blank (MB)

(MB) R3134190-3 05/04/16 05:51

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134190-3 05/04/16 05:51

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	105			90.0-115
(S) Dibromofluoromethane	104			79.0-121
(S) 4-Bromofluorobenzene	103			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134190-1 05/04/16 04:27 • (LCSD) R3134190-2 05/04/16 04:48

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 %
Acetone	0.125	0.129	0.124	103	99.5	28.7-175			3.50	20.9
Benzene	0.0250	0.0265	0.0276	106	110	73.0-122			4.18	20
Bromodichloromethane	0.0250	0.0268	0.0276	107	110	75.5-121			2.61	20
Bromoform	0.0250	0.0255	0.0260	102	104	71.5-131			2.11	20
Bromomethane	0.0250	0.0336	0.0356	134	142	22.4-187			5.75	20
n-Butylbenzene	0.0250	0.0256	0.0275	102	110	75.9-134			7.09	20
sec-Butylbenzene	0.0250	0.0249	0.0267	99.5	107	80.6-126			7.27	20
Carbon disulfide	0.0250	0.0246	0.0256	98.4	102	53.0-134			3.79	20
Carbon tetrachloride	0.0250	0.0252	0.0264	101	105	70.9-129			4.58	20
Chlorobenzene	0.0250	0.0261	0.0275	104	110	79.7-122			5.41	20
Chlorodibromomethane	0.0250	0.0266	0.0273	107	109	78.2-124			2.43	20
Chloroethane	0.0250	0.0297	0.0309	119	124	41.2-153			3.80	20
Chloroform	0.0250	0.0272	0.0279	109	112	73.2-125			2.81	20
Chloromethane	0.0250	0.0276	0.0289	111	116	55.8-134			4.35	20
1,2-Dibromoethane	0.0250	0.0266	0.0272	106	109	79.8-122			2.26	20
1,1-Dichloroethane	0.0250	0.0269	0.0279	108	112	71.7-127			3.73	20

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

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07



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

(LCS) R3134190-1 05/04/16 04:27 • (LCSD) R3134190-2 05/04/16 04:48

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 %
1,2-Dichloroethane	0.0250	0.0276	0.0279	110	112	65.3-126			1.25	20
1,1-Dichloroethene	0.0250	0.0250	0.0260	100	104	59.9-137			3.89	20
cis-1,2-Dichloroethene	0.0250	0.0276	0.0282	111	113	77.3-122			2.17	20
trans-1,2-Dichloroethene	0.0250	0.0277	0.0289	111	116	72.6-125			4.39	20
1,2-Dichloropropane	0.0250	0.0264	0.0269	105	108	77.4-125			1.94	20
cis-1,3-Dichloropropene	0.0250	0.0273	0.0281	109	112	77.7-124			2.79	20
trans-1,3-Dichloropropene	0.0250	0.0280	0.0284	112	113	73.5-127			1.11	20
Ethylbenzene	0.0250	0.0250	0.0270	100	108	80.9-121			7.84	20
2-Hexanone	0.125	0.140	0.139	112	111	59.4-151			0.190	20
Isopropylbenzene	0.0250	0.0255	0.0270	102	108	81.6-124			5.79	20
p-Isopropyltoluene	0.0250	0.0256	0.0275	102	110	77.6-129			7.06	20
2-Butanone (MEK)	0.125	0.142	0.140	114	112	46.4-155			2.02	20
Methylene Chloride	0.0250	0.0268	0.0277	107	111	69.5-120			3.15	20
4-Methyl-2-pentanone (MIBK)	0.125	0.138	0.135	110	108	63.3-138			1.89	20
Methyl tert-butyl ether	0.0250	0.0268	0.0269	107	108	70.1-125			0.340	20
Naphthalene	0.0250	0.0242	0.0254	96.8	102	69.7-134			4.75	20
n-Propylbenzene	0.0250	0.0260	0.0276	104	110	81.9-122			5.91	20
Styrene	0.0250	0.0274	0.0289	110	116	79.9-124			5.15	20
1,1,1,2-Tetrachloroethane	0.0250	0.0249	0.0262	99.5	105	78.5-125			5.05	20
1,1,2,2-Tetrachloroethane	0.0250	0.0258	0.0264	103	105	79.3-123			2.10	20
Tetrachloroethene	0.0250	0.0253	0.0269	101	108	73.5-130			6.15	20
Toluene	0.0250	0.0257	0.0267	103	107	77.9-116			3.95	20
1,1,1-Trichloroethane	0.0250	0.0267	0.0280	107	112	71.1-129			4.72	20
1,1,2-Trichloroethane	0.0250	0.0264	0.0271	105	108	81.6-120			2.69	20
Trichloroethene	0.0250	0.0257	0.0269	103	108	79.5-121			4.40	20
1,2,4-Trimethylbenzene	0.0250	0.0252	0.0268	101	107	79.0-122			6.06	20
1,3,5-Trimethylbenzene	0.0250	0.0254	0.0269	101	108	81.0-123			5.96	20
Vinyl chloride	0.0250	0.0276	0.0284	110	114	61.5-134			2.89	20
Xylenes, Total	0.0750	0.0762	0.0806	102	107	79.2-122			5.61	20
o-Xylene	0.0250	0.0255	0.0267	102	107	79.1-123			4.75	20
m&p-Xylenes	0.0500	0.0508	0.0539	102	108	78.5-122			6.03	20
(S) Toluene-d8				106	105	90.0-115				
(S) Dibromofluoromethane				106	105	79.0-121				
(S) 4-Bromofluorobenzene				102	102	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG68987

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

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.



L832460-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-02 05/04/16 08:03 • (MS) R3134190-4 05/04/16 06:18 • (MSD) R3134190-5 05/04/16 06:39

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	U	0.0437	0.0610	34.9	48.8	1	25.0-156		J3	33.1	21.5
Benzene	0.0250	U	0.0184	0.0261	73.6	104	1	58.6-133		J3	34.7	20
Bromodichloromethane	0.0250	U	0.0197	0.0268	78.9	107	1	69.2-127		J3	30.5	20
Bromoform	0.0250	U	0.0187	0.0258	74.6	103	1	66.3-140		J3	32.1	20
Bromomethane	0.0250	U	0.0218	0.0317	87.3	127	1	16.6-183		J3	36.8	20.5
n-Butylbenzene	0.0250	U	0.0192	0.0262	76.9	105	1	64.8-145		J3	30.7	20
sec-Butylbenzene	0.0250	U	0.0181	0.0255	72.5	102	1	66.8-139		J3	33.7	20
Carbon disulfide	0.0250	U	0.0147	0.0207	58.9	82.8	1	34.9-138		J3	33.7	20
Carbon tetrachloride	0.0250	U	0.0175	0.0251	70.1	101	1	60.6-139		J3	35.7	20
Chlorobenzene	0.0250	U	0.0192	0.0261	76.6	105	1	70.1-130		J3	30.8	20
Chlorodibromomethane	0.0250	U	0.0197	0.0266	78.8	107	1	71.6-132		J3	29.9	20
Chloroethane	0.0250	U	0.0204	0.0281	81.4	112	1	33.3-155		J3	31.9	20
Chloroform	0.0250	0.000943	0.0198	0.0280	75.5	108	1	66.1-133		J3	34.2	20
Chloromethane	0.0250	U	0.0174	0.0244	69.4	97.5	1	40.7-139		J3	33.7	20
1,2-Dibromoethane	0.0250	U	0.0194	0.0263	77.5	105	1	73.8-131		J3	30.5	20
1,1-Dichloroethane	0.0250	U	0.0189	0.0268	75.4	107	1	64.0-134		J3	34.8	20
1,2-Dichloroethane	0.0250	U	0.0198	0.0276	79.1	111	1	60.7-132		J3	33.1	20
1,1-Dichloroethene	0.0250	U	0.0169	0.0239	67.4	95.4	1	48.8-144		J3	34.4	20
cis-1,2-Dichloroethene	0.0250	U	0.0194	0.0270	77.6	108	1	60.6-136		J3	32.8	20
trans-1,2-Dichloroethene	0.0250	U	0.0189	0.0266	75.5	106	1	61.0-132		J3	33.8	20
1,2-Dichloropropane	0.0250	U	0.0192	0.0261	76.8	104	1	69.7-130		J3	30.3	20
cis-1,3-Dichloropropene	0.0250	U	0.0196	0.0265	78.5	106	1	71.1-129		J3	29.6	20
trans-1,3-Dichloropropene	0.0250	U	0.0203	0.0274	81.2	110	1	66.3-136		J3	29.9	20
Ethylbenzene	0.0250	U	0.0181	0.0252	72.5	101	1	62.7-136		J3	32.6	20
2-Hexanone	0.125	U	0.0817	0.114	65.4	91.3	1	59.4-154		J3	33.2	20.1
Isopropylbenzene	0.0250	U	0.0183	0.0257	73.2	103	1	67.4-136		J3	33.8	20
p-Isopropyltoluene	0.0250	U	0.0187	0.0262	74.9	105	1	62.8-143		J3	33.3	20
2-Butanone (MEK)	0.125	U	0.0709	0.100	56.7	80.2	1	45.0-156		J3	34.3	20.8
Methylene Chloride	0.0250	U	0.0190	0.0264	76.1	106	1	61.5-125		J3	32.7	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.0976	0.135	78.1	108	1	60.7-150		J3	32.5	20
Methyl tert-butyl ether	0.0250	U	0.0194	0.0274	77.4	110	1	61.4-136		J3	34.4	20
Naphthalene	0.0250	U	0.0175	0.0248	70.1	99.2	1	61.8-143		J3	34.4	20
n-Propylbenzene	0.0250	U	0.0189	0.0262	75.7	105	1	63.2-139		J3	32.3	20
Styrene	0.0250	U	0.0202	0.0274	80.7	110	1	68.2-133		J3	30.4	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0185	0.0252	74.0	101	1	70.5-132		J3	30.9	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0194	0.0269	77.7	108	1	64.9-145		J3	32.3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE. 

L832460-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-02 05/04/16 08:03 • (MS) R3134190-4 05/04/16 06:18 • (MSD) R3134190-5 05/04/16 06:39												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0178	0.0248	71.3	99.2	1	57.4-141		J3	32.7	20
Toluene	0.0250	U	0.0181	0.0250	72.4	100	1	67.8-124		J3	32.1	20
1,1,1-Trichloroethane	0.0250	U	0.0187	0.0272	74.7	109	1	58.7-134		J3	37.2	20
1,1,2-Trichloroethane	0.0250	U	0.0195	0.0267	78.2	107	1	74.1-130		J3	31.1	20
Trichloroethene	0.0250	U	0.0181	0.0252	72.3	101	1	48.9-148		J3	33.0	20
1,2,4-Trimethylbenzene	0.0250	U	0.0184	0.0256	73.7	102	1	60.5-137		J3	32.5	20
1,3,5-Trimethylbenzene	0.0250	U	0.0185	0.0257	73.9	103	1	67.9-134		J3	32.6	20
Vinyl chloride	0.0250	U	0.0179	0.0255	71.6	102	1	44.3-143		J3	35.0	20
Xylenes, Total	0.0750	U	0.0555	0.0760	74.0	101	1	65.6-133		J3	31.2	20
o-Xylene	0.0250	U	0.0185	0.0255	73.9	102	1	67.1-133		J3	31.8	20
m&p-Xylenes	0.0500	U	0.0370	0.0505	74.0	101	1	64.1-133		J3	30.8	20
(S) Toluene-d8					105	105		90.0-115				
(S) Dibromofluoromethane					103	106		79.0-121				
(S) 4-Bromofluorobenzene					101	102		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832462-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133525-1 05/03/16 13:09				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	108			50.0-150

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

(LCS) R3133525-2 05/03/16 13:25 • (LCSD) R3133525-3 05/03/16 13:42										
	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	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.75	1.71	117	114	50.0-150			2.53	20
(S) o-Terphenyl				108	104	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832462

DATE/TIME:  
05/10/16 14:20

PAGE:  
38 of 41



## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Sample Detection Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gi<sup>8</sup> Al<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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



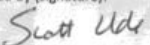
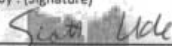
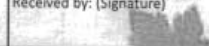
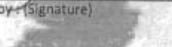
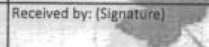
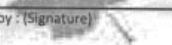
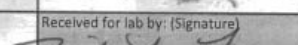
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A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752			Billing Information: <b>Accounts Payable</b> <b>21 Griffin Road North</b> <b>Windsor, CT 06095</b>			Amalysis / Container / Preservative DRO - 40mlAmb-HCl-BT GRO - 40mlAmb-HCl V8260 - 40mlAmb-HCl Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500mlHDPE-HNO3 Cyanide (CN) - 250mlHDPEAmb-NaOH Cations-Total Ca, K, Na - 500mlHDPE-HNO3 Anions- Chloride, Fluoride, Sulfate- 125mlHDPE-NoPres Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4 TDS - 250mlHDPE-NoPres										Chain of Custody Page 1 of 1  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# <b>B32462</b> <b>B201</b> Accnum: TRCATX Template: T111398 Prelogin: P549626 TSR: <b>Chris McCord</b> Cooler: Shipped Via:				
Report to: jspeer@trcsolutions.com			Email To: jspeer@trcsolutions.com			Tot./Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V														
Project Description: <b>NCL Spring 2016 - Team H CJH</b>			City/State Collected: <b>Artesia, NM</b>																	
Phone: 512-684-3170 Fax:			Client Project # Lab Project # <b>TRCATX-NCL SPRING</b>																	
Collected by (print): <b>Scott Ude + Hm Team</b>			Site/Facility ID # <b>NCL - Navajo- Artesia</b>																	
Collected by (signature): 			Rush? (Lab MUST Be Notified) Same Day .....200% Next Day .....100% Two Day .....50% Three Day .....25%			Date Results Needed Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes No. of Cntrs			Sample ID MW-56 NCL-34A MW-108 NCL-31 NCL-32 EB-NCL-01 NCL-44			Comp (Grab) Matrix * GW			Depth 4/28/16 1200 10 4/28/16 825 10 4/28/16 925 10 4/28/16 1040 10 4/28/16 1140 10 4/28/16 1220 10 4/28/16 1300 10			Date Time Cntrs		
Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>			Date Time Cntrs																	
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other																				
						Remarks: <b>Log all metals by 6020. Dissolved metals are field filtered.</b>														
Relinquished by: (Signature) 			Date: <b>4/28/16</b>						Time: <b>1415</b>			Received by: (Signature) 			Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>			Condition: (lab use only) <b>JW7</b>		
Relinquished by: (Signature) 			Date:			Time:			Received by: (Signature) 			Temp: <b>3.1</b> °C Bottles Received: <b>69</b>			COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA					
Relinquished by: (Signature) 			Date:			Time:			Received for lab by: (Signature) 			Date: <b>4/29/16</b> Time: <b>6200</b>			pH Checked: <b>62</b> NCF:					

## TRC Solutions - Austin, TX

Sample Delivery Group: L832468  
Samples Received: 04/29/2016  
Project Number: 249545.0000.0000 000  
Description: NCL Spring 2016  
Site: NCL - NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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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<b><sup>2</sup>Tc: Table of Contents</b>	<b>2</b>
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<b><sup>4</sup>Cn: Case Narrative</b>	<b>5</b>
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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-45 L832468-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 17:45

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869072	1	05/02/16 13:50	05/02/16 14:22	
Mercury by Method 7470A	WG869159	1	05/02/16 11:44	05/03/16 11:04	NJB
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:36	NJB
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:05	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:26	JDG
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 11:00	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 03:14	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 12:58	05/04/16 12:58	BMB
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 06:47	05/06/16 06:47	ASK
Wet Chemistry by Method 9012B	WG870326	1	05/06/16 12:26	05/12/16 15:29	DR
Wet Chemistry by Method 9056A	WG868879	1	05/02/16 17:37	05/02/16 17:37	CM
Wet Chemistry by Method 9056A	WG868879	50	05/02/16 17:52	05/02/16 17:52	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

TRIP BLANK-NCL-01 L832468-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 00:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 07:42	05/04/16 07:42	BMB

NCL-49 L832468-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 16:30

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869072	1	05/02/16 13:50	05/02/16 14:22	
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:08	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:28	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 03:32	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 13:19	05/04/16 13:19	BMB
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 06:48	05/06/16 06:48	ASK
Wet Chemistry by Method 9056A	WG868881	1	05/02/16 11:47	05/02/16 11:47	CM
Wet Chemistry by Method 9056A	WG868881	50	05/02/16 12:01	05/02/16 12:01	CM

DUP-NCL-01 L832468-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 15:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869072	1	05/02/16 13:50	05/02/16 14:22	
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:10	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:31	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 03:51	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 13:40	05/04/16 13:40	BMB
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 06:54	05/06/16 06:54	ASK
Wet Chemistry by Method 9056A	WG868881	1	05/02/16 12:16	05/02/16 12:16	CM
Wet Chemistry by Method 9056A	WG868881	50	05/02/16 14:00	05/02/16 14:00	CM

MW-54A L832468-05 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 17:20

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:28	ST

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

249545.0000.0000 000

SDG:

L832468

DATE/TIME:

05/12/16 19:04

PAGE:

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## SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-54A L832468-05 GW

Collected by  
SU / HM1 TeamCollected date/time  
04/26/16 17:20Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:33	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 04:09	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868987	1	05/04/16 14:01	05/04/16 14:01	BMB
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 06:55	05/06/16 06:55	ASK
Wet Chemistry by Method 9056A	WG868881	1	05/02/16 14:15	05/02/16 14:15	CM
Wet Chemistry by Method 9056A	WG868881	50	05/02/16 14:30	05/02/16 14:30	CM

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

MW-53 L832468-06 GW

Collected by  
SU / HM1 TeamCollected date/time  
04/26/16 15:40Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:31	ST
Metals (ICPMS) by Method 6020	WG870075	5	05/05/16 17:34	05/09/16 11:35	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869251	1	05/02/16 16:48	05/05/16 04:27	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG869009	1	05/05/16 20:56	05/05/16 20:56	ACG
Wet Chemistry by Method 353.2	WG870056	20	05/06/16 06:58	05/06/16 06:58	ASK
Wet Chemistry by Method 9056A	WG868881	1	05/02/16 14:45	05/02/16 14:45	CM
Wet Chemistry by Method 9056A	WG868881	50	05/02/16 15:00	05/02/16 15:00	CM



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

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Dissolved Solids	4760		2.82	10.0	10.0	1	05/02/2016 14:22	WG869072

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 06:47	WG870056

## Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Cyanide	U		0.00180	0.00500	0.00500	1	05/12/2016 15:29	WG870326

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Chloride	524		2.60	1.00	50.0	50	05/02/2016 17:52	WG868879
Fluoride	1.51		0.00990	0.100	0.100	1	05/02/2016 17:37	WG868879
Sulfate	2710		3.87	5.00	250	50	05/02/2016 17:52	WG868879

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/03/2016 11:04	WG869159
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:36	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Arsenic	0.00752	J	0.00125	0.00200	0.0100	5	05/06/2016 21:05	WG869318
Arsenic,Dissolved	0.00368	J	0.00125	0.00200	0.0100	5	05/09/2016 11:26	WG870075
Barium	0.0191	J	0.00180	0.00500	0.0250	5	05/06/2016 21:05	WG869318
Barium,Dissolved	0.0185	J	0.00180	0.00500	0.0250	5	05/09/2016 11:26	WG870075
Boron	0.671		0.00750	0.0200	0.100	5	05/06/2016 21:05	WG869318
Boron,Dissolved	0.596	Q1	0.0150	0.0200	0.200	10	05/09/2016 11:00	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 21:05	WG869318
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/09/2016 11:26	WG870075
Calcium	689		0.230	1.00	5.00	5	05/06/2016 21:05	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:05	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:26	WG870075
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 21:05	WG869318
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/09/2016 11:26	WG870075
Iron	4.14		0.0750	0.100	0.500	5	05/06/2016 21:05	WG869318
Iron,Dissolved	1.25		0.0750	0.100	0.500	5	05/09/2016 11:26	WG870075
Lead	0.00443	J	0.00120	0.00200	0.0100	5	05/06/2016 21:05	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:26	WG870075
Manganese	0.633		0.00125	0.00500	0.0250	5	05/06/2016 21:05	WG869318
Manganese,Dissolved	0.561		0.00125	0.00500	0.0250	5	05/09/2016 11:26	WG870075
Nickel	0.00631	J	0.00175	0.00200	0.0100	5	05/06/2016 21:05	WG869318
Nickel,Dissolved	0.00391	J	0.00175	0.00200	0.0100	5	05/09/2016 11:26	WG870075
Potassium	6.33		0.185	1.00	5.00	5	05/06/2016 21:05	WG869318
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 21:05	WG869318
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 11:26	WG870075
Sodium	429		0.550	1.00	5.00	5	05/06/2016 21:05	WG869318



Collected date/time: 04/26/16 17:45

L832468

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/06/2016 21:05	WG869318
Uranium,Dissolved	U		0.00165	0.0100	0.0500	5	05/09/2016 11:26	WG870075
Vanadium	0.00188	U	0.000900	0.00500	0.0250	5	05/06/2016 21:05	WG869318
Vanadium,Dissolved	0.00103	U	0.000900	0.00500	0.0250	5	05/09/2016 11:26	WG870075

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 12:58	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 12:58	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 12:58	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 12:58	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 12:58	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 12:58	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:58	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 12:58	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 12:58	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 12:58	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 12:58	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 12:58	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 12:58	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 12:58	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 12:58	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 12:58	WG868987
Methyl tert-butyl ether	0.00152		0.000367	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 12:58	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 12:58	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 12:58	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 12:58	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 12:58	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 12:58	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 12:58	WG868987
(S) Toluene-d8	103				90.0-115		05/04/2016 12:58	WG868987

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



Collected date/time: 04/26/16 17:45

L832468

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 12:58	WG868987
(S) 4-Bromofluorobenzene	99.6				80.1-120		05/04/2016 12:58	WG868987

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.11		0.0247	0.100	0.100	1	05/05/2016 03:14	WG869251
(S) o-Terphenyl	111				50.0-150		05/05/2016 03:14	WG869251

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Collected date/time: 04/26/16 00:00

L832468

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 07:42	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 07:42	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 07:42	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 07:42	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 07:42	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 07:42	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:42	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 07:42	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 07:42	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 07:42	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 07:42	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 07:42	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 07:42	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 07:42	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 07:42	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 07:42	WG868987
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 07:42	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 07:42	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 07:42	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 07:42	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 07:42	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 07:42	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 07:42	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 07:42	WG868987
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 07:42	WG868987
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 07:42	WG868987

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2820		2.82	10.0	10.0	1	05/02/2016 14:22	WG869072

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	5.71		0.197	0.100	1.00	10	05/06/2016 06:48	WG870056

## Wet Chemistry by Method 9056A

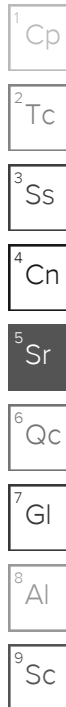
Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	119		2.60	1.00	50.0	50	05/02/2016 12:01	WG868881
Fluoride	0.685		0.00990	0.100	0.100	1	05/02/2016 11:47	WG868881
Sulfate	1570		3.87	5.00	250	50	05/02/2016 12:01	WG868881

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00188	J	0.00125	0.00200	0.0100	5	05/06/2016 21:08	WG869318
Arsenic,Dissolved	0.00163	J	0.00125	0.00200	0.0100	5	05/09/2016 11:28	WG870075
Barium	0.0150	J	0.00180	0.00500	0.0250	5	05/06/2016 21:08	WG869318
Barium,Dissolved	0.0136	J	0.00180	0.00500	0.0250	5	05/09/2016 11:28	WG870075
Calcium	468		0.230	1.00	5.00	5	05/06/2016 21:08	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:08	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:28	WG870075
Iron	U		0.0750	0.100	0.500	5	05/06/2016 21:08	WG869318
Iron,Dissolved	0.204	J	0.0750	0.100	0.500	5	05/09/2016 11:28	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:08	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:28	WG870075
Manganese	U		0.00125	0.00500	0.0250	5	05/06/2016 21:08	WG869318
Manganese,Dissolved	0.00168	J	0.00125	0.00500	0.0250	5	05/09/2016 11:28	WG870075
Potassium	0.749	J	0.185	1.00	5.00	5	05/06/2016 21:08	WG869318
Selenium	0.00518	J	0.00190	0.00200	0.0100	5	05/06/2016 21:08	WG869318
Selenium,Dissolved	0.00498	J	0.00190	0.00200	0.0100	5	05/09/2016 11:28	WG870075
Sodium	136		0.550	1.00	5.00	5	05/06/2016 21:08	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 13:19	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 13:19	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 13:19	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 13:19	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 13:19	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 13:19	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 13:19	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 13:19	WG868987





Collected date/time: 04/26/16 16:30

L832468

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 13:19	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:19	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 13:19	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 13:19	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 13:19	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 13:19	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 13:19	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 13:19	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 13:19	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 13:19	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 13:19	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 13:19	WG868987
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 13:19	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 13:19	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 13:19	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 13:19	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 13:19	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:19	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 13:19	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 13:19	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 13:19	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 13:19	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 13:19	WG868987
(S) Toluene-d8	104				90.0-115		05/04/2016 13:19	WG868987
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 13:19	WG868987
(S) 4-Bromofluorobenzene	104				80.1-120		05/04/2016 13:19	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0890	U	0.0247	0.100	0.100	1	05/05/2016 03:32	WG869251
(S) o-Terphenyl	104				50.0-150		05/05/2016 03:32	WG869251





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2790		2.82	10.0	10.0	1	05/02/2016 14:22	WG869072

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	5.63		0.197	0.100	1.00	10	05/06/2016 06:54	WG870056

## Wet Chemistry by Method 9056A

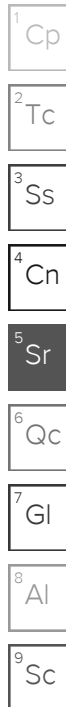
Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	119		2.60	1.00	50.0	50	05/02/2016 14:00	WG868881
Fluoride	0.685		0.00990	0.100	0.100	1	05/02/2016 12:16	WG868881
Sulfate	1580		3.87	5.00	250	50	05/02/2016 14:00	WG868881

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00178	J	0.00125	0.00200	0.0100	5	05/06/2016 21:10	WG869318
Arsenic,Dissolved	0.00155	J	0.00125	0.00200	0.0100	5	05/09/2016 11:31	WG870075
Barium	0.0134	J	0.00180	0.00500	0.0250	5	05/06/2016 21:10	WG869318
Barium,Dissolved	0.0143	J	0.00180	0.00500	0.0250	5	05/09/2016 11:31	WG870075
Calcium	470		0.230	1.00	5.00	5	05/06/2016 21:10	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:10	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:31	WG870075
Iron	U		0.0750	0.100	0.500	5	05/06/2016 21:10	WG869318
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 11:31	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:10	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:31	WG870075
Manganese	U		0.00125	0.00500	0.0250	5	05/06/2016 21:10	WG869318
Manganese,Dissolved	U		0.00125	0.00500	0.0250	5	05/09/2016 11:31	WG870075
Potassium	0.792	J	0.185	1.00	5.00	5	05/06/2016 21:10	WG869318
Selenium	0.00483	J	0.00190	0.00200	0.0100	5	05/06/2016 21:10	WG869318
Selenium,Dissolved	0.00471	J	0.00190	0.00200	0.0100	5	05/09/2016 11:31	WG870075
Sodium	137		0.550	1.00	5.00	5	05/06/2016 21:10	WG869318

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 13:40	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 13:40	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 13:40	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 13:40	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 13:40	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 13:40	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 13:40	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 13:40	WG868987





Collected date/time: 04/26/16 15:00

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 13:40	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:40	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 13:40	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 13:40	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 13:40	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 13:40	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 13:40	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 13:40	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 13:40	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 13:40	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 13:40	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 13:40	WG868987
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 13:40	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 13:40	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 13:40	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 13:40	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 13:40	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:40	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 13:40	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 13:40	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 13:40	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 13:40	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 13:40	WG868987
(S) Toluene-d8	106				90.0-115		05/04/2016 13:40	WG868987
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 13:40	WG868987
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 13:40	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0664	U	0.0247	0.100	0.100	1	05/05/2016 03:51	WG869251
(S) o-Terphenyl	100				50.0-150		05/05/2016 03:51	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1780		2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U	J6	0.197	0.100	1.00	10	05/06/2016 06:55	WG870056

## Wet Chemistry by Method 9056A

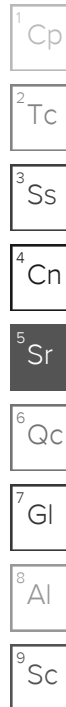
Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	176		2.60	1.00	50.0	50	05/02/2016 14:30	WG868881
Fluoride	1.12		0.00990	0.100	0.100	1	05/02/2016 14:15	WG868881
Sulfate	625		3.87	5.00	250	50	05/02/2016 14:30	WG868881

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00343	J	0.00125	0.00200	0.0100	5	05/06/2016 21:28	WG869318
Arsenic,Dissolved	0.00314	J	0.00125	0.00200	0.0100	5	05/09/2016 11:33	WG870075
Barium	0.0189	J	0.00180	0.00500	0.0250	5	05/06/2016 21:28	WG869318
Barium,Dissolved	0.0175	J	0.00180	0.00500	0.0250	5	05/09/2016 11:33	WG870075
Calcium	381		0.230	1.00	5.00	5	05/06/2016 21:28	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:28	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:33	WG870075
Iron	U		0.0750	0.100	0.500	5	05/06/2016 21:28	WG869318
Iron,Dissolved	0.354	J	0.0750	0.100	0.500	5	05/09/2016 11:33	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:28	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:33	WG870075
Manganese	0.512		0.00125	0.00500	0.0250	5	05/06/2016 21:28	WG869318
Manganese,Dissolved	0.477		0.00125	0.00500	0.0250	5	05/09/2016 11:33	WG870075
Potassium	0.303	J	0.185	1.00	5.00	5	05/06/2016 21:28	WG869318
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 21:28	WG869318
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 11:33	WG870075
Sodium	69.4		0.550	1.00	5.00	5	05/06/2016 21:28	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 14:01	WG868987
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 14:01	WG868987
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 14:01	WG868987
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 14:01	WG868987
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 14:01	WG868987
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 14:01	WG868987
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 14:01	WG868987
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 14:01	WG868987





Collected date/time: 04/26/16 17:20

L832468

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 14:01	WG868987
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 14:01	WG868987
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 14:01	WG868987
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 14:01	WG868987
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 14:01	WG868987
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 14:01	WG868987
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 14:01	WG868987
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 14:01	WG868987
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 14:01	WG868987
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 14:01	WG868987
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 14:01	WG868987
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 14:01	WG868987
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 14:01	WG868987
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 14:01	WG868987
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 14:01	WG868987
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 14:01	WG868987
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 14:01	WG868987
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 14:01	WG868987
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 14:01	WG868987
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 14:01	WG868987
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 14:01	WG868987
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 14:01	WG868987
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 14:01	WG868987
(S) Toluene-d8	105				90.0-115		05/04/2016 14:01	WG868987
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 14:01	WG868987
(S) 4-Bromofluorobenzene	104				80.1-120		05/04/2016 14:01	WG868987

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.34		0.0247	0.100	0.100	1	05/05/2016 04:09	WG869251
(S) o-Terphenyl	110				50.0-150		05/05/2016 04:09	WG869251



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2890		2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	25.3		0.394	0.100	2.00	20	05/06/2016 06:58	WG870056

## Wet Chemistry by Method 9056A

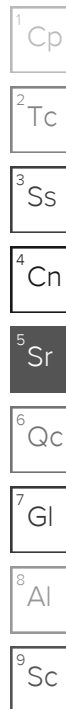
Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	346		2.60	1.00	50.0	50	05/02/2016 15:00	WG868881
Fluoride	1.06		0.00990	0.100	0.100	1	05/02/2016 14:45	WG868881
Sulfate	1340		3.87	5.00	250	50	05/02/2016 15:00	WG868881

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00193	J	0.00125	0.00200	0.0100	5	05/06/2016 21:31	WG869318
Arsenic,Dissolved	0.00166	J	0.00125	0.00200	0.0100	5	05/09/2016 11:35	WG870075
Barium	0.0308		0.00180	0.00500	0.0250	5	05/06/2016 21:31	WG869318
Barium,Dissolved	0.0246	J	0.00180	0.00500	0.0250	5	05/09/2016 11:35	WG870075
Calcium	459		0.230	1.00	5.00	5	05/06/2016 21:31	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:31	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 11:35	WG870075
Iron	U		0.0750	0.100	0.500	5	05/06/2016 21:31	WG869318
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 11:35	WG870075
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:31	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 11:35	WG870075
Manganese	1.07		0.00125	0.00500	0.0250	5	05/06/2016 21:31	WG869318
Manganese,Dissolved	0.605		0.00125	0.00500	0.0250	5	05/09/2016 11:35	WG870075
Potassium	1.42	J	0.185	1.00	5.00	5	05/06/2016 21:31	WG869318
Selenium	0.00617	J	0.00190	0.00200	0.0100	5	05/06/2016 21:31	WG869318
Selenium,Dissolved	0.00498	J	0.00190	0.00200	0.0100	5	05/09/2016 11:35	WG870075
Sodium	161		0.550	1.00	5.00	5	05/06/2016 21:31	WG869318

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 20:56	WG869009
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 20:56	WG869009
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 20:56	WG869009
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 20:56	WG869009
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 20:56	WG869009
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 20:56	WG869009
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 20:56	WG869009
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 20:56	WG869009





Collected date/time: 04/26/16 15:40

L832468

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 20:56	WG869009
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 20:56	WG869009
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 20:56	WG869009
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 20:56	WG869009
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 20:56	WG869009
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 20:56	WG869009
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 20:56	WG869009
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 20:56	WG869009
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 20:56	WG869009
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 20:56	WG869009
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 20:56	WG869009
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 20:56	WG869009
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 20:56	WG869009
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 20:56	WG869009
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 20:56	WG869009
1,1,2,2-Tetrachloroethane	U	J4	0.000130	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 20:56	WG869009
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 20:56	WG869009
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 20:56	WG869009
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 20:56	WG869009
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 20:56	WG869009
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 20:56	WG869009
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 20:56	WG869009
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 20:56	WG869009
(S) Toluene-d8	102				90.0-115		05/05/2016 20:56	WG869009
(S) Dibromofluoromethane	104				79.0-121		05/05/2016 20:56	WG869009
(S) 4-Bromofluorobenzene	98.6				80.1-120		05/05/2016 20:56	WG869009

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.316		0.0247	0.100	0.100	1	05/05/2016 04:27	WG869251
(S) o-Terphenyl	103				50.0-150		05/05/2016 04:27	WG869251

WG869072

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832468-01,03,04

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133392-1 05/02/16 14:22

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

L832199-06 Original Sample (OS) • Duplicate (DUP)

(OS) L832199-06 05/02/16 14:22 • (DUP) R3133392-4 05/02/16 14:22

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	2180	2140	1	1.62		5

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

(LCS) R3133392-2 05/02/16 14:22 • (LCSD) R3133392-3 05/02/16 14:22

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 %
Dissolved Solids	8800	8660	8630	98.4	98.1	85.0-115			0.347	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869073

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832468-05.06

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133357-1 05/02/16 14:55

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

L832468-05 Original Sample (OS) • Duplicate (DUP)

(OS) L832468-05 05/02/16 14:55 • (DUP) R3133357-4 05/02/16 14:55

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1780	1780	1	0.000		5

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

(LCS) R3133357-2 05/02/16 14:55 • (LCSD) R3133357-3 05/02/16 14:55

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 %
Dissolved Solids	8800	8730	8740	99.2	99.3	85.0-115			0.114	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



WG870056

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832468-01,03,04,05,06

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134255-1 05/06/16 06:40

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

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L832468-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832468-03 05/06/16 06:48 • (DUP) R3134255-4 05/06/16 06:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier %	DUP RPD Limits %
Nitrate-Nitrite	5.71	5.54	10	3.00		20

L832472-08 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-08 05/06/16 07:09 • (DUP) R3134255-6 05/06/16 07:10

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

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

(LCS) R3134255-2 05/06/16 06:41 • (LCSD) R3134255-3 05/06/16 06:42

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 %
Nitrate-Nitrite	5.00	4.88	4.97	98.0	99.0	90.0-110			2.00	20

L832468-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L832468-05 05/06/16 06:55 • (MS) R3134255-5 05/06/16 06:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier %
Nitrate-Nitrite	5.00	U	4.34	9.00	10	90.0-110	J6

ACCOUNT:  
TRC Solutions - Austin, TX

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832468-01,03,04,05,06

ONE LAB. NATIONWIDE.



L832472-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-12 05/06/16 07:14 • (MS) R3134255-7 05/06/16 07:20 • (MSD) R3134255-8 05/06/16 07:21

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 %
Nitrate-Nitrite	5.00	U	4.11	4.15	8.00	8.00	10	90.0-110	J6	J6	1.00	20

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

ACCOUNT:  
TRC Solutions - Austin, TX

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WG870326

Wet Chemistry by Method 9012B

QUALITY CONTROL SUMMARY

L832468-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136186-1 05/12/16 15:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	0.00294	J	0.00180	0.00500

L832450-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832450-04 05/12/16 15:22 • (DUP) R3136186-4 05/12/16 15:23

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

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

(LCS) R3136186-2 05/12/16 15:18 • (LCSD) R3136186-3 05/12/16 15:19

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 %
Cyanide	0.100	0.0916	0.104	92.0	104	90.0-110			13.0	20

L832460-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-08 05/12/16 15:24 • (MS) R3136186-5 05/12/16 15:25 • (MSD) R3136186-6 05/12/16 15:26

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 %
Cyanide	0.200	U	0.00566	0.178	3.00	89.0	1	90.0-110	J6	J3 J6	188	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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L832468

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WG68879

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832468-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133150-1 05/02/16 09:53

	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

L831886-03 Original Sample (OS) • Duplicate (DUP)

(OS) L831886-03 05/02/16 12:06 • (DUP) R3133150-4 05/02/16 12:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	309	307	10	1		15

L831886-04 Original Sample (OS) • Duplicate (DUP)

(OS) L831886-04 05/02/16 19:21 • (DUP) R3133150-5 05/02/16 19:36

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	342	341	10	0		15

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

(LCS) R3133150-2 05/02/16 10:07 • (LCSD) R3133150-3 05/02/16 10:22

	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	39.9	39.9	100	100	80-120			0	15
Fluoride	8.00	8.05	8.05	101	101	80-120			0	15
Sulfate	40.0	40.3	40.4	101	101	80-120			0	15

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832468-03,04,05,06

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133189-1 05/02/16 09:52

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

L832472-10 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-10 05/02/16 12:31 • (DUP) R3133189-4 05/02/16 12:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	U	0.000	1	0		15
Fluoride	U	0.000	1	0		15
Sulfate	U	0.000	1	0		15

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

(LCS) R3133189-2 05/02/16 10:07 • (LCSD) R3133189-3 05/02/16 10:22

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	%	%	%			%	%
Chloride	40.0	39.9	39.9	100	100	80-120			0	15
Fluoride	8.00	8.04	8.03	101	100	80-120			0	15
Sulfate	40.0	40.2	40.2	101	101	80-120			0	15

L832472-17 Original Sample (OS) • Matrix Spike (MS)

(OS) L832472-17 05/02/16 13:31 • (MS) R3133189-5 05/02/16 13:45

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	U	49.3	99	1	80-120	
Fluoride	5.00	U	5.00	100	1	80-120	
Sulfate	50.0	U	49.8	100	1	80-120	

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832468-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133255-1 05/03/16 10:26				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

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

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

(LCS) R3133255-2 05/03/16 10:28 • (LCSD) R3133255-3 05/03/16 10:31										
	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	0.00298	0.00292	99	97	80-120			2	20

L832391-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832391-01 05/03/16 10:40 • (MS) R3133255-4 05/03/16 10:43 • (MSD) R3133255-5 05/03/16 10:46												
	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	0.00307	0.00291	102	97	1	75-125			5	20

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832468-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133626-1 05/04/16 12:07				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury,Dissolved	U		0.000049	0.000200

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

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

(LCS) R3133626-2 05/04/16 12:09 • (LCSD) R3133626-3 05/04/16 12:11										
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 %
Mercury,Dissolved	0.00300	0.00284	0.00263	95	88	80-120			7	20

L832603-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-17 05/04/16 12:13 • (MS) R3133626-4 05/04/16 12:16 • (MSD) R3133626-5 05/04/16 12:18												
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 %
Mercury,Dissolved	0.00300	U	0.00254	0.00254	85	85	1	75-125			0	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832468-01,03,04,05,06

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134607-1 05/06/16 20:46

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
Boron	U		0.0015	0.0200
Cadmium	U		0.00016	0.00100
Calcium	0.0807		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	0.0188		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.000451		0.00025	0.00500
Nickel	0.000359		0.00035	0.00200
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Uranium	U		0.00033	0.0100
Vanadium	0.0002		0.00018	0.00500

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134607-2 05/06/16 20:49 • (LCSD) R3134607-3 05/06/16 20:51

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	0.0508	0.0521	102	104	80-120			2	20
Barium	0.0500	0.0533	0.0507	107	101	80-120			5	20
Boron	0.0500	0.0444	0.0463	89	93	80-120			4	20
Cadmium	0.0500	0.0531	0.0542	106	108	80-120			2	20
Calcium	5.00	5.24	5.21	105	104	80-120			1	20
Chromium	0.0500	0.0519	0.0507	104	101	80-120			2	20
Cobalt	0.0500	0.0529	0.0514	106	103	80-120			3	20
Iron	5.00	5.07	4.96	101	99	80-120			2	20
Lead	0.0500	0.0519	0.0516	104	103	80-120			1	20
Manganese	0.0500	0.0519	0.0503	104	101	80-120			3	20
Nickel	0.0500	0.0540	0.0514	108	103	80-120			5	20
Potassium	5.00	5.08	5.01	102	100	80-120			2	20
Selenium	0.0500	0.0505	0.0501	101	100	80-120			1	20
Sodium	5.00	5.11	5.07	102	101	80-120			1	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832468-01,03,04,05,06

ONE LAB. NATIONWIDE.



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

(LCS) R3134607-2 05/06/16 20:49 • (LCSD) R3134607-3 05/06/16 20:51										
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	%	%	%			%	%
Uranium	0.0500	0.0519	0.0521	104	104	80-120			0	20
Vanadium	0.0500	0.0511	0.0501	102	100	80-120			2	20

L832488-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832488-12 05/06/16 20:54 • (MS) R3134607-5 05/06/16 20:59 • (MSD) R3134607-6 05/06/16 21:02												
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	%	%		%			%	%
Arsenic	0.0100	0.0106	0.0724	0.0674	124	114	5	75-125			7	20
Barium	0.0100	0.0200	0.0795	0.0765	119	113	5	75-125			4	20
Boron	0.0100	0.714	0.764	0.773	99	117	5	75-125			1	20
Cadmium	0.0100	U	0.0582	0.0555	116	111	5	75-125			5	20
Calcium	1.00	728	723	691	0	0	5	75-125	V	V	5	20
Chromium	0.0100	U	0.0570	0.0536	114	107	5	75-125			6	20
Cobalt	0.0100	0.00303	0.0596	0.0560	113	106	5	75-125			6	20
Potassium	1.00	27.9	34.8	32.1	138	84	5	75-125	V		8	20
Iron	1.00	4.56	10.2	9.59	113	101	5	75-125			6	20
Lead	0.0100	U	0.0572	0.0546	114	109	5	75-125			5	20
Manganese	0.0100	2.70	2.81	2.66	223	0	5	75-125	V	V	5	20
Nickel	0.0100	0.0148	0.0715	0.0653	113	101	5	75-125			9	20
Selenium	0.0100	U	0.0584	0.0563	117	113	5	75-125			4	20
Sodium	1.00	3230	3300	3120	1300	0	5	75-125	V	V	5	20
Uranium	0.0100	0.0168	0.0762	0.0716	119	110	5	75-125			6	20
Vanadium	0.0100	0.00265	0.0609	0.0578	116	110	5	75-125			5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832468-01,03,04,05,06

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134963-1 05/09/16 10:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	0.0259		0.015	0.100
Lead,Dissolved	0.000687		0.00024	0.00200
Manganese,Dissolved	0.0003		0.00025	0.00500
Nickel,Dissolved	U		0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	0.000218		0.00018	0.00500

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) R3134963-2 05/09/16 10:30 • (LCSD) R3134963-3 05/09/16 10:33

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,Dissolved	0.0500	0.0512	0.0534	102	107	80-120			4	20
Barium,Dissolved	0.0500	0.0517	0.0524	103	105	80-120			1	20
Cadmium,Dissolved	0.0500	0.0547	0.0572	109	114	80-120			5	20
Chromium,Dissolved	0.0500	0.0534	0.0550	107	110	80-120			3	20
Cobalt,Dissolved	0.0500	0.0554	0.0568	111	114	80-120			2	20
Iron,Dissolved	5.00	5.23	5.38	105	108	80-120			3	20
Lead,Dissolved	0.0500	0.0524	0.0538	105	108	80-120			3	20
Manganese,Dissolved	0.0500	0.0518	0.0526	104	105	80-120			1	20
Nickel,Dissolved	0.0500	0.0553	0.0560	111	112	80-120			1	20
Selenium,Dissolved	0.0500	0.0506	0.0519	101	104	80-120			2	20
Uranium,Dissolved	0.0500	0.0516	0.0530	103	106	80-120			3	20
Vanadium,Dissolved	0.0500	0.0522	0.0541	104	108	80-120			4	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832468-01,03,04,05,06

ONE LAB. NATIONWIDE.



L832447-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832447-01 05/09/16 10:35 • (MS) R3134963-5 05/09/16 10:40 • (MSD) R3134963-6 05/09/16 10:42

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	%	%		%			%	%
Arsenic,Dissolved	0.0100	0.00646	0.0536	0.0585	94	104	5	75-125			9	20
Barium,Dissolved	0.0100	0.0161	0.0606	0.0636	89	95	5	75-125			5	20
Cadmium,Dissolved	0.0100	U	0.0473	0.0523	95	105	5	75-125			10	20
Chromium,Dissolved	0.0100	U	0.0489	0.0497	98	99	5	75-125			2	20
Cobalt,Dissolved	0.0100	U	0.0484	0.0505	97	101	5	75-125			4	20
Iron,Dissolved	1.00	U	4.68	5.46	94	109	5	75-125			15	20
Lead,Dissolved	0.0100	U	0.0486	0.0513	97	103	5	75-125			5	20
Manganese,Dissolved	0.0100	0.319	0.326	0.350	14	63	5	75-125	<u>V</u>	<u>V</u>	7	20
Nickel,Dissolved	0.0100	0.00490	0.0531	0.0509	96	92	5	75-125			4	20
Selenium,Dissolved	0.0100	0.00234	0.0506	0.0560	96	107	5	75-125			10	20
Uranium,Dissolved	0.0100	0.0181	0.0628	0.0668	89	97	5	75-125			6	20
Vanadium,Dissolved	0.0100	0.0109	0.0559	0.0602	90	99	5	75-125			7	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832468-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134973-1 05/09/16 10:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0015	0.0200

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

(LCS) R3134973-2 05/09/16 10:50 • (LCSD) R3134973-3 05/09/16 10:55

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 %
Boron,Dissolved	0.0500	0.0484	0.0502	97	100	80-120			4	20

L832468-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832468-01 05/09/16 11:00 • (MS) R3134973-5 05/09/16 11:09 • (MSD) R3134973-6 05/09/16 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 %
Boron,Dissolved	0.00500	0.596	0.642	0.644	92	95	10	75-125			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

QUALITY CONTROL SUMMARY

L832468-01,02,03,04,05

ONE LAB. NATIONWIDE. 

Method Blank (MB)

(MB) R3134190-3 05/04/16 05:51

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

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Al

9

Sc

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

QUALITY CONTROL SUMMARY

L832468-01,02,03,04,05

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134190-3 05/04/16 05:51

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	105			90.0-115
(S) Dibromofluoromethane	104			79.0-121
(S) 4-Bromofluorobenzene	103			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134190-1 05/04/16 04:27 • (LCSD) R3134190-2 05/04/16 04:48

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 %
Acetone	0.125	0.129	0.124	103	99.5	28.7-175			3.50	20.9
Benzene	0.0250	0.0265	0.0276	106	110	73.0-122			4.18	20
Bromodichloromethane	0.0250	0.0268	0.0276	107	110	75.5-121			2.61	20
Bromoform	0.0250	0.0255	0.0260	102	104	71.5-131			2.11	20
Bromomethane	0.0250	0.0336	0.0356	134	142	22.4-187			5.75	20
n-Butylbenzene	0.0250	0.0256	0.0275	102	110	75.9-134			7.09	20
sec-Butylbenzene	0.0250	0.0249	0.0267	99.5	107	80.6-126			7.27	20
Carbon disulfide	0.0250	0.0246	0.0256	98.4	102	53.0-134			3.79	20
Carbon tetrachloride	0.0250	0.0252	0.0264	101	105	70.9-129			4.58	20
Chlorobenzene	0.0250	0.0261	0.0275	104	110	79.7-122			5.41	20
Chlorodibromomethane	0.0250	0.0266	0.0273	107	109	78.2-124			2.43	20
Chloroethane	0.0250	0.0297	0.0309	119	124	41.2-153			3.80	20
Chloroform	0.0250	0.0272	0.0279	109	112	73.2-125			2.81	20
Chloromethane	0.0250	0.0276	0.0289	111	116	55.8-134			4.35	20
1,2-Dibromoethane	0.0250	0.0266	0.0272	106	109	79.8-122			2.26	20
1,1-Dichloroethane	0.0250	0.0269	0.0279	108	112	71.7-127			3.73	20

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832468-01,02,03,04,05

ONE LAB. NATIONWIDE.



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

(LCS) R3134190-1 05/04/16 04:27 • (LCSD) R3134190-2 05/04/16 04:48

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 %
1,2-Dichloroethane	0.0250	0.0276	0.0279	110	112	65.3-126			1.25	20
1,1-Dichloroethene	0.0250	0.0250	0.0260	100	104	59.9-137			3.89	20
cis-1,2-Dichloroethene	0.0250	0.0276	0.0282	111	113	77.3-122			2.17	20
trans-1,2-Dichloroethene	0.0250	0.0277	0.0289	111	116	72.6-125			4.39	20
1,2-Dichloropropane	0.0250	0.0264	0.0269	105	108	77.4-125			1.94	20
cis-1,3-Dichloropropene	0.0250	0.0273	0.0281	109	112	77.7-124			2.79	20
trans-1,3-Dichloropropene	0.0250	0.0280	0.0284	112	113	73.5-127			1.11	20
Ethylbenzene	0.0250	0.0250	0.0270	100	108	80.9-121			7.84	20
2-Hexanone	0.125	0.140	0.139	112	111	59.4-151			0.190	20
Isopropylbenzene	0.0250	0.0255	0.0270	102	108	81.6-124			5.79	20
p-Isopropyltoluene	0.0250	0.0256	0.0275	102	110	77.6-129			7.06	20
2-Butanone (MEK)	0.125	0.142	0.140	114	112	46.4-155			2.02	20
Methylene Chloride	0.0250	0.0268	0.0277	107	111	69.5-120			3.15	20
4-Methyl-2-pentanone (MIBK)	0.125	0.138	0.135	110	108	63.3-138			1.89	20
Methyl tert-butyl ether	0.0250	0.0268	0.0269	107	108	70.1-125			0.340	20
Naphthalene	0.0250	0.0242	0.0254	96.8	102	69.7-134			4.75	20
n-Propylbenzene	0.0250	0.0260	0.0276	104	110	81.9-122			5.91	20
Styrene	0.0250	0.0274	0.0289	110	116	79.9-124			5.15	20
1,1,1,2-Tetrachloroethane	0.0250	0.0249	0.0262	99.5	105	78.5-125			5.05	20
1,1,2,2-Tetrachloroethane	0.0250	0.0258	0.0264	103	105	79.3-123			2.10	20
Tetrachloroethene	0.0250	0.0253	0.0269	101	108	73.5-130			6.15	20
Toluene	0.0250	0.0257	0.0267	103	107	77.9-116			3.95	20
1,1,1-Trichloroethane	0.0250	0.0267	0.0280	107	112	71.1-129			4.72	20
1,1,2-Trichloroethane	0.0250	0.0264	0.0271	105	108	81.6-120			2.69	20
Trichloroethene	0.0250	0.0257	0.0269	103	108	79.5-121			4.40	20
1,2,4-Trimethylbenzene	0.0250	0.0252	0.0268	101	107	79.0-122			6.06	20
1,3,5-Trimethylbenzene	0.0250	0.0254	0.0269	101	108	81.0-123			5.96	20
Vinyl chloride	0.0250	0.0276	0.0284	110	114	61.5-134			2.89	20
Xylenes, Total	0.0750	0.0762	0.0806	102	107	79.2-122			5.61	20
o-Xylene	0.0250	0.0255	0.0267	102	107	79.1-123			4.75	20
m&p-Xylenes	0.0500	0.0508	0.0539	102	108	78.5-122			6.03	20
(S) Toluene-d8				106	105	90.0-115				
(S) Dibromofluoromethane				106	105	79.0-121				
(S) 4-Bromofluorobenzene				102	102	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832468-01,02,03,04,05

ONE LAB. NATIONWIDE.



L832460-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-02 05/04/16 08:03 • (MS) R3134190-4 05/04/16 06:18 • (MSD) R3134190-5 05/04/16 06:39

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	%	%		%			%	%
Acetone	0.125	U	0.0437	0.0610	34.9	48.8	1	25.0-156		J3	33.1	21.5
Benzene	0.0250	U	0.0184	0.0261	73.6	104	1	58.6-133		J3	34.7	20
Bromodichloromethane	0.0250	U	0.0197	0.0268	78.9	107	1	69.2-127		J3	30.5	20
Bromoform	0.0250	U	0.0187	0.0258	74.6	103	1	66.3-140		J3	32.1	20
Bromomethane	0.0250	U	0.0218	0.0317	87.3	127	1	16.6-183		J3	36.8	20.5
n-Butylbenzene	0.0250	U	0.0192	0.0262	76.9	105	1	64.8-145		J3	30.7	20
sec-Butylbenzene	0.0250	U	0.0181	0.0255	72.5	102	1	66.8-139		J3	33.7	20
Carbon disulfide	0.0250	U	0.0147	0.0207	58.9	82.8	1	34.9-138		J3	33.7	20
Carbon tetrachloride	0.0250	U	0.0175	0.0251	70.1	101	1	60.6-139		J3	35.7	20
Chlorobenzene	0.0250	U	0.0192	0.0261	76.6	105	1	70.1-130		J3	30.8	20
Chlorodibromomethane	0.0250	U	0.0197	0.0266	78.8	107	1	71.6-132		J3	29.9	20
Chloroethane	0.0250	U	0.0204	0.0281	81.4	112	1	33.3-155		J3	31.9	20
Chloroform	0.0250	0.000943	0.0198	0.0280	75.5	108	1	66.1-133		J3	34.2	20
Chloromethane	0.0250	U	0.0174	0.0244	69.4	97.5	1	40.7-139		J3	33.7	20
1,2-Dibromoethane	0.0250	U	0.0194	0.0263	77.5	105	1	73.8-131		J3	30.5	20
1,1-Dichloroethane	0.0250	U	0.0189	0.0268	75.4	107	1	64.0-134		J3	34.8	20
1,2-Dichloroethane	0.0250	U	0.0198	0.0276	79.1	111	1	60.7-132		J3	33.1	20
1,1-Dichloroethene	0.0250	U	0.0169	0.0239	67.4	95.4	1	48.8-144		J3	34.4	20
cis-1,2-Dichloroethene	0.0250	U	0.0194	0.0270	77.6	108	1	60.6-136		J3	32.8	20
trans-1,2-Dichloroethene	0.0250	U	0.0189	0.0266	75.5	106	1	61.0-132		J3	33.8	20
1,2-Dichloropropane	0.0250	U	0.0192	0.0261	76.8	104	1	69.7-130		J3	30.3	20
cis-1,3-Dichloropropene	0.0250	U	0.0196	0.0265	78.5	106	1	71.1-129		J3	29.6	20
trans-1,3-Dichloropropene	0.0250	U	0.0203	0.0274	81.2	110	1	66.3-136		J3	29.9	20
Ethylbenzene	0.0250	U	0.0181	0.0252	72.5	101	1	62.7-136		J3	32.6	20
2-Hexanone	0.125	U	0.0817	0.114	65.4	91.3	1	59.4-154		J3	33.2	20.1
Isopropylbenzene	0.0250	U	0.0183	0.0257	73.2	103	1	67.4-136		J3	33.8	20
p-Isopropyltoluene	0.0250	U	0.0187	0.0262	74.9	105	1	62.8-143		J3	33.3	20
2-Butanone (MEK)	0.125	U	0.0709	0.100	56.7	80.2	1	45.0-156		J3	34.3	20.8
Methylene Chloride	0.0250	U	0.0190	0.0264	76.1	106	1	61.5-125		J3	32.7	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.0976	0.135	78.1	108	1	60.7-150		J3	32.5	20
Methyl tert-butyl ether	0.0250	U	0.0194	0.0274	77.4	110	1	61.4-136		J3	34.4	20
Naphthalene	0.0250	U	0.0175	0.0248	70.1	99.2	1	61.8-143		J3	34.4	20
n-Propylbenzene	0.0250	U	0.0189	0.0262	75.7	105	1	63.2-139		J3	32.3	20
Styrene	0.0250	U	0.0202	0.0274	80.7	110	1	68.2-133		J3	30.4	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0185	0.0252	74.0	101	1	70.5-132		J3	30.9	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0194	0.0269	77.7	108	1	64.9-145		J3	32.3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

QUALITY CONTROL SUMMARY

L832468-01,02,03,04,05

ONE LAB. NATIONWIDE. 

L832460-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-02 05/04/16 08:03 • (MS) R3134190-4 05/04/16 06:18 • (MSD) R3134190-5 05/04/16 06:39												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0178	0.0248	71.3	99.2	1	57.4-141		J3	32.7	20
Toluene	0.0250	U	0.0181	0.0250	72.4	100	1	67.8-124		J3	32.1	20
1,1,1-Trichloroethane	0.0250	U	0.0187	0.0272	74.7	109	1	58.7-134		J3	37.2	20
1,1,2-Trichloroethane	0.0250	U	0.0195	0.0267	78.2	107	1	74.1-130		J3	31.1	20
Trichloroethene	0.0250	U	0.0181	0.0252	72.3	101	1	48.9-148		J3	33.0	20
1,2,4-Trimethylbenzene	0.0250	U	0.0184	0.0256	73.7	102	1	60.5-137		J3	32.5	20
1,3,5-Trimethylbenzene	0.0250	U	0.0185	0.0257	73.9	103	1	67.9-134		J3	32.6	20
Vinyl chloride	0.0250	U	0.0179	0.0255	71.6	102	1	44.3-143		J3	35.0	20
Xylenes, Total	0.0750	U	0.0555	0.0760	74.0	101	1	65.6-133		J3	31.2	20
o-Xylene	0.0250	U	0.0185	0.0255	73.9	102	1	67.1-133		J3	31.8	20
m&p-Xylenes	0.0500	U	0.0370	0.0505	74.0	101	1	64.1-133		J3	30.8	20
(S) Toluene-d8					105	105		90.0-115				
(S) Dibromofluoromethane					103	106		79.0-121				
(S) 4-Bromofluorobenzene					101	102		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

QUALITY CONTROL SUMMARY

L832468-06

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134400-3 05/05/16 18:29

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

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

QUALITY CONTROL SUMMARY

L832468-06

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134400-3 05/05/16 18:29

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	102			90.0-115
(S) Dibromofluoromethane	104			79.0-121
(S) 4-Bromofluorobenzene	98.8			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134400-1 05/05/16 17:12 • (LCSD) R3134400-2 05/05/16 17:32

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	0.0942	0.0987	75.4	79.0	28.7-175			4.68	20.9
Benzene	0.0250	0.0213	0.0220	85.0	87.9	73.0-122			3.29	20
Bromodichloromethane	0.0250	0.0221	0.0217	88.3	86.9	75.5-121			1.56	20
Bromoform	0.0250	0.0208	0.0210	83.2	84.2	71.5-131			1.13	20
Bromomethane	0.0250	0.0294	0.0292	117	117	22.4-187			0.410	20
n-Butylbenzene	0.0250	0.0232	0.0243	92.9	97.3	75.9-134			4.72	20
sec-Butylbenzene	0.0250	0.0213	0.0221	85.1	88.4	80.6-126			3.78	20
Carbon disulfide	0.0250	0.0213	0.0218	85.2	87.2	53.0-134			2.30	20
Carbon tetrachloride	0.0250	0.0216	0.0212	86.2	85.0	70.9-129			1.49	20
Chlorobenzene	0.0250	0.0229	0.0231	91.6	92.3	79.7-122			0.690	20
Chlorodibromomethane	0.0250	0.0217	0.0218	86.6	87.2	78.2-124			0.620	20
Chloroethane	0.0250	0.0232	0.0233	92.8	93.2	41.2-153			0.420	20
Chloroform	0.0250	0.0224	0.0231	89.7	92.6	73.2-125			3.17	20
Chloromethane	0.0250	0.0203	0.0209	81.1	83.7	55.8-134			3.07	20
1,2-Dibromoethane	0.0250	0.0225	0.0228	90.0	91.2	79.8-122			1.33	20
1,1-Dichloroethane	0.0250	0.0227	0.0232	90.6	92.7	71.7-127			2.30	20

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

QUALITY CONTROL SUMMARY

L832468-06



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

(LCS) R3134400-1 05/05/16 17:12 • (LCSD) R3134400-2 05/05/16 17:32

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	0.0240	0.0251	95.9	100	65.3-126			4.54	20
1,1-Dichloroethene	0.0250	0.0237	0.0238	94.6	95.3	59.9-137			0.680	20
cis-1,2-Dichloroethene	0.0250	0.0224	0.0227	89.5	90.9	77.3-122			1.57	20
trans-1,2-Dichloroethene	0.0250	0.0214	0.0222	85.5	88.9	72.6-125			3.90	20
1,2-Dichloropropane	0.0250	0.0209	0.0219	83.8	87.5	77.4-125			4.31	20
cis-1,3-Dichloropropene	0.0250	0.0221	0.0219	88.3	87.8	77.7-124			0.630	20
trans-1,3-Dichloropropene	0.0250	0.0217	0.0223	86.7	89.2	73.5-127			2.81	20
Ethylbenzene	0.0250	0.0223	0.0229	89.3	91.6	80.9-121			2.61	20
2-Hexanone	0.125	0.101	0.105	81.0	84.1	59.4-151			3.81	20
Isopropylbenzene	0.0250	0.0217	0.0224	86.8	89.7	81.6-124			3.21	20
p-Isopropyltoluene	0.0250	0.0218	0.0228	87.2	91.2	77.6-129			4.43	20
2-Butanone (MEK)	0.125	0.0926	0.0956	74.1	76.5	46.4-155			3.16	20
Methylene Chloride	0.0250	0.0208	0.0212	83.3	85.0	69.5-120			1.95	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0977	0.101	78.1	81.0	63.3-138			3.60	20
Methyl tert-butyl ether	0.0250	0.0218	0.0222	87.3	88.7	70.1-125			1.67	20
Naphthalene	0.0250	0.0194	0.0212	77.6	84.7	69.7-134			8.83	20
n-Propylbenzene	0.0250	0.0230	0.0235	92.2	93.8	81.9-122			1.79	20
Styrene	0.0250	0.0227	0.0228	91.0	91.4	79.9-124			0.430	20
1,1,1,2-Tetrachloroethane	0.0250	0.0215	0.0217	85.8	86.8	78.5-125			1.09	20
1,1,2,2-Tetrachloroethane	0.0250	0.0192	0.0200	76.8	80.2	79.3-123	J4		4.22	20
Tetrachloroethene	0.0250	0.0230	0.0230	91.9	91.9	73.5-130			0.0300	20
Toluene	0.0250	0.0214	0.0216	85.5	86.3	77.9-116			0.930	20
1,1,1-Trichloroethane	0.0250	0.0214	0.0225	85.5	90.0	71.1-129			5.06	20
1,1,2-Trichloroethane	0.0250	0.0222	0.0220	88.6	87.9	81.6-120			0.770	20
Trichloroethene	0.0250	0.0224	0.0218	89.7	87.3	79.5-121			2.62	20
1,2,4-Trimethylbenzene	0.0250	0.0220	0.0223	87.8	89.2	79.0-122			1.59	20
1,3,5-Trimethylbenzene	0.0250	0.0215	0.0220	85.8	87.9	81.0-123			2.42	20
Vinyl chloride	0.0250	0.0227	0.0231	90.7	92.4	61.5-134			1.91	20
Xylenes, Total	0.0750	0.0666	0.0681	88.8	90.8	79.2-122			2.18	20
o-Xylene	0.0250	0.0224	0.0230	89.7	91.9	79.1-123			2.38	20
m&p-Xylenes	0.0500	0.0442	0.0451	88.4	90.3	78.5-122			2.08	20
(S) Toluene-d8				105	104	90.0-115				
(S) Dibromofluoromethane				105	105	79.0-121				
(S) 4-Bromofluorobenzene				101	101	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG869009

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

QUALITY CONTROL SUMMARY

L832468-06

ONE LAB. NATIONWIDE.



L832468-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832468-06 05/05/16 20:56 • (MS) R3134400-4 05/05/16 19:01 • (MSD) R3134400-5 05/05/16 19:20

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	%	%		%			%	%
Acetone	0.125	U	0.0511	0.0488	40.9	39.1	1	25.0-156			4.49	21.5
Benzene	0.0250	U	0.0194	0.0188	77.6	75.4	1	58.6-133			2.85	20
Bromodichloromethane	0.0250	U	0.0218	0.0211	87.1	84.3	1	69.2-127			3.27	20
Bromoform	0.0250	U	0.0202	0.0191	80.9	76.5	1	66.3-140			5.57	20
Bromomethane	0.0250	U	0.0229	0.0203	91.7	81.2	1	16.6-183			12.2	20.5
n-Butylbenzene	0.0250	U	0.0228	0.0223	91.3	89.0	1	64.8-145			2.53	20
sec-Butylbenzene	0.0250	U	0.0209	0.0199	83.6	79.5	1	66.8-139			4.96	20
Carbon disulfide	0.0250	U	0.0141	0.0133	56.4	53.1	1	34.9-138			5.96	20
Carbon tetrachloride	0.0250	U	0.0189	0.0186	75.8	74.4	1	60.6-139			1.89	20
Chlorobenzene	0.0250	U	0.0210	0.0203	84.0	81.3	1	70.1-130			3.30	20
Chlorodibromomethane	0.0250	U	0.0205	0.0196	81.9	78.5	1	71.6-132			4.31	20
Chloroethane	0.0250	U	0.0197	0.0188	78.7	75.0	1	33.3-155			4.81	20
Chloroform	0.0250	U	0.0305	0.0296	122	119	1	66.1-133			2.99	20
Chloromethane	0.0250	U	0.0167	0.0156	66.8	62.6	1	40.7-139			6.50	20
1,2-Dibromoethane	0.0250	U	0.0209	0.0198	83.8	79.2	1	73.8-131			5.59	20
1,1-Dichloroethane	0.0250	U	0.0210	0.0202	83.9	80.7	1	64.0-134			3.90	20
1,2-Dichloroethane	0.0250	U	0.0221	0.0210	88.3	84.2	1	60.7-132			4.83	20
1,1-Dichloroethene	0.0250	U	0.0202	0.0190	80.9	76.0	1	48.8-144			6.34	20
cis-1,2-Dichloroethene	0.0250	U	0.0201	0.0200	80.3	80.2	1	60.6-136			0.150	20
trans-1,2-Dichloroethene	0.0250	U	0.0187	0.0180	74.8	72.2	1	61.0-132			3.53	20
1,2-Dichloropropane	0.0250	U	0.0195	0.0193	77.9	77.2	1	69.7-130			0.950	20
cis-1,3-Dichloropropene	0.0250	U	0.0197	0.0191	78.9	76.3	1	71.1-129			3.32	20
trans-1,3-Dichloropropene	0.0250	U	0.0199	0.0191	79.8	76.3	1	66.3-136			4.43	20
Ethylbenzene	0.0250	U	0.0225	0.0212	90.1	84.8	1	62.7-136			6.04	20
2-Hexanone	0.125	U	0.0862	0.0843	68.9	67.5	1	59.4-154			2.14	20.1
Isopropylbenzene	0.0250	U	0.0210	0.0202	84.1	80.9	1	67.4-136			3.87	20
p-Isopropyltoluene	0.0250	U	0.0217	0.0210	86.8	83.8	1	62.8-143			3.51	20
2-Butanone (MEK)	0.125	U	0.0680	0.0683	54.4	54.6	1	45.0-156			0.390	20.8
Methylene Chloride	0.0250	U	0.0180	0.0175	72.0	69.9	1	61.5-125			2.96	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.0972	0.0980	77.7	78.4	1	60.7-150			0.810	20
Methyl tert-butyl ether	0.0250	U	0.0202	0.0196	80.7	78.3	1	61.4-136			3.02	20
Naphthalene	0.0250	U	0.0214	0.0220	85.7	88.1	1	61.8-143			2.76	20
n-Propylbenzene	0.0250	U	0.0223	0.0218	89.2	87.0	1	63.2-139			2.43	20
Styrene	0.0250	U	0.0212	0.0202	84.7	81.0	1	68.2-133			4.46	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0206	0.0195	82.3	77.9	1	70.5-132			5.58	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0190	0.0185	75.9	74.2	1	64.9-145			2.27	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832468

DATE/TIME:  
05/12/16 19:04

PAGE:  
40 of 45

WG869009

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

QUALITY CONTROL SUMMARY

L832468-06

ONE LAB. NATIONWIDE. 

L832468-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832468-06 05/05/16 20:56 • (MS) R3134400-4 05/05/16 19:01 • (MSD) R3134400-5 05/05/16 19:20												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0202	0.0193	80.9	77.2	1	57.4-141			4.62	20
Toluene	0.0250	U	0.0223	0.0214	89.2	85.7	1	67.8-124			4.02	20
1,1,1-Trichloroethane	0.0250	U	0.0202	0.0199	80.8	79.6	1	58.7-134			1.44	20
1,1,2-Trichloroethane	0.0250	U	0.0206	0.0200	82.5	79.8	1	74.1-130			3.29	20
Trichloroethene	0.0250	U	0.0196	0.0188	78.3	75.3	1	48.9-148			3.91	20
1,2,4-Trimethylbenzene	0.0250	U	0.0246	0.0236	98.3	94.4	1	60.5-137			4.06	20
1,3,5-Trimethylbenzene	0.0250	U	0.0218	0.0209	87.3	83.7	1	67.9-134			4.25	20
Vinyl chloride	0.0250	U	0.0177	0.0169	70.9	67.5	1	44.3-143			4.96	20
Xylenes, Total	0.0750	U	0.0691	0.0661	92.1	88.2	1	65.6-133			4.33	20
o-Xylene	0.0250	U	0.0239	0.0229	95.6	91.5	1	67.1-133			4.40	20
m&p-Xylenes	0.0500	U	0.0452	0.0433	90.3	86.5	1	64.1-133			4.30	20
(S) Toluene-d8					103	103		90.0-115				
(S) Dibromofluoromethane					104	102		79.0-121				
(S) 4-Bromofluorobenzene					102	100		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832468

DATE/TIME:  
05/12/16 19:04

PAGE:  
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WG869251

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832468-01,03,04,05,06

Method Blank (MB)

(MB) R3133569-1 05/03/16 13:27

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	116			50.0-150

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Sample Detection Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> GI

<sup>8</sup> Al

<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		Billing Information: <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		Analysis / Container / Preservative										Chain of Custody Page <u>1</u> of <u>1</u>					
Report to: jspeer@trcsolutions.com		Email To: jspeer@trcsolutions.com		 YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 										L# <u>L832468</u> <b>G068</b> Acctnum: TRCATX Template: T111398 Prelogin: P549626 TSR: Chris McCord Cooler: Shipped Via:					
Project Description: <b>NCL Spring 2016 -Team H- CJH</b>		City/State Collected: <b>Artesia, NM</b>																	
Phone: 512-684-3170	Client Project #	Lab Project #		DRO - 40ml/Amb-HCl-BT GRO - 40ml/Amb-HCl V8260 - 40ml/Amb-HCl Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500mlHDPE-HNO3 Cyanide (CN) - 250mlHDPEAmb-NaOH Cations-Total Ca, K, Na - 500mlHDPE-HNO3 Anions- Chloride, Fluoride, Sulfate- 125mlHDPE-NoPres Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4 TDS - 250mlHDPE-NoPres Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V										Rem./Contaminant Sample # (lab only)					
Fax:	Site/Facility ID #	P.O. #																	
Collected by (print): <i>Scott Ude + HMI Team</i>	<b>NCL - Navajo- Artesia</b>	Date Results Needed																	
Collected by (signature): <i>Scott Ude</i>	<b>Rush? (Lab MUST Be Notified)</b> <input type="checkbox"/> Same Day .....200% <input type="checkbox"/> Next Day .....100% <input type="checkbox"/> Two Day .....50% <input type="checkbox"/> Three Day .....25%	<input type="checkbox"/> Email? ___ No ___ Yes <input type="checkbox"/> FAX? ___ No ___ Yes																	
Immediately Packed on Ice N ___ Y <input checked="" type="checkbox"/>																			
Sample ID	Comp	Grab	Matrix *	Depth	Date	Time	No. of Cntrs												
MW-45			GW		4/26/16	1745	11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-01	
Trip Blank-NCL-01					4/26/16	-	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	02	
NCL-49					4/26/16	1630	10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03	
DUP-NCL-01					4/26/16	1500	10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	04	
MW-54A					4/26/16	1720	10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	05	
MW-53					4/26/16	1540	10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	06	
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____																			
Remarks: <b>Log all metals by 6020. Dissolved metals are field filtered.</b>																			
Relinquished by: (Signature) <i>Scott Ude</i>		Date: 4/27/16		Time: 1400		Received by: (Signature) <i>[Signature]</i>		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>		Condition: (lab use only)									
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: °C Bottles Received: 38 52		COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA									
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) <i>[Signature]</i>		Date: 4/29/16		Time: 0900		pH Checked: 2.712		NCF:					

## TRC Solutions - Austin, TX

Sample Delivery Group: L832472  
Samples Received: 04/29/2016  
Project Number: 249545.0000.0000 000  
Description: EP Spring 2016  
Site: EP NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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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MW-4A L832472-03	18
MW-123 L832472-04	20
MW-10 L832472-05	22
MW-22A L832472-06	24
DUP-EP-02 L832472-07	26
MW-88 L832472-08	28
MW-5A L832472-09	30
EB-EP-03 L832472-10	32
MW-7A L832472-11	34
DUP-EP-01 L832472-12	36
OCD-8A L832472-13	38
MW-73 L832472-14	41
TRIP BLANK-EP-01 L832472-15	43
MW-74 L832472-16	44
EB-EP-01 L832472-17	46
MW-79 L832472-18	48
EB-EP-04 L832472-19	50
MW-6A L832472-20	52
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OCD-6 L832472-22	56
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<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



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<b><sup>7</sup>Gl: Glossary of Terms</b>	<b>143</b>
<b><sup>8</sup>Al: Accreditations &amp; Locations</b>	<b>144</b>
<b><sup>9</sup>Sc: Chain of Custody</b>	<b>145</b>

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

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-83 L832472-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 13:10

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:29	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:29	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	5	05/02/16 16:48	05/04/16 08:55	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 07:21	05/05/16 07:21	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 01:05	05/04/16 01:05	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 06:59	05/06/16 06:59	ASK
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 04:05	05/09/16 04:05	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 03:19	05/09/16 03:19	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

TRIP BLANK-EP-02 L832472-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 00:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 00:25	05/04/16 00:25	DAH

MW-4A L832472-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 12:15

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:31	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:31	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	5	05/02/16 16:48	05/04/16 08:36	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 07:43	05/05/16 07:43	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 01:25	05/04/16 01:25	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:00	05/06/16 07:00	ASK
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 14:48	05/09/16 14:48	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 15:03	05/09/16 15:03	CM

MW-123 L832472-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 11:15

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:34	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:34	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 15:35	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 08:04	05/05/16 08:04	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 01:46	05/04/16 01:46	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:01	05/06/16 07:01	ASK
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 15:19	05/09/16 15:19	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 15:34	05/09/16 15:34	CM

MW-10 L832472-05 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 10:20

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:41	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:41	JDG

## SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-10 L832472-05 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 10:20	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 19:47	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 15:53	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 08:26	05/05/16 08:26	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 02:06	05/04/16 02:06	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:02	05/06/16 07:02	ASK
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 15:50	05/09/16 15:50	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 16:05	05/09/16 16:05	CM

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

## MW-22A L832472-06 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 09:00	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:43	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:43	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 16:11	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870384	1	05/06/16 03:35	05/06/16 03:35	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 02:26	05/04/16 02:26	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:07	05/06/16 07:07	ASK
Wet Chemistry by Method 9056A	WG869680	1	05/09/16 14:17	05/09/16 14:17	CM
Wet Chemistry by Method 9056A	WG869680	100	05/09/16 16:51	05/09/16 16:51	CM

## DUP-EP-02 L832472-07 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 10:00	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:46	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:45	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 16:29	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870384	1	05/06/16 03:58	05/06/16 03:58	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 02:46	05/04/16 02:46	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:08	05/06/16 07:08	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 02:06	05/07/16 02:06	CSU
Wet Chemistry by Method 9056A	WG869689	50	05/07/16 02:21	05/07/16 02:21	CSU

## MW-88 L832472-08 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 08:10	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:48	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:48	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 06:47	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 09:30	05/05/16 09:30	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 03:06	05/04/16 03:06	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:09	05/06/16 07:09	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 02:36	05/07/16 02:36	CSU
Wet Chemistry by Method 9056A	WG869689	50	05/07/16 02:51	05/07/16 02:51	CSU

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-5A L832472-09 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 17:50

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869307	10	05/03/16 19:35	05/05/16 14:30	JDG
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:50	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:50	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 16:47	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG870384	1	05/05/16 23:22	05/05/16 23:22	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 03:27	05/04/16 03:27	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:11	05/06/16 07:11	ASK
Wet Chemistry by Method 9056A	WG868881	1	05/02/16 15:15	05/02/16 15:15	CM
Wet Chemistry by Method 9056A	WG868881	100	05/02/16 15:30	05/02/16 15:30	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

EB-EP-03 L832472-10 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 18:10

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869307	1	05/03/16 19:35	05/07/16 11:15	JDG
Metals (ICPMS) by Method 6020	WG870076	1	05/05/16 13:23	05/07/16 11:29	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 17:05	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 10:13	05/05/16 10:13	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 03:46	05/04/16 03:46	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:12	05/06/16 07:12	ASK
Wet Chemistry by Method 9056A	WG868881	1	05/02/16 12:31	05/02/16 12:31	CM

MW-7A L832472-11 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 16:35

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:55	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:55	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 17:24	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 10:35	05/05/16 10:35	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 04:06	05/04/16 04:06	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:13	05/06/16 07:13	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 03:06	05/07/16 03:06	CSU
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 03:50	05/07/16 03:50	CSU

DUP-EP-01 L832472-12 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 12:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 13:58	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:57	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 17:42	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 10:56	05/05/16 10:56	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 04:27	05/04/16 04:27	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:14	05/06/16 07:14	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 04:05	05/07/16 04:05	CSU
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 04:20	05/07/16 04:20	CSU

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## OCD-8A L832472-13 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 15:35

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Mercury by Method 7470A	WG869159	1	05/02/16 11:44	05/03/16 11:07	NJB
Mercury by Method 7470A	WG869579	1	05/03/16 18:43	05/04/16 09:32	NJB
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 14:00	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 17:00	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 09:47	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 11:43	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 18:00	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 11:18	05/05/16 11:18	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 04:47	05/04/16 04:47	DAH
Wet Chemistry by Method 353.2	WG870056	10	05/06/16 07:22	05/06/16 07:22	ASK
Wet Chemistry by Method 9012B	WG870326	1	05/06/16 12:26	05/12/16 15:30	DR
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 04:35	05/07/16 04:35	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 05:50	05/07/16 05:50	SAM

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

## MW-73 L832472-14 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 14:50

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 14:02	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 17:02	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 18:18	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869044	1	05/05/16 11:39	05/05/16 11:39	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 05:07	05/04/16 05:07	DAH
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:14	05/06/16 08:14	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 06:34	05/07/16 06:34	CSU
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 06:49	05/07/16 06:49	CSU

## TRIP BLANK-EP-01 L832472-15 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 00:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 00:45	05/04/16 00:45	DAH

## MW-74 L832472-16 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 15:45

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 14:10	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 17:09	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	20	05/02/16 16:48	05/05/16 04:46	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/03/16 18:47	05/03/16 18:47	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 05:27	05/04/16 05:27	DAH
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:16	05/06/16 08:16	ASK
Wet Chemistry by Method 9056A	WG869276	1	05/03/16 14:00	05/03/16 14:00	SAM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 18:29	05/10/16 18:29	CM

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



EB-EP-01 L832472-17 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 16:05

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869073	1	05/02/16 14:23	05/02/16 14:55	
Metals (ICPMS) by Method 6020	WG869307	1	05/03/16 19:35	05/07/16 11:17	JDG
Metals (ICPMS) by Method 6020	WG870076	1	05/05/16 13:23	05/07/16 11:32	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 18:55	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/03/16 19:08	05/03/16 19:08	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 05:46	05/04/16 05:46	DAH
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:19	05/06/16 08:19	ASK
Wet Chemistry by Method 9056A	WG868881	1	05/02/16 13:31	05/02/16 13:31	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

MW-79 L832472-18 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 16:45

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869074	1	05/02/16 15:20	05/02/16 15:59	
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 14:12	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 17:14	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 20:26	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/03/16 19:30	05/03/16 19:30	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 06:06	05/04/16 06:06	DAH
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:20	05/06/16 08:20	ASK
Wet Chemistry by Method 9056A	WG869276	1	05/03/16 14:15	05/03/16 14:15	SAM
Wet Chemistry by Method 9056A	WG869276	50	05/03/16 14:59	05/03/16 14:59	SAM

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

EB-EP-04 L832472-19 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 17:10

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869074	1	05/02/16 15:20	05/02/16 15:59	
Metals (ICPMS) by Method 6020	WG869307	1	05/03/16 19:35	05/07/16 11:27	JDG
Metals (ICPMS) by Method 6020	WG870076	1	05/05/16 13:23	05/07/16 11:34	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 20:44	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/03/16 19:51	05/03/16 19:51	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 06:26	05/04/16 06:26	DAH
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:25	05/06/16 08:25	ASK
Wet Chemistry by Method 9056A	WG869276	1	05/03/16 18:28	05/03/16 18:28	SAM

MW-6A L832472-20 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 08:10

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869534	1	05/03/16 18:05	05/03/16 18:57	MMF
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 14:16	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 17:18	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 07:05	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/03/16 20:13	05/03/16 20:13	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868984	1	05/04/16 06:46	05/04/16 06:46	DAH
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:26	05/06/16 08:26	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 07:04	05/07/16 07:04	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 07:19	05/07/16 07:19	SAM

ACCOUNT:

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## OCD-7AR L832472-21 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 09:00	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869541	1	05/04/16 03:25	05/04/16 03:49	JM
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 14:19	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 17:21	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 07:23	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/03/16 20:34	05/03/16 20:34	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 13:12	05/04/16 13:12	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:27	05/06/16 08:27	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 07:34	05/07/16 07:34	CSU
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 07:49	05/07/16 07:49	CSU

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

## OCD-6 L832472-22 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 09:55	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869541	1	05/04/16 03:25	05/04/16 03:49	JM
Metals (ICPMS) by Method 6020	WG869307	5	05/03/16 19:35	05/05/16 14:21	JDG
Metals (ICPMS) by Method 6020	WG870076	5	05/05/16 13:23	05/05/16 16:20	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 07:42	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/03/16 20:56	05/03/16 20:56	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 13:31	05/04/16 13:31	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:28	05/06/16 08:28	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 09:41	05/07/16 09:41	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 09:59	05/07/16 09:59	SAM

## MW-72 L832472-23 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 10:45	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869541	1	05/04/16 03:25	05/04/16 03:49	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:32	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:15	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 08:00	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/03/16 21:17	05/03/16 21:17	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 13:50	05/04/16 13:50	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:29	05/06/16 08:29	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 10:14	05/07/16 10:14	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 10:29	05/07/16 10:29	SAM

## MW-2A L832472-24 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 11:35	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	20	05/03/16 19:00	05/07/16 11:43	JDG
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:34	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:17	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 08:18	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/04/16 00:03	05/04/16 00:03	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 14:09	05/04/16 14:09	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:30	05/06/16 08:30	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 10:44	05/07/16 10:44	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 10:59	05/07/16 10:59	SAM

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-122 L832472-25 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 12:35

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:37	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:20	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 14:43	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/04/16 00:24	05/04/16 00:24	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 14:28	05/04/16 14:28	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:31	05/06/16 08:31	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 11:13	05/07/16 11:13	CSU
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 11:28	05/07/16 11:28	CSU

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

MW-121 L832472-26 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 13:25

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:44	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:27	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 15:01	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/04/16 00:46	05/04/16 00:46	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 14:48	05/04/16 14:48	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:32	05/06/16 08:32	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 04:50	05/07/16 04:50	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 05:05	05/07/16 05:05	SAM

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-124 L832472-27 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 17:25

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869074	1	05/02/16 15:20	05/02/16 15:59	
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:47	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:29	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 21:03	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/04/16 01:07	05/04/16 01:07	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 15:07	05/04/16 15:07	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:38	05/06/16 08:38	ASK
Wet Chemistry by Method 9056A	WG869276	1	05/03/16 15:14	05/03/16 15:14	SAM
Wet Chemistry by Method 9056A	WG869276	50	05/03/16 15:29	05/03/16 15:29	SAM

EB-EP-02 L832472-28 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 17:40

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869074	1	05/02/16 15:20	05/02/16 15:59	
Metals (ICPMS) by Method 6020	WG869316	1	05/03/16 19:00	05/07/16 11:41	JDG
Metals (ICPMS) by Method 6020	WG870080	1	05/05/16 17:40	05/09/16 12:06	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 21:21	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869702	1	05/04/16 13:55	05/04/16 13:55	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 15:25	05/04/16 15:25	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:39	05/06/16 08:39	ASK
Wet Chemistry by Method 9056A	WG869276	1	05/03/16 15:44	05/03/16 15:44	SAM

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-18A L832472-29 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 15:40

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869074	1	05/02/16 15:20	05/02/16 15:59	
Mercury by Method 7470A	WG869159	1	05/02/16 11:44	05/03/16 11:15	NJB
Mercury by Method 7470A	WG869579	1	05/03/16 18:43	05/04/16 09:38	NJB
Metals (ICPMS) by Method 6020	WG869316	20	05/03/16 19:00	05/07/16 11:46	JDG
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:52	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:31	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 09:52	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 11:48	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 21:39	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 15:44	05/04/16 15:44	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:40	05/06/16 08:40	ASK
Wet Chemistry by Method 9012B	WG870326	1	05/06/16 12:26	05/12/16 15:31	DR
Wet Chemistry by Method 9056A	WG869276	1	05/03/16 17:14	05/03/16 17:14	SAM
Wet Chemistry by Method 9056A	WG869276	100	05/03/16 16:29	05/03/16 16:29	SAM

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

MW-70 L832472-30 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/26/16 16:40

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869074	1	05/02/16 15:20	05/02/16 15:59	
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:54	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:33	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869252	1	05/02/16 16:48	05/03/16 21:57	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/04/16 01:29	05/04/16 01:29	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 16:03	05/04/16 16:03	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:41	05/06/16 08:41	ASK
Wet Chemistry by Method 9056A	WG869276	1	05/03/16 17:29	05/03/16 17:29	SAM
Wet Chemistry by Method 9056A	WG869276	50	05/03/16 17:44	05/03/16 17:44	SAM

OCD-1R L832472-31 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 08:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:57	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:37	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 15:19	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/04/16 01:50	05/04/16 01:50	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 16:22	05/04/16 16:22	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:42	05/06/16 08:42	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 15:19	05/07/16 15:19	CSU
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 15:34	05/07/16 15:34	CSU

OCD-2A L832472-32 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 08:50

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:59	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 12:40	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 15:37	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869045	1	05/04/16 02:11	05/04/16 02:11	JAH

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## OCD-2A L832472-32 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 08:50	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 16:41	05/04/16 16:41	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:43	05/06/16 08:43	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 15:49	05/07/16 15:49	CSU
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 16:04	05/07/16 16:04	CSU

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## OCD-3 L832472-33 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 09:40	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 04:02	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 16:30	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 15:55	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869702	1	05/04/16 14:16	05/04/16 14:16	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 16:59	05/04/16 16:59	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:44	05/06/16 08:44	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 16:19	05/07/16 16:19	CSU
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 16:34	05/07/16 16:34	CSU

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## OCD-4 L832472-34 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 10:30	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	20	05/03/16 19:00	05/07/16 11:48	JDG
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 04:04	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 16:33	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 16:13	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869702	1	05/04/16 17:03	05/04/16 17:03	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868985	1	05/04/16 17:18	05/04/16 17:18	BMB
Wet Chemistry by Method 353.2	WG870057	10	05/06/16 08:50	05/06/16 08:50	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 16:49	05/07/16 16:49	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 17:04	05/07/16 17:04	SAM

## OCD-5 L832472-35 GW

			Collected by SU / HM1 Team	Collected date/time 04/27/16 11:15	Received date/time 04/29/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	20	05/03/16 19:00	05/07/16 11:51	JDG
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 04:07	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 16:35	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 17:45	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869702	1	05/04/16 17:24	05/04/16 17:24	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG869976	1	05/04/16 22:28	05/04/16 22:28	LRL
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:26	05/06/16 15:26	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 08:04	05/07/16 08:04	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 08:20	05/07/16 08:20	SAM

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-11A L832472-36 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 12:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 03:22	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 16:37	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 18:03	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869702	1	05/04/16 17:45	05/04/16 17:45	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG869976	1	05/04/16 22:45	05/04/16 22:45	LRL
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:28	05/06/16 15:28	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 17:19	05/07/16 17:19	SAM
Wet Chemistry by Method 9056A	WG869689	100	05/07/16 18:04	05/07/16 18:04	SAM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-15 L832472-37 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 13:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869542	1	05/04/16 03:52	05/04/16 04:11	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 04:14	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 16:40	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869254	1	05/02/16 16:49	05/04/16 18:21	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/03/16 22:39	05/03/16 22:39	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG869976	1	05/04/16 23:02	05/04/16 23:02	LRL
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:30	05/06/16 15:30	ASK
Wet Chemistry by Method 9056A	WG869689	1	05/07/16 18:33	05/07/16 18:33	CSU
Wet Chemistry by Method 9056A	WG869689	50	05/07/16 18:48	05/07/16 18:48	CSU



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

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





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4980		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 06:59	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	769		5.19	1.00	100	100	05/09/2016 03:19	WG869680
Fluoride	4.80		0.00990	0.100	0.100	1	05/09/2016 04:05	WG869680
Sulfate	3770		7.74	5.00	500	100	05/09/2016 03:19	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0313		0.00125	0.00200	0.0100	5	05/05/2016 13:29	WG869307
Arsenic,Dissolved	0.0282		0.00125	0.00200	0.0100	5	05/05/2016 16:29	WG870076
Barium	0.0248	J	0.00180	0.00500	0.0250	5	05/05/2016 13:29	WG869307
Barium,Dissolved	0.0207	J	0.00180	0.00500	0.0250	5	05/05/2016 16:29	WG870076
Calcium	483		0.230	1.00	5.00	5	05/05/2016 13:29	WG869307
Chromium	0.0153		0.00270	0.00200	0.0100	5	05/05/2016 13:29	WG869307
Chromium,Dissolved	0.00814	J	0.00270	0.00200	0.0100	5	05/05/2016 16:29	WG870076
Iron	5.63		0.0750	0.100	0.500	5	05/05/2016 13:29	WG869307
Iron,Dissolved	3.77		0.0750	0.100	0.500	5	05/05/2016 16:29	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:29	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:29	WG870076
Manganese	0.573		0.00125	0.00500	0.0250	5	05/05/2016 13:29	WG869307
Manganese,Dissolved	0.532		0.00125	0.00500	0.0250	5	05/05/2016 16:29	WG870076
Potassium	36.7		0.185	1.00	5.00	5	05/05/2016 13:29	WG869307
Selenium	0.00364	J	0.00190	0.00200	0.0100	5	05/05/2016 13:29	WG869307
Selenium,Dissolved	0.00520	J	0.00190	0.00200	0.0100	5	05/05/2016 16:29	WG870076
Sodium	563		0.550	1.00	5.00	5	05/05/2016 13:29	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.310		0.0314	0.100	0.100	1	05/05/2016 07:21	WG869044
(S) a,a,q-Trifluorotoluene(FID)	99.3				62.0-128		05/05/2016 07:21	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	0.0120	J	0.0100	0.0500	0.0500	1	05/04/2016 01:05	WG868984
Benzene	0.00114		0.000331	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 01:05	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 01:05	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 01:05	WG868984



Collected date/time: 04/27/16 13:10

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 01:05	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 01:05	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 01:05	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 01:05	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 01:05	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 01:05	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 01:05	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Isopropylbenzene	0.00143		0.000326	0.00100	0.00100	1	05/04/2016 01:05	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 01:05	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 01:05	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 01:05	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 01:05	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 01:05	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 01:05	WG868984
n-Propylbenzene	0.000365	U	0.000349	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 01:05	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 01:05	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 01:05	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 01:05	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 01:05	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 01:05	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 01:05	WG868984
(S) Dibromofluoromethane	102				79.0-121		05/04/2016 01:05	WG868984
(S) 4-Bromofluorobenzene	97.3				80.1-120		05/04/2016 01:05	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	26.0		0.124	0.100	0.500	5	05/04/2016 08:55	WG869252
(S) o-Terphenyl	122				50.0-150		05/04/2016 08:55	WG869252



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 00:25	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 00:25	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 00:25	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 00:25	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 00:25	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 00:25	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 00:25	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 00:25	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 00:25	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 00:25	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 00:25	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 00:25	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 00:25	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 00:25	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 00:25	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 00:25	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 00:25	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 00:25	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 00:25	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 00:25	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 00:25	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 00:25	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 00:25	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 00:25	WG868984
(S) Dibromofluoromethane	101				79.0-121		05/04/2016 00:25	WG868984
(S) 4-Bromofluorobenzene	98.4				80.1-120		05/04/2016 00:25	WG868984

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5090		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:00	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1860		5.19	1.00	100	100	05/09/2016 15:03	WG869680
Fluoride	1.78		0.00990	0.100	0.100	1	05/09/2016 14:48	WG869680
Sulfate	2990		7.74	5.00	500	100	05/09/2016 15:03	WG869680

## Metals (ICPMS) by Method 6020

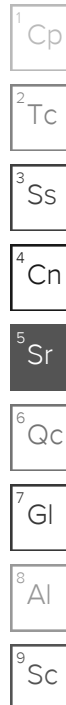
Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.188		0.00125	0.00200	0.0100	5	05/05/2016 13:31	WG869307
Arsenic,Dissolved	0.174		0.00125	0.00200	0.0100	5	05/05/2016 16:31	WG870076
Barium	0.0125	J	0.00180	0.00500	0.0250	5	05/05/2016 13:31	WG869307
Barium,Dissolved	0.0128	J	0.00180	0.00500	0.0250	5	05/05/2016 16:31	WG870076
Calcium	507		0.230	1.00	5.00	5	05/05/2016 13:31	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 13:31	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:31	WG870076
Iron	3.21		0.0750	0.100	0.500	5	05/05/2016 13:31	WG869307
Iron,Dissolved	2.99		0.0750	0.100	0.500	5	05/05/2016 16:31	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:31	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:31	WG870076
Manganese	2.39		0.00125	0.00500	0.0250	5	05/05/2016 13:31	WG869307
Manganese,Dissolved	2.29		0.00125	0.00500	0.0250	5	05/05/2016 16:31	WG870076
Potassium	4.03	J	0.185	1.00	5.00	5	05/05/2016 13:31	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:31	WG869307
Selenium,Dissolved	0.00269	J	0.00190	0.00200	0.0100	5	05/05/2016 16:31	WG870076
Sodium	1060		0.550	1.00	5.00	5	05/05/2016 13:31	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.402		0.0314	0.100	0.100	1	05/05/2016 07:43	WG869044
(S) a,a,q-Trifluorotoluene(FID)	99.1				62.0-128		05/05/2016 07:43	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 01:25	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 01:25	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 01:25	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 01:25	WG868984





Collected date/time: 04/27/16 12:15

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 01:25	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 01:25	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 01:25	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 01:25	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 01:25	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 01:25	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 01:25	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Isopropylbenzene	0.00698		0.000326	0.00100	0.00100	1	05/04/2016 01:25	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 01:25	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 01:25	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 01:25	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 01:25	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 01:25	WG868984
Methyl tert-butyl ether	0.000605	U	0.000367	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 01:25	WG868984
n-Propylbenzene	0.000357	U	0.000349	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 01:25	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 01:25	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 01:25	WG868984
o-Xylene	0.000352	U	0.000341	0.00100	0.00100	1	05/04/2016 01:25	WG868984
m&p-Xylene	0.00166		0.000719	0.00100	0.00100	1	05/04/2016 01:25	WG868984
Xylenes, Total	0.00201	U	0.00106	0.00300	0.00300	1	05/04/2016 01:25	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 01:25	WG868984
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 01:25	WG868984
(S) 4-Bromofluorobenzene	97.1				80.1-120		05/04/2016 01:25	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.76		0.124	0.100	0.500	5	05/04/2016 08:36	WG869252
(S) o-Terphenyl	104				50.0-150		05/04/2016 08:36	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5850		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:01	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1880		5.19	1.00	100	100	05/09/2016 15:34	WG869680
Fluoride	1.09		0.00990	0.100	0.100	1	05/09/2016 15:19	WG869680
Sulfate	2410		7.74	5.00	500	100	05/09/2016 15:34	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0275		0.00125	0.00200	0.0100	5	05/05/2016 13:34	WG869307
Arsenic,Dissolved	0.0254		0.00125	0.00200	0.0100	5	05/05/2016 16:34	WG870076
Barium	0.0242	J	0.00180	0.00500	0.0250	5	05/05/2016 13:34	WG869307
Barium,Dissolved	0.0211	J	0.00180	0.00500	0.0250	5	05/05/2016 16:34	WG870076
Calcium	570		0.230	1.00	5.00	5	05/05/2016 13:34	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 13:34	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:34	WG870076
Iron	U		0.0750	0.100	0.500	5	05/05/2016 13:34	WG869307
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 16:34	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:34	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:34	WG870076
Manganese	2.92		0.00125	0.00500	0.0250	5	05/05/2016 13:34	WG869307
Manganese,Dissolved	2.85		0.00125	0.00500	0.0250	5	05/05/2016 16:34	WG870076
Potassium	3.73	J	0.185	1.00	5.00	5	05/05/2016 13:34	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:34	WG869307
Selenium,Dissolved	0.00220	J	0.00190	0.00200	0.0100	5	05/05/2016 16:34	WG870076
Sodium	1320		0.550	1.00	5.00	5	05/05/2016 13:34	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	1.83		0.0314	0.100	0.100	1	05/05/2016 08:04	WG869044
(S) a,a,a-Trifluorotoluene(FID)	98.1				62.0-128		05/05/2016 08:04	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 01:46	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 01:46	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 01:46	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 01:46	WG868984



Collected date/time: 04/27/16 11:15

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 01:46	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 01:46	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 01:46	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 01:46	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 01:46	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 01:46	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 01:46	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 01:46	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 01:46	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 01:46	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 01:46	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 01:46	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 01:46	WG868984
Methyl tert-butyl ether	0.00143		0.000367	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 01:46	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 01:46	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 01:46	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 01:46	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 01:46	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 01:46	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 01:46	WG868984
(S) Toluene-d8	104				90.0-115		05/04/2016 01:46	WG868984
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 01:46	WG868984
(S) 4-Bromofluorobenzene	99.3				80.1-120		05/04/2016 01:46	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.82		0.0247	0.100	0.100	1	05/03/2016 15:35	WG869252
(S) o-Terphenyl	108				50.0-150		05/03/2016 15:35	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5120		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:02	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1530		5.19	1.00	100	100	05/09/2016 16:05	WG869680
Fluoride	0.826		0.00990	0.100	0.100	1	05/09/2016 15:50	WG869680
Sulfate	2220		7.74	5.00	500	100	05/09/2016 16:05	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0196		0.00125	0.00200	0.0100	5	05/05/2016 13:41	WG869307
Arsenic,Dissolved	0.0247		0.00125	0.00200	0.0100	5	05/05/2016 16:41	WG870076
Barium	0.0123	J	0.00180	0.00500	0.0250	5	05/05/2016 13:41	WG869307
Barium,Dissolved	0.0174	J	0.00180	0.00500	0.0250	5	05/05/2016 16:41	WG870076
Calcium	523		0.230	1.00	5.00	5	05/05/2016 13:41	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 13:41	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:41	WG870076
Iron	U		0.0750	0.100	0.500	5	05/05/2016 13:41	WG869307
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 16:41	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:41	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:41	WG870076
Manganese	2.83		0.00125	0.00500	0.0250	5	05/05/2016 13:41	WG869307
Manganese,Dissolved	2.60		0.00125	0.00500	0.0250	5	05/05/2016 19:47	WG870076
Potassium	3.83	J	0.185	1.00	5.00	5	05/05/2016 13:41	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:41	WG869307
Selenium,Dissolved	0.00211	J	0.00190	0.00200	0.0100	5	05/05/2016 16:41	WG870076
Sodium	1110		0.550	1.00	5.00	5	05/05/2016 13:41	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	1.06		0.0314	0.100	0.100	1	05/05/2016 08:26	WG869044
(S) a,a,q-Trifluorotoluene(FID)	97.8				62.0-128		05/05/2016 08:26	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 02:06	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 02:06	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 02:06	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 02:06	WG868984





Collected date/time: 04/27/16 10:20

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 02:06	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 02:06	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 02:06	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 02:06	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 02:06	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 02:06	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 02:06	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 02:06	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 02:06	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 02:06	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 02:06	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 02:06	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 02:06	WG868984
Methyl tert-butyl ether	0.00216		0.000367	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 02:06	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 02:06	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 02:06	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 02:06	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 02:06	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 02:06	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 02:06	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 02:06	WG868984
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 02:06	WG868984
(S) 4-Bromofluorobenzene	98.9				80.1-120		05/04/2016 02:06	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.19		0.0247	0.100	0.100	1	05/03/2016 15:53	WG869252
(S) o-Terphenyl	104				50.0-150		05/03/2016 15:53	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	6190		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:07	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1890		5.19	1.00	100	100	05/09/2016 16:51	WG869680
Fluoride	0.645		0.00990	0.100	0.100	1	05/09/2016 14:17	WG869680
Sulfate	2340		7.74	5.00	500	100	05/09/2016 16:51	WG869680

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0449		0.00125	0.00200	0.0100	5	05/05/2016 13:43	WG869307
Arsenic,Dissolved	0.0383		0.00125	0.00200	0.0100	5	05/05/2016 16:43	WG870076
Barium	0.0174	J	0.00180	0.00500	0.0250	5	05/05/2016 13:43	WG869307
Barium,Dissolved	0.0157	J	0.00180	0.00500	0.0250	5	05/05/2016 16:43	WG870076
Calcium	548		0.230	1.00	5.00	5	05/05/2016 13:43	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 13:43	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:43	WG870076
Iron	4.42		0.0750	0.100	0.500	5	05/05/2016 13:43	WG869307
Iron,Dissolved	2.37		0.0750	0.100	0.500	5	05/05/2016 16:43	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:43	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:43	WG870076
Manganese	6.06		0.00125	0.00500	0.0250	5	05/05/2016 13:43	WG869307
Manganese,Dissolved	5.83		0.00125	0.00500	0.0250	5	05/05/2016 16:43	WG870076
Potassium	4.08	J	0.185	1.00	5.00	5	05/05/2016 13:43	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:43	WG869307
Selenium,Dissolved	0.00242	J	0.00190	0.00200	0.0100	5	05/05/2016 16:43	WG870076
Sodium	1440		0.550	1.00	5.00	5	05/05/2016 13:43	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	3.53		0.0314	0.100	0.100	1	05/06/2016 03:35	WG870384
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/06/2016 03:35	WG870384

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 02:26	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 02:26	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 02:26	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 02:26	WG868984



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 02:26	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 02:26	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 02:26	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 02:26	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 02:26	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 02:26	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 02:26	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 02:26	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 02:26	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 02:26	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 02:26	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 02:26	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 02:26	WG868984
Methyl tert-butyl ether	0.00907		0.000367	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 02:26	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 02:26	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 02:26	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 02:26	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 02:26	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 02:26	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 02:26	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 02:26	WG868984
(S) Dibromofluoromethane	102				79.0-121		05/04/2016 02:26	WG868984
(S) 4-Bromofluorobenzene	3440	J1			80.1-120		05/04/2016 02:26	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7.43		0.0247	0.100	0.100	1	05/03/2016 16:11	WG869252
(S) o-Terphenyl	116				50.0-150		05/03/2016 16:11	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	6160		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:08	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1900		2.60	1.00	50.0	50	05/07/2016 02:21	WG869689
Fluoride	0.660		0.00990	0.100	0.100	1	05/07/2016 02:06	WG869689
Sulfate	2560		3.87	5.00	250	50	05/07/2016 02:21	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0455		0.00125	0.00200	0.0100	5	05/05/2016 13:46	WG869307
Arsenic,Dissolved	0.0370		0.00125	0.00200	0.0100	5	05/05/2016 16:45	WG870076
Barium	0.0167	J	0.00180	0.00500	0.0250	5	05/05/2016 13:46	WG869307
Barium,Dissolved	0.0171	J	0.00180	0.00500	0.0250	5	05/05/2016 16:45	WG870076
Calcium	541		0.230	1.00	5.00	5	05/05/2016 13:46	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 13:46	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:45	WG870076
Iron	4.46		0.0750	0.100	0.500	5	05/05/2016 13:46	WG869307
Iron,Dissolved	2.39		0.0750	0.100	0.500	5	05/05/2016 16:45	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:46	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:45	WG870076
Manganese	6.20		0.00125	0.00500	0.0250	5	05/05/2016 13:46	WG869307
Manganese,Dissolved	5.87		0.00125	0.00500	0.0250	5	05/05/2016 16:45	WG870076
Potassium	4.04	J	0.185	1.00	5.00	5	05/05/2016 13:46	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:46	WG869307
Selenium,Dissolved	0.00218	J	0.00190	0.00200	0.0100	5	05/05/2016 16:45	WG870076
Sodium	1440		0.550	1.00	5.00	5	05/05/2016 13:46	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	4.02		0.0314	0.100	0.100	1	05/06/2016 03:58	WG870384
(S) a,a,q-Trifluorotoluene(FID)	102				62.0-128		05/06/2016 03:58	WG870384

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 02:46	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 02:46	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 02:46	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 02:46	WG868984



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 02:46	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 02:46	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 02:46	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 02:46	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 02:46	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 02:46	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 02:46	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 02:46	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 02:46	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 02:46	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 02:46	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 02:46	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 02:46	WG868984
Methyl tert-butyl ether	0.00887		0.000367	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 02:46	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 02:46	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 02:46	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 02:46	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 02:46	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 02:46	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 02:46	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 02:46	WG868984
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 02:46	WG868984
(S) 4-Bromofluorobenzene	3420	J1			80.1-120		05/04/2016 02:46	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7.66		0.0247	0.100	0.100	1	05/03/2016 16:29	WG869252
(S) o-Terphenyl	116				50.0-150		05/03/2016 16:29	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5800		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:09	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	1610		2.60	1.00	50.0	50	05/07/2016 02:51	WG869689
Fluoride	1.22		0.00990	0.100	0.100	1	05/07/2016 02:36	WG869689
Sulfate	2600		3.87	5.00	250	50	05/07/2016 02:51	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00976	J	0.00125	0.00200	0.0100	5	05/05/2016 13:48	WG869307
Arsenic,Dissolved	0.00969	J	0.00125	0.00200	0.0100	5	05/05/2016 16:48	WG870076
Barium	0.0107	J	0.00180	0.00500	0.0250	5	05/05/2016 13:48	WG869307
Barium,Dissolved	0.0111	J	0.00180	0.00500	0.0250	5	05/05/2016 16:48	WG870076
Calcium	417		0.230	1.00	5.00	5	05/05/2016 13:48	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 13:48	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:48	WG870076
Iron	U		0.0750	0.100	0.500	5	05/05/2016 13:48	WG869307
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 16:48	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:48	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:48	WG870076
Manganese	0.844		0.00125	0.00500	0.0250	5	05/05/2016 13:48	WG869307
Manganese,Dissolved	0.852		0.00125	0.00500	0.0250	5	05/05/2016 16:48	WG870076
Potassium	3.10	J	0.185	1.00	5.00	5	05/05/2016 13:48	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:48	WG869307
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 16:48	WG870076
Sodium	1220		0.550	1.00	5.00	5	05/05/2016 13:48	WG869307

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/05/2016 09:30	WG869044
(S) a,a,a-Trifluorotoluene(FID)	98.0				62.0-128		05/05/2016 09:30	WG869044

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 03:06	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 03:06	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 03:06	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 03:06	WG868984



Collected date/time: 04/27/16 08:10

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 03:06	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 03:06	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 03:06	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 03:06	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 03:06	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 03:06	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 03:06	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 03:06	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 03:06	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 03:06	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 03:06	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 03:06	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 03:06	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 03:06	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 03:06	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 03:06	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 03:06	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 03:06	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 03:06	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 03:06	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 03:06	WG868984
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 03:06	WG868984
(S) 4-Bromofluorobenzene	96.4				80.1-120		05/04/2016 03:06	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.636		0.0247	0.100	0.100	1	05/04/2016 06:47	WG869254
(S) o-Terphenyl	109				50.0-150		05/04/2016 06:47	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	13700		2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	1.72		0.197	0.100	1.00	10	05/06/2016 07:11	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	3010		5.19	1.00	100	100	05/02/2016 15:30	WG868881
Fluoride	3.11		0.00990	0.100	0.100	1	05/02/2016 15:15	WG868881
Sulfate	5610		7.74	5.00	500	100	05/02/2016 15:30	WG868881

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.213		0.00125	0.00200	0.0100	5	05/05/2016 13:50	WG869307
Arsenic,Dissolved	0.179		0.00125	0.00200	0.0100	5	05/05/2016 16:50	WG870076
Barium	0.0149	J	0.00180	0.00500	0.0250	5	05/05/2016 13:50	WG869307
Barium,Dissolved	0.0128	J	0.00180	0.00500	0.0250	5	05/05/2016 16:50	WG870076
Calcium	472		0.230	1.00	5.00	5	05/05/2016 13:50	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 13:50	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:50	WG870076
Iron	8.10		0.0750	0.100	0.500	5	05/05/2016 13:50	WG869307
Iron,Dissolved	6.87		0.0750	0.100	0.500	5	05/05/2016 16:50	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:50	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:50	WG870076
Manganese	1.34		0.00125	0.00500	0.0250	5	05/05/2016 13:50	WG869307
Manganese,Dissolved	1.33		0.00125	0.00500	0.0250	5	05/05/2016 16:50	WG870076
Potassium	7.39		0.185	1.00	5.00	5	05/05/2016 13:50	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:50	WG869307
Selenium,Dissolved	0.00262	J	0.00190	0.00200	0.0100	5	05/05/2016 16:50	WG870076
Sodium	2990		1.10	1.00	10.0	10	05/05/2016 14:30	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	2.09		0.0314	0.100	0.100	1	05/05/2016 23:22	WG870384
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/05/2016 23:22	WG870384

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 03:27	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 03:27	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 03:27	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 03:27	WG868984





Collected date/time: 04/26/16 17:50

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 03:27	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 03:27	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 03:27	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 03:27	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 03:27	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 03:27	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 03:27	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 03:27	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 03:27	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 03:27	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 03:27	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 03:27	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 03:27	WG868984
Methyl tert-butyl ether	0.00212		0.000367	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 03:27	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 03:27	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 03:27	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 03:27	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 03:27	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 03:27	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 03:27	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 03:27	WG868984
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 03:27	WG868984
(S) 4-Bromofluorobenzene	1970	J1			80.1-120		05/04/2016 03:27	WG868984

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.92		0.0247	0.100	0.100	1	05/03/2016 16:47	WG869252
(S) o-Terphenyl	107				50.0-150		05/03/2016 16:47	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3.00	J	2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:12	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	U		0.0519	1.00	1.00	1	05/02/2016 12:31	WG868881
Fluoride	U		0.00990	0.100	0.100	1	05/02/2016 12:31	WG868881
Sulfate	U		0.0774	5.00	5.00	1	05/02/2016 12:31	WG868881

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.000570	J	0.000250	0.00200	0.00200	1	05/07/2016 11:15	WG869307
Arsenic,Dissolved	0.000594	J	0.000250	0.00200	0.00200	1	05/07/2016 11:29	WG870076
Barium	U		0.000360	0.00500	0.00500	1	05/07/2016 11:15	WG869307
Barium,Dissolved	U		0.000360	0.00500	0.00500	1	05/07/2016 11:29	WG870076
Calcium	U		0.0460	1.00	1.00	1	05/07/2016 11:15	WG869307
Chromium	U		0.000540	0.00200	0.00200	1	05/07/2016 11:15	WG869307
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/07/2016 11:29	WG870076
Iron	U		0.0150	0.100	0.100	1	05/07/2016 11:15	WG869307
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/07/2016 11:29	WG870076
Lead	U		0.000240	0.00200	0.00200	1	05/07/2016 11:15	WG869307
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/07/2016 11:29	WG870076
Manganese	0.000252	J	0.000250	0.00500	0.00500	1	05/07/2016 11:15	WG869307
Manganese,Dissolved	0.000385	J	0.000250	0.00500	0.00500	1	05/07/2016 11:29	WG870076
Potassium	U		0.0370	1.00	1.00	1	05/07/2016 11:15	WG869307
Selenium	U		0.000380	0.00200	0.00200	1	05/07/2016 11:15	WG869307
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/07/2016 11:29	WG870076
Sodium	U		0.110	1.00	1.00	1	05/07/2016 11:15	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/05/2016 10:13	WG869044
(S) a,a,a-Trifluorotoluene(FID)	98.9				62.0-128		05/05/2016 10:13	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 03:46	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 03:46	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 03:46	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 03:46	WG868984



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 03:46	WG868984
Chloroform	0.000742	U	0.000324	0.00500	0.00500	1	05/04/2016 03:46	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 03:46	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 03:46	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 03:46	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 03:46	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 03:46	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 03:46	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 03:46	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 03:46	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 03:46	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 03:46	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 03:46	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 03:46	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 03:46	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 03:46	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 03:46	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 03:46	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 03:46	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 03:46	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 03:46	WG868984
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 03:46	WG868984
(S) 4-Bromofluorobenzene	99.1				80.1-120		05/04/2016 03:46	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0593	U	0.0247	0.100	0.100	1	05/03/2016 17:05	WG869252
(S) o-Terphenyl	104				50.0-150		05/03/2016 17:05	WG869252



Collected date/time: 04/26/16 16:35

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## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	7620		2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:13	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	2500		5.19	1.00	100	100	05/07/2016 03:50	WG869689
Fluoride	1.24		0.00990	0.100	0.100	1	05/07/2016 03:06	WG869689
Sulfate	3360		7.74	5.00	500	100	05/07/2016 03:50	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0382		0.00125	0.00200	0.0100	5	05/05/2016 13:55	WG869307
Arsenic,Dissolved	0.0224		0.00125	0.00200	0.0100	5	05/05/2016 16:55	WG870076
Barium	0.0170	J	0.00180	0.00500	0.0250	5	05/05/2016 13:55	WG869307
Barium,Dissolved	0.0170	J	0.00180	0.00500	0.0250	5	05/05/2016 16:55	WG870076
Calcium	459		0.230	1.00	5.00	5	05/05/2016 13:55	WG869307
Chromium	0.00370	J	0.00270	0.00200	0.0100	5	05/05/2016 13:55	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:55	WG870076
Iron	6.35		0.0750	0.100	0.500	5	05/05/2016 13:55	WG869307
Iron,Dissolved	2.63		0.0750	0.100	0.500	5	05/05/2016 16:55	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:55	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:55	WG870076
Manganese	0.682		0.00125	0.00500	0.0250	5	05/05/2016 13:55	WG869307
Manganese,Dissolved	0.634		0.00125	0.00500	0.0250	5	05/05/2016 16:55	WG870076
Potassium	4.18	J	0.185	1.00	5.00	5	05/05/2016 13:55	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:55	WG869307
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 16:55	WG870076
Sodium	1810		0.550	1.00	5.00	5	05/05/2016 13:55	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.251		0.0314	0.100	0.100	1	05/05/2016 10:35	WG869044
(S) a,a,q-Trifluorotoluene(FID)	98.3				62.0-128		05/05/2016 10:35	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 04:06	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 04:06	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 04:06	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 04:06	WG868984



Collected date/time: 04/26/16 16:35

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 04:06	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 04:06	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 04:06	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 04:06	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 04:06	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 04:06	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 04:06	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 04:06	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 04:06	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 04:06	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 04:06	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 04:06	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 04:06	WG868984
Methyl tert-butyl ether	0.00168		0.000367	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 04:06	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 04:06	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 04:06	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 04:06	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 04:06	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 04:06	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 04:06	WG868984
(S) Toluene-d8	104				90.0-115		05/04/2016 04:06	WG868984
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 04:06	WG868984
(S) 4-Bromofluorobenzene	97.5				80.1-120		05/04/2016 04:06	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.22		0.0247	0.100	0.100	1	05/03/2016 17:24	WG869252
(S) o-Terphenyl	107				50.0-150		05/03/2016 17:24	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	7540		2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U	J6	0.197	0.100	1.00	10	05/06/2016 07:14	WG870056

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	2550		5.19	1.00	100	100	05/07/2016 04:20	WG869689
Fluoride	1.24		0.00990	0.100	0.100	1	05/07/2016 04:05	WG869689
Sulfate	3710		7.74	5.00	500	100	05/07/2016 04:20	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0305		0.00125	0.00200	0.0100	5	05/05/2016 13:58	WG869307
Arsenic,Dissolved	0.0226		0.00125	0.00200	0.0100	5	05/05/2016 16:57	WG870076
Barium	0.0158	J	0.00180	0.00500	0.0250	5	05/05/2016 13:58	WG869307
Barium,Dissolved	0.0174	J	0.00180	0.00500	0.0250	5	05/05/2016 16:57	WG870076
Calcium	423		0.230	1.00	5.00	5	05/05/2016 13:58	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 13:58	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:57	WG870076
Iron	4.43		0.0750	0.100	0.500	5	05/05/2016 13:58	WG869307
Iron,Dissolved	2.56		0.0750	0.100	0.500	5	05/05/2016 16:57	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 13:58	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:57	WG870076
Manganese	0.588		0.00125	0.00500	0.0250	5	05/05/2016 13:58	WG869307
Manganese,Dissolved	0.642		0.00125	0.00500	0.0250	5	05/05/2016 16:57	WG870076
Potassium	3.94	J	0.185	1.00	5.00	5	05/05/2016 13:58	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 13:58	WG869307
Selenium,Dissolved	0.00207	J	0.00190	0.00200	0.0100	5	05/05/2016 16:57	WG870076
Sodium	1690		0.550	1.00	5.00	5	05/05/2016 13:58	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.269		0.0314	0.100	0.100	1	05/05/2016 10:56	WG869044
(S) a,a,a-Trifluorotoluene(FID)	98.3				62.0-128		05/05/2016 10:56	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 04:27	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 04:27	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 04:27	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 04:27	WG868984



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 04:27	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 04:27	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 04:27	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 04:27	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 04:27	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 04:27	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 04:27	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 04:27	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 04:27	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 04:27	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 04:27	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 04:27	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 04:27	WG868984
Methyl tert-butyl ether	0.00168		0.000367	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 04:27	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 04:27	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 04:27	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 04:27	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 04:27	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 04:27	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 04:27	WG868984
(S) Toluene-d8	104				90.0-115		05/04/2016 04:27	WG868984
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 04:27	WG868984
(S) 4-Bromofluorobenzene	97.0				80.1-120		05/04/2016 04:27	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.32		0.0247	0.100	0.100	1	05/03/2016 17:42	WG869252
(S) o-Terphenyl	108				50.0-150		05/03/2016 17:42	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	11000		2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 07:22	WG870056

## Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00180	0.00500	0.00500	1	05/12/2016 15:30	WG870326

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	3480		5.19	1.00	100	100	05/07/2016 05:50	WG869689
Fluoride	1.88		0.00990	0.100	0.100	1	05/07/2016 04:35	WG869689
Sulfate	3630		7.74	5.00	500	100	05/07/2016 05:50	WG869689

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/03/2016 11:07	WG869159
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 09:32	WG869579

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0618		0.00125	0.00200	0.0100	5	05/05/2016 14:00	WG869307
Arsenic,Dissolved	0.0651		0.00125	0.00200	0.0100	5	05/05/2016 17:00	WG870076
Barium	0.0199	J	0.00180	0.00500	0.0250	5	05/05/2016 14:00	WG869307
Barium,Dissolved	0.0222	J	0.00180	0.00500	0.0250	5	05/05/2016 17:00	WG870076
Boron	0.813		0.0150	0.0200	0.200	10	05/07/2016 09:47	WG870589
Boron,Dissolved	0.816		0.0150	0.0200	0.200	10	05/09/2016 11:43	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/05/2016 14:00	WG869307
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/05/2016 17:00	WG870076
Calcium	762		0.230	1.00	5.00	5	05/05/2016 14:00	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 14:00	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 17:00	WG870076
Cobalt	U		0.00130	0.00200	0.0100	5	05/05/2016 14:00	WG869307
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/05/2016 17:00	WG870076
Iron	8.89		0.0750	0.100	0.500	5	05/05/2016 14:00	WG869307
Iron,Dissolved	9.02		0.0750	0.100	0.500	5	05/05/2016 17:00	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 14:00	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 17:00	WG870076
Manganese	3.80		0.00125	0.00500	0.0250	5	05/05/2016 14:00	WG869307
Manganese,Dissolved	3.89		0.00125	0.00500	0.0250	5	05/05/2016 17:00	WG870076
Nickel	0.0306		0.00350	0.00200	0.0200	10	05/07/2016 09:47	WG870589
Nickel,Dissolved	0.0331		0.00350	0.00200	0.0200	10	05/09/2016 11:43	WG870591
Potassium	9.09		0.185	1.00	5.00	5	05/05/2016 14:00	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 14:00	WG869307
Selenium,Dissolved	0.00226	J	0.00190	0.00200	0.0100	5	05/05/2016 17:00	WG870076
Sodium	2410		0.550	1.00	5.00	5	05/05/2016 14:00	WG869307





## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/05/2016 14:00	WG869307
Uranium,Dissolved	U		0.00165	0.0100	0.0500	5	05/05/2016 17:00	WG870076
Vanadium	0.00190	J	0.000900	0.00500	0.0250	5	05/05/2016 14:00	WG869307
Vanadium,Dissolved	0.00186	J	0.000900	0.00500	0.0250	5	05/05/2016 17:00	WG870076

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.726		0.0314	0.100	0.100	1	05/05/2016 11:18	WG869044
(S) a,a,a-Trifluorotoluene(FID)	98.0				62.0-128		05/05/2016 11:18	WG869044

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 04:47	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 04:47	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 04:47	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 04:47	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 04:47	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 04:47	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 04:47	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 04:47	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 04:47	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 04:47	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 04:47	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 04:47	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 04:47	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 04:47	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 04:47	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 04:47	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 04:47	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 04:47	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 04:47	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 04:47	WG868984
Methyl tert-butyl ether	0.00475		0.000367	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 04:47	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 04:47	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 04:47	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 04:47	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 04:47	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 04:47	WG868984

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/26/16 15:35

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	0.000482	J	0.000373	0.00100	0.00100	1	05/04/2016 04:47	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 04:47	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 04:47	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 04:47	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 04:47	WG868984
(S) Toluene-d8	105				90.0-115		05/04/2016 04:47	WG868984
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 04:47	WG868984
(S) 4-Bromofluorobenzene	96.7				80.1-120		05/04/2016 04:47	WG868984

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.26		0.0247	0.100	0.100	1	05/03/2016 18:00	WG869252
(S) o-Terphenyl	112				50.0-150		05/03/2016 18:00	WG869252

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	9360		2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.501	J P1	0.197	0.100	1.00	10	05/06/2016 08:14	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	2790		5.19	1.00	100	100	05/07/2016 06:49	WG869689
Fluoride	1.96		0.00990	0.100	0.100	1	05/07/2016 06:34	WG869689
Sulfate	5090		7.74	5.00	500	100	05/07/2016 06:49	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0990		0.00125	0.00200	0.0100	5	05/05/2016 14:02	WG869307
Arsenic,Dissolved	0.0843		0.00125	0.00200	0.0100	5	05/05/2016 17:02	WG870076
Barium	0.0114	J	0.00180	0.00500	0.0250	5	05/05/2016 14:02	WG869307
Barium,Dissolved	0.0109	J	0.00180	0.00500	0.0250	5	05/05/2016 17:02	WG870076
Calcium	597		0.230	1.00	5.00	5	05/05/2016 14:02	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 14:02	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 17:02	WG870076
Iron	8.28		0.0750	0.100	0.500	5	05/05/2016 14:02	WG869307
Iron,Dissolved	3.67		0.0750	0.100	0.500	5	05/05/2016 17:02	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 14:02	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 17:02	WG870076
Manganese	3.17		0.00125	0.00500	0.0250	5	05/05/2016 14:02	WG869307
Manganese,Dissolved	3.00		0.00125	0.00500	0.0250	5	05/05/2016 17:02	WG870076
Potassium	2.32	J	0.185	1.00	5.00	5	05/05/2016 14:02	WG869307
Selenium	0.00201	J	0.00190	0.00200	0.0100	5	05/05/2016 14:02	WG869307
Selenium,Dissolved	0.00314	J	0.00190	0.00200	0.0100	5	05/05/2016 17:02	WG870076
Sodium	2240		0.550	1.00	5.00	5	05/05/2016 14:02	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.925		0.0314	0.100	0.100	1	05/05/2016 11:39	WG869044
(S) a,a,a-Trifluorotoluene(FID)	98.4				62.0-128		05/05/2016 11:39	WG869044

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 05:07	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 05:07	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 05:07	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 05:07	WG868984



Collected date/time: 04/26/16 14:50

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 05:07	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 05:07	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 05:07	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 05:07	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 05:07	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 05:07	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 05:07	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 05:07	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 05:07	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 05:07	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 05:07	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 05:07	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 05:07	WG868984
Methyl tert-butyl ether	0.00270		0.000367	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 05:07	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 05:07	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,2,4-Trimethylbenzene	0.00171		0.000373	0.00100	0.00100	1	05/04/2016 05:07	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 05:07	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 05:07	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 05:07	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 05:07	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 05:07	WG868984
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 05:07	WG868984
(S) 4-Bromofluorobenzene	97.9				80.1-120		05/04/2016 05:07	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5.17		0.0247	0.100	0.100	1	05/03/2016 18:18	WG869252
(S) o-Terphenyl	118				50.0-150		05/03/2016 18:18	WG869252



Collected date/time: 04/26/16 00:00

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 00:45	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 00:45	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 00:45	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 00:45	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 00:45	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 00:45	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 00:45	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 00:45	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 00:45	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 00:45	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 00:45	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 00:45	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 00:45	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 00:45	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 00:45	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 00:45	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 00:45	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 00:45	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 00:45	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 00:45	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 00:45	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 00:45	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 00:45	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 00:45	WG868984
(S) Dibromofluoromethane	101				79.0-121		05/04/2016 00:45	WG868984
(S) 4-Bromofluorobenzene	100				80.1-120		05/04/2016 00:45	WG868984

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	8280		2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.796	J	0.197	0.100	1.00	10	05/06/2016 08:16	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1640		5.19	1.00	100	100	05/10/2016 18:29	WG870882
Fluoride	7.44		0.00990	0.100	0.100	1	05/03/2016 14:00	WG869276
Sulfate	3100		7.74	5.00	500	100	05/10/2016 18:29	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.136		0.00125	0.00200	0.0100	5	05/05/2016 14:10	WG869307
Arsenic,Dissolved	0.135		0.00125	0.00200	0.0100	5	05/05/2016 17:09	WG870076
Barium	0.0151	J	0.00180	0.00500	0.0250	5	05/05/2016 14:10	WG869307
Barium,Dissolved	0.0133	J	0.00180	0.00500	0.0250	5	05/05/2016 17:09	WG870076
Calcium	632		0.230	1.00	5.00	5	05/05/2016 14:10	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 14:10	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 17:09	WG870076
Iron	0.756		0.0750	0.100	0.500	5	05/05/2016 14:10	WG869307
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 17:09	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 14:10	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 17:09	WG870076
Manganese	2.19		0.00125	0.00500	0.0250	5	05/05/2016 14:10	WG869307
Manganese,Dissolved	2.20		0.00125	0.00500	0.0250	5	05/05/2016 17:09	WG870076
Potassium	35.6		0.185	1.00	5.00	5	05/05/2016 14:10	WG869307
Selenium	0.0150		0.00190	0.00200	0.0100	5	05/05/2016 14:10	WG869307
Selenium,Dissolved	0.0155		0.00190	0.00200	0.0100	5	05/05/2016 17:09	WG870076
Sodium	2080		0.550	1.00	5.00	5	05/05/2016 14:10	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	1.20		0.0314	0.100	0.100	1	05/03/2016 18:47	WG869045
(S) a,a,a-Trifluorotoluene(FID)	103				62.0-128		05/03/2016 18:47	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 05:27	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 05:27	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 05:27	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 05:27	WG868984



Collected date/time: 04/26/16 15:45

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 05:27	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 05:27	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 05:27	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 05:27	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 05:27	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 05:27	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 05:27	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 05:27	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 05:27	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 05:27	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 05:27	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 05:27	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 05:27	WG868984
Methyl tert-butyl ether	0.000972	J	0.000367	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 05:27	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 05:27	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,2,4-Trimethylbenzene	0.00216		0.000373	0.00100	0.00100	1	05/04/2016 05:27	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 05:27	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 05:27	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 05:27	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 05:27	WG868984
(S) Toluene-d8	104				90.0-115		05/04/2016 05:27	WG868984
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 05:27	WG868984
(S) 4-Bromofluorobenzene	99.0				80.1-120		05/04/2016 05:27	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	18.4		0.494	0.100	2.00	20	05/05/2016 04:46	WG869252
(S) o-Terphenyl	148	J7			50.0-150		05/05/2016 04:46	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3.00	J	2.82	10.0	10.0	1	05/02/2016 14:55	WG869073

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.450	J	0.197	0.100	1.00	10	05/06/2016 08:19	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	U		0.0519	1.00	1.00	1	05/02/2016 13:31	WG868881
Fluoride	U		0.00990	0.100	0.100	1	05/02/2016 13:31	WG868881
Sulfate	U		0.0774	5.00	5.00	1	05/02/2016 13:31	WG868881

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.000636	J	0.000250	0.00200	0.00200	1	05/07/2016 11:17	WG869307
Arsenic,Dissolved	0.000579	J	0.000250	0.00200	0.00200	1	05/07/2016 11:32	WG870076
Barium	U		0.000360	0.00500	0.00500	1	05/07/2016 11:17	WG869307
Barium,Dissolved	U		0.000360	0.00500	0.00500	1	05/07/2016 11:32	WG870076
Calcium	U		0.0460	1.00	1.00	1	05/07/2016 11:17	WG869307
Chromium	U		0.000540	0.00200	0.00200	1	05/07/2016 11:17	WG869307
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/07/2016 11:32	WG870076
Iron	U		0.0150	0.100	0.100	1	05/07/2016 11:17	WG869307
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/07/2016 11:32	WG870076
Lead	U		0.000240	0.00200	0.00200	1	05/07/2016 11:17	WG869307
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/07/2016 11:32	WG870076
Manganese	0.000293	J	0.000250	0.00500	0.00500	1	05/07/2016 11:17	WG869307
Manganese,Dissolved	0.000505	J	0.000250	0.00500	0.00500	1	05/07/2016 11:32	WG870076
Potassium	U		0.0370	1.00	1.00	1	05/07/2016 11:17	WG869307
Selenium	U		0.000380	0.00200	0.00200	1	05/07/2016 11:17	WG869307
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/07/2016 11:32	WG870076
Sodium	U		0.110	1.00	1.00	1	05/07/2016 11:17	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 19:08	WG869045
(S) a,a,q-Trifluorotoluene(FID)	104				62.0-128		05/03/2016 19:08	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 05:46	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 05:46	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 05:46	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 05:46	WG868984





Collected date/time: 04/26/16 16:05

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 05:46	WG868984
Chloroform	0.000729	U	0.000324	0.00500	0.00500	1	05/04/2016 05:46	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 05:46	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 05:46	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 05:46	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 05:46	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 05:46	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 05:46	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 05:46	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 05:46	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 05:46	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 05:46	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 05:46	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 05:46	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 05:46	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 05:46	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 05:46	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 05:46	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 05:46	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 05:46	WG868984
(S) Toluene-d8	104				90.0-115		05/04/2016 05:46	WG868984
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 05:46	WG868984
(S) 4-Bromofluorobenzene	99.1				80.1-120		05/04/2016 05:46	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0856	U	0.0247	0.100	0.100	1	05/03/2016 18:55	WG869252
(S) o-Terphenyl	107				50.0-150		05/03/2016 18:55	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5320		2.82	10.0	10.0	1	05/02/2016 15:59	WG869074

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	1.87		0.197	0.100	1.00	10	05/06/2016 08:20	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1390		2.60	1.00	50.0	50	05/03/2016 14:59	WG869276
Fluoride	7.08		0.00990	0.100	0.100	1	05/03/2016 14:15	WG869276
Sulfate	2040		3.87	5.00	250	50	05/03/2016 14:59	WG869276

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0113		0.00125	0.00200	0.0100	5	05/05/2016 14:12	WG869307
Arsenic,Dissolved	0.00557	J	0.00125	0.00200	0.0100	5	05/05/2016 17:14	WG870076
Barium	0.0181	J	0.00180	0.00500	0.0250	5	05/05/2016 14:12	WG869307
Barium,Dissolved	0.0166	J	0.00180	0.00500	0.0250	5	05/05/2016 17:14	WG870076
Calcium	603		0.230	1.00	5.00	5	05/05/2016 14:12	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 14:12	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 17:14	WG870076
Iron	0.882		0.0750	0.100	0.500	5	05/05/2016 14:12	WG869307
Iron,Dissolved	0.130	J	0.0750	0.100	0.500	5	05/05/2016 17:14	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 14:12	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 17:14	WG870076
Manganese	3.00		0.00125	0.00500	0.0250	5	05/05/2016 14:12	WG869307
Manganese,Dissolved	2.91		0.00125	0.00500	0.0250	5	05/05/2016 17:14	WG870076
Potassium	8.43		0.185	1.00	5.00	5	05/05/2016 14:12	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 14:12	WG869307
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 17:14	WG870076
Sodium	1140		0.550	1.00	5.00	5	05/05/2016 14:12	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 19:30	WG869045
(S) a,a,a-Trifluorotoluene(FID)	103				62.0-128		05/03/2016 19:30	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 06:06	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 06:06	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 06:06	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 06:06	WG868984



Collected date/time: 04/26/16 16:45

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 06:06	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 06:06	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 06:06	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:06	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 06:06	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 06:06	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 06:06	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 06:06	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 06:06	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 06:06	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 06:06	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 06:06	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 06:06	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 06:06	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 06:06	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 06:06	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 06:06	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 06:06	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 06:06	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 06:06	WG868984
(S) Toluene-d8	104				90.0-115		05/04/2016 06:06	WG868984
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 06:06	WG868984
(S) 4-Bromofluorobenzene	98.6				80.1-120		05/04/2016 06:06	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.516		0.0247	0.100	0.100	1	05/03/2016 20:26	WG869252
(S) o-Terphenyl	109				50.0-150		05/03/2016 20:26	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	U		2.82	10.0	10.0	1	05/02/2016 15:59	WG869074

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.414	J	0.197	0.100	1.00	10	05/06/2016 08:25	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	U		0.0519	1.00	1.00	1	05/03/2016 18:28	WG869276
Fluoride	U		0.00990	0.100	0.100	1	05/03/2016 18:28	WG869276
Sulfate	U		0.0774	5.00	5.00	1	05/03/2016 18:28	WG869276

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.000724	J	0.000250	0.00200	0.00200	1	05/07/2016 11:27	WG869307
Arsenic,Dissolved	0.000660	J	0.000250	0.00200	0.00200	1	05/07/2016 11:34	WG870076
Barium	U		0.000360	0.00500	0.00500	1	05/07/2016 11:27	WG869307
Barium,Dissolved	0.000419	J	0.000360	0.00500	0.00500	1	05/07/2016 11:34	WG870076
Calcium	U		0.0460	1.00	1.00	1	05/07/2016 11:27	WG869307
Chromium	U		0.000540	0.00200	0.00200	1	05/07/2016 11:27	WG869307
Chromium,Dissolved	0.000630	J	0.000540	0.00200	0.00200	1	05/07/2016 11:34	WG870076
Iron	U		0.0150	0.100	0.100	1	05/07/2016 11:27	WG869307
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/07/2016 11:34	WG870076
Lead	U		0.000240	0.00200	0.00200	1	05/07/2016 11:27	WG869307
Lead,Dissolved	0.000254	J	0.000240	0.00200	0.00200	1	05/07/2016 11:34	WG870076
Manganese	0.000259	J	0.000250	0.00500	0.00500	1	05/07/2016 11:27	WG869307
Manganese,Dissolved	0.000458	J	0.000250	0.00500	0.00500	1	05/07/2016 11:34	WG870076
Potassium	U		0.0370	1.00	1.00	1	05/07/2016 11:27	WG869307
Selenium	U		0.000380	0.00200	0.00200	1	05/07/2016 11:27	WG869307
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/07/2016 11:34	WG870076
Sodium	U		0.110	1.00	1.00	1	05/07/2016 11:27	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 19:51	WG869045
(S) a,a,a-Trifluorotoluene(FID)	104				62.0-128		05/03/2016 19:51	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 06:26	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 06:26	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 06:26	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 06:26	WG868984



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 06:26	WG868984
Chloroform	0.000629	U	0.000324	0.00500	0.00500	1	05/04/2016 06:26	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 06:26	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:26	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 06:26	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 06:26	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 06:26	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 06:26	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 06:26	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 06:26	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 06:26	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 06:26	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 06:26	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 06:26	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 06:26	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 06:26	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 06:26	WG868984
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 06:26	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 06:26	WG868984
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 06:26	WG868984
(S) Toluene-d8	104				90.0-115		05/04/2016 06:26	WG868984
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 06:26	WG868984
(S) 4-Bromofluorobenzene	97.3				80.1-120		05/04/2016 06:26	WG868984

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0312	U	0.0247	0.100	0.100	1	05/03/2016 20:44	WG869252
(S) o-Terphenyl	103				50.0-150		05/03/2016 20:44	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4290		2.82	10.0	10.0	1	05/03/2016 18:57	WG869534

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.461	J	0.197	0.100	1.00	10	05/06/2016 08:26	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1300		5.19	1.00	100	100	05/07/2016 07:19	WG869689
Fluoride	1.52		0.00990	0.100	0.100	1	05/07/2016 07:04	WG869689
Sulfate	2360		7.74	5.00	500	100	05/07/2016 07:19	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00953	J	0.00125	0.00200	0.0100	5	05/05/2016 14:16	WG869307
Arsenic,Dissolved	0.00932	J	0.00125	0.00200	0.0100	5	05/05/2016 17:18	WG870076
Barium	0.0158	J	0.00180	0.00500	0.0250	5	05/05/2016 14:16	WG869307
Barium,Dissolved	0.0156	J	0.00180	0.00500	0.0250	5	05/05/2016 17:18	WG870076
Calcium	449		0.230	1.00	5.00	5	05/05/2016 14:16	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 14:16	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 17:18	WG870076
Iron	0.0787	J	0.0750	0.100	0.500	5	05/05/2016 14:16	WG869307
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/05/2016 17:18	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 14:16	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 17:18	WG870076
Manganese	0.505		0.00125	0.00500	0.0250	5	05/05/2016 14:16	WG869307
Manganese,Dissolved	0.491		0.00125	0.00500	0.0250	5	05/05/2016 17:18	WG870076
Potassium	1.74	J	0.185	1.00	5.00	5	05/05/2016 14:16	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 14:16	WG869307
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/05/2016 17:18	WG870076
Sodium	835		0.550	1.00	5.00	5	05/05/2016 14:16	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 20:13	WG869045
(S) a,a,a-Trifluorotoluene(FID)	103				62.0-128		05/03/2016 20:13	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 06:46	WG868984
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 06:46	WG868984
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 06:46	WG868984
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 06:46	WG868984



Collected date/time: 04/27/16 08:10

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 06:46	WG868984
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 06:46	WG868984
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 06:46	WG868984
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:46	WG868984
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 06:46	WG868984
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 06:46	WG868984
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 06:46	WG868984
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Ethylbenzene	0.00116		0.000384	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Isopropylbenzene	0.000386	U	0.000326	0.00100	0.00100	1	05/04/2016 06:46	WG868984
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 06:46	WG868984
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 06:46	WG868984
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 06:46	WG868984
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 06:46	WG868984
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 06:46	WG868984
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 06:46	WG868984
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 06:46	WG868984
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 06:46	WG868984
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 06:46	WG868984
o-Xylene	0.00119		0.000341	0.00100	0.00100	1	05/04/2016 06:46	WG868984
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 06:46	WG868984
Xylenes, Total	0.00119	U	0.00106	0.00300	0.00300	1	05/04/2016 06:46	WG868984
(S) Toluene-d8	103				90.0-115		05/04/2016 06:46	WG868984
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 06:46	WG868984
(S) 4-Bromofluorobenzene	97.6				80.1-120		05/04/2016 06:46	WG868984

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4.81		0.0247	0.100	0.100	1	05/04/2016 07:05	WG869254
(S) o-Terphenyl	110				50.0-150		05/04/2016 07:05	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	8480		2.82	10.0	10.0	1	05/04/2016 03:49	WG869541

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	1.03		0.197	0.100	1.00	10	05/06/2016 08:27	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	2550		5.19	1.00	100	100	05/07/2016 07:49	WG869689
Fluoride	2.78		0.00990	0.100	0.100	1	05/07/2016 07:34	WG869689
Sulfate	4740		7.74	5.00	500	100	05/07/2016 07:49	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.150		0.00125	0.00200	0.0100	5	05/05/2016 14:19	WG869307
Arsenic,Dissolved	0.127		0.00125	0.00200	0.0100	5	05/05/2016 17:21	WG870076
Barium	0.0145	J	0.00180	0.00500	0.0250	5	05/05/2016 14:19	WG869307
Barium,Dissolved	0.0133	J	0.00180	0.00500	0.0250	5	05/05/2016 17:21	WG870076
Calcium	694		0.230	1.00	5.00	5	05/05/2016 14:19	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 14:19	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 17:21	WG870076
Iron	2.89		0.0750	0.100	0.500	5	05/05/2016 14:19	WG869307
Iron,Dissolved	0.217	J	0.0750	0.100	0.500	5	05/05/2016 17:21	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 14:19	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 17:21	WG870076
Manganese	2.25		0.00125	0.00500	0.0250	5	05/05/2016 14:19	WG869307
Manganese,Dissolved	2.20		0.00125	0.00500	0.0250	5	05/05/2016 17:21	WG870076
Potassium	6.27		0.185	1.00	5.00	5	05/05/2016 14:19	WG869307
Selenium	0.00195	J	0.00190	0.00200	0.0100	5	05/05/2016 14:19	WG869307
Selenium,Dissolved	0.00360	J	0.00190	0.00200	0.0100	5	05/05/2016 17:21	WG870076
Sodium	2580		0.550	1.00	5.00	5	05/05/2016 14:19	WG869307

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.443		0.0314	0.100	0.100	1	05/03/2016 20:34	WG869045
(S) a,a,a-Trifluorotoluene(FID)	104				62.0-128		05/03/2016 20:34	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 13:12	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 13:12	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 13:12	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 13:12	WG868985





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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 13:12	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 13:12	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 13:12	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:12	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 13:12	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 13:12	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 13:12	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 13:12	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 13:12	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 13:12	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 13:12	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 13:12	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 13:12	WG868985
Methyl tert-butyl ether	0.00141		0.000367	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 13:12	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 13:12	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,2,4-Trimethylbenzene	0.00104		0.000373	0.00100	0.00100	1	05/04/2016 13:12	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 13:12	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 13:12	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 13:12	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 13:12	WG868985
(S) Toluene-d8	104				90.0-115		05/04/2016 13:12	WG868985
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 13:12	WG868985
(S) 4-Bromofluorobenzene	95.4				80.1-120		05/04/2016 13:12	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5.24		0.0247	0.100	0.100	1	05/04/2016 07:23	WG869254
(S) o-Terphenyl	108				50.0-150		05/04/2016 07:23	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	10600		2.82	10.0	10.0	1	05/04/2016 03:49	WG869541

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.22		0.197	0.100	1.00	10	05/06/2016 08:28	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	4440		5.19	1.00	100	100	05/07/2016 09:59	WG869689
Fluoride	2.47		0.00990	0.100	0.100	1	05/07/2016 09:41	WG869689
Sulfate	3410		7.74	5.00	500	100	05/07/2016 09:59	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0139		0.00125	0.00200	0.0100	5	05/05/2016 14:21	WG869307
Arsenic,Dissolved	0.0118		0.00125	0.00200	0.0100	5	05/05/2016 16:20	WG870076
Barium	0.0214	J	0.00180	0.00500	0.0250	5	05/05/2016 14:21	WG869307
Barium,Dissolved	0.0208	J	0.00180	0.00500	0.0250	5	05/05/2016 16:20	WG870076
Calcium	866		0.230	1.00	5.00	5	05/05/2016 14:21	WG869307
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 14:21	WG869307
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/05/2016 16:20	WG870076
Iron	2.39		0.0750	0.100	0.500	5	05/05/2016 14:21	WG869307
Iron,Dissolved	2.00		0.0750	0.100	0.500	5	05/05/2016 16:20	WG870076
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 14:21	WG869307
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/05/2016 16:20	WG870076
Manganese	2.22		0.00125	0.00500	0.0250	5	05/05/2016 14:21	WG869307
Manganese,Dissolved	2.14	V	0.00125	0.00500	0.0250	5	05/05/2016 16:20	WG870076
Potassium	17.0		0.185	1.00	5.00	5	05/05/2016 14:21	WG869307
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 14:21	WG869307
Selenium,Dissolved	0.00282	J	0.00190	0.00200	0.0100	5	05/05/2016 16:20	WG870076
Sodium	2700		0.550	1.00	5.00	5	05/05/2016 14:21	WG869307

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0939	J	0.0314	0.100	0.100	1	05/03/2016 20:56	WG869045
(S) a,a,q-Trifluorotoluene(FID)	102				62.0-128		05/03/2016 20:56	WG869045

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 13:31	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 13:31	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 13:31	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 13:31	WG868985



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 13:31	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 13:31	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 13:31	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:31	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 13:31	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 13:31	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 13:31	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 13:31	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 13:31	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 13:31	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 13:31	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 13:31	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 13:31	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 13:31	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 13:31	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 13:31	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 13:31	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 13:31	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 13:31	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 13:31	WG868985
(S) Toluene-d8	102				90.0-115		05/04/2016 13:31	WG868985
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 13:31	WG868985
(S) 4-Bromofluorobenzene	100				80.1-120		05/04/2016 13:31	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.11		0.0247	0.100	0.100	1	05/04/2016 07:42	WG869254
(S) o-Terphenyl	108				50.0-150		05/04/2016 07:42	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	9140		2.82	10.0	10.0	1	05/04/2016 03:49	WG869541

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	1.88		0.197	0.100	1.00	10	05/06/2016 08:29	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	3310		5.19	1.00	100	100	05/07/2016 10:29	WG869689
Fluoride	5.88		0.00990	0.100	0.100	1	05/07/2016 10:14	WG869689
Sulfate	3400		7.74	5.00	500	100	05/07/2016 10:29	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0318		0.00125	0.00200	0.0100	5	05/06/2016 03:32	WG869316
Arsenic,Dissolved	0.0269		0.00125	0.00200	0.0100	5	05/09/2016 12:15	WG870080
Barium	0.0195	J	0.00180	0.00500	0.0250	5	05/06/2016 03:32	WG869316
Barium,Dissolved	0.0185	J	0.00180	0.00500	0.0250	5	05/09/2016 12:15	WG870080
Calcium	700		0.230	1.00	5.00	5	05/06/2016 03:32	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 03:32	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 12:15	WG870080
Iron	7.20		0.0750	0.100	0.500	5	05/06/2016 03:32	WG869316
Iron,Dissolved	5.04		0.0750	0.100	0.500	5	05/09/2016 12:15	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:32	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:15	WG870080
Manganese	4.86		0.00125	0.00500	0.0250	5	05/06/2016 03:32	WG869316
Manganese,Dissolved	4.98		0.00125	0.00500	0.0250	5	05/09/2016 12:15	WG870080
Potassium	8.82		0.185	1.00	5.00	5	05/06/2016 03:32	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 03:32	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 12:15	WG870080
Sodium	2060		0.550	1.00	5.00	5	05/06/2016 03:32	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 21:17	WG869045
(S) a,a,q-Trifluorotoluene(FID)	103				62.0-128		05/03/2016 21:17	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 13:50	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 13:50	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 13:50	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 13:50	WG868985



Collected date/time: 04/27/16 10:45

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 13:50	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 13:50	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 13:50	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:50	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 13:50	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 13:50	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 13:50	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 13:50	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 13:50	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 13:50	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 13:50	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 13:50	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 13:50	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 13:50	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 13:50	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 13:50	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 13:50	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 13:50	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 13:50	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 13:50	WG868985
(S) Toluene-d8	104				90.0-115		05/04/2016 13:50	WG868985
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 13:50	WG868985
(S) 4-Bromofluorobenzene	97.8				80.1-120		05/04/2016 13:50	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.950		0.0247	0.100	0.100	1	05/04/2016 08:00	WG869254
(S) o-Terphenyl	106				50.0-150		05/04/2016 08:00	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	20700		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.501	J	0.197	0.100	1.00	10	05/06/2016 08:30	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	8400		5.19	1.00	100	100	05/07/2016 10:59	WG869689
Fluoride	1.53		0.00990	0.100	0.100	1	05/07/2016 10:44	WG869689
Sulfate	7640		7.74	5.00	500	100	05/07/2016 10:59	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0154		0.00125	0.00200	0.0100	5	05/06/2016 03:34	WG869316
Arsenic,Dissolved	0.0140		0.00125	0.00200	0.0100	5	05/09/2016 12:17	WG870080
Barium	0.0228	J	0.00180	0.00500	0.0250	5	05/06/2016 03:34	WG869316
Barium,Dissolved	0.0223	J	0.00180	0.00500	0.0250	5	05/09/2016 12:17	WG870080
Calcium	933		0.230	1.00	5.00	5	05/06/2016 03:34	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 03:34	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 12:17	WG870080
Iron	3.37		0.0750	0.100	0.500	5	05/06/2016 03:34	WG869316
Iron,Dissolved	2.64		0.0750	0.100	0.500	5	05/09/2016 12:17	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:34	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:17	WG870080
Manganese	2.50		0.00125	0.00500	0.0250	5	05/06/2016 03:34	WG869316
Manganese,Dissolved	2.31		0.00125	0.00500	0.0250	5	05/09/2016 12:17	WG870080
Potassium	7.35		0.185	1.00	5.00	5	05/06/2016 03:34	WG869316
Selenium	0.00432	J	0.00190	0.00200	0.0100	5	05/06/2016 03:34	WG869316
Selenium,Dissolved	0.00347	J	0.00190	0.00200	0.0100	5	05/09/2016 12:17	WG870080
Sodium	5280		2.20	1.00	20.0	20	05/07/2016 11:43	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 00:03	WG869045
(S) a,a,a-Trifluorotoluene(FID)	103				62.0-128		05/04/2016 00:03	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 14:09	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 14:09	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 14:09	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 14:09	WG868985



Collected date/time: 04/27/16 11:35

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 14:09	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 14:09	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 14:09	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 14:09	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 14:09	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 14:09	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 14:09	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 14:09	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 14:09	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 14:09	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 14:09	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 14:09	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 14:09	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 14:09	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 14:09	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 14:09	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 14:09	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 14:09	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 14:09	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 14:09	WG868985
(S) Toluene-d8	103				90.0-115		05/04/2016 14:09	WG868985
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 14:09	WG868985
(S) 4-Bromofluorobenzene	95.5				80.1-120		05/04/2016 14:09	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.212		0.0247	0.100	0.100	1	05/04/2016 08:18	WG869254
(S) o-Terphenyl	104				50.0-150		05/04/2016 08:18	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	6700		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.499	J	0.197	0.100	1.00	10	05/06/2016 08:31	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1920		5.19	1.00	100	100	05/07/2016 11:28	WG869689
Fluoride	3.57		0.00990	0.100	0.100	1	05/07/2016 11:13	WG869689
Sulfate	3430		7.74	5.00	500	100	05/07/2016 11:28	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00444	J	0.00125	0.00200	0.0100	5	05/06/2016 03:37	WG869316
Arsenic,Dissolved	0.00405	J	0.00125	0.00200	0.0100	5	05/09/2016 12:20	WG870080
Barium	0.0291		0.00180	0.00500	0.0250	5	05/06/2016 03:37	WG869316
Barium,Dissolved	0.0280		0.00180	0.00500	0.0250	5	05/09/2016 12:20	WG870080
Calcium	549		0.230	1.00	5.00	5	05/06/2016 03:37	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 03:37	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 12:20	WG870080
Iron	0.610		0.0750	0.100	0.500	5	05/06/2016 03:37	WG869316
Iron,Dissolved	0.541	B	0.0750	0.100	0.500	5	05/09/2016 12:20	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:37	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:20	WG870080
Manganese	1.50		0.00125	0.00500	0.0250	5	05/06/2016 03:37	WG869316
Manganese,Dissolved	1.39		0.00125	0.00500	0.0250	5	05/09/2016 12:20	WG870080
Potassium	4.78	J	0.185	1.00	5.00	5	05/06/2016 03:37	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 03:37	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 12:20	WG870080
Sodium	1350		0.550	1.00	5.00	5	05/06/2016 03:37	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 00:24	WG869045
(S) a,a,a-Trifluorotoluene(FID)	103				62.0-128		05/04/2016 00:24	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 14:28	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 14:28	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 14:28	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 14:28	WG868985





Collected date/time: 04/27/16 12:35

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 14:28	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 14:28	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 14:28	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 14:28	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 14:28	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 14:28	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 14:28	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 14:28	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 14:28	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 14:28	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 14:28	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 14:28	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 14:28	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 14:28	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 14:28	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 14:28	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 14:28	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 14:28	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 14:28	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 14:28	WG868985
(S) Toluene-d8	102				90.0-115		05/04/2016 14:28	WG868985
(S) Dibromofluoromethane	102				79.0-121		05/04/2016 14:28	WG868985
(S) 4-Bromofluorobenzene	97.1				80.1-120		05/04/2016 14:28	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.824		0.0247	0.100	0.100	1	05/04/2016 14:43	WG869254
(S) o-Terphenyl	106				50.0-150		05/04/2016 14:43	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5550		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.13		0.197	0.100	1.00	10	05/06/2016 08:32	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	1520		5.19	1.00	100	100	05/07/2016 05:05	WG869689
Fluoride	4.34		0.00990	0.100	0.100	1	05/07/2016 04:50	WG869689
Sulfate	3790		7.74	5.00	500	100	05/07/2016 05:05	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0443		0.00125	0.00200	0.0100	5	05/06/2016 03:44	WG869316
Arsenic,Dissolved	0.0369		0.00125	0.00200	0.0100	5	05/09/2016 12:27	WG870080
Barium	0.0179	J	0.00180	0.00500	0.0250	5	05/06/2016 03:44	WG869316
Barium,Dissolved	0.0134	J	0.00180	0.00500	0.0250	5	05/09/2016 12:27	WG870080
Calcium	718		0.230	1.00	5.00	5	05/06/2016 03:44	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 03:44	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 12:27	WG870080
Iron	0.530		0.0750	0.100	0.500	5	05/06/2016 03:44	WG869316
Iron,Dissolved	0.174	B J	0.0750	0.100	0.500	5	05/09/2016 12:27	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:44	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:27	WG870080
Manganese	3.56		0.00125	0.00500	0.0250	5	05/06/2016 03:44	WG869316
Manganese,Dissolved	2.92		0.00125	0.00500	0.0250	5	05/09/2016 12:27	WG870080
Potassium	3.39	J	0.185	1.00	5.00	5	05/06/2016 03:44	WG869316
Selenium	0.00777	J	0.00190	0.00200	0.0100	5	05/06/2016 03:44	WG869316
Selenium,Dissolved	0.00792	J	0.00190	0.00200	0.0100	5	05/09/2016 12:27	WG870080
Sodium	968		0.550	1.00	5.00	5	05/06/2016 03:44	WG869316

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 00:46	WG869045
(S) a,a,a-Trifluorotoluene(FID)	104				62.0-128		05/04/2016 00:46	WG869045

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 14:48	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 14:48	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 14:48	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 14:48	WG868985



Collected date/time: 04/27/16 13:25

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 14:48	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 14:48	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 14:48	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 14:48	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 14:48	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 14:48	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 14:48	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 14:48	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 14:48	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 14:48	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 14:48	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 14:48	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 14:48	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 14:48	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 14:48	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 14:48	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 14:48	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 14:48	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 14:48	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 14:48	WG868985
(S) Toluene-d8	102				90.0-115		05/04/2016 14:48	WG868985
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 14:48	WG868985
(S) 4-Bromofluorobenzene	96.2				80.1-120		05/04/2016 14:48	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.456		0.0247	0.100	0.100	1	05/04/2016 15:01	WG869254
(S) o-Terphenyl	98.8				50.0-150		05/04/2016 15:01	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	9800		2.82	10.0	10.0	1	05/02/2016 15:59	WG869074

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.415	J	0.197	0.100	1.00	10	05/06/2016 08:38	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1490		2.60	1.00	50.0	50	05/03/2016 15:29	WG869276
Fluoride	1.20		0.00990	0.100	0.100	1	05/03/2016 15:14	WG869276
Sulfate	1720		3.87	5.00	250	50	05/03/2016 15:29	WG869276

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00477	J	0.00125	0.00200	0.0100	5	05/06/2016 03:47	WG869316
Arsenic,Dissolved	0.00255	J	0.00125	0.00200	0.0100	5	05/09/2016 12:29	WG870080
Barium	0.0288		0.00180	0.00500	0.0250	5	05/06/2016 03:47	WG869316
Barium,Dissolved	0.0198	J	0.00180	0.00500	0.0250	5	05/09/2016 12:29	WG870080
Calcium	929		0.230	1.00	5.00	5	05/06/2016 03:47	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 03:47	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 12:29	WG870080
Iron	4.08		0.0750	0.100	0.500	5	05/06/2016 03:47	WG869316
Iron,Dissolved	2.70		0.0750	0.100	0.500	5	05/09/2016 12:29	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:47	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:29	WG870080
Manganese	0.749		0.00125	0.00500	0.0250	5	05/06/2016 03:47	WG869316
Manganese,Dissolved	0.601		0.00125	0.00500	0.0250	5	05/09/2016 12:29	WG870080
Potassium	8.45		0.185	1.00	5.00	5	05/06/2016 03:47	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 03:47	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 12:29	WG870080
Sodium	2150		0.550	1.00	5.00	5	05/06/2016 03:47	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 01:07	WG869045
(S) a,a,a-Trifluorotoluene(FID)	104				62.0-128		05/04/2016 01:07	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 15:07	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 15:07	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 15:07	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 15:07	WG868985



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 15:07	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 15:07	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 15:07	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 15:07	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 15:07	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 15:07	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 15:07	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 15:07	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 15:07	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 15:07	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 15:07	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 15:07	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 15:07	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 15:07	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 15:07	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 15:07	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 15:07	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 15:07	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 15:07	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 15:07	WG868985
(S) Toluene-d8	102				90.0-115		05/04/2016 15:07	WG868985
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 15:07	WG868985
(S) 4-Bromofluorobenzene	95.6				80.1-120		05/04/2016 15:07	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	0.100	1	05/03/2016 21:03	WG869252
(S) o-Terphenyl	105				50.0-150		05/03/2016 21:03	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	U		2.82	10.0	10.0	1	05/02/2016 15:59	WG869074

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.408	J	0.197	0.100	1.00	10	05/06/2016 08:39	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	U		0.0519	1.00	1.00	1	05/03/2016 15:44	WG869276
Fluoride	U		0.00990	0.100	0.100	1	05/03/2016 15:44	WG869276
Sulfate	U		0.0774	5.00	5.00	1	05/03/2016 15:44	WG869276

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.000656	J	0.000250	0.00200	0.00200	1	05/07/2016 11:41	WG869316
Arsenic,Dissolved	0.000615	J	0.000250	0.00200	0.00200	1	05/09/2016 12:06	WG870080
Barium	U		0.000360	0.00500	0.00500	1	05/07/2016 11:41	WG869316
Barium,Dissolved	U		0.000360	0.00500	0.00500	1	05/09/2016 12:06	WG870080
Calcium	U		0.0460	1.00	1.00	1	05/07/2016 11:41	WG869316
Chromium	U		0.000540	0.00200	0.00200	1	05/07/2016 11:41	WG869316
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/09/2016 12:06	WG870080
Iron	U		0.0150	0.100	0.100	1	05/07/2016 11:41	WG869316
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/09/2016 12:06	WG870080
Lead	U		0.000240	0.00200	0.00200	1	05/07/2016 11:41	WG869316
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/09/2016 12:06	WG870080
Manganese	0.000472	J	0.000250	0.00500	0.00500	1	05/07/2016 11:41	WG869316
Manganese,Dissolved	0.000556	J	0.000250	0.00500	0.00500	1	05/09/2016 12:06	WG870080
Potassium	U		0.0370	1.00	1.00	1	05/07/2016 11:41	WG869316
Selenium	U		0.000380	0.00200	0.00200	1	05/07/2016 11:41	WG869316
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/09/2016 12:06	WG870080
Sodium	U		0.110	1.00	1.00	1	05/07/2016 11:41	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 13:55	WG869702
(S) a,a,a-Trifluorotoluene(FID)	99.0				62.0-128		05/04/2016 13:55	WG869702

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 15:25	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 15:25	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 15:25	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 15:25	WG868985



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 15:25	WG868985
Chloroform	0.000730	U	0.000324	0.00500	0.00500	1	05/04/2016 15:25	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 15:25	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 15:25	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 15:25	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 15:25	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 15:25	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 15:25	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 15:25	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 15:25	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 15:25	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 15:25	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 15:25	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 15:25	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 15:25	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 15:25	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 15:25	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 15:25	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 15:25	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 15:25	WG868985
(S) Toluene-d8	102				90.0-115		05/04/2016 15:25	WG868985
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 15:25	WG868985
(S) 4-Bromofluorobenzene	100				80.1-120		05/04/2016 15:25	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	0.100	1	05/03/2016 21:21	WG869252
(S) o-Terphenyl	102				50.0-150		05/03/2016 21:21	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	20500		2.82	10.0	10.0	1	05/02/2016 15:59	WG869074

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.371	J	0.197	0.100	1.00	10	05/06/2016 08:40	WG870057

## Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00180	0.00500	0.00500	1	05/12/2016 15:31	WG870326

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	6820		5.19	1.00	100	100	05/03/2016 16:29	WG869276
Fluoride	2.83		0.00990	0.100	0.100	1	05/03/2016 17:14	WG869276
Sulfate	6360		7.74	5.00	500	100	05/03/2016 16:29	WG869276

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/03/2016 11:15	WG869159
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 09:38	WG869579

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00644	J	0.00125	0.00200	0.0100	5	05/06/2016 03:52	WG869316
Arsenic,Dissolved	0.00629	J	0.00125	0.00200	0.0100	5	05/09/2016 12:31	WG870080
Barium	0.0155	J	0.00180	0.00500	0.0250	5	05/06/2016 03:52	WG869316
Barium,Dissolved	0.0157	J	0.00180	0.00500	0.0250	5	05/09/2016 12:31	WG870080
Boron	3.14		0.0150	0.0200	0.200	10	05/07/2016 09:52	WG870589
Boron,Dissolved	2.87		0.0150	0.0200	0.200	10	05/09/2016 11:48	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 03:52	WG869316
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/09/2016 12:31	WG870080
Calcium	704		0.230	1.00	5.00	5	05/06/2016 03:52	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 03:52	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 12:31	WG870080
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 03:52	WG869316
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/09/2016 12:31	WG870080
Iron	0.358	J	0.0750	0.100	0.500	5	05/06/2016 03:52	WG869316
Iron,Dissolved	0.333	B J	0.0750	0.100	0.500	5	05/09/2016 12:31	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:52	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:31	WG870080
Manganese	0.366		0.00125	0.00500	0.0250	5	05/06/2016 03:52	WG869316
Manganese,Dissolved	0.335		0.00125	0.00500	0.0250	5	05/09/2016 12:31	WG870080
Nickel	0.0121	J	0.00350	0.00200	0.0200	10	05/07/2016 09:52	WG870589
Nickel,Dissolved	0.00835	J	0.00175	0.00200	0.0100	5	05/09/2016 12:31	WG870080
Potassium	46.6		0.185	1.00	5.00	5	05/06/2016 03:52	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 03:52	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 12:31	WG870080
Sodium	4730		2.20	1.00	20.0	20	05/07/2016 11:46	WG869316

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc





Collected date/time: 04/26/16 15:40

L832472

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.0417	U	0.00165	0.0100	0.0500	5	05/06/2016 03:52	WG869316
Uranium,Dissolved	0.0410	U	0.00165	0.0100	0.0500	5	05/09/2016 12:31	WG870080
Vanadium	0.00258	U	0.000900	0.00500	0.0250	5	05/06/2016 03:52	WG869316
Vanadium,Dissolved	0.00163	U	0.000900	0.00500	0.0250	5	05/09/2016 12:31	WG870080

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 15:44	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 15:44	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 15:44	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 15:44	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 15:44	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 15:44	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 15:44	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 15:44	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 15:44	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 15:44	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 15:44	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 15:44	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 15:44	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 15:44	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 15:44	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 15:44	WG868985
Methyl tert-butyl ether	0.000490	U	0.000367	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 15:44	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 15:44	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 15:44	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 15:44	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 15:44	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 15:44	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 15:44	WG868985
(S) Toluene-d8	103				90.0-115		05/04/2016 15:44	WG868985

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

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
(S) Dibromofluoromethane	107				79.0-121		05/04/2016 15:44	WG868985
(S) 4-Bromofluorobenzene	96.6				80.1-120		05/04/2016 15:44	WG868985

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.460		0.0247	0.100	0.100	1	05/03/2016 21:39	WG869252
(S) o-Terphenyl	108				50.0-150		05/03/2016 21:39	WG869252

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5730		2.82	10.0	10.0	1	05/02/2016 15:59	WG869074

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.416	J	0.197	0.100	1.00	10	05/06/2016 08:41	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1370		2.60	1.00	50.0	50	05/03/2016 17:44	WG869276
Fluoride	0.775		0.00990	0.100	0.100	1	05/03/2016 17:29	WG869276
Sulfate	2240		3.87	5.00	250	50	05/03/2016 17:44	WG869276

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0238		0.00125	0.00200	0.0100	5	05/06/2016 03:54	WG869316
Arsenic,Dissolved	0.0228		0.00125	0.00200	0.0100	5	05/09/2016 12:33	WG870080
Barium	0.0147	J	0.00180	0.00500	0.0250	5	05/06/2016 03:54	WG869316
Barium,Dissolved	0.0147	J	0.00180	0.00500	0.0250	5	05/09/2016 12:33	WG870080
Calcium	720		0.230	1.00	5.00	5	05/06/2016 03:54	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 03:54	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 12:33	WG870080
Iron	6.19		0.0750	0.100	0.500	5	05/06/2016 03:54	WG869316
Iron,Dissolved	5.40		0.0750	0.100	0.500	5	05/09/2016 12:33	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:54	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:33	WG870080
Manganese	0.543		0.00125	0.00500	0.0250	5	05/06/2016 03:54	WG869316
Manganese,Dissolved	0.513		0.00125	0.00500	0.0250	5	05/09/2016 12:33	WG870080
Potassium	5.46		0.185	1.00	5.00	5	05/06/2016 03:54	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 03:54	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 12:33	WG870080
Sodium	908		0.550	1.00	5.00	5	05/06/2016 03:54	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	1.46		0.0314	0.100	0.100	1	05/04/2016 01:29	WG869045
(S) a,a,q-Trifluorotoluene(FID)	104				62.0-128		05/04/2016 01:29	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 16:03	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 16:03	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 16:03	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 16:03	WG868985



Collected date/time: 04/26/16 16:40

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 16:03	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 16:03	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 16:03	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 16:03	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 16:03	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 16:03	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 16:03	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 16:03	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 16:03	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 16:03	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 16:03	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 16:03	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 16:03	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 16:03	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 16:03	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 16:03	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 16:03	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 16:03	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 16:03	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 16:03	WG868985
(S) Toluene-d8	104				90.0-115		05/04/2016 16:03	WG868985
(S) Dibromofluoromethane	105				79.0-121		05/04/2016 16:03	WG868985
(S) 4-Bromofluorobenzene	97.1				80.1-120		05/04/2016 16:03	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.896		0.0247	0.100	0.100	1	05/03/2016 21:57	WG869252
(S) o-Terphenyl	107				50.0-150		05/03/2016 21:57	WG869252



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	8960		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.928	J	0.197	0.100	1.00	10	05/06/2016 08:42	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	2570		5.19	1.00	100	100	05/07/2016 15:34	WG869689
Fluoride	2.90		0.00990	0.100	0.100	1	05/07/2016 15:19	WG869689
Sulfate	3550		7.74	5.00	500	100	05/07/2016 15:34	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00729	J	0.00125	0.00200	0.0100	5	05/06/2016 03:57	WG869316
Arsenic,Dissolved	0.00566	J	0.00125	0.00200	0.0100	5	05/09/2016 12:37	WG870080
Barium	0.0141	J	0.00180	0.00500	0.0250	5	05/06/2016 03:57	WG869316
Barium,Dissolved	0.0159	J	0.00180	0.00500	0.0250	5	05/09/2016 12:37	WG870080
Calcium	641		0.230	1.00	5.00	5	05/06/2016 03:57	WG869316
Chromium	0.105		0.00270	0.00200	0.0100	5	05/06/2016 03:57	WG869316
Chromium,Dissolved	0.0508		0.00270	0.00200	0.0100	5	05/09/2016 12:37	WG870080
Iron	1.54		0.0750	0.100	0.500	5	05/06/2016 03:57	WG869316
Iron,Dissolved	0.905		0.0750	0.100	0.500	5	05/09/2016 12:37	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:57	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:37	WG870080
Manganese	0.462		0.00125	0.00500	0.0250	5	05/06/2016 03:57	WG869316
Manganese,Dissolved	0.599		0.00125	0.00500	0.0250	5	05/09/2016 12:37	WG870080
Potassium	4.54	J	0.185	1.00	5.00	5	05/06/2016 03:57	WG869316
Selenium	0.00420	J	0.00190	0.00200	0.0100	5	05/06/2016 03:57	WG869316
Selenium,Dissolved	0.00328	J	0.00190	0.00200	0.0100	5	05/09/2016 12:37	WG870080
Sodium	2220		0.550	1.00	5.00	5	05/06/2016 03:57	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 01:50	WG869045
(S) a,a,a-Trifluorotoluene(FID)	104				62.0-128		05/04/2016 01:50	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 16:22	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 16:22	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 16:22	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 16:22	WG868985



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 16:22	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 16:22	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 16:22	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 16:22	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 16:22	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 16:22	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 16:22	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 16:22	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 16:22	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 16:22	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 16:22	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 16:22	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 16:22	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 16:22	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 16:22	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 16:22	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 16:22	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 16:22	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 16:22	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 16:22	WG868985
(S) Toluene-d8	105				90.0-115		05/04/2016 16:22	WG868985
(S) Dibromofluoromethane	108				79.0-121		05/04/2016 16:22	WG868985
(S) 4-Bromofluorobenzene	100				80.1-120		05/04/2016 16:22	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.241		0.0247	0.100	0.100	1	05/04/2016 15:19	WG869254
(S) o-Terphenyl	99.8				50.0-150		05/04/2016 15:19	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5870		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.417	J	0.197	0.100	1.00	10	05/06/2016 08:43	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1800		5.19	1.00	100	100	05/07/2016 16:04	WG869689
Fluoride	0.705		0.00990	0.100	0.100	1	05/07/2016 15:49	WG869689
Sulfate	2750		7.74	5.00	500	100	05/07/2016 16:04	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00640	J	0.00125	0.00200	0.0100	5	05/06/2016 03:59	WG869316
Arsenic,Dissolved	0.00460	J	0.00125	0.00200	0.0100	5	05/09/2016 12:40	WG870080
Barium	0.0209	J	0.00180	0.00500	0.0250	5	05/06/2016 03:59	WG869316
Barium,Dissolved	0.0237	J	0.00180	0.00500	0.0250	5	05/09/2016 12:40	WG870080
Calcium	678		0.230	1.00	5.00	5	05/06/2016 03:59	WG869316
Chromium	0.00304	J	0.00270	0.00200	0.0100	5	05/06/2016 03:59	WG869316
Chromium,Dissolved	0.00345	J	0.00270	0.00200	0.0100	5	05/09/2016 12:40	WG870080
Iron	5.47		0.0750	0.100	0.500	5	05/06/2016 03:59	WG869316
Iron,Dissolved	4.22		0.0750	0.100	0.500	5	05/09/2016 12:40	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:59	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 12:40	WG870080
Manganese	1.66		0.00125	0.00500	0.0250	5	05/06/2016 03:59	WG869316
Manganese,Dissolved	1.41		0.00125	0.00500	0.0250	5	05/09/2016 12:40	WG870080
Potassium	5.98		0.185	1.00	5.00	5	05/06/2016 03:59	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 03:59	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 12:40	WG870080
Sodium	1340		0.550	1.00	5.00	5	05/06/2016 03:59	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 02:11	WG869045
(S) a,a,a-Trifluorotoluene(FID)	104				62.0-128		05/04/2016 02:11	WG869045

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 16:41	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 16:41	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 16:41	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 16:41	WG868985



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 16:41	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 16:41	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 16:41	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 16:41	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 16:41	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 16:41	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 16:41	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 16:41	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 16:41	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 16:41	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 16:41	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 16:41	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 16:41	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 16:41	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 16:41	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 16:41	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 16:41	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 16:41	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 16:41	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 16:41	WG868985
(S) Toluene-d8	103				90.0-115		05/04/2016 16:41	WG868985
(S) Dibromofluoromethane	104				79.0-121		05/04/2016 16:41	WG868985
(S) 4-Bromofluorobenzene	96.4				80.1-120		05/04/2016 16:41	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0682	U	0.0247	0.100	0.100	1	05/04/2016 15:37	WG869254
(S) o-Terphenyl	96.1				50.0-150		05/04/2016 15:37	WG869254





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5890		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U	P1	0.197	0.100	1.00	10	05/06/2016 08:44	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1640		5.19	1.00	100	100	05/07/2016 16:34	WG869689
Fluoride	0.899		0.00990	0.100	0.100	1	05/07/2016 16:19	WG869689
Sulfate	3080		7.74	5.00	500	100	05/07/2016 16:34	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00389	J	0.00125	0.00200	0.0100	5	05/06/2016 04:02	WG869316
Arsenic,Dissolved	0.00135	J	0.00125	0.00200	0.0100	5	05/09/2016 16:30	WG870080
Barium	0.0214	J	0.00180	0.00500	0.0250	5	05/06/2016 04:02	WG869316
Barium,Dissolved	0.0219	J	0.00180	0.00500	0.0250	5	05/09/2016 16:30	WG870080
Calcium	746		0.230	1.00	5.00	5	05/06/2016 04:02	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 04:02	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 16:30	WG870080
Iron	1.23		0.0750	0.100	0.500	5	05/06/2016 04:02	WG869316
Iron,Dissolved	0.0865	B J	0.0750	0.100	0.500	5	05/09/2016 16:30	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 04:02	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 16:30	WG870080
Manganese	0.0524		0.00125	0.00500	0.0250	5	05/06/2016 04:02	WG869316
Manganese,Dissolved	0.0382		0.00125	0.00500	0.0250	5	05/09/2016 16:30	WG870080
Potassium	14.5		0.185	1.00	5.00	5	05/06/2016 04:02	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 04:02	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 16:30	WG870080
Sodium	1100		0.550	1.00	5.00	5	05/06/2016 04:02	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 14:16	WG869702
(S) a,a,a-Trifluorotoluene(FID)	99.5				62.0-128		05/04/2016 14:16	WG869702

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 16:59	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 16:59	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 16:59	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 16:59	WG868985



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 16:59	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 16:59	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 16:59	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 16:59	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 16:59	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 16:59	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 16:59	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 16:59	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 16:59	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 16:59	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 16:59	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 16:59	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 16:59	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 16:59	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 16:59	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 16:59	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 16:59	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 16:59	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 16:59	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 16:59	WG868985
(S) Toluene-d8	103				90.0-115		05/04/2016 16:59	WG868985
(S) Dibromofluoromethane	103				79.0-121		05/04/2016 16:59	WG868985
(S) 4-Bromofluorobenzene	97.3				80.1-120		05/04/2016 16:59	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	0.100	1	05/04/2016 15:55	WG869254
(S) o-Terphenyl	94.4				50.0-150		05/04/2016 15:55	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	12700		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.446	J	0.197	0.100	1.00	10	05/06/2016 08:50	WG870057

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	5320		5.19	1.00	100	100	05/07/2016 17:04	WG869689
Fluoride	0.608		0.00990	0.100	0.100	1	05/07/2016 16:49	WG869689
Sulfate	3610		7.74	5.00	500	100	05/07/2016 17:04	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00209	J	0.00125	0.00200	0.0100	5	05/06/2016 04:04	WG869316
Arsenic,Dissolved	0.00176	J	0.00125	0.00200	0.0100	5	05/09/2016 16:33	WG870080
Barium	0.0226	J	0.00180	0.00500	0.0250	5	05/06/2016 04:04	WG869316
Barium,Dissolved	0.0263		0.00180	0.00500	0.0250	5	05/09/2016 16:33	WG870080
Calcium	927		0.230	1.00	5.00	5	05/06/2016 04:04	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 04:04	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 16:33	WG870080
Iron	0.855		0.0750	0.100	0.500	5	05/06/2016 04:04	WG869316
Iron,Dissolved	0.800		0.0750	0.100	0.500	5	05/09/2016 16:33	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 04:04	WG869316
Lead,Dissolved	0.00146	J	0.00120	0.00200	0.0100	5	05/09/2016 16:33	WG870080
Manganese	0.119		0.00125	0.00500	0.0250	5	05/06/2016 04:04	WG869316
Manganese,Dissolved	0.149		0.00125	0.00500	0.0250	5	05/09/2016 16:33	WG870080
Potassium	36.2		0.185	1.00	5.00	5	05/06/2016 04:04	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 04:04	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 16:33	WG870080
Sodium	3400		2.20	1.00	20.0	20	05/07/2016 11:48	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 17:03	WG869702
(S) a,a,a-Trifluorotoluene(FID)	99.3				62.0-128		05/04/2016 17:03	WG869702

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 17:18	WG868985
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 17:18	WG868985
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 17:18	WG868985
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 17:18	WG868985



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 17:18	WG868985
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 17:18	WG868985
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 17:18	WG868985
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 17:18	WG868985
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 17:18	WG868985
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 17:18	WG868985
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 17:18	WG868985
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 17:18	WG868985
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 17:18	WG868985
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 17:18	WG868985
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 17:18	WG868985
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 17:18	WG868985
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 17:18	WG868985
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 17:18	WG868985
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 17:18	WG868985
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 17:18	WG868985
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 17:18	WG868985
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 17:18	WG868985
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 17:18	WG868985
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 17:18	WG868985
(S) Toluene-d8	103				90.0-115		05/04/2016 17:18	WG868985
(S) Dibromofluoromethane	106				79.0-121		05/04/2016 17:18	WG868985
(S) 4-Bromofluorobenzene	94.7				80.1-120		05/04/2016 17:18	WG868985

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	0.100	1	05/04/2016 16:13	WG869254
(S) o-Terphenyl	91.2				50.0-150		05/04/2016 16:13	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	9960		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.222	J	0.197	0.100	1.00	10	05/06/2016 15:26	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	5030		5.19	1.00	100	100	05/07/2016 08:20	WG869689
Fluoride	0.774	J3 J6	0.00990	0.100	0.100	1	05/07/2016 08:04	WG869689
Sulfate	3780		7.74	5.00	500	100	05/07/2016 08:20	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0126		0.00125	0.00200	0.0100	5	05/06/2016 04:07	WG869316
Arsenic,Dissolved	0.00259	J	0.00125	0.00200	0.0100	5	05/09/2016 16:35	WG870080
Barium	0.0279		0.00180	0.00500	0.0250	5	05/06/2016 04:07	WG869316
Barium,Dissolved	0.0240	J	0.00180	0.00500	0.0250	5	05/09/2016 16:35	WG870080
Calcium	900		0.230	1.00	5.00	5	05/06/2016 04:07	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 04:07	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 16:35	WG870080
Iron	15.4		0.0750	0.100	0.500	5	05/06/2016 04:07	WG869316
Iron,Dissolved	1.16		0.0750	0.100	0.500	5	05/09/2016 16:35	WG870080
Lead	0.00177	J	0.00120	0.00200	0.0100	5	05/06/2016 04:07	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 16:35	WG870080
Manganese	0.267		0.00125	0.00500	0.0250	5	05/06/2016 04:07	WG869316
Manganese,Dissolved	0.216		0.00125	0.00500	0.0250	5	05/09/2016 16:35	WG870080
Potassium	41.2		0.185	1.00	5.00	5	05/06/2016 04:07	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 04:07	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 16:35	WG870080
Sodium	2960		2.20	1.00	20.0	20	05/07/2016 11:51	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 17:24	WG869702
(S) a,a,a-Trifluorotoluene(FID)	99.2				62.0-128		05/04/2016 17:24	WG869702

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 22:28	WG869976
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 22:28	WG869976
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 22:28	WG869976
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 22:28	WG869976



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 22:28	WG869976
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 22:28	WG869976
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 22:28	WG869976
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 22:28	WG869976
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 22:28	WG869976
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 22:28	WG869976
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 22:28	WG869976
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 22:28	WG869976
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 22:28	WG869976
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 22:28	WG869976
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 22:28	WG869976
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 22:28	WG869976
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 22:28	WG869976
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 22:28	WG869976
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 22:28	WG869976
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 22:28	WG869976
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 22:28	WG869976
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 22:28	WG869976
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 22:28	WG869976
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 22:28	WG869976
(S) Toluene-d8	107				90.0-115		05/04/2016 22:28	WG869976
(S) Dibromofluoromethane	110				79.0-121		05/04/2016 22:28	WG869976
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 22:28	WG869976

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0576	J	0.0247	0.100	0.100	1	05/04/2016 17:45	WG869254
(S) o-Terphenyl	96.7				50.0-150		05/04/2016 17:45	WG869254



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	18600		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.715	J J6	0.197	0.100	1.00	10	05/06/2016 15:28	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	9440		5.19	1.00	100	100	05/07/2016 18:04	WG869689
Fluoride	0.414	J6	0.00990	0.100	0.100	1	05/07/2016 17:19	WG869689
Sulfate	3510		7.74	5.00	500	100	05/07/2016 18:04	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	U		0.00125	0.00200	0.0100	5	05/06/2016 03:22	WG869316
Arsenic,Dissolved	0.00133	J	0.00125	0.00200	0.0100	5	05/09/2016 16:37	WG870080
Barium	0.0301		0.00180	0.00500	0.0250	5	05/06/2016 03:22	WG869316
Barium,Dissolved	0.0321		0.00180	0.00500	0.0250	5	05/09/2016 16:37	WG870080
Calcium	1280	V	0.230	1.00	5.00	5	05/06/2016 03:22	WG869316
Chromium	0.00353	J	0.00270	0.00200	0.0100	5	05/06/2016 03:22	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 16:37	WG870080
Iron	0.416	J	0.0750	0.100	0.500	5	05/06/2016 03:22	WG869316
Iron,Dissolved	0.887		0.0750	0.100	0.500	5	05/09/2016 16:37	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 03:22	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 16:37	WG870080
Manganese	0.876	V	0.00125	0.00500	0.0250	5	05/06/2016 03:22	WG869316
Manganese,Dissolved	0.903		0.00125	0.00500	0.0250	5	05/09/2016 16:37	WG870080
Potassium	19.0		0.185	1.00	5.00	5	05/06/2016 03:22	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 03:22	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 16:37	WG870080
Sodium	5150	E V	0.550	1.00	5.00	5	05/06/2016 03:22	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 17:45	WG869702
(S) a,a,a-Trifluorotoluene(FID)	99.6				62.0-128		05/04/2016 17:45	WG869702

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 22:45	WG869976
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 22:45	WG869976
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 22:45	WG869976
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 22:45	WG869976



Collected date/time: 04/27/16 12:00

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 22:45	WG869976
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 22:45	WG869976
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 22:45	WG869976
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 22:45	WG869976
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 22:45	WG869976
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 22:45	WG869976
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 22:45	WG869976
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 22:45	WG869976
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 22:45	WG869976
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 22:45	WG869976
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 22:45	WG869976
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 22:45	WG869976
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 22:45	WG869976
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 22:45	WG869976
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 22:45	WG869976
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 22:45	WG869976
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 22:45	WG869976
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 22:45	WG869976
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 22:45	WG869976
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 22:45	WG869976
(S) Toluene-d8	105				90.0-115		05/04/2016 22:45	WG869976
(S) Dibromofluoromethane	109				79.0-121		05/04/2016 22:45	WG869976
(S) 4-Bromofluorobenzene	103				80.1-120		05/04/2016 22:45	WG869976

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		0.0247	0.100	0.100	1	05/04/2016 18:03	WG869254
(S) o-Terphenyl	92.0				50.0-150		05/04/2016 18:03	WG869254





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4720		2.82	10.0	10.0	1	05/04/2016 04:11	WG869542

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	3.99		0.197	0.100	1.00	10	05/06/2016 15:30	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	611		2.60	1.00	50.0	50	05/07/2016 18:48	WG869689
Fluoride	2.01		0.00990	0.100	0.100	1	05/07/2016 18:33	WG869689
Sulfate	1240		3.87	5.00	250	50	05/07/2016 18:48	WG869689

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0216		0.00125	0.00200	0.0100	5	05/06/2016 04:14	WG869316
Arsenic,Dissolved	0.0204		0.00125	0.00200	0.0100	5	05/09/2016 16:40	WG870080
Barium	0.0203	J	0.00180	0.00500	0.0250	5	05/06/2016 04:14	WG869316
Barium,Dissolved	0.0217	J	0.00180	0.00500	0.0250	5	05/09/2016 16:40	WG870080
Calcium	487		0.230	1.00	5.00	5	05/06/2016 04:14	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 04:14	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 16:40	WG870080
Iron	U		0.0750	0.100	0.500	5	05/06/2016 04:14	WG869316
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 16:40	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 04:14	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 16:40	WG870080
Manganese	0.887		0.00125	0.00500	0.0250	5	05/06/2016 04:14	WG869316
Manganese,Dissolved	0.874		0.00125	0.00500	0.0250	5	05/09/2016 16:40	WG870080
Potassium	5.53		0.185	1.00	5.00	5	05/06/2016 04:14	WG869316
Selenium	0.00201	J	0.00190	0.00200	0.0100	5	05/06/2016 04:14	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 16:40	WG870080
Sodium	795		0.550	1.00	5.00	5	05/06/2016 04:14	WG869316

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.203		0.0314	0.100	0.100	1	05/03/2016 22:39	WG869046
(S) a,a,a-Trifluorotoluene(FID)	92.0				62.0-128		05/03/2016 22:39	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 23:02	WG869976
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 23:02	WG869976
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 23:02	WG869976
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 23:02	WG869976



Collected date/time: 04/27/16 13:00

L832472

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 23:02	WG869976
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 23:02	WG869976
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 23:02	WG869976
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 23:02	WG869976
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 23:02	WG869976
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 23:02	WG869976
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 23:02	WG869976
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 23:02	WG869976
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 23:02	WG869976
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 23:02	WG869976
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 23:02	WG869976
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 23:02	WG869976
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 23:02	WG869976
Methyl tert-butyl ether	0.000602	U	0.000367	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 23:02	WG869976
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 23:02	WG869976
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 23:02	WG869976
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 23:02	WG869976
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 23:02	WG869976
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 23:02	WG869976
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 23:02	WG869976
(S) Toluene-d8	105				90.0-115		05/04/2016 23:02	WG869976
(S) Dibromofluoromethane	108				79.0-121		05/04/2016 23:02	WG869976
(S) 4-Bromofluorobenzene	100				80.1-120		05/04/2016 23:02	WG869976

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.549		0.0247	0.100	0.100	1	05/04/2016 18:21	WG869254
(S) o-Terphenyl	104				50.0-150		05/04/2016 18:21	WG869254

WG869073

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832472-09,10,11,12,13,14,16,17

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133357-1 05/02/16 14:55				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

- Cp
- Tc
- Ss
- Cn
- Sr
- Qc
- Gl
- Al
- Sc

L832468-05 Original Sample (OS) • Duplicate (DUP)

(OS) L832468-05 05/02/16 14:55 • (DUP) R3133357-4 05/02/16 14:55						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1780	1780	1	0.000		5

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

(LCS) R3133357-2 05/02/16 14:55 • (LCSD) R3133357-3 05/02/16 14:55										
	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	%	%	%			%	%
Dissolved Solids	8800	8730	8740	99.2	99.3	85.0-115			0.114	5

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832472

DATE/TIME:  
05/17/16 22:18

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WG869074

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832472-18,19,27,28,29,30

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133371-1 05/02/16 15:59

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

L832037-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832037-01 05/02/16 15:59 • (DUP) R3133371-4 05/02/16 15:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	5890	5840	1	0.853		5

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

(LCS) R3133371-2 05/02/16 15:59 • (LCSD) R3133371-3 05/02/16 15:59

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 %
Dissolved Solids	8800	8680	8670	98.6	98.5	85.0-115			0.115	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869534

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06,07,08,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133743-1 05/03/16 18:57				
	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

L832447-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832447-04 05/03/16 18:57 • (DUP) R3133743-4 05/03/16 18:57						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	8730	8710	1	0.229		5

L832887-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832887-01 05/03/16 18:57 • (DUP) R3133743-5 05/03/16 18:57						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1720	1710	1	0.583		5

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

(LCS) R3133743-2 05/03/16 18:57 • (LCSD) R3133743-3 05/03/16 18:57									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD
Analyte	mg/l	mg/l	mg/l	%	%	%			%
Dissolved Solids	8800	8700	8720	98.9	99.1	85.0-115			0.230
									5

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832472

DATE/TIME:  
05/17/16 22:18

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WG869541

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832472-21,22,23

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133873-1 05/04/16 03:49

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

L832453-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832453-01 05/04/16 03:49 • (DUP) R3133873-4 05/04/16 03:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	848	835	1	1.58		5

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

(LCS) R3133873-2 05/04/16 03:49 • (LCSD) R3133873-3 05/04/16 03:49

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 %
Dissolved Solids	8800	8920	8690	101	98.8	85.0-115			2.61	5

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

WG869542

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832472-24,25,26,31,32,33,34,35,36,37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133869-1 05/04/16 04:11

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

L832472-24 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-24 05/04/16 04:11 • (DUP) R3133869-4 05/04/16 04:11

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	20700	20400	1	1.56		5

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

(LCS) R3133869-2 05/04/16 04:11 • (LCSD) R3133869-3 05/04/16 04:11

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 %
Dissolved Solids	8800	8830	8760	100	99.5	85.0-115			0.796	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870056

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06,07,08,09,10,11,12,13

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134255-1 05/06/16 06:40				
Analyte	MB Result mg/l	MB Qualifier mg/l	MB MDL mg/l	MB RDL 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

L832468-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832468-03 05/06/16 06:48 • (DUP) R3134255-4 05/06/16 06:49						
Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier %	DUP RPD Limits %
Nitrate-Nitrite	5.71	5.54	10	3.00		20

L832472-08 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-08 05/06/16 07:09 • (DUP) R3134255-6 05/06/16 07:10						
Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier %	DUP RPD Limits %
Nitrate-Nitrite	U	ND	10	0.000		20

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

(LCS) R3134255-2 05/06/16 06:41 • (LCSD) R3134255-3 05/06/16 06:42										
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 %
Nitrate-Nitrite	5.00	4.88	4.97	98.0	99.0	90.0-110			2.00	20

L832468-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L832468-05 05/06/16 06:55 • (MS) R3134255-5 05/06/16 06:56							
Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier %
Nitrate-Nitrite	0.500	U	4.34	85.4	10	90.0-110	J6

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06,07,08,09,10,11,12,13

ONE LAB. NATIONWIDE.



L832472-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-12 05/06/16 07:14 • (MS) R3134255-7 05/06/16 07:20 • (MSD) R3134255-8 05/06/16 07:21

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 %
Nitrate-Nitrite	0.500	U	4.11	4.15	80.6	81.4	10	90.0-110	J6	J6	0.993	20

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

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832472-14,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134279-3 05/06/16 08:10

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L832472-14 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-14 05/06/16 08:14 • (DUP) R3134279-9 05/06/16 08:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.501	ND	10	132	P1	20

L832472-33 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-33 05/06/16 08:44 • (DUP) R3134279-10 05/06/16 08:45

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	U	ND	10	115	J P1	20

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

(LCS) R3134279-4 05/06/16 08:11 • (LCSD) R3134279-5 05/06/16 08:12

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 %
Nitrate-Nitrite	5.00	5.17	5.26	103	105	90.0-110			2.00	20

L832472-16 Original Sample (OS) • Matrix Spike (MS)

(OS) L832472-16 05/06/16 08:16 • (MS) R3134279-6 05/06/16 08:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.796	54.9	108	10	90.0-110	

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832472-14,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34

ONE LAB. NATIONWIDE.



L832472-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-34 05/06/16 08:50 • (MS) R3134279-7 05/06/16 08:51 • (MSD) R3134279-8 05/06/16 08:52

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	%	%		%			%	%
Nitrate-Nitrite	5.00	0.446	54.9	55.4	109	110	10	90.0-110			1.00	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832472-35,36,37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134522-1 05/06/16 15:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	0.0230		0.0197	0.100

L832472-35 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-35 05/06/16 15:26 • (DUP) R3134522-4 05/06/16 15:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.222	ND	10	19.0	J	20

L832546-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832546-01 05/06/16 15:51 • (DUP) R3134522-6 05/06/16 15:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.62	1.62	1	0.000		20

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

(LCS) R3134522-2 05/06/16 15:22 • (LCSD) R3134522-3 05/06/16 15:23

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 %
Nitrate-Nitrite	5.00	4.95	4.92	99.0	98.0	90.0-110			1.00	20

L832472-36 Original Sample (OS) • Matrix Spike (MS)

(OS) L832472-36 05/06/16 15:28 • (MS) R3134522-5 05/06/16 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.715	39.4	77.0	10	90.0-110	J6

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832472-35,36,37

ONE LAB. NATIONWIDE.



L832603-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-01 05/06/16 15:53 • (MS) R3134522-7 05/06/16 15:58 • (MSD) R3134522-8 05/06/16 15:59

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	0.0490	4.68	4.49	93.0	89.0	1	90.0-110		J6	4.00	20

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

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Wet Chemistry by Method 9012B

QUALITY CONTROL SUMMARY

L832472-13,29

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136186-1 05/12/16 15:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	0.00294	J	0.00180	0.00500

L832450-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832450-04 05/12/16 15:22 • (DUP) R3136186-4 05/12/16 15:23

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

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

(LCS) R3136186-2 05/12/16 15:18 • (LCSD) R3136186-3 05/12/16 15:19

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 %
Cyanide	0.100	0.0916	0.104	92.0	104	90.0-110			13.0	20

L832460-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-08 05/12/16 15:24 • (MS) R3136186-5 05/12/16 15:25 • (MSD) R3136186-6 05/12/16 15:26

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 %
Cyanide	0.200	U	0.00566	0.178	3.00	89.0	1	90.0-110	J6	J3 J6	188	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832472-09,10,17

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133189-1 05/02/16 09:52

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

L832472-10 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-10 05/02/16 12:31 • (DUP) R3133189-4 05/02/16 12:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	U	0.000	1	0		15
Fluoride	U	0.000	1	0		15
Sulfate	U	0.000	1	0		15

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

(LCS) R3133189-2 05/02/16 10:07 • (LCSD) R3133189-3 05/02/16 10:22

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	%	%	%			%	%
Chloride	40.0	39.9	39.9	100	100	80-120			0	15
Fluoride	8.00	8.04	8.03	101	100	80-120			0	15
Sulfate	40.0	40.2	40.2	101	101	80-120			0	15

L832472-17 Original Sample (OS) • Matrix Spike (MS)

(OS) L832472-17 05/02/16 13:31 • (MS) R3133189-5 05/02/16 13:45

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	U	49.3	99	1	80-120	
Fluoride	5.00	U	5.00	100	1	80-120	
Sulfate	50.0	U	49.8	100	1	80-120	

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832472-16,18,19,27,28,29,30

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133681-1 05/03/16 08:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	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

L832033-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832033-01 05/03/16 10:44 • (DUP) R3133681-4 05/03/16 12:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	40.3	41.7	10	3		15
Fluoride	U	0.000	10	0		15
Sulfate	112	115	10	3		15

L832472-19 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-19 05/03/16 18:28 • (DUP) R3133681-7 05/03/16 18:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	U	0.000	1	0		15
Fluoride	U	0.000	1	0		15
Sulfate	U	0.000	1	0		15

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

(LCS) R3133681-2 05/03/16 08:39 • (LCSD) R3133681-3 05/03/16 08:54

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	%	%	%			%	%
Chloride	40.0	39.8	39.7	99	99	80-120			0	15
Fluoride	8.00	8.01	7.99	100	100	80-120			0	15
Sulfate	40.0	40.1	40.0	100	100	80-120			0	15

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QUALITY CONTROL SUMMARY

L832472-16,18,19,27,28,29,30

ONE LAB. NATIONWIDE.



L832472-28 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-28 05/03/16 15:44 • (MS) R3133681-5 05/03/16 15:59 • (MSD) R3133681-6 05/03/16 16:14

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	%	%		%			%	%
Chloride	50.0	U	49.6	49.8	99	100	1	80-120			1	15
Fluoride	5.00	U	5.02	5.01	100	100	1	80-120			0	15
Sulfate	50.0	U	50.0	50.0	100	100	1	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135217-1 05/09/16 01:00

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

L832472-06 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-06 05/09/16 14:17 • (DUP) R3135217-7 05/09/16 14:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	0.645	0.660	1	2		15

L832472-06 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-06 05/09/16 16:51 • (DUP) R3135217-8 05/09/16 17:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1890	1930	100	2		15
Sulfate	2340	2410	100	3		15

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

(LCS) R3135217-2 05/09/16 01:15 • (LCSD) R3135217-3 05/09/16 01:31

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 %
Chloride	40.0	39.3	39.2	98	98	80-120			0	15
Fluoride	8.00	7.88	7.88	99	98	80-120			0	15
Sulfate	40.0	39.6	39.6	99	99	80-120			0	15

L832460-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832460-02 05/09/16 04:20 • (MS) R3135217-4 05/09/16 04:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	0.0574	51.5	103	1	80-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06

ONE LAB. NATIONWIDE.



L832460-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832460-02 05/09/16 04:20 • (MS) R3135217-4 05/09/16 04:36

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	5.00	U	5.13	103	1	80-120	
Sulfate	50.0	U	52.1	104	1	80-120	

L832462-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832462-06 05/09/16 11:01 • (MS) R3135217-5 05/09/16 11:16 • (MSD) R3135217-6 05/09/16 11:32

	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	50.0	0.107	51.1	51.0	102	102	1	80-120			0	15
Fluoride	5.00	U	5.16	5.10	103	102	1	80-120			1	15
Sulfate	50.0	U	51.2	51.5	102	103	1	80-120			1	15

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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QUALITY CONTROL SUMMARY

L832472-07,08,11,12,13,14,20,21,22,23,24,25,26,31,32,33,34,35,36,37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135222-1 05/07/16 00:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	0.204	J	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

L832472-26 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-26 05/07/16 04:50 • (DUP) R3135222-4 05/07/16 05:20

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	4.34	4.31	1	1		15

L832472-26 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-26 05/07/16 05:05 • (DUP) R3135222-5 05/07/16 05:35

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1520	1480	100	2		15
Sulfate	3790	3710	100	2		15

L832472-37 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-37 05/07/16 18:33 • (DUP) R3135222-9 05/07/16 19:03

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	2.01	1.92	1	5		15

L832472-37 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-37 05/07/16 18:48 • (DUP) R3135222-10 05/07/16 19:18

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	611	544	50	12		15
Sulfate	1240	1160	50	7		15

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QUALITY CONTROL SUMMARY

L832472-07,08,11,12,13,14,20,21,22,23,24,25,26,31,32,33,34,35,36,37

ONE LAB. NATIONWIDE.



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

(LCS) R3135222-2 05/07/16 01:06 • (LCSD) R3135222-3 05/07/16 01:21										
	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	39.6	39.6	99	99	80-120			0	15
Fluoride	8.00	8.01	8.01	100	100	80-120			0	15
Sulfate	40.0	40.0	40.1	100	100	80-120			0	15

L832472-35 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-35 05/07/16 08:04 • (MS) R3135222-6 05/07/16 08:35 • (MSD) R3135222-7 05/07/16 09:22													
	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	%	%		%			%	%	
Fluoride	5.00	0.774	4.48	5.40	74	93	1	80-120	<u>J6</u>	<u>J3</u>	19	15	

L832472-36 Original Sample (OS) • Matrix Spike (MS)

(OS) L832472-36 05/07/16 17:19 • (MS) R3135222-8 05/07/16 18:18							
	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	0.414	2.99	52	1	80-120	<u>J6</u>

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870882

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832472-16

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136016-1 05/09/16 23:45

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

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

L832488-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832488-01 05/10/16 11:35 • (DUP) R3136016-6 05/10/16 11:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	3690	3620	100	2		15
Sulfate	2510	2500	100	0		15

L832422-15 Original Sample (OS) • Duplicate (DUP)

(OS) L832422-15 05/10/16 16:38 • (DUP) R3136016-7 05/10/16 16:54

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	569	559	10	2		15
Sulfate	164	155	10	5		15

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

(LCS) R3136016-2 05/10/16 00:01 • (LCSD) R3136016-3 05/10/16 00:17

	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	40.2	39.7	100	99	80-120			1	15
Sulfate	40.0	40.2	39.8	100	99	80-120			1	15

L832422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832422-03 05/10/16 17:09 • (MS) R3136016-8 05/10/16 17:25 • (MSD) R3136016-9 05/10/16 17:41

	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	50.0	U	49.3	49.3	99	99	1	80-120			0	15
Sulfate	50.0	U	49.2	49.2	98	98	1	80-120			0	15

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WG869159

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832472-13,29

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133255-1 05/03/16 10:26				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

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

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

LCS) R3133255-2 05/03/16 10:28 • (LCSD) R3133255-3 05/03/16 10:31										
	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	0.00298	0.00292	99	97	80-120			2	20

L832391-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832391-01 05/03/16 10:40 • (MS) R3133255-4 05/03/16 10:43 • (MSD) R3133255-5 05/03/16 10:46												
	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	ND	0.00307	0.00291	102	97	1	75-125			5	20

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832472-13,29

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133555-2 05/04/16 09:17

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

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

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

(LCS) R3133555-3 05/04/16 09:27 • (LCSD) R3133555-4 05/04/16 09:29

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 %
Mercury,Dissolved	0.00300	0.00285	0.00298	95	99	80-120			5	20

L832472-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-13 05/04/16 09:32 • (MS) R3133555-5 05/04/16 09:34 • (MSD) R3133555-6 05/04/16 09:36

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 %
Mercury,Dissolved	0.00300	U	0.00258	0.00264	86	88	1	75-125			2	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06,07,08,09,10,11,12,13,14,16,17,18,19,20,21,22

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134068-1 05/05/16 13:12

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
Cadmium	U		0.00016	0.00100
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	U		0.015	0.100
Lead	0.0012		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
Uranium	U		0.00033	0.0100
Vanadium	0.000218		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3134068-2 05/05/16 13:15 • (LCSD) R3134068-3 05/05/16 13:17

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	0.0481	0.0464	96	93	80-120			4	20
Barium	0.0500	0.0493	0.0501	99	100	80-120			2	20
Cadmium	0.0500	0.0502	0.0493	100	99	80-120			2	20
Calcium	5.00	4.92	5.02	98	100	80-120			2	20
Chromium	0.0500	0.0503	0.0509	101	102	80-120			1	20
Cobalt	0.0500	0.0509	0.0520	102	104	80-120			2	20
Iron	5.00	4.93	5.01	99	100	80-120			2	20
Lead	0.0500	0.0505	0.0502	101	100	80-120			1	20
Manganese	0.0500	0.0496	0.0509	99	102	80-120			3	20
Potassium	5.00	4.91	4.88	98	98	80-120			1	20
Selenium	0.0500	0.0474	0.0491	95	98	80-120			4	20
Sodium	5.00	5.22	5.14	104	103	80-120			1	20
Uranium	0.0500	0.0492	0.0500	98	100	80-120			2	20
Vanadium	0.0500	0.0497	0.0500	99	100	80-120			1	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06,07,08,09,10,11,12,13,14,16,17,18,19,20,21,22

ONE LAB. NATIONWIDE.



L832472-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-17 05/07/16 11:17 • (MS) R3134667-2 05/07/16 11:22 • (MSD) R3134667-3 05/07/16 11:24

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	%	%		%			%	%
Arsenic	0.0500	0.000636	0.0479	0.0522	95	103	1	75-125			9	20
Barium	0.0500	U	0.0491	0.0504	98	101	1	75-125			3	20
Cadmium	0.0500	U	0.0506	0.0541	101	108	1	75-125			7	20
Calcium	5.00	U	4.98	5.21	100	104	1	75-125			5	20
Chromium	0.0500	U	0.0493	0.0507	99	101	1	75-125			3	20
Cobalt	0.0500	U	0.0511	0.0524	102	105	1	75-125			3	20
Potassium	5.00	U	4.80	5.06	96	101	1	75-125			5	20
Iron	5.00	U	4.77	4.93	95	99	1	75-125			3	20
Lead	0.0500	U	0.0488	0.0501	98	100	1	75-125			3	20
Manganese	0.0500	0.000293	0.0482	0.0501	96	100	1	75-125			4	20
Selenium	0.0500	U	0.0486	0.0511	97	102	1	75-125			5	20
Sodium	5.00	U	5.20	5.35	104	107	1	75-125			3	20
Uranium	0.0500	U	0.0485	0.0491	97	98	1	75-125			1	20
Vanadium	0.0500	0.000184	0.0487	0.0499	97	99	1	75-125			2	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

ACCOUNT:  
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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-23,24,25,26,27,28,29,30,31,32,33,34,35,36,37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134375-7 05/06/16 03:15

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
Cadmium	U		0.00016	0.00100
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	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
Uranium	U		0.00033	0.0100
Vanadium	0.000203		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3134375-8 05/06/16 03:17 • (LCSD) R3134375-9 05/06/16 03:19

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	0.0480	100	96	80-120			4	20
Barium	0.0500	0.0489	0.0484	98	97	80-120			1	20
Cadmium	0.0500	0.0522	0.0500	104	100	80-120			4	20
Calcium	5.00	5.12	4.94	102	99	80-120			4	20
Chromium	0.0500	0.0529	0.0518	106	104	80-120			2	20
Cobalt	0.0500	0.0537	0.0524	107	105	80-120			2	20
Iron	5.00	5.20	5.07	104	101	80-120			3	20
Lead	0.0500	0.0506	0.0499	101	100	80-120			1	20
Manganese	0.0500	0.0524	0.0508	105	102	80-120			3	20
Potassium	5.00	4.92	4.74	98	95	80-120			4	20
Selenium	0.0500	0.0500	0.0480	100	96	80-120			4	20
Sodium	5.00	4.88	4.69	98	94	80-120			4	20
Uranium	0.0500	0.0502	0.0498	100	100	80-120			1	20
Vanadium	0.0500	0.0513	0.0507	103	101	80-120			1	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-23,24,25,26,27,28,29,30,31,32,33,34,35,36,37

ONE LAB. NATIONWIDE.



L832472-36 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-36 05/06/16 03:22 • (MS) R3134375-11 05/06/16 03:27 • (MSD) R3134375-12 05/06/16 03:29

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	%	%		%			%	%
Arsenic	0.0100	U	0.0613	0.0596	123	119	5	75-125			3	20
Barium	0.0100	0.0301	0.0845	0.0823	109	104	5	75-125			3	20
Cadmium	0.0100	U	0.0559	0.0527	112	105	5	75-125			6	20
Calcium	1.00	1280	1340	1300	1190	387	5	75-125	V	V	3	20
Chromium	0.0100	0.00353	0.0576	0.0567	108	106	5	75-125			2	20
Cobalt	0.0100	U	0.0539	0.0522	108	104	5	75-125			3	20
Potassium	1.00	19.0	24.5	24.1	110	103	5	75-125			1	20
Iron	1.00	0.416	5.67	5.62	105	104	5	75-125			1	20
Lead	0.0100	U	0.0547	0.0533	109	107	5	75-125			3	20
Manganese	0.0100	0.876	0.942	0.931	133	111	5	75-125	V		1	20
Selenium	0.0100	U	0.0549	0.0556	110	111	5	75-125			1	20
Sodium	1.00	5150	5350	5210	3990	1170	5	75-125	E V	E V	3	20
Uranium	0.0100	U	0.0573	0.0546	115	109	5	75-125			5	20
Vanadium	0.0100	U	0.0550	0.0546	110	109	5	75-125			1	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

WG870076

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06,07,08,09,10,11,12,13,14,16,17,18,19,20,21,22

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134180-1 05/05/16 16:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	0.000304		0.00024	0.00200
Manganese,Dissolved	0.000472		0.00025	0.00500
Selenium,Dissolved	0.000395		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	0.00021		0.00018	0.00500

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134180-2 05/05/16 16:15 • (LCSD) R3134180-3 05/05/16 16:17

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,Dissolved	0.0500	0.0496	0.0457	99	91	80-120			8	20
Barium,Dissolved	0.0500	0.0482	0.0474	96	95	80-120			2	20
Cadmium,Dissolved	0.0500	0.0526	0.0486	105	97	80-120			8	20
Chromium,Dissolved	0.0500	0.0501	0.0493	100	99	80-120			2	20
Cobalt,Dissolved	0.0500	0.0508	0.0506	102	101	80-120			0	20
Iron,Dissolved	5.00	4.86	4.85	97	97	80-120			0	20
Lead,Dissolved	0.0500	0.0499	0.0483	100	97	80-120			3	20
Manganese,Dissolved	0.0500	0.0494	0.0489	99	98	80-120			1	20
Selenium,Dissolved	0.0500	0.0485	0.0484	97	97	80-120			0	20
Uranium,Dissolved	0.0500	0.0484	0.0476	97	95	80-120			2	20
Vanadium,Dissolved	0.0500	0.0495	0.0491	99	98	80-120			1	20

L832472-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-22 05/05/16 16:20 • (MS) R3134180-5 05/05/16 16:24 • (MSD) R3134180-6 05/05/16 16:27

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,Dissolved	0.0100	0.0118	0.0645	0.0665	106	109	5	75-125			3	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-01,03,04,05,06,07,08,09,10,11,12,13,14,16,17,18,19,20,21,22

ONE LAB. NATIONWIDE.



L832472-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-22 05/05/16 16:20 • (MS) R3134180-5 05/05/16 16:24 • (MSD) R3134180-6 05/05/16 16:27

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	%	%		%			%	%
Barium,Dissolved	0.0100	0.0208	0.0707	0.0737	100	106	5	75-125			4	20
Cadmium,Dissolved	0.0100	U	0.0509	0.0533	102	107	5	75-125			5	20
Chromium,Dissolved	0.0100	U	0.0504	0.0520	101	104	5	75-125			3	20
Cobalt,Dissolved	0.0100	U	0.0501	0.0517	100	103	5	75-125			3	20
Iron,Dissolved	1.00	2.00	7.00	7.27	100	106	5	75-125			4	20
Lead,Dissolved	0.0100	U	0.0509	0.0523	102	105	5	75-125			3	20
Manganese,Dissolved	0.0100	2.14	2.19	2.31	95	332	5	75-125		V	5	20
Selenium,Dissolved	0.0100	0.00282	0.0536	0.0582	102	111	5	75-125			8	20
Uranium,Dissolved	0.0100	U	0.0518	0.0527	104	105	5	75-125			2	20
Vanadium,Dissolved	0.0100	0.000921	0.0511	0.0537	100	106	5	75-125			5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-23,24,25,26,27,28,29,30,31,32,33,34,35,36,37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134964-1 05/09/16 11:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	0.0559		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000728		0.00025	0.00500
Nickel,Dissolved	0.00081		0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	U		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3134964-2 05/09/16 12:01 • (LCSD) R3134964-3 05/09/16 12:03

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 %
Arsenic,Dissolved	0.0500	0.0499	0.0509	100	102	80-120			2	20
Barium,Dissolved	0.0500	0.0489	0.0488	98	98	80-120			0	20
Cadmium,Dissolved	0.0500	0.0538	0.0541	108	108	80-120			0	20
Chromium,Dissolved	0.0500	0.0509	0.0515	102	103	80-120			1	20
Cobalt,Dissolved	0.0500	0.0527	0.0528	105	106	80-120			0	20
Iron,Dissolved	5.00	5.03	5.05	101	101	80-120			0	20
Lead,Dissolved	0.0500	0.0499	0.0509	100	102	80-120			2	20
Manganese,Dissolved	0.0500	0.0499	0.0498	100	100	80-120			0	20
Nickel,Dissolved	0.0500	0.0529	0.0538	106	108	80-120			2	20
Selenium,Dissolved	0.0500	0.0499	0.0502	100	100	80-120			1	20
Uranium,Dissolved	0.0500	0.0492	0.0505	98	101	80-120			3	20
Vanadium,Dissolved	0.0500	0.0498	0.0503	100	101	80-120			1	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-23,24,25,26,27,28,29,30,31,32,33,34,35,36,37

ONE LAB. NATIONWIDE.



L832472-28 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-28 05/09/16 12:06 • (MS) R3134964-5 05/09/16 12:10 • (MSD) R3134964-6 05/09/16 12:13

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	%	%		%			%	%
Arsenic,Dissolved	0.0500	0.000615	0.0503	0.0500	99	99	1	75-125			1	20
Barium,Dissolved	0.0500	U	0.0496	0.0490	99	98	1	75-125			1	20
Cadmium,Dissolved	0.0500	U	0.0530	0.0532	106	106	1	75-125			1	20
Chromium,Dissolved	0.0500	U	0.0504	0.0518	101	104	1	75-125			3	20
Cobalt,Dissolved	0.0500	U	0.0524	0.0529	105	106	1	75-125			1	20
Iron,Dissolved	5.00	U	5.01	5.05	100	101	1	75-125			1	20
Lead,Dissolved	0.0500	U	0.0504	0.0500	101	100	1	75-125			1	20
Manganese,Dissolved	0.0500	0.000556	0.0500	0.0493	99	97	1	75-125			1	20
Nickel,Dissolved	0.0500	0.000529	0.0526	0.0528	104	105	1	75-125			0	20
Selenium,Dissolved	0.0500	U	0.0505	0.0492	101	98	1	75-125			2	20
Uranium,Dissolved	0.0500	U	0.0495	0.0493	99	99	1	75-125			0	20
Vanadium,Dissolved	0.0500	0.000196	0.0496	0.0501	99	100	1	75-125			1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-13,29

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134666-1 05/07/16 08:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.0015	0.0200
Nickel	U		0.00035	0.00200

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) R3134666-2 05/07/16 08:35 • (LCSD) R3134666-3 05/07/16 08:40

	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	%	%	%			%	%
Boron	0.0500	0.0478	0.0491	96	98	80-120			3	20
Nickel	0.0500	0.0517	0.0517	103	103	80-120			0	20

L832450-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-04 05/07/16 08:45 • (MS) R3134666-5 05/07/16 08:54 • (MSD) R3134666-6 05/07/16 08:59

	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	%	%		%			%	%
Boron	0.00500	0.689	0.704	0.712	31	47	10	75-125	✓	✓	1	20
Nickel	0.00500	U	0.0574	0.0516	115	103	10	75-125			11	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832472-13,29

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134973-1 05/09/16 10:45				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0015	0.0200
Nickel,Dissolved	U		0.00035	0.00200

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

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

(LCS) R3134973-2 05/09/16 10:50 • (LCSD) R3134973-3 05/09/16 10:55										
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 %
Boron,Dissolved	0.0500	0.0484	0.0502	97	100	80-120			4	20
Nickel,Dissolved	0.0500	0.0530	0.0543	106	109	80-120			2	20

L832468-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832468-01 05/09/16 11:00 • (MS) R3134973-5 05/09/16 11:09 • (MSD) R3134973-6 05/09/16 11:14												
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	%	%		%			%	%
Boron,Dissolved	0.00500	0.596	0.642	0.644	92	95	10	75-125			0	20
Nickel,Dissolved	0.00500	0.00560	0.0580	0.0600	105	109	10	75-125			3	20

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

QUALITY CONTROL SUMMARY

L832472-01,03,04,05,08,10,11,12,13,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134064-3 05/05/16 03:24				
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)	99.3			62.0-128

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

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

(LCS) R3134064-1 05/05/16 02:19 • (LCSD) R3134064-2 05/05/16 02:41										
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) Low Fraction	5.50	5.96	5.71	108	104	67.0-132			4.20	20
(S) a,a,a-Trifluorotoluene(FID)				101	100	62.0-128				

L832460-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832460-02 05/05/16 04:50 • (MS) R3134064-4 05/05/16 03:45 • (MSD) R3134064-5 05/05/16 04:07												
	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	%	%		%			%	
TPH (GC/FID) Low Fraction	5.50	U	4.30	4.12	78.2	74.8	1	50.0-143			4.43	20
(S) a,a,a-Trifluorotoluene(FID)					99.3	98.8		62.0-128				

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

QUALITY CONTROL SUMMARY

L832472-16,17,18,19,20,21,22,23,24,25,26,27,30,31,32

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133498-3 05/03/16 11:51				
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) 104			62.0-128	

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

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

(LCS) R3133498-1 05/03/16 10:48 • (LCSD) R3133498-2 05/03/16 11:09										
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 %
TPH (GC/FID) Low Fraction	5.50	6.39	6.05	116	110	67.0-132			5.55	20
(S) a,a,a-Trifluorotoluene(FID)				104	105	62.0-128				

L832472-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-16 05/03/16 18:47 • (MS) R3133498-4 05/03/16 21:39 • (MSD) R3133498-5 05/03/16 22:00												
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 %
TPH (GC/FID) Low Fraction	5.50	1.20	7.86	7.80	121	120	1	50.0-143			0.790	20
(S) a,a,a-Trifluorotoluene(FID)					105	105		62.0-128				

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

QUALITY CONTROL SUMMARY

L832472-37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133660-3 05/03/16 19:07				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	0.0316		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	93.4			62.0-128

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

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

(LCS) R3133660-1 05/03/16 18:01 • (LCSD) R3133660-2 05/03/16 18:23										
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	5.37	5.38	97.6	97.8	67.0-132			0.180	20
(S) a,a,a-Trifluorotoluene(FID)				101	101	62.0-128				

L832472-37 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-37 05/03/16 22:39 • (MS) R3133660-4 05/03/16 23:45 • (MSD) R3133660-5 05/04/16 00:07												
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	0.203	4.04	4.23	69.7	73.3	1	50.0-143			4.78	20
(S) a,a,a-Trifluorotoluene(FID)					98.4	98.7		62.0-128				

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

QUALITY CONTROL SUMMARY

L832472-28,33,34,35,36

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133815-4 05/04/16 09:11				
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)	99.2			62.0-128

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

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

(LCS) R3133815-2 05/04/16 08:09 • (LCSD) R3133815-3 05/04/16 08:30										
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	5.64	5.83	103	106	67.0-132			3.35	20
(S) a,a,a-Trifluorotoluene(FID)				98.0	99.7	62.0-128				

L832099-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832099-05 05/04/16 11:29 • (MS) R3133815-8 05/04/16 15:18 • (MSD) R3133815-9 05/04/16 15:39												
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	ND	5.87	7.99	107	145	1	50.0-143		J3 J5	30.6	20
(S) a,a,a-Trifluorotoluene(FID)					100	101		62.0-128				

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

QUALITY CONTROL SUMMARY

L832472-06,07,09

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134272-3 05/05/16 20:05				
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) 102			62.0-128	

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

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

(LCS) R3134272-1 05/05/16 18:55 • (LCSD) R3134272-2 05/05/16 19:18										
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 %
TPH (GC/FID) Low Fraction	5.50	5.72	5.74	104	104	67.0-132			0.480	20
(S) a,a,a-Trifluorotoluene(FID)				101	101	62.0-128				

L832472-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-09 05/05/16 23:22 • (MS) R3134272-4 05/05/16 22:13 • (MSD) R3134272-5 05/05/16 22:36												
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	2.09	6.24	5.37	75.4	59.6	1	50.0-143			15.0	20
(S) a,a,a-Trifluorotoluene(FID)					99.6	99.7		62.0-128				

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

QUALITY CONTROL SUMMARY

L832472-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134035-3 05/03/16 22:37

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

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

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

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L832472

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

QUALITY CONTROL SUMMARY

L832472-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134035-3 05/03/16 22:37

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	103			90.0-115
(S) Dibromofluoromethane	103			79.0-121
(S) 4-Bromofluorobenzene	98.6			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

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

(LCS) R3134035-1 05/03/16 20:56 • (LCSD) R3134035-2 05/03/16 21:16

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	0.0968	0.0993	77.5	79.4	28.7-175			2.49	20.9
Benzene	0.0250	0.0282	0.0274	113	110	73.0-122			2.67	20
Bromodichloromethane	0.0250	0.0268	0.0268	107	107	75.5-121			0.120	20
Bromoform	0.0250	0.0257	0.0258	103	103	71.5-131			0.0700	20
Bromomethane	0.0250	0.0258	0.0257	103	103	22.4-187			0.290	20
n-Butylbenzene	0.0250	0.0310	0.0300	124	120	75.9-134			3.17	20
sec-Butylbenzene	0.0250	0.0277	0.0275	111	110	80.6-126			0.920	20
Carbon disulfide	0.0250	0.0296	0.0290	118	116	53.0-134			2.16	20
Carbon tetrachloride	0.0250	0.0263	0.0260	105	104	70.9-129			1.11	20
Chlorobenzene	0.0250	0.0268	0.0261	107	104	79.7-122			2.73	20
Chlorodibromomethane	0.0250	0.0255	0.0248	102	99.0	78.2-124			3.15	20
Chloroethane	0.0250	0.0260	0.0252	104	101	41.2-153			3.14	20
Chloroform	0.0250	0.0273	0.0267	109	107	73.2-125			2.55	20
Chloromethane	0.0250	0.0298	0.0292	119	117	55.8-134			2.17	20
1,2-Dibromoethane	0.0250	0.0258	0.0255	103	102	79.8-122			1.16	20
1,1-Dichloroethane	0.0250	0.0278	0.0274	111	109	71.7-127			1.60	20

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832472-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



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

(LCS) R3134035-1 05/03/16 20:56 • (LCSD) R3134035-2 05/03/16 21:16

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	0.0257	102	103	65.3-126			0.400	20
1,1-Dichloroethene	0.0250	0.0282	0.0272	113	109	59.9-137			3.42	20
cis-1,2-Dichloroethene	0.0250	0.0276	0.0271	110	109	77.3-122			1.52	20
trans-1,2-Dichloroethene	0.0250	0.0285	0.0275	114	110	72.6-125			3.33	20
1,2-Dichloropropane	0.0250	0.0273	0.0271	109	109	77.4-125			0.420	20
cis-1,3-Dichloropropene	0.0250	0.0277	0.0274	111	110	77.7-124			1.20	20
trans-1,3-Dichloropropene	0.0250	0.0249	0.0247	99.7	99.0	73.5-127			0.800	20
Ethylbenzene	0.0250	0.0272	0.0264	109	106	80.9-121			3.03	20
2-Hexanone	0.125	0.136	0.139	109	111	59.4-151			2.02	20
Isopropylbenzene	0.0250	0.0279	0.0272	111	109	81.6-124			2.23	20
p-Isopropyltoluene	0.0250	0.0277	0.0272	111	109	77.6-129			2.13	20
2-Butanone (MEK)	0.125	0.135	0.143	108	114	46.4-155			5.67	20
Methylene Chloride	0.0250	0.0274	0.0272	110	109	69.5-120			0.750	20
4-Methyl-2-pentanone (MIBK)	0.125	0.137	0.144	110	115	63.3-138			5.01	20
Methyl tert-butyl ether	0.0250	0.0270	0.0283	108	113	70.1-125			4.79	20
Naphthalene	0.0250	0.0218	0.0228	87.4	91.0	69.7-134			4.06	20
n-Propylbenzene	0.0250	0.0277	0.0267	111	107	81.9-122			3.59	20
Styrene	0.0250	0.0287	0.0276	115	110	79.9-124			4.07	20
1,1,1,2-Tetrachloroethane	0.0250	0.0262	0.0258	105	103	78.5-125			1.34	20
1,1,2,2-Tetrachloroethane	0.0250	0.0263	0.0265	105	106	79.3-123			0.800	20
Tetrachloroethene	0.0250	0.0258	0.0252	103	101	73.5-130			2.45	20
Toluene	0.0250	0.0276	0.0269	110	108	77.9-116			2.60	20
1,1,1-Trichloroethane	0.0250	0.0277	0.0276	111	110	71.1-129			0.220	20
1,1,2-Trichloroethane	0.0250	0.0257	0.0256	103	103	81.6-120			0.230	20
Trichloroethene	0.0250	0.0262	0.0256	105	103	79.5-121			2.32	20
1,2,4-Trimethylbenzene	0.0250	0.0270	0.0265	108	106	79.0-122			1.75	20
1,3,5-Trimethylbenzene	0.0250	0.0274	0.0269	110	108	81.0-123			1.84	20
Vinyl chloride	0.0250	0.0273	0.0269	109	108	61.5-134			1.39	20
Xylenes, Total	0.0750	0.0825	0.0797	110	106	79.2-122			3.40	20
o-Xylene	0.0250	0.0275	0.0268	110	107	79.1-123			2.45	20
m&p-Xylenes	0.0500	0.0550	0.0529	110	106	78.5-122			3.88	20
(S) Toluene-d8				103	104	90.0-115				
(S) Dibromofluoromethane				104	104	79.0-121				
(S) 4-Bromofluorobenzene				98.0	97.5	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832472-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



L832472-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-01 05/04/16 01:05 • (MS) R3134035-4 05/03/16 23:25 • (MSD) R3134035-5 05/03/16 23:45												
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	%	%		%			%	%
Acetone	0.125	0.0120	0.0866	0.0888	59.7	61.5	1	25.0-156			2.51	21.5
Benzene	0.0250	0.00114	0.0287	0.0288	110	111	1	58.6-133			0.430	20
Bromodichloromethane	0.0250	U	0.0272	0.0274	109	109	1	69.2-127			0.530	20
Bromoform	0.0250	U	0.0268	0.0267	107	107	1	66.3-140			0.380	20
Bromomethane	0.0250	U	0.0260	0.0263	104	105	1	16.6-183			1.01	20.5
n-Butylbenzene	0.0250	U	0.0312	0.0314	125	126	1	64.8-145			0.750	20
sec-Butylbenzene	0.0250	U	0.0282	0.0284	113	113	1	66.8-139			0.450	20
Carbon disulfide	0.0250	U	0.0287	0.0308	115	123	1	34.9-138			7.08	20
Carbon tetrachloride	0.0250	U	0.0263	0.0277	105	111	1	60.6-139			5.22	20
Chlorobenzene	0.0250	U	0.0270	0.0271	108	108	1	70.1-130			0.360	20
Chlorodibromomethane	0.0250	U	0.0259	0.0259	103	104	1	71.6-132			0.100	20
Chloroethane	0.0250	U	0.0261	0.0266	104	106	1	33.3-155			1.81	20
Chloroform	0.0250	U	0.0273	0.0276	109	110	1	66.1-133			0.870	20
Chloromethane	0.0250	U	0.0295	0.0299	118	119	1	40.7-139			1.25	20
1,2-Dibromoethane	0.0250	U	0.0265	0.0264	106	106	1	73.8-131			0.430	20
1,1-Dichloroethane	0.0250	U	0.0278	0.0282	111	113	1	64.0-134			1.32	20
1,2-Dichloroethane	0.0250	U	0.0260	0.0261	104	104	1	60.7-132			0.410	20
1,1-Dichloroethene	0.0250	U	0.0254	0.0284	102	114	1	48.8-144			11.1	20
cis-1,2-Dichloroethene	0.0250	U	0.0277	0.0280	111	112	1	60.6-136			1.04	20
trans-1,2-Dichloroethene	0.0250	U	0.0283	0.0283	113	113	1	61.0-132			0.150	20
1,2-Dichloropropane	0.0250	U	0.0275	0.0279	110	112	1	69.7-130			1.34	20
cis-1,3-Dichloropropene	0.0250	U	0.0278	0.0278	111	111	1	71.1-129			0.130	20
trans-1,3-Dichloropropene	0.0250	U	0.0262	0.0258	105	103	1	66.3-136			1.29	20
Ethylbenzene	0.0250	U	0.0276	0.0278	110	111	1	62.7-136			0.860	20
2-Hexanone	0.125	U	0.139	0.135	111	108	1	59.4-154			3.17	20.1
Isopropylbenzene	0.0250	0.00143	0.0292	0.0292	111	111	1	67.4-136			0.180	20
p-Isopropyltoluene	0.0250	U	0.0282	0.0281	113	112	1	62.8-143			0.360	20
2-Butanone (MEK)	0.125	U	0.118	0.116	94.2	92.6	1	45.0-156			1.67	20.8
Methylene Chloride	0.0250	U	0.0275	0.0275	110	110	1	61.5-125			0.240	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.148	0.144	118	115	1	60.7-150			2.55	20
Methyl tert-butyl ether	0.0250	U	0.0279	0.0287	112	115	1	61.4-136			2.64	20
Naphthalene	0.0250	U	0.0229	0.0234	91.8	93.8	1	61.8-143			2.14	20
n-Propylbenzene	0.0250	0.000365	0.0283	0.0285	112	113	1	63.2-139			0.890	20
Styrene	0.0250	U	0.0286	0.0289	115	116	1	68.2-133			0.940	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0268	0.0268	107	107	1	70.5-132			0.160	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0281	0.0280	112	112	1	64.9-145			0.250	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

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

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

QUALITY CONTROL SUMMARY

L832472-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



L832472-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-01 05/04/16 01:05 • (MS) R3134035-4 05/03/16 23:25 • (MSD) R3134035-5 05/03/16 23:45												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0265	0.0268	106	107	1	57.4-141			1.01	20
Toluene	0.0250	U	0.0276	0.0276	110	110	1	67.8-124			0.0400	20
1,1,1-Trichloroethane	0.0250	U	0.0282	0.0288	113	115	1	58.7-134			2.08	20
1,1,2-Trichloroethane	0.0250	U	0.0262	0.0263	105	105	1	74.1-130			0.420	20
Trichloroethene	0.0250	U	0.0264	0.0266	106	106	1	48.9-148			0.780	20
1,2,4-Trimethylbenzene	0.0250	U	0.0274	0.0274	110	110	1	60.5-137			0.0700	20
1,3,5-Trimethylbenzene	0.0250	U	0.0278	0.0278	111	111	1	67.9-134			0.130	20
Vinyl chloride	0.0250	U	0.0271	0.0276	108	111	1	44.3-143			1.93	20
Xylenes, Total	0.0750	U	0.0826	0.0831	110	111	1	65.6-133			0.600	20
o-Xylene	0.0250	U	0.0278	0.0278	111	111	1	67.1-133			0.0300	20
m&p-Xylenes	0.0500	U	0.0548	0.0553	110	111	1	64.1-133			0.920	20
(S) Toluene-d8					103	103		90.0-115				
(S) Dibromofluoromethane					103	103		79.0-121				
(S) 4-Bromofluorobenzene					97.9	97.0		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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L832472

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

QUALITY CONTROL SUMMARY

L832472-21,22,23,24,25,26,27,28,29,30,31,32,33,34

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133628-3 05/04/16 09:47

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

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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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ACCOUNT:  
TRC Solutions - Austin, TX

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L832472

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

QUALITY CONTROL SUMMARY

L832472-21,22,23,24,25,26,27,28,29,30,31,32,33,34

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133628-3 05/04/16 09:47

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	103			90.0-115
(S) Dibromofluoromethane	100			79.0-121
(S) 4-Bromofluorobenzene	96.5			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3133628-1 05/04/16 08:31 • (LCSD) R3133628-2 05/04/16 08:49

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	0.197	0.192	157	154	28.7-175			2.38	20.9
Benzene	0.0250	0.0259	0.0253	104	101	73.0-122			2.34	20
Bromodichloromethane	0.0250	0.0244	0.0241	97.7	96.3	75.5-121			1.42	20
Bromoform	0.0250	0.0250	0.0245	100	97.8	71.5-131			2.33	20
Bromomethane	0.0250	0.0213	0.0215	85.1	86.0	22.4-187			1.12	20
n-Butylbenzene	0.0250	0.0223	0.0229	89.4	91.6	75.9-134			2.48	20
sec-Butylbenzene	0.0250	0.0230	0.0226	91.9	90.5	80.6-126			1.46	20
Carbon disulfide	0.0250	0.0240	0.0226	96.1	90.3	53.0-134			6.31	20
Carbon tetrachloride	0.0250	0.0239	0.0234	95.7	93.7	70.9-129			2.07	20
Chlorobenzene	0.0250	0.0241	0.0235	96.3	93.9	79.7-122			2.54	20
Chlorodibromomethane	0.0250	0.0242	0.0244	96.8	97.5	78.2-124			0.780	20
Chloroethane	0.0250	0.0231	0.0226	92.4	90.3	41.2-153			2.28	20
Chloroform	0.0250	0.0254	0.0249	102	99.7	73.2-125			1.96	20
Chloromethane	0.0250	0.0286	0.0279	115	112	55.8-134			2.62	20
1,2-Dibromoethane	0.0250	0.0240	0.0238	96.1	95.3	79.8-122			0.830	20
1,1-Dichloroethane	0.0250	0.0273	0.0265	109	106	71.7-127			2.77	20

ACCOUNT:  
TRC Solutions - Austin, TX

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SDG:  
L832472

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

QUALITY CONTROL SUMMARY

L832472-21,22,23,24,25,26,27,28,29,30,31,32,33,34

ONE LAB. NATIONWIDE.



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

(LCS) R3133628-1 05/04/16 08:31 • (LCSD) R3133628-2 05/04/16 08:49

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	0.0252	0.0250	101	100	65.3-126			0.630	20
1,1-Dichloroethene	0.0250	0.0237	0.0227	94.7	90.9	59.9-137			4.14	20
cis-1,2-Dichloroethene	0.0250	0.0253	0.0248	101	99.3	77.3-122			1.92	20
trans-1,2-Dichloroethene	0.0250	0.0255	0.0246	102	98.2	72.6-125			3.79	20
1,2-Dichloropropane	0.0250	0.0283	0.0274	113	109	77.4-125			3.26	20
cis-1,3-Dichloropropene	0.0250	0.0268	0.0258	107	103	77.7-124			4.11	20
trans-1,3-Dichloropropene	0.0250	0.0263	0.0256	105	103	73.5-127			2.68	20
Ethylbenzene	0.0250	0.0236	0.0231	94.5	92.2	80.9-121			2.41	20
2-Hexanone	0.125	0.145	0.142	116	114	59.4-151			1.66	20
Isopropylbenzene	0.0250	0.0223	0.0218	89.2	87.3	81.6-124			2.18	20
p-Isopropyltoluene	0.0250	0.0227	0.0225	90.7	89.9	77.6-129			0.960	20
2-Butanone (MEK)	0.125	0.188	0.184	150	147	46.4-155			1.98	20
Methylene Chloride	0.0250	0.0242	0.0236	96.6	94.5	69.5-120			2.19	20
4-Methyl-2-pentanone (MIBK)	0.125	0.153	0.151	122	121	63.3-138			1.05	20
Methyl tert-butyl ether	0.0250	0.0255	0.0259	102	104	70.1-125			1.87	20
Naphthalene	0.0250	0.0225	0.0240	89.8	95.8	69.7-134			6.44	20
n-Propylbenzene	0.0250	0.0233	0.0228	93.4	91.2	81.9-122			2.39	20
Styrene	0.0250	0.0234	0.0237	93.5	94.9	79.9-124			1.54	20
1,1,1,2-Tetrachloroethane	0.0250	0.0241	0.0238	96.2	95.0	78.5-125			1.23	20
1,1,2,2-Tetrachloroethane	0.0250	0.0251	0.0239	100	95.5	79.3-123			4.99	20
Tetrachloroethene	0.0250	0.0237	0.0229	94.7	91.7	73.5-130			3.25	20
Toluene	0.0250	0.0250	0.0242	100	96.9	77.9-116			3.39	20
1,1,1-Trichloroethane	0.0250	0.0242	0.0242	96.9	96.7	71.1-129			0.160	20
1,1,2-Trichloroethane	0.0250	0.0248	0.0245	99.1	97.9	81.6-120			1.21	20
Trichloroethene	0.0250	0.0258	0.0249	103	99.7	79.5-121			3.49	20
1,2,4-Trimethylbenzene	0.0250	0.0232	0.0227	92.7	90.7	79.0-122			2.12	20
1,3,5-Trimethylbenzene	0.0250	0.0229	0.0225	91.5	90.1	81.0-123			1.57	20
Vinyl chloride	0.0250	0.0245	0.0236	98.1	94.6	61.5-134			3.67	20
Xylenes, Total	0.0750	0.0706	0.0687	94.2	91.6	79.2-122			2.82	20
o-Xylene	0.0250	0.0237	0.0231	94.7	92.3	79.1-123			2.55	20
m&p-Xylenes	0.0500	0.0470	0.0456	93.9	91.2	78.5-122			2.96	20
(S) Toluene-d8				102	102	90.0-115				
(S) Dibromofluoromethane				102	103	79.0-121				
(S) 4-Bromofluorobenzene				96.7	96.3	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832472-21,22,23,24,25,26,27,28,29,30,31,32,33,34

ONE LAB. NATIONWIDE.



L832472-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-22 05/04/16 13:31 • (MS) R3133628-4 05/04/16 10:59 • (MSD) R3133628-5 05/04/16 11:18

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 %
Acetone	0.125	U	0.0993	0.0978	79.5	78.3	1	25.0-156			1.55	21.5
Benzene	0.0250	U	0.0267	0.0262	107	105	1	58.6-133			1.81	20
Bromodichloromethane	0.0250	U	0.0245	0.0246	97.8	98.3	1	69.2-127			0.510	20
Bromoform	0.0250	U	0.0244	0.0247	97.6	98.9	1	66.3-140			1.31	20
Bromomethane	0.0250	U	0.0207	0.0206	82.7	82.4	1	16.6-183			0.460	20.5
n-Butylbenzene	0.0250	U	0.0237	0.0237	94.8	94.8	1	64.8-145			0.0100	20
sec-Butylbenzene	0.0250	U	0.0230	0.0227	91.9	90.6	1	66.8-139			1.41	20
Carbon disulfide	0.0250	U	0.0233	0.0233	93.3	93.1	1	34.9-138			0.300	20
Carbon tetrachloride	0.0250	U	0.0247	0.0242	99.0	96.9	1	60.6-139			2.19	20
Chlorobenzene	0.0250	U	0.0232	0.0234	92.8	93.5	1	70.1-130			0.670	20
Chlorodibromomethane	0.0250	U	0.0231	0.0232	92.5	92.7	1	71.6-132			0.240	20
Chloroethane	0.0250	U	0.0224	0.0219	89.8	87.7	1	33.3-155			2.30	20
Chloroform	0.0250	U	0.0259	0.0256	103	102	1	66.1-133			0.990	20
Chloromethane	0.0250	U	0.0257	0.0250	103	100	1	40.7-139			2.83	20
1,2-Dibromoethane	0.0250	U	0.0240	0.0239	95.8	95.5	1	73.8-131			0.360	20
1,1-Dichloroethane	0.0250	U	0.0277	0.0276	111	110	1	64.0-134			0.410	20
1,2-Dichloroethane	0.0250	U	0.0251	0.0253	100	101	1	60.7-132			0.930	20
1,1-Dichloroethene	0.0250	U	0.0238	0.0229	95.2	91.7	1	48.8-144			3.73	20
cis-1,2-Dichloroethene	0.0250	U	0.0253	0.0254	101	102	1	60.6-136			0.440	20
trans-1,2-Dichloroethene	0.0250	U	0.0254	0.0249	101	99.4	1	61.0-132			2.03	20
1,2-Dichloropropane	0.0250	U	0.0283	0.0284	113	114	1	69.7-130			0.460	20
cis-1,3-Dichloropropene	0.0250	U	0.0253	0.0256	101	102	1	71.1-129			1.17	20
trans-1,3-Dichloropropene	0.0250	U	0.0266	0.0268	106	107	1	66.3-136			0.830	20
Ethylbenzene	0.0250	U	0.0229	0.0229	91.4	91.7	1	62.7-136			0.280	20
2-Hexanone	0.125	U	0.112	0.114	89.8	91.5	1	59.4-154			1.94	20.1
Isopropylbenzene	0.0250	U	0.0222	0.0223	88.7	89.1	1	67.4-136			0.380	20
p-Isopropyltoluene	0.0250	U	0.0220	0.0219	88.1	87.6	1	62.8-143			0.610	20
2-Butanone (MEK)	0.125	U	0.139	0.142	111	113	1	45.0-156			2.19	20.8
Methylene Chloride	0.0250	U	0.0243	0.0243	97.4	97.0	1	61.5-125			0.380	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.152	0.153	121	123	1	60.7-150			1.24	20
Methyl tert-butyl ether	0.0250	U	0.0273	0.0278	109	111	1	61.4-136			2.07	20
Naphthalene	0.0250	U	0.0246	0.0250	98.3	100	1	61.8-143			1.75	20
n-Propylbenzene	0.0250	U	0.0229	0.0227	91.7	90.8	1	63.2-139			0.970	20
Styrene	0.0250	U	0.0224	0.0222	89.7	89.0	1	68.2-133			0.760	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0235	0.0235	94.2	93.8	1	70.5-132			0.350	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0254	0.0255	102	102	1	64.9-145			0.130	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832472-21,22,23,24,25,26,27,28,29,30,31,32,33,34

ONE LAB. NATIONWIDE.



L832472-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-22 05/04/16 13:31 • (MS) R3133628-4 05/04/16 10:59 • (MSD) R3133628-5 05/04/16 11:18												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0227	0.0228	90.8	91.0	1	57.4-141			0.260	20
Toluene	0.0250	U	0.0252	0.0249	101	99.7	1	67.8-124			0.920	20
1,1,1-Trichloroethane	0.0250	U	0.0254	0.0251	101	100	1	58.7-134			0.990	20
1,1,2-Trichloroethane	0.0250	U	0.0244	0.0242	97.5	96.7	1	74.1-130			0.770	20
Trichloroethene	0.0250	U	0.0256	0.0250	102	99.8	1	48.9-148			2.41	20
1,2,4-Trimethylbenzene	0.0250	U	0.0226	0.0227	90.5	90.7	1	60.5-137			0.160	20
1,3,5-Trimethylbenzene	0.0250	U	0.0229	0.0227	91.6	91.0	1	67.9-134			0.730	20
Vinyl chloride	0.0250	U	0.0228	0.0222	91.2	88.8	1	44.3-143			2.72	20
Xylenes, Total	0.0750	U	0.0693	0.0690	92.4	92.0	1	65.6-133			0.490	20
o-Xylene	0.0250	U	0.0233	0.0230	93.4	92.1	1	67.1-133			1.40	20
m&p-Xylenes	0.0500	U	0.0460	0.0460	92.0	91.9	1	64.1-133			0.0300	20
(S) Toluene-d8					102	102		90.0-115				
(S) Dibromofluoromethane					102	103		79.0-121				
(S) 4-Bromofluorobenzene					94.4	96.2		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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

QUALITY CONTROL SUMMARY

L832472-35,36,37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133943-3 05/04/16 18:58

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

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Sc

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

QUALITY CONTROL SUMMARY

L832472-35,36,37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133943-3 05/04/16 18:58

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	107			90.0-115
(S) Dibromofluoromethane	108			79.0-121
(S) 4-Bromofluorobenzene	104			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3133943-1 05/04/16 17:49 • (LCSD) R3133943-2 05/04/16 18:06

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 %
Acetone	0.125	0.151	0.153	121	122	28.7-175			0.860	20.9
Benzene	0.0250	0.0241	0.0247	96.4	99.0	73.0-122			2.60	20
Bromodichloromethane	0.0250	0.0244	0.0250	97.4	99.9	75.5-121			2.49	20
Bromoform	0.0250	0.0238	0.0237	95.2	94.9	71.5-131			0.370	20
Bromomethane	0.0250	0.0252	0.0283	101	113	22.4-187			11.7	20
n-Butylbenzene	0.0250	0.0240	0.0241	95.8	96.6	75.9-134			0.740	20
sec-Butylbenzene	0.0250	0.0242	0.0257	96.8	103	80.6-126			6.11	20
Carbon disulfide	0.0250	0.0227	0.0249	90.7	99.6	53.0-134			9.42	20
Carbon tetrachloride	0.0250	0.0221	0.0239	88.6	95.6	70.9-129			7.62	20
Chlorobenzene	0.0250	0.0237	0.0243	94.9	97.1	79.7-122			2.23	20
Chlorodibromomethane	0.0250	0.0242	0.0242	96.6	96.7	78.2-124			0.140	20
Chloroethane	0.0250	0.0249	0.0274	99.6	110	41.2-153			9.58	20
Chloroform	0.0250	0.0245	0.0253	98.0	101	73.2-125			3.35	20
Chloromethane	0.0250	0.0251	0.0272	100	109	55.8-134			8.27	20
1,2-Dibromoethane	0.0250	0.0240	0.0230	96.1	92.0	79.8-122			4.38	20
1,1-Dichloroethane	0.0250	0.0248	0.0256	99.3	102	71.7-127			3.06	20

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

QUALITY CONTROL SUMMARY

L832472-35,36,37

ONE LAB. NATIONWIDE.



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

(LCS) R3133943-1 05/04/16 17:49 • (LCSD) R3133943-2 05/04/16 18:06

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 %
1,2-Dichloroethane	0.0250	0.0242	0.0243	97.0	97.0	65.3-126			0.0600	20
1,1-Dichloroethene	0.0250	0.0254	0.0273	102	109	59.9-137			7.01	20
cis-1,2-Dichloroethene	0.0250	0.0245	0.0259	97.9	104	77.3-122			5.78	20
trans-1,2-Dichloroethene	0.0250	0.0248	0.0267	99.1	107	72.6-125			7.36	20
1,2-Dichloropropane	0.0250	0.0244	0.0250	97.4	99.9	77.4-125			2.53	20
cis-1,3-Dichloropropene	0.0250	0.0250	0.0243	99.8	97.2	77.7-124			2.65	20
trans-1,3-Dichloropropene	0.0250	0.0242	0.0236	96.7	94.6	73.5-127			2.22	20
Ethylbenzene	0.0250	0.0237	0.0246	94.9	98.5	80.9-121			3.70	20
2-Hexanone	0.125	0.127	0.119	101	95.0	59.4-151			6.51	20
Isopropylbenzene	0.0250	0.0246	0.0259	98.2	103	81.6-124			5.19	20
p-Isopropyltoluene	0.0250	0.0243	0.0259	97.0	104	77.6-129			6.55	20
2-Butanone (MEK)	0.125	0.113	0.108	90.8	86.1	46.4-155			5.22	20
Methylene Chloride	0.0250	0.0235	0.0253	94.1	101	69.5-120			7.49	20
4-Methyl-2-pentanone (MIBK)	0.125	0.127	0.124	102	99.6	63.3-138			1.98	20
Methyl tert-butyl ether	0.0250	0.0241	0.0245	96.3	97.9	70.1-125			1.65	20
Naphthalene	0.0250	0.0256	0.0255	103	102	69.7-134			0.550	20
n-Propylbenzene	0.0250	0.0245	0.0259	97.9	104	81.9-122			5.67	20
Styrene	0.0250	0.0240	0.0249	96.1	99.5	79.9-124			3.52	20
1,1,1,2-Tetrachloroethane	0.0250	0.0230	0.0240	91.8	96.1	78.5-125			4.57	20
1,1,2,2-Tetrachloroethane	0.0250	0.0242	0.0244	96.7	97.5	79.3-123			0.900	20
Tetrachloroethene	0.0250	0.0244	0.0248	97.7	99.3	73.5-130			1.59	20
Toluene	0.0250	0.0242	0.0249	96.7	99.4	77.9-116			2.76	20
1,1,1-Trichloroethane	0.0250	0.0253	0.0274	101	110	71.1-129			7.79	20
1,1,2-Trichloroethane	0.0250	0.0237	0.0234	94.9	93.6	81.6-120			1.38	20
Trichloroethene	0.0250	0.0248	0.0251	99.1	101	79.5-121			1.42	20
1,2,4-Trimethylbenzene	0.0250	0.0239	0.0253	95.8	101	79.0-122			5.51	20
1,3,5-Trimethylbenzene	0.0250	0.0236	0.0251	94.5	100	81.0-123			6.06	20
Vinyl chloride	0.0250	0.0266	0.0293	106	117	61.5-134			9.56	20
Xylenes, Total	0.0750	0.0717	0.0750	95.6	100	79.2-122			4.52	20
o-Xylene	0.0250	0.0237	0.0251	94.6	100	79.1-123			5.78	20
m&p-Xylenes	0.0500	0.0480	0.0499	96.0	99.8	78.5-122			3.88	20
(S) Toluene-d8				106	108	90.0-115				
(S) Dibromofluoromethane				103	105	79.0-121				
(S) 4-Bromofluorobenzene				98.6	101	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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SDG:  
L832472

DATE/TIME:  
05/17/16 22:18

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WG69976

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

QUALITY CONTROL SUMMARY

L832472-35,36,37

ONE LAB. NATIONWIDE.



L832423-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832423-02 05/04/16 21:01 • (MS) R3133943-4 05/04/16 19:35 • (MSD) R3133943-5 05/04/16 19:52

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	%	%		%			%	%
Acetone	0.125	0.0427	0.105	0.0964	49.8	42.9	1	25.0-156			8.55	21.5
Benzene	0.0250	U	0.0243	0.0228	97.4	91.1	1	58.6-133			6.61	20
Bromodichloromethane	0.0250	U	0.0243	0.0232	97.3	92.8	1	69.2-127			4.72	20
Bromoform	0.0250	U	0.0230	0.0231	92.2	92.6	1	66.3-140			0.420	20
Bromomethane	0.0250	U	0.0275	0.0239	110	95.7	1	16.6-183			14.0	20.5
n-Butylbenzene	0.0250	0.00119	0.0251	0.0243	95.8	92.4	1	64.8-145			3.49	20
sec-Butylbenzene	0.0250	0.00165	0.0266	0.0253	99.9	94.5	1	66.8-139			5.25	20
Carbon disulfide	0.0250	0.000429	0.0255	0.0219	100	85.8	1	34.9-138			15.2	20
Carbon tetrachloride	0.0250	U	0.0243	0.0209	97.0	83.6	1	60.6-139			14.9	20
Chlorobenzene	0.0250	U	0.0238	0.0232	95.0	92.7	1	70.1-130			2.49	20
Chlorodibromomethane	0.0250	U	0.0232	0.0234	92.6	93.6	1	71.6-132			1.10	20
Chloroethane	0.0250	U	0.0273	0.0233	109	93.3	1	33.3-155			15.6	20
Chloroform	0.0250	U	0.0249	0.0231	99.6	92.6	1	66.1-133			7.30	20
Chloromethane	0.0250	U	0.0271	0.0226	108	90.6	1	40.7-139			17.7	20
1,2-Dibromoethane	0.0250	U	0.0223	0.0225	89.4	90.0	1	73.8-131			0.690	20
1,1-Dichloroethane	0.0250	U	0.0253	0.0233	101	93.1	1	64.0-134			8.52	20
1,2-Dichloroethane	0.0250	U	0.0237	0.0231	95.0	92.4	1	60.7-132			2.73	20
1,1-Dichloroethene	0.0250	U	0.0270	0.0238	108	95.1	1	48.8-144			12.7	20
cis-1,2-Dichloroethene	0.0250	U	0.0255	0.0236	102	94.5	1	60.6-136			7.43	20
trans-1,2-Dichloroethene	0.0250	U	0.0261	0.0235	104	93.9	1	61.0-132			10.4	20
1,2-Dichloropropane	0.0250	U	0.0243	0.0229	97.4	91.8	1	69.7-130			5.90	20
cis-1,3-Dichloropropene	0.0250	U	0.0241	0.0239	96.2	95.4	1	71.1-129			0.790	20
trans-1,3-Dichloropropene	0.0250	U	0.0232	0.0233	92.9	93.1	1	66.3-136			0.190	20
Ethylbenzene	0.0250	0.00223	0.0263	0.0252	96.4	91.8	1	62.7-136			4.48	20
2-Hexanone	0.125	U	0.0913	0.0967	73.0	77.4	1	59.4-154			5.80	20.1
Isopropylbenzene	0.0250	0.00198	0.0275	0.0260	102	96.0	1	67.4-136			5.59	20
p-Isopropyltoluene	0.0250	0.00132	0.0291	0.0278	111	106	1	62.8-143			4.72	20
2-Butanone (MEK)	0.125	0.00960	0.0817	0.0804	57.7	56.7	1	45.0-156			1.52	20.8
Methylene Chloride	0.0250	U	0.0244	0.0221	97.8	88.6	1	61.5-125			9.86	20
4-Methyl-2-pentanone (MIBK)	0.125	0.00432	0.125	0.120	96.9	92.3	1	60.7-150			4.71	20
Methyl tert-butyl ether	0.0250	U	0.0239	0.0225	95.5	89.8	1	61.4-136			6.12	20
Naphthalene	0.0250	0.00705	0.0299	0.0307	91.5	94.4	1	61.8-143			2.41	20
n-Propylbenzene	0.0250	0.00362	0.0292	0.0277	102	96.4	1	63.2-139			5.16	20
Styrene	0.0250	U	0.0245	0.0240	97.9	95.9	1	68.2-133			2.13	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0232	0.0224	92.9	89.6	1	70.5-132			3.60	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0239	0.0234	95.7	93.6	1	64.9-145			2.25	20

1

Cp

2

Tc

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Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832472

DATE/TIME:  
05/17/16 22:18

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WG869976

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

QUALITY CONTROL SUMMARY

L832472-35,36,37

ONE LAB. NATIONWIDE. 

L832423-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832423-02 05/04/16 21:01 • (MS) R3133943-4 05/04/16 19:35 • (MSD) R3133943-5 05/04/16 19:52												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0246	0.0238	98.3	95.3	1	57.4-141			3.09	20
Toluene	0.0250	U	0.0251	0.0232	101	92.9	1	67.8-124			7.89	20
1,1,1-Trichloroethane	0.0250	U	0.0275	0.0241	110	96.4	1	58.7-134			13.3	20
1,1,2-Trichloroethane	0.0250	U	0.0225	0.0228	90.1	91.2	1	74.1-130			1.24	20
Trichloroethene	0.0250	U	0.0242	0.0230	96.8	92.0	1	48.9-148			5.08	20
1,2,4-Trimethylbenzene	0.0250	0.0204	0.0443	0.0424	95.7	87.9	1	60.5-137			4.50	20
1,3,5-Trimethylbenzene	0.0250	0.00399	0.0286	0.0270	98.3	92.2	1	67.9-134			5.47	20
Vinyl chloride	0.0250	U	0.0291	0.0246	116	98.6	1	44.3-143			16.6	20
Xylenes, Total	0.0750	0.00712	0.0805	0.0774	97.8	93.8	1	65.6-133			3.82	20
o-Xylene	0.0250	0.00401	0.0283	0.0273	97.1	93.0	1	67.1-133			3.70	20
m&p-Xylenes	0.0500	0.00311	0.0522	0.0502	98.1	94.1	1	64.1-133			3.89	20
(S) Toluene-d8					110	106		90.0-115				
(S) Dibromofluoromethane					106	103		79.0-121				
(S) 4-Bromofluorobenzene					103	102		80.1-120				

1

Cp

2

Tc

3

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

WG869252

Semi-Volatile Organic Compounds (GC) by Method 3511/8015 L832472-01,03,04,05,06,07,09,10,11,12,13,14,16,17,18,19,27,28,29,30

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE. 

Method Blank (MB)

(MB) R3133570-1 05/03/16 10:44				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	89.1			50.0-150

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

(LCS) R3133570-2 05/03/16 11:02 • (LCSD) R3133570-3 05/03/16 11:20									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD
Analyte	mg/l	mg/l	mg/l	%	%	%			RPD Limits
TPH (GC/FID) High Fraction	1.50	1.54	1.46	102	97.2	50.0-150			5.28 20
(S) o-Terphenyl				103	101	50.0-150			

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869254

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832472-08,20,21,22,23,24,25,26,31,32,33,34,35,36,37

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133571-1 05/03/16 12:33

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	91.5			50.0-150

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

(LCS) R3133571-2 05/03/16 12:51 • (LCSD) R3133571-3 05/03/16 13:09

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 %
TPH (GC/FID) High Fraction	1.50	1.48	1.53	98.4	102	50.0-150			3.61	20
(S) o-Terphenyl				102	103	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 Sample Detection Limit.
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
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gi<sup>8</sup> Al<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		Billing Information: <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		Analysis / Container / Preservative										Chain of Custody Page <b>1</b> of <b>4</b>				
Report to: jspeer@trcsolutions.com		Email To: jspeer@trcsolutions.com												 <b>ESC</b> 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 Fax: 615-758-5859				
Project <b>EP Spring 2016 - Team C CJH</b>		City/State Collected: <b>Artesia, NM</b>												12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Fax: 615-758-5859				
Phone: 512-684-3170		Client Project #		Lab Project # <b>TRCATX-EP SPRING</b>										L# <b>1832472</b> <b>G069</b>				
Fax:		Site/Facility ID # <b>Navajo- Artesia</b>		P.O. #										Accnum: TRCATX Template: T111232-1 Prelogin: P549272-43 TSR: Chris McCord Cooler: 4/7/16 98 Shipped Via:				
Collected by (print): <b>Scott Ude + HMI Team</b>		Rush? (Lab MUST Be Notified)		Date Results Needed										No. of Cntrs				
Collected by (signature): <b>Scott Ude</b>		<input type="checkbox"/> Same Day ..... 200% <input type="checkbox"/> Next Day ..... 100% <input type="checkbox"/> Two Day ..... 50% <input type="checkbox"/> Three Day ..... 25%		<input type="checkbox"/> Email? ___ No ___ Yes <input type="checkbox"/> FAX? ___ No ___ Yes														
Immediately Packed on Ice <b>N</b> <input checked="" type="checkbox"/> <b>Y</b> <input checked="" type="checkbox"/>																		
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DRO - 40ml Amb-HCl-BT	GRO - 40ml Amb-HCl	V8260 - 40ml Amb-HCl	Tot/Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500ml HDPE-HNO3	Cyanide (CN) - 250ml HDPE-Amb-NaOH	Cations-Total Ca, K, Na - 500ml HDPE-HNO3	Anions- Chloride, Fluoride, Sulfate - 125ml HDPE-NoPres	Nitrate/Nitrite (NO2/NO3) - 250ml HDPE-H2SO4	TDS - 250ml HDPE-NoPres	Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V	Rem./Contaminant	Sample # (lab only)
MW-83		GW		4/27/16	1310	12	✓	✓	✓	✓	✓	✓	✓	✓	✓			01
Trip Blank-EP-02				4/27/16	-	1			✓									02
MW-4A				4/27/16	1215	12	✓	✓	✓	✓		✓	✓	✓	✓			03
MW-123				4/27/16	1115	12	✓	✓	✓	✓		✓	✓	✓	✓			04
MW-10				4/27/16	1020	12	✓	✓	✓	✓		✓	✓	✓	✓			05
MW-22A				4/27/16	900	12	✓	✓	✓	✓		✓	✓	✓	✓			06
DUP-EP-02				4/27/16	1000	12	✓	✓	✓	✓		✓	✓	✓	✓			07
MW-88				4/27/16	810	12	✓	✓	✓	✓		✓	✓	✓	✓			08
MW-5A				4/26/16	1750	11	✓	✓	✓	✓		✓	✓	✓	✓			09
EB-EP-03	✓	✓		4/26/16	1810	12	✓	✓	✓	✓		✓	✓	✓	✓			10
* Matrix: SS - Soil GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other Remarks: <b>Log all metals by 6020. Dissolved metals are field filtered.</b> Relinquished by: (Signature) <b>Scott Ude</b> Date: <b>4/27/16</b> Time: <b>1400</b> Relinquished by: (Signature) Date: Time: Received by: (Signature) Relinquished by: (Signature) Date: Time: Received for lab by: (Signature) <b>4/29/16 0900</b> Samples returned via: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> Other Temp: <b>35</b> °C Bottles Received: <b>435</b> Condition: (lab use only) <b>ml</b> COC Seal Intact: <b>Y</b> <input type="checkbox"/> <b>N</b> <input type="checkbox"/> <b>NA</b> pH Checked: <b>&lt;2, &gt;12</b> NCF:																		

Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		Billing Information: <b>Accounts Payable</b> <b>21 Griffin Road North</b> <b>Windsor, CT 06095</b>		Analysis / Container / Preservative										Chain of Custody Page <b>2</b> of <b>4</b>					
Report to: jspeer@trcsolutions.com		Email To: jspeer@trcsolutions.com		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															
Project Description: <b>EP Spring 2016 - Team C-CTH</b>		City/State Collected: <b>Artesia, NM</b>		L# <b>L832472</b>										Table #					
Phone: 512-684-3170 Fax:		Client Project #		Lab Project # <b>TRCATX-EP SPRING</b>										Acctnum: TRCATX Template: T111232 Prelogin: P549272 TSR: Chris McCord Cooler: 4/7/16 RA					
Collected by (print): <b>Scott Ude + HMI Team</b>		Site/Facility ID # <b>Navajo- Artesia</b>		P.O. #										Shipped Via:					
Collected by (signature): <b>Scott Ude</b>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day ..... 200% <input type="checkbox"/> Next Day ..... 100% <input type="checkbox"/> Two Day ..... 50% <input type="checkbox"/> Three Day ..... 25%		Date Results Needed Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes										No. of Cntrs					
Immediately Packed on Ice <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/>																			
Sample ID	Comp	Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DRO - 40mlAmb-HCl-BT	GRO - 40mlAmb-HCl	V8260 - 40mlAmb-HCl	Tot/Diss. As,Ba,Cr,Fe,Pb,Mn,Se - 500mlHDPE-HNO3	Cyanide (CN) - 250mlHDPEAmb-NaOH	Cations-Total Ca, K, Na - 500mlHDPE-HNO3	Anions- Chloride, Fluoride, Sulfate - 125mlHDPE-NoPres	Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	Tot/Diss. As,Ba,Cd,Cr,Co,Fe,Hg,Mn,Ni,Pb,Se,U,V	Rem./Contaminant	Sample # (lab only)
MW-7A			GW		4/26/16	1635	12	✓	✓	✓	✓		✓	✓	✓	✓			11
DVP-EP-01					4/26/16	1200	12	✓	✓	✓	✓		✓	✓	✓	✓			12
OCB-8A					4/26/16	1535	13	✓	✓	✓		✓	✓	✓	✓	✓	✓		13
MW-73					4/26/16	1450	12	✓	✓	✓	✓		✓	✓	✓	✓			14
Trip Blank-EP-01					4/26/16		1			✓									15
MW-74					4/26/16	1545	12	✓	✓	✓	✓		✓	✓	✓	✓			16
EB-EP-01					4/26/16	1605	12	✓	✓	✓	✓		✓	✓	✓	✓			17
MW-79					4/26/16	1645	12	✓	✓	✓	✓		✓	✓	✓	✓			18
EB-EP-04					4/26/16	1710	12	✓	✓	✓	✓		✓	✓	✓	✓			19
MW-6A					4/27/16	810	12	✓	✓	✓	✓		✓	✓	✓	✓			20
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____																		pH _____ Temp _____	
Remarks: <b>Log all metals by 6020. Dissolved metals are field filtered.</b>																		Flow _____ Other _____	
Relinquished by: (Signature) <b>Scott Ude</b>		Date: <b>4/27/16</b>		Time: <b>1400</b>		Received by: (Signature) 		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>		Condition: (lab use only) <b>MR</b>		Temp: <b>31.5</b> °C Bottles Received: <b>435</b>		COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		pH Checked: <b>4.2</b> NCF:			
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp:		Condition:		COC Seal Intact:		pH Checked:		NCF:			
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) <b>Paula L. Turner</b>		Date: <b>4/29/16</b>		Time: <b>0900</b>		Condition:		COC Seal Intact:		pH Checked:			


Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		Billing Information: <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		Analysis / Container / Preservative <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           DRO - 40ml Amb-HCl-BT            GRO - 40ml Amb-HCl            V8260 - 40ml Amb-HCl            Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500ml HDPE-HNO3            Cyanide (CN) - 250ml HDPE-Amb-NaOH            Cations-Total Ca, K, Na - 500ml HDPE-HNO3            Anions- Chloride, Fluoride, Sulfate- 125ml HDPE-NoPres            Nitrate/Nitrite (NO2NO3) - 250ml HDPE-H2SO4            TDS - 250ml HDPE-NoPres         </div> <div style="width: 45%;">           Tot./Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V         </div> </div>										Chain of Custody Page <b>3</b> of <b>4</b>  <b>ESC</b> LAB 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: jspeer@trcsolutions.com		Email To: jspeer@trcsolutions.com																	
Project Description: <b>EP Spring 2016 - Team C - CJH</b>		City/State Collected: <b>Artesia, NM</b>																	
Phone: 512-684-3170 Fax:		Client Project # <b>Navajo- Artesia</b>		Lab Project # <b>TRCATX-EP SPRING</b>															
Collected by (print): <b>Scott Ude + HMI Team</b>		Site/Facility ID # <b>Navajo- Artesia</b>		P.O. #															
Collected by (signature): 		Rush? (Lab MUST Be Notified) Same Day ..... 200% Next Day ..... 100% Two Day ..... 50% Three Day ..... 25%		Date Results Needed Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes		No. of Cntrs													
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>																			
Sample ID	Comp	Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DRO	GRO	V8260	Tot./Diss.	Cyanide	Cations	Anions	Nitrate	TDS	Tot./Diss.	Rem./Contaminant	Sample # (lab only)
OCD-7AR			GW		4/27/16	900	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		21
OCD-6					4/27/16	955	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		22
MW-72					4/27/16	1045	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		23
MW-2A					4/27/16	1135	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		24
MW-122					4/27/16	1235	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		25
MW-121					4/27/16	1325	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		26
MW-124					4/26/16	1725	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		27
EB-EP-02					4/26/16	1740	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		28
MW-18A					4/26/16	1540	13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		29
MW-70					4/26/16	1640	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		30

\* Matrix: SS - Soil GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other \_\_\_\_\_

Remarks: **Log all metals by 6020. Dissolved metals are field filtered.**

Relinquished by: (Signature) 		Date: <b>4/27/16</b>		Time: <b>1400</b>		Received by: (Signature) 		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> Other		Condition: (lab use only) <b>ma</b>	
Relinquished by: (Signature) 		Date:		Time:		Received by: (Signature) 		Temp: <b>3.5</b> °C Bottles Received: <b>435</b>		COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
Relinquished by: (Signature) 		Date:		Time:		Received for lab by: (Signature) 		Date: <b>4/27/16</b>		Time: <b>0900</b>	
								pH Checked: <b>7.2</b>		NCF:	



Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		Billing Information: <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		Analysis / Container / Preservative										Chain of Custody Page <u>4</u> of <u>4</u>					
Report to: jspeer@trcsolutions.com		Email To: jspeer@trcsolutions.com												 <b>ESC</b> 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: <b>EP Spring 2016 - Team CCJH</b>		City/State Collected: <b>Artesia, NM</b>												L# <b>L832472</b>					
Phone: 512-684-3170		Client Project #		Lab Project # <b>TRCATX-EP SPRING</b>										Table #					
Fax:		Site/Facility ID # <b>Navajo- Artesia</b>		P.O. #										Accnum: TRCATX					
Collected by (print): <b>Scott Ude + HMI Team</b>		Rush? (Lab MUST Be Notified)		Date Results Needed										Template: T111232					
Collected by (signature): <b>Scott Ude</b>		<input type="checkbox"/> Same Day ..... 200% <input type="checkbox"/> Next Day ..... 100% <input type="checkbox"/> Two Day ..... 50% <input type="checkbox"/> Three Day ..... 25%		Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes										Prelogin: P549272					
Immediately														TSR: Chris McCord					
Packed on Ice <b>N</b> <input type="checkbox"/> <b>Y</b> <input checked="" type="checkbox"/>														Cooler: <b>4/27/16</b>					
														Shipped Via:					
Sample ID	Com/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DRO - 40mlAmb-HCl-BT	GRO - 40mlAmb-HCl	V8260 - 40mlAmb-HCl	Tot/Diss. As,Ba,Cr,Fe,Pb,Mn,Se - 500mlHDPE-HNO3	Cyanide (CN) - 250mlHDPEAmb-NaOH	Cations-Total Ca, K, Na - 500mlHDPE-HNO3	Anions- Chloride, Fluoride, Sulfate - 125mlHDPE-NoPres	Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4	TDS - 250mlHDPE-NoPres	Tot/Diss. As,Ba,Cd,Co,Cr,Fe,Hg,Mn,Ni,Pb,Se,U,V	Rem./Contaminant	Sample # (lab only)	
OCD-1R		GW		4-27-16	800	17	✓	✓	✓	✓		✓	✓	✓	✓			31	
OCD-2A				4/27/16	850	1	✓	✓	✓	✓		✓	✓	✓	✓			32	
OCD-3				4/27/16	940	1	✓	✓	✓	✓		✓	✓	✓	✓			33	
OCD-4				4/27/16	1030	1	✓	✓	✓	✓		✓	✓	✓	✓			34	
OCD-5				4/27/16	1115	1	✓	✓	✓	✓		✓	✓	✓	✓			35	
MW-11A				4/27/16	1200	1	✓	✓	✓	✓		✓	✓	✓	✓		54		
MW-11A				4/27/16	1200	1	✓	✓	✓	✓		✓	✓	✓	✓			36	
MW-15	✓	✓		4/27/16	1300	1	✓	✓	✓	✓		✓	✓	✓	✓			37	
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____ Remarks: <b>Log all metals by 6020. Dissolved metals are field filtered.</b>																			
Relinquished by: (Signature) <b>Scott Ude</b>		Date: <b>4/27/16</b>		Time: <b>1400</b>		Received by: (Signature)		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>		Temp: <b>3.5</b> °C Bottles Received: <b>435</b>		Condition: (lab use only) <b>M12</b>							
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: <b>3.5</b> °C Bottles Received: <b>435</b>		COC Seal Intact: <b>Y</b> <input type="checkbox"/> <b>N</b> <input type="checkbox"/> <b>NA</b> <input type="checkbox"/>		pH Checked: <b>&lt;2 &gt;12</b>		NCF:					
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) <b>Scott Ude</b>		Date: <b>4/29/16</b> Time: <b>0900</b>											

## TRC Solutions - Austin, TX

Sample Delivery Group: L832488  
Samples Received: 04/29/2016  
Project Number: 249545.0000.0000 000  
Description: EP Spring 2016  
Site: EP NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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-120 L832488-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 14:20

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:34	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 14:54	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	1	05/03/16 22:14	05/05/16 21:06	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/03/16 23:01	05/03/16 23:01	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 08:52	05/04/16 08:52	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:31	05/06/16 15:31	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 03:48	05/10/16 03:48	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 11:35	05/10/16 11:35	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

MW-81 L832488-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 15:10

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:36	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 14:57	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	1	05/03/16 22:14	05/05/16 21:24	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/03/16 23:23	05/03/16 23:23	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 09:12	05/04/16 09:12	BMB
Wet Chemistry by Method 353.2	WG870059	50	05/06/16 16:00	05/06/16 16:00	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 04:20	05/10/16 04:20	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 12:07	05/10/16 12:07	CM

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-80 L832488-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 16:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:39	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:00	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	1	05/03/16 22:14	05/05/16 21:42	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 01:55	05/04/16 01:55	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 09:32	05/04/16 09:32	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:37	05/06/16 15:37	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 04:36	05/10/16 04:36	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 12:23	05/10/16 12:23	CM

MW-84 L832488-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 16:55

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:42	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:08	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	20	05/03/16 22:14	05/06/16 05:57	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 02:17	05/04/16 02:17	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 09:52	05/04/16 09:52	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:38	05/06/16 15:38	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 04:52	05/10/16 04:52	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 12:39	05/10/16 12:39	CM

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

249545.0000.0000 000

SDG:

L832488

DATE/TIME:

05/17/16 20:49

PAGE:

3 of 58

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-82 L832488-05 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 17:50

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:44	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:10	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	1	05/03/16 22:14	05/05/16 22:01	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 02:39	05/04/16 02:39	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 10:12	05/04/16 10:12	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:39	05/06/16 15:39	ASK
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 13:27	05/10/16 13:27	CM
Wet Chemistry by Method 9056A	WG872424	10	05/15/16 19:53	05/15/16 19:53	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-78 L832488-06 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 17:30

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:47	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:13	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	50	05/03/16 22:14	05/06/16 06:15	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 03:01	05/04/16 03:01	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 10:33	05/04/16 10:33	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:40	05/06/16 15:40	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 05:55	05/10/16 05:55	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 13:42	05/10/16 13:42	CM

MW-77 L832488-07 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 14:30

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:50	ST
Metals (ICPMS) by Method 6020	WG870083	10	05/05/16 20:28	05/09/16 14:57	LAT
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:16	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	50	05/03/16 22:14	05/06/16 06:34	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 03:24	05/04/16 03:24	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 10:53	05/04/16 10:53	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:41	05/06/16 15:41	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 06:11	05/10/16 06:11	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 13:58	05/10/16 13:58	CM

MW-76 L832488-08 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 16:40

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 21:52	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:19	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	5	05/03/16 22:14	05/06/16 04:07	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 03:46	05/04/16 03:46	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 11:13	05/04/16 11:13	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:42	05/06/16 15:42	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 06:27	05/10/16 06:27	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 14:14	05/10/16 14:14	CM

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-3 L832488-09 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 15:25

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 22:04	ST
Metals (ICPMS) by Method 6020	WG870083	1	05/05/16 20:28	05/09/16 15:00	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	5	05/03/16 22:14	05/06/16 12:43	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 04:08	05/04/16 04:08	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 11:33	05/04/16 11:33	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:43	05/06/16 15:43	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 06:43	05/10/16 06:43	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 14:30	05/10/16 14:30	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## DUP-EP-03 L832488-10 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 12:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869544	1	05/04/16 04:54	05/04/16 05:11	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 22:07	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:24	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	5	05/03/16 22:14	05/06/16 12:25	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 04:30	05/04/16 04:30	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 11:53	05/04/16 11:53	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 15:49	05/06/16 15:49	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 06:59	05/10/16 06:59	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 14:46	05/10/16 14:46	CM

## MW-75 L832488-11 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 17:10

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869546	1	05/04/16 05:13	05/04/16 05:57	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 22:10	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:27	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	5	05/03/16 22:14	05/06/16 03:49	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 04:52	05/04/16 04:52	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 12:13	05/04/16 12:13	BMB
Wet Chemistry by Method 353.2	WG871208	10	05/10/16 17:35	05/10/16 17:35	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 07:15	05/10/16 07:15	CM
Wet Chemistry by Method 9056A	WG872424	50	05/15/16 20:08	05/15/16 20:08	CM

## MW-87 L832488-12 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 16:15

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869546	1	05/04/16 05:13	05/04/16 05:57	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 20:54	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 14:44	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	1	05/03/16 22:14	05/06/16 00:09	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 05:14	05/04/16 05:14	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 12:33	05/04/16 12:33	BMB
Wet Chemistry by Method 353.2	WG871208	10	05/10/16 17:36	05/10/16 17:36	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 07:31	05/10/16 07:31	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 15:34	05/10/16 15:34	CM

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



TRIP BLANK-EP-03 L832488-13 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 00:00

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 07:10	05/04/16 07:10	BMB

MW-1R L832488-14 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/27/16 15:20

Received date/time  
04/29/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869546	1	05/04/16 05:13	05/04/16 05:57	JM
Metals (ICPMS) by Method 6020	WG869318	5	05/02/16 19:47	05/06/16 22:12	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:29	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	1	05/03/16 22:14	05/06/16 00:27	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868989	1	05/04/16 12:53	05/04/16 12:53	BMB
Wet Chemistry by Method 353.2	WG870059	10	05/06/16 16:05	05/06/16 16:05	ASK
Wet Chemistry by Method 9056A	WG870882	1	05/10/16 07:47	05/10/16 07:47	CM
Wet Chemistry by Method 9056A	WG870882	100	05/10/16 16:22	05/10/16 16:22	CM

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

ACCOUNT:

TRC Solutions - Austin, TX

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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

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	9100		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 15:31	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	3690		5.19	1.00	100	100	05/10/2016 11:35	WG870882
Fluoride	2.56		0.00990	0.100	0.100	1	05/10/2016 03:48	WG870882
Sulfate	2510		7.74	5.00	500	100	05/10/2016 11:35	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0138		0.00125	0.00200	0.0100	5	05/06/2016 21:34	WG869318
Arsenic,Dissolved	0.00838	J	0.00125	0.00200	0.0100	5	05/07/2016 14:54	WG870083
Barium	0.0176	J	0.00180	0.00500	0.0250	5	05/06/2016 21:34	WG869318
Barium,Dissolved	0.0155	J	0.00180	0.00500	0.0250	5	05/07/2016 14:54	WG870083
Calcium	939		0.230	1.00	5.00	5	05/06/2016 21:34	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:34	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:54	WG870083
Iron	7.32		0.0750	0.100	0.500	5	05/06/2016 21:34	WG869318
Iron,Dissolved	3.28		0.0750	0.100	0.500	5	05/07/2016 14:54	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:34	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:54	WG870083
Manganese	2.14		0.00125	0.00500	0.0250	5	05/06/2016 21:34	WG869318
Manganese,Dissolved	1.85		0.00125	0.00500	0.0250	5	05/07/2016 14:54	WG870083
Potassium	4.25	J	0.185	1.00	5.00	5	05/06/2016 21:34	WG869318
Selenium	0.00511	J	0.00190	0.00200	0.0100	5	05/06/2016 21:34	WG869318
Selenium,Dissolved	0.00538	J	0.00190	0.00200	0.0100	5	05/07/2016 14:54	WG870083
Sodium	1910		0.550	1.00	5.00	5	05/06/2016 21:34	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.0845	J	0.0314	0.100	0.100	1	05/03/2016 23:01	WG869046
(S) a,a,a-Trifluorotoluene(FID)	94.5				62.0-128		05/03/2016 23:01	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	0.0108	J	0.0100	0.0500	0.0500	1	05/04/2016 08:52	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 08:52	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 08:52	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 08:52	WG868989



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 08:52	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 08:52	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 08:52	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 08:52	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 08:52	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 08:52	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 08:52	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 08:52	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 08:52	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 08:52	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 08:52	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 08:52	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 08:52	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 08:52	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 08:52	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 08:52	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 08:52	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 08:52	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 08:52	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 08:52	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 08:52	WG868989
(S) Dibromofluoromethane	98.7				79.0-121		05/04/2016 08:52	WG868989
(S) 4-Bromofluorobenzene	86.1				80.1-120		05/04/2016 08:52	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.82		0.0247	0.100	0.100	1	05/05/2016 21:06	WG869613
(S) o-Terphenyl	112				50.0-150		05/05/2016 21:06	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	6730		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	105		0.985	0.100	5.00	50	05/06/2016 16:00	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1120		5.19	1.00	100	100	05/10/2016 12:07	WG870882
Fluoride	5.93		0.00990	0.100	0.100	1	05/10/2016 04:20	WG870882
Sulfate	2790		7.74	5.00	500	100	05/10/2016 12:07	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0300		0.00125	0.00200	0.0100	5	05/06/2016 21:36	WG869318
Arsenic,Dissolved	0.0226		0.00125	0.00200	0.0100	5	05/07/2016 14:57	WG870083
Barium	0.0212	J	0.00180	0.00500	0.0250	5	05/06/2016 21:36	WG869318
Barium,Dissolved	0.0137	J	0.00180	0.00500	0.0250	5	05/07/2016 14:57	WG870083
Calcium	687		0.230	1.00	5.00	5	05/06/2016 21:36	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:36	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:57	WG870083
Iron	0.136	J	0.0750	0.100	0.500	5	05/06/2016 21:36	WG869318
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 14:57	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:36	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:57	WG870083
Manganese	0.106		0.00125	0.00500	0.0250	5	05/06/2016 21:36	WG869318
Manganese,Dissolved	0.00553	J	0.00125	0.00500	0.0250	5	05/07/2016 14:57	WG870083
Potassium	12.2		0.185	1.00	5.00	5	05/06/2016 21:36	WG869318
Selenium	0.0467		0.00190	0.00200	0.0100	5	05/06/2016 21:36	WG869318
Selenium,Dissolved	0.0426		0.00190	0.00200	0.0100	5	05/07/2016 14:57	WG870083
Sodium	1690		0.550	1.00	5.00	5	05/06/2016 21:36	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.0339	J	0.0314	0.100	0.100	1	05/03/2016 23:23	WG869046
(S) a,a,a-Trifluorotoluene(FID)	92.9				62.0-128		05/03/2016 23:23	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 09:12	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 09:12	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 09:12	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 09:12	WG868989





Collected date/time: 04/27/16 15:10

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 09:12	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 09:12	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 09:12	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:12	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 09:12	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 09:12	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 09:12	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 09:12	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 09:12	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 09:12	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 09:12	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 09:12	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 09:12	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 09:12	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 09:12	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 09:12	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 09:12	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 09:12	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 09:12	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 09:12	WG868989
(S) Toluene-d8	100				90.0-115		05/04/2016 09:12	WG868989
(S) Dibromofluoromethane	99.8				79.0-121		05/04/2016 09:12	WG868989
(S) 4-Bromofluorobenzene	88.6				80.1-120		05/04/2016 09:12	WG868989

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.64		0.0247	0.100	0.100	1	05/05/2016 21:24	WG869613
(S) o-Terphenyl	122				50.0-150		05/05/2016 21:24	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	6340		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.523	J	0.197	0.100	1.00	10	05/06/2016 15:37	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1970		5.19	1.00	100	100	05/10/2016 12:23	WG870882
Fluoride	3.30		0.00990	0.100	0.100	1	05/10/2016 04:36	WG870882
Sulfate	2270		7.74	5.00	500	100	05/10/2016 12:23	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00788	J	0.00125	0.00200	0.0100	5	05/06/2016 21:39	WG869318
Arsenic,Dissolved	0.00359	J	0.00125	0.00200	0.0100	5	05/07/2016 15:00	WG870083
Barium	0.0185	J	0.00180	0.00500	0.0250	5	05/06/2016 21:39	WG869318
Barium,Dissolved	0.0171	J	0.00180	0.00500	0.0250	5	05/07/2016 15:00	WG870083
Calcium	875		0.230	1.00	5.00	5	05/06/2016 21:39	WG869318
Chromium	0.0465		0.00270	0.00200	0.0100	5	05/06/2016 21:39	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:00	WG870083
Iron	1.34		0.0750	0.100	0.500	5	05/06/2016 21:39	WG869318
Iron,Dissolved	0.173	J	0.0750	0.100	0.500	5	05/07/2016 15:00	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:39	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 15:00	WG870083
Manganese	0.234		0.00125	0.00500	0.0250	5	05/06/2016 21:39	WG869318
Manganese,Dissolved	0.162		0.00125	0.00500	0.0250	5	05/07/2016 15:00	WG870083
Potassium	4.07	J	0.185	1.00	5.00	5	05/06/2016 21:39	WG869318
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 21:39	WG869318
Selenium,Dissolved	0.00232	J	0.00190	0.00200	0.0100	5	05/07/2016 15:00	WG870083
Sodium	1240		0.550	1.00	5.00	5	05/06/2016 21:39	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 01:55	WG869046
(S) a,a,a-Trifluorotoluene(FID)	92.6				62.0-128		05/04/2016 01:55	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 09:32	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 09:32	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 09:32	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 09:32	WG868989



Collected date/time: 04/27/16 16:00

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 09:32	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 09:32	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 09:32	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:32	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 09:32	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 09:32	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 09:32	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 09:32	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 09:32	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 09:32	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 09:32	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 09:32	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 09:32	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 09:32	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 09:32	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 09:32	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 09:32	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 09:32	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 09:32	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 09:32	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 09:32	WG868989
(S) Dibromofluoromethane	99.4				79.0-121		05/04/2016 09:32	WG868989
(S) 4-Bromofluorobenzene	88.0				80.1-120		05/04/2016 09:32	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.317		0.0247	0.100	0.100	1	05/05/2016 21:42	WG869613
(S) o-Terphenyl	108				50.0-150		05/05/2016 21:42	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	9480		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 15:38	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1410		5.19	1.00	100	100	05/10/2016 12:39	WG870882
Fluoride	5.54		0.00990	0.100	0.100	1	05/10/2016 04:52	WG870882
Sulfate	4550		7.74	5.00	500	100	05/10/2016 12:39	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.115		0.00125	0.00200	0.0100	5	05/06/2016 21:42	WG869318
Arsenic,Dissolved	0.0867		0.00125	0.00200	0.0100	5	05/07/2016 15:08	WG870083
Barium	0.0173	J	0.00180	0.00500	0.0250	5	05/06/2016 21:42	WG869318
Barium,Dissolved	0.0146	J	0.00180	0.00500	0.0250	5	05/07/2016 15:08	WG870083
Calcium	643		0.230	1.00	5.00	5	05/06/2016 21:42	WG869318
Chromium	0.00771	J	0.00270	0.00200	0.0100	5	05/06/2016 21:42	WG869318
Chromium,Dissolved	0.00527	J	0.00270	0.00200	0.0100	5	05/07/2016 15:08	WG870083
Iron	1.27		0.0750	0.100	0.500	5	05/06/2016 21:42	WG869318
Iron,Dissolved	0.682		0.0750	0.100	0.500	5	05/07/2016 15:08	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:42	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 15:08	WG870083
Manganese	3.30		0.00125	0.00500	0.0250	5	05/06/2016 21:42	WG869318
Manganese,Dissolved	2.98		0.00125	0.00500	0.0250	5	05/07/2016 15:08	WG870083
Potassium	10.2		0.185	1.00	5.00	5	05/06/2016 21:42	WG869318
Selenium	0.00714	J	0.00190	0.00200	0.0100	5	05/06/2016 21:42	WG869318
Selenium,Dissolved	0.00813	J	0.00190	0.00200	0.0100	5	05/07/2016 15:08	WG870083
Sodium	1840		0.550	1.00	5.00	5	05/06/2016 21:42	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.519		0.0314	0.100	0.100	1	05/04/2016 02:17	WG869046
(S) a,a,a-Trifluorotoluene(FID)	94.5				62.0-128		05/04/2016 02:17	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 09:52	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 09:52	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 09:52	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 09:52	WG868989



Collected date/time: 04/27/16 16:55

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 09:52	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 09:52	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 09:52	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:52	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 09:52	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 09:52	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 09:52	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 09:52	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 09:52	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 09:52	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 09:52	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 09:52	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 09:52	WG868989
Methyl tert-butyl ether	0.00129		0.000367	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 09:52	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 09:52	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 09:52	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 09:52	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 09:52	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 09:52	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 09:52	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 09:52	WG868989
(S) Dibromofluoromethane	97.7				79.0-121		05/04/2016 09:52	WG868989
(S) 4-Bromofluorobenzene	86.6				80.1-120		05/04/2016 09:52	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	83.8		0.494	0.100	2.00	20	05/06/2016 05:57	WG869613
(S) o-Terphenyl	0.000	J7			50.0-150		05/06/2016 05:57	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5410		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.262	J	0.197	0.100	1.00	10	05/06/2016 15:39	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1360		5.19	1.00	100	100	05/10/2016 13:27	WG870882
Fluoride	12.1		0.0990	0.100	1.00	10	05/15/2016 19:53	WG872424
Sulfate	2350		7.74	5.00	500	100	05/10/2016 13:27	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0510		0.00125	0.00200	0.0100	5	05/06/2016 21:44	WG869318
Arsenic,Dissolved	0.0400		0.00125	0.00200	0.0100	5	05/07/2016 15:10	WG870083
Barium	0.0387		0.00180	0.00500	0.0250	5	05/06/2016 21:44	WG869318
Barium,Dissolved	0.0326		0.00180	0.00500	0.0250	5	05/07/2016 15:10	WG870083
Calcium	350		0.230	1.00	5.00	5	05/06/2016 21:44	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:44	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:10	WG870083
Iron	0.414	J	0.0750	0.100	0.500	5	05/06/2016 21:44	WG869318
Iron,Dissolved	0.121	J	0.0750	0.100	0.500	5	05/07/2016 15:10	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:44	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 15:10	WG870083
Manganese	1.76		0.00125	0.00500	0.0250	5	05/06/2016 21:44	WG869318
Manganese,Dissolved	1.64		0.00125	0.00500	0.0250	5	05/07/2016 15:10	WG870083
Potassium	9.87		0.185	1.00	5.00	5	05/06/2016 21:44	WG869318
Selenium	0.00199	J	0.00190	0.00200	0.0100	5	05/06/2016 21:44	WG869318
Selenium,Dissolved	0.00331	J	0.00190	0.00200	0.0100	5	05/07/2016 15:10	WG870083
Sodium	1790		0.550	1.00	5.00	5	05/06/2016 21:44	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.334		0.0314	0.100	0.100	1	05/04/2016 02:39	WG869046
(S) a,a,a-Trifluorotoluene(FID)	95.0				62.0-128		05/04/2016 02:39	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 10:12	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 10:12	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 10:12	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 10:12	WG868989



Collected date/time: 04/27/16 17:50

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 10:12	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 10:12	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 10:12	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:12	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 10:12	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 10:12	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 10:12	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 10:12	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 10:12	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 10:12	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 10:12	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 10:12	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 10:12	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 10:12	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 10:12	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 10:12	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 10:12	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 10:12	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 10:12	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 10:12	WG868989
(S) Toluene-d8	102				90.0-115		05/04/2016 10:12	WG868989
(S) Dibromofluoromethane	101				79.0-121		05/04/2016 10:12	WG868989
(S) 4-Bromofluorobenzene	87.8				80.1-120		05/04/2016 10:12	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	8.41		0.0247	0.100	0.100	1	05/05/2016 22:01	WG869613
(S) o-Terphenyl	120				50.0-150		05/05/2016 22:01	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5270		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 15:40	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	72.5		0.0519	1.00	1.00	1	05/10/2016 05:55	WG870882
Fluoride	9.96		0.00990	0.100	0.100	1	05/10/2016 05:55	WG870882
Sulfate	2690		7.74	5.00	500	100	05/10/2016 13:42	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0210		0.00125	0.00200	0.0100	5	05/06/2016 21:47	WG869318
Arsenic,Dissolved	0.0116		0.00125	0.00200	0.0100	5	05/07/2016 15:13	WG870083
Barium	0.0445		0.00180	0.00500	0.0250	5	05/06/2016 21:47	WG869318
Barium,Dissolved	0.0382		0.00180	0.00500	0.0250	5	05/07/2016 15:13	WG870083
Calcium	659		0.230	1.00	5.00	5	05/06/2016 21:47	WG869318
Chromium	0.0761		0.00270	0.00200	0.0100	5	05/06/2016 21:47	WG869318
Chromium,Dissolved	0.0490		0.00270	0.00200	0.0100	5	05/07/2016 15:13	WG870083
Iron	14.8		0.0750	0.100	0.500	5	05/06/2016 21:47	WG869318
Iron,Dissolved	11.2		0.0750	0.100	0.500	5	05/07/2016 15:13	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:47	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 15:13	WG870083
Manganese	0.946		0.00125	0.00500	0.0250	5	05/06/2016 21:47	WG869318
Manganese,Dissolved	0.773		0.00125	0.00500	0.0250	5	05/07/2016 15:13	WG870083
Potassium	22.9		0.185	1.00	5.00	5	05/06/2016 21:47	WG869318
Selenium	0.0141		0.00190	0.00200	0.0100	5	05/06/2016 21:47	WG869318
Selenium,Dissolved	0.0124		0.00190	0.00200	0.0100	5	05/07/2016 15:13	WG870083
Sodium	540		0.550	1.00	5.00	5	05/06/2016 21:47	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.269		0.0314	0.100	0.100	1	05/04/2016 03:01	WG869046
(S) a,a,a-Trifluorotoluene(FID)	94.2				62.0-128		05/04/2016 03:01	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	0.0152	J	0.0100	0.0500	0.0500	1	05/04/2016 10:33	WG868989
Benzene	0.00275		0.000331	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 10:33	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 10:33	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 10:33	WG868989





Collected date/time: 04/27/16 17:30

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 10:33	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 10:33	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 10:33	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:33	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 10:33	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 10:33	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 10:33	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Ethylbenzene	0.000942	J	0.000384	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Isopropylbenzene	0.00168		0.000326	0.00100	0.00100	1	05/04/2016 10:33	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 10:33	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 10:33	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 10:33	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 10:33	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 10:33	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 10:33	WG868989
n-Propylbenzene	0.00152		0.000349	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Toluene	0.00125	J	0.000780	0.00500	0.00500	1	05/04/2016 10:33	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 10:33	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 10:33	WG868989
o-Xylene	0.00135		0.000341	0.00100	0.00100	1	05/04/2016 10:33	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 10:33	WG868989
Xylenes, Total	0.00135	J	0.00106	0.00300	0.00300	1	05/04/2016 10:33	WG868989
(S) Toluene-d8	99.5				90.0-115		05/04/2016 10:33	WG868989
(S) Dibromofluoromethane	99.3				79.0-121		05/04/2016 10:33	WG868989
(S) 4-Bromofluorobenzene	87.9				80.1-120		05/04/2016 10:33	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	63.2		1.24	0.100	5.00	50	05/06/2016 06:15	WG869613
(S) o-Terphenyl	0.000	J			50.0-150		05/06/2016 06:15	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	7110		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.406	J	0.197	0.100	1.00	10	05/06/2016 15:41	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	378		5.19	1.00	100	100	05/10/2016 13:58	WG870882
Fluoride	3.03		0.00990	0.100	0.100	1	05/10/2016 06:11	WG870882
Sulfate	4010		7.74	5.00	500	100	05/10/2016 13:58	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0749		0.00125	0.00200	0.0100	5	05/06/2016 21:50	WG869318
Arsenic,Dissolved	0.0594		0.00250	0.00200	0.0200	10	05/09/2016 14:57	WG870083
Barium	0.0136	J	0.00180	0.00500	0.0250	5	05/06/2016 21:50	WG869318
Barium,Dissolved	0.00881	J	0.00360	0.00500	0.0500	10	05/09/2016 14:57	WG870083
Calcium	589		0.230	1.00	5.00	5	05/06/2016 21:50	WG869318
Chromium	0.0132		0.00270	0.00200	0.0100	5	05/06/2016 21:50	WG869318
Chromium,Dissolved	0.0122	J	0.00540	0.00200	0.0200	10	05/09/2016 14:57	WG870083
Iron	12.2		0.0750	0.100	0.500	5	05/06/2016 21:50	WG869318
Iron,Dissolved	10.7		0.150	0.100	1.00	10	05/09/2016 14:57	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:50	WG869318
Lead,Dissolved	U		0.00240	0.00200	0.0200	10	05/09/2016 14:57	WG870083
Manganese	0.687		0.00125	0.00500	0.0250	5	05/06/2016 21:50	WG869318
Manganese,Dissolved	0.599		0.00250	0.00500	0.0500	10	05/09/2016 14:57	WG870083
Potassium	82.9		0.185	1.00	5.00	5	05/06/2016 21:50	WG869318
Selenium	0.0137		0.00190	0.00200	0.0100	5	05/06/2016 21:50	WG869318
Selenium,Dissolved	0.0110		0.00190	0.00200	0.0100	5	05/07/2016 15:16	WG870083
Sodium	1610		0.550	1.00	5.00	5	05/06/2016 21:50	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.968		0.0314	0.100	0.100	1	05/04/2016 03:24	WG869046
(S) a,a,a-Trifluorotoluene(FID)	93.1				62.0-128		05/04/2016 03:24	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	0.0313	J	0.0100	0.0500	0.0500	1	05/04/2016 10:53	WG868989
Benzene	0.00287		0.000331	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 10:53	WG868989
n-Butylbenzene	0.000463	J	0.000361	0.00100	0.00100	1	05/04/2016 10:53	WG868989
sec-Butylbenzene	0.00348		0.000365	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 10:53	WG868989



Collected date/time: 04/27/16 14:30

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 10:53	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 10:53	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 10:53	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:53	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 10:53	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 10:53	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 10:53	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Ethylbenzene	0.00300		0.000384	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Isopropylbenzene	0.0230		0.000326	0.00100	0.00100	1	05/04/2016 10:53	WG868989
p-Isopropyltoluene	0.00264		0.000350	0.00100	0.00100	1	05/04/2016 10:53	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 10:53	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 10:53	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 10:53	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 10:53	WG868989
Methyl tert-butyl ether	0.00647		0.000367	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 10:53	WG868989
n-Propylbenzene	0.00578		0.000349	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Toluene	0.00138	U	0.000780	0.00500	0.00500	1	05/04/2016 10:53	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,2,4-Trimethylbenzene	0.00267		0.000373	0.00100	0.00100	1	05/04/2016 10:53	WG868989
1,3,5-Trimethylbenzene	0.00161		0.000387	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 10:53	WG868989
o-Xylene	0.000583	U	0.000341	0.00100	0.00100	1	05/04/2016 10:53	WG868989
m&p-Xylene	0.00332		0.000719	0.00100	0.00100	1	05/04/2016 10:53	WG868989
Xylenes, Total	0.00390		0.00106	0.00300	0.00300	1	05/04/2016 10:53	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 10:53	WG868989
(S) Dibromofluoromethane	99.6				79.0-121		05/04/2016 10:53	WG868989
(S) 4-Bromofluorobenzene	81.0				80.1-120		05/04/2016 10:53	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	101		1.24	0.100	5.00	50	05/06/2016 06:34	WG869613
(S) o-Terphenyl	0.000	J7			50.0-150		05/06/2016 06:34	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5220		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 15:42	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	1180		5.19	1.00	100	100	05/10/2016 14:14	WG870882
Fluoride	2.96		0.00990	0.100	0.100	1	05/10/2016 06:27	WG870882
Sulfate	2250		7.74	5.00	500	100	05/10/2016 14:14	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0610		0.00125	0.00200	0.0100	5	05/06/2016 21:52	WG869318
Arsenic,Dissolved	0.0455		0.00125	0.00200	0.0100	5	05/07/2016 15:19	WG870083
Barium	0.0140	J	0.00180	0.00500	0.0250	5	05/06/2016 21:52	WG869318
Barium,Dissolved	0.0120	J	0.00180	0.00500	0.0250	5	05/07/2016 15:19	WG870083
Calcium	531		0.230	1.00	5.00	5	05/06/2016 21:52	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 21:52	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:19	WG870083
Iron	4.68		0.0750	0.100	0.500	5	05/06/2016 21:52	WG869318
Iron,Dissolved	3.62		0.0750	0.100	0.500	5	05/07/2016 15:19	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 21:52	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 15:19	WG870083
Manganese	1.07		0.00125	0.00500	0.0250	5	05/06/2016 21:52	WG869318
Manganese,Dissolved	0.856		0.00125	0.00500	0.0250	5	05/07/2016 15:19	WG870083
Potassium	29.4		0.185	1.00	5.00	5	05/06/2016 21:52	WG869318
Selenium	0.00298	J	0.00190	0.00200	0.0100	5	05/06/2016 21:52	WG869318
Selenium,Dissolved	0.00464	J	0.00190	0.00200	0.0100	5	05/07/2016 15:19	WG870083
Sodium	1110		0.550	1.00	5.00	5	05/06/2016 21:52	WG869318

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.759		0.0314	0.100	0.100	1	05/04/2016 03:46	WG869046
(S) a,a,a-Trifluorotoluene(FID)	95.0				62.0-128		05/04/2016 03:46	WG869046

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 11:13	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 11:13	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 11:13	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 11:13	WG868989



Collected date/time: 04/27/16 16:40

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 11:13	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 11:13	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 11:13	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:13	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 11:13	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 11:13	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 11:13	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Isopropylbenzene	0.0108		0.000326	0.00100	0.00100	1	05/04/2016 11:13	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 11:13	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 11:13	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 11:13	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 11:13	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 11:13	WG868989
Methyl tert-butyl ether	0.00756		0.000367	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 11:13	WG868989
n-Propylbenzene	0.000356	U	0.000349	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 11:13	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 11:13	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 11:13	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 11:13	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 11:13	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 11:13	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 11:13	WG868989
(S) Dibromofluoromethane	101				79.0-121		05/04/2016 11:13	WG868989
(S) 4-Bromofluorobenzene	86.2				80.1-120		05/04/2016 11:13	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	24.1		0.124	0.100	0.500	5	05/06/2016 04:07	WG869613
(S) o-Terphenyl	104				50.0-150		05/06/2016 04:07	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	6260		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.404	J	0.197	0.100	1.00	10	05/06/2016 15:43	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1360		5.19	1.00	100	100	05/10/2016 14:30	WG870882
Fluoride	1.87		0.00990	0.100	0.100	1	05/10/2016 06:43	WG870882
Sulfate	2640		7.74	5.00	500	100	05/10/2016 14:30	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0388		0.00125	0.00200	0.0100	5	05/06/2016 22:04	WG869318
Arsenic,Dissolved	0.0299		0.000250	0.00200	0.00200	1	05/09/2016 15:00	WG870083
Barium	0.0175	J	0.00180	0.00500	0.0250	5	05/06/2016 22:04	WG869318
Barium,Dissolved	0.0146		0.000360	0.00500	0.00500	1	05/09/2016 15:00	WG870083
Calcium	728		0.230	1.00	5.00	5	05/06/2016 22:04	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 22:04	WG869318
Chromium,Dissolved	0.00103	J	0.000540	0.00200	0.00200	1	05/09/2016 15:00	WG870083
Iron	0.677		0.0750	0.100	0.500	5	05/06/2016 22:04	WG869318
Iron,Dissolved	0.388		0.0150	0.100	0.100	1	05/09/2016 15:00	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 22:04	WG869318
Lead,Dissolved	0.000300	J	0.000240	0.00200	0.00200	1	05/09/2016 15:00	WG870083
Manganese	2.61		0.00125	0.00500	0.0250	5	05/06/2016 22:04	WG869318
Manganese,Dissolved	2.49		0.000250	0.00500	0.00500	1	05/09/2016 15:00	WG870083
Potassium	5.64		0.185	1.00	5.00	5	05/06/2016 22:04	WG869318
Selenium	0.00580	J	0.00190	0.00200	0.0100	5	05/06/2016 22:04	WG869318
Selenium,Dissolved	0.00429		0.000380	0.00200	0.00200	1	05/09/2016 15:00	WG870083
Sodium	1160		0.550	1.00	5.00	5	05/06/2016 22:04	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.499		0.0314	0.100	0.100	1	05/04/2016 04:08	WG869046
(S) a,a,q-Trifluorotoluene(FID)	95.5				62.0-128		05/04/2016 04:08	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 11:33	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 11:33	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 11:33	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 11:33	WG868989



Collected date/time: 04/27/16 15:25

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 11:33	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 11:33	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 11:33	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:33	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 11:33	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 11:33	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 11:33	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 11:33	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 11:33	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 11:33	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 11:33	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 11:33	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 11:33	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 11:33	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 11:33	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 11:33	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 11:33	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 11:33	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 11:33	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 11:33	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 11:33	WG868989
(S) Dibromofluoromethane	97.3				79.0-121		05/04/2016 11:33	WG868989
(S) 4-Bromofluorobenzene	86.6				80.1-120		05/04/2016 11:33	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	10.2		0.124	0.100	0.500	5	05/06/2016 12:43	WG869613
(S) o-Terphenyl	111				50.0-150		05/06/2016 12:43	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	6240		2.82	10.0	10.0	1	05/04/2016 05:11	WG869544

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.231	J	0.197	0.100	1.00	10	05/06/2016 15:49	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	1290		5.19	1.00	100	100	05/10/2016 14:46	WG870882
Fluoride	1.87		0.00990	0.100	0.100	1	05/10/2016 06:59	WG870882
Sulfate	2530		7.74	5.00	500	100	05/10/2016 14:46	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0348		0.00125	0.00200	0.0100	5	05/06/2016 22:07	WG869318
Arsenic,Dissolved	0.0246		0.00125	0.00200	0.0100	5	05/07/2016 15:24	WG870083
Barium	0.0168	J	0.00180	0.00500	0.0250	5	05/06/2016 22:07	WG869318
Barium,Dissolved	0.0141	J	0.00180	0.00500	0.0250	5	05/07/2016 15:24	WG870083
Calcium	690		0.230	1.00	5.00	5	05/06/2016 22:07	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 22:07	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:24	WG870083
Iron	0.612		0.0750	0.100	0.500	5	05/06/2016 22:07	WG869318
Iron,Dissolved	0.401	J	0.0750	0.100	0.500	5	05/07/2016 15:24	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 22:07	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 15:24	WG870083
Manganese	2.62		0.00125	0.00500	0.0250	5	05/06/2016 22:07	WG869318
Manganese,Dissolved	2.13		0.00125	0.00500	0.0250	5	05/07/2016 15:24	WG870083
Potassium	5.47		0.185	1.00	5.00	5	05/06/2016 22:07	WG869318
Selenium	0.00575	J	0.00190	0.00200	0.0100	5	05/06/2016 22:07	WG869318
Selenium,Dissolved	0.00615	J	0.00190	0.00200	0.0100	5	05/07/2016 15:24	WG870083
Sodium	1140		0.550	1.00	5.00	5	05/06/2016 22:07	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.490		0.0314	0.100	0.100	1	05/04/2016 04:30	WG869046
(S) a,a,a-Trifluorotoluene(FID)	94.8				62.0-128		05/04/2016 04:30	WG869046

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 11:53	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 11:53	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 11:53	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 11:53	WG868989





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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 11:53	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 11:53	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 11:53	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:53	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 11:53	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 11:53	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 11:53	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 11:53	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 11:53	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 11:53	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 11:53	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 11:53	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 11:53	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 11:53	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 11:53	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 11:53	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 11:53	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 11:53	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 11:53	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 11:53	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 11:53	WG868989
(S) Dibromofluoromethane	98.9				79.0-121		05/04/2016 11:53	WG868989
(S) 4-Bromofluorobenzene	89.3				80.1-120		05/04/2016 11:53	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	9.97		0.124	0.100	0.500	5	05/06/2016 12:25	WG869613
(S) o-Terphenyl	115				50.0-150		05/06/2016 12:25	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5940		2.82	10.0	10.0	1	05/04/2016 05:57	WG869546

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/10/2016 17:35	WG871208

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	1530		2.60	1.00	50.0	50	05/15/2016 20:08	WG872424
Fluoride	7.62		0.00990	0.100	0.100	1	05/10/2016 07:15	WG870882
Sulfate	1940		3.87	5.00	250	50	05/15/2016 20:08	WG872424

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.183		0.00125	0.00200	0.0100	5	05/06/2016 22:10	WG869318
Arsenic,Dissolved	0.125		0.00125	0.00200	0.0100	5	05/07/2016 15:27	WG870083
Barium	0.0218	J	0.00180	0.00500	0.0250	5	05/06/2016 22:10	WG869318
Barium,Dissolved	0.0176	J	0.00180	0.00500	0.0250	5	05/07/2016 15:27	WG870083
Calcium	374		0.230	1.00	5.00	5	05/06/2016 22:10	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 22:10	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:27	WG870083
Iron	2.52		0.0750	0.100	0.500	5	05/06/2016 22:10	WG869318
Iron,Dissolved	1.08		0.0750	0.100	0.500	5	05/07/2016 15:27	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 22:10	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 15:27	WG870083
Manganese	1.01		0.00125	0.00500	0.0250	5	05/06/2016 22:10	WG869318
Manganese,Dissolved	0.907		0.00125	0.00500	0.0250	5	05/07/2016 15:27	WG870083
Potassium	21.5		0.185	1.00	5.00	5	05/06/2016 22:10	WG869318
Selenium	0.00310	J	0.00190	0.00200	0.0100	5	05/06/2016 22:10	WG869318
Selenium,Dissolved	0.00374	J	0.00190	0.00200	0.0100	5	05/07/2016 15:27	WG870083
Sodium	1640		0.550	1.00	5.00	5	05/06/2016 22:10	WG869318

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.39		0.0314	0.100	0.100	1	05/04/2016 04:52	WG869046
(S) a,a,a-Trifluorotoluene(FID)	94.5				62.0-128		05/04/2016 04:52	WG869046

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 12:13	WG868989
Benzene	0.00134		0.000331	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 12:13	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 12:13	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 12:13	WG868989



Collected date/time: 04/27/16 17:10

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 12:13	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 12:13	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 12:13	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:13	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 12:13	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 12:13	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 12:13	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Isopropylbenzene	0.00144		0.000326	0.00100	0.00100	1	05/04/2016 12:13	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 12:13	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 12:13	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 12:13	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 12:13	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 12:13	WG868989
Methyl tert-butyl ether	0.00577		0.000367	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 12:13	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 12:13	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 12:13	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 12:13	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 12:13	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 12:13	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 12:13	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 12:13	WG868989
(S) Dibromofluoromethane	99.0				79.0-121		05/04/2016 12:13	WG868989
(S) 4-Bromofluorobenzene	86.5				80.1-120		05/04/2016 12:13	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	18.2		0.124	0.100	0.500	5	05/06/2016 03:49	WG869613
(S) o-Terphenyl	99.0				50.0-150		05/06/2016 03:49	WG869613



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	12000		2.82	10.0	10.0	1	05/04/2016 05:57	WG869546

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/10/2016 17:36	WG871208

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	4180		5.19	1.00	100	100	05/10/2016 15:34	WG870882
Fluoride	1.40		0.00990	0.100	0.100	1	05/10/2016 07:31	WG870882
Sulfate	4310		7.74	5.00	500	100	05/10/2016 15:34	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0106		0.00125	0.00200	0.0100	5	05/06/2016 20:54	WG869318
Arsenic,Dissolved	0.00841	J	0.00125	0.00200	0.0100	5	05/07/2016 14:44	WG870083
Barium	0.0200	J O1	0.00180	0.00500	0.0250	5	05/06/2016 20:54	WG869318
Barium,Dissolved	0.0178	J	0.00180	0.00500	0.0250	5	05/07/2016 14:44	WG870083
Calcium	728	V	0.230	1.00	5.00	5	05/06/2016 20:54	WG869318
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 20:54	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:44	WG870083
Iron	4.56		0.0750	0.100	0.500	5	05/06/2016 20:54	WG869318
Iron,Dissolved	3.82	O1	0.0750	0.100	0.500	5	05/07/2016 14:44	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 20:54	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:44	WG870083
Manganese	2.70	V	0.00125	0.00500	0.0250	5	05/06/2016 20:54	WG869318
Manganese,Dissolved	2.39	V	0.00125	0.00500	0.0250	5	05/07/2016 14:44	WG870083
Potassium	27.9	V	0.185	1.00	5.00	5	05/06/2016 20:54	WG869318
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 20:54	WG869318
Selenium,Dissolved	0.00215	J	0.00190	0.00200	0.0100	5	05/07/2016 14:44	WG870083
Sodium	3230	V	0.550	1.00	5.00	5	05/06/2016 20:54	WG869318

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0421	J	0.0314	0.100	0.100	1	05/04/2016 05:14	WG869046
(S) a,a,q-Trifluorotoluene(FID)	92.6				62.0-128		05/04/2016 05:14	WG869046

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 12:33	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 12:33	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 12:33	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 12:33	WG868989



Collected date/time: 04/27/16 16:15

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 12:33	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 12:33	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 12:33	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:33	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 12:33	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 12:33	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 12:33	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 12:33	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 12:33	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 12:33	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 12:33	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 12:33	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 12:33	WG868989
Methyl tert-butyl ether	0.000646	U	0.000367	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 12:33	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 12:33	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 12:33	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 12:33	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 12:33	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 12:33	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 12:33	WG868989
(S) Toluene-d8	99.7				90.0-115		05/04/2016 12:33	WG868989
(S) Dibromofluoromethane	102				79.0-121		05/04/2016 12:33	WG868989
(S) 4-Bromofluorobenzene	89.2				80.1-120		05/04/2016 12:33	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.449		0.0247	0.100	0.100	1	05/06/2016 00:09	WG869613
(S) o-Terphenyl	110				50.0-150		05/06/2016 00:09	WG869613



Collected date/time: 04/27/16 00:00

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 07:10	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 07:10	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 07:10	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 07:10	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 07:10	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 07:10	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:10	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 07:10	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 07:10	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 07:10	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 07:10	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 07:10	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 07:10	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 07:10	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 07:10	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 07:10	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 07:10	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 07:10	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 07:10	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 07:10	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 07:10	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 07:10	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 07:10	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 07:10	WG868989
(S) Dibromofluoromethane	99.8				79.0-121		05/04/2016 07:10	WG868989
(S) 4-Bromofluorobenzene	89.0				80.1-120		05/04/2016 07:10	WG868989

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	10100		2.82	10.0	10.0	1	05/04/2016 05:57	WG869546

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	U		0.197	0.100	1.00	10	05/06/2016 16:05	WG870059

## Wet Chemistry by Method 9056A

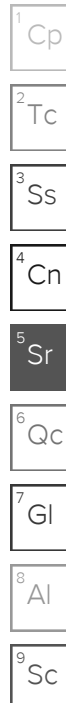
Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	3330		5.19	1.00	100	100	05/10/2016 16:22	WG870882
Fluoride	0.603	J6	0.00990	0.100	0.100	1	05/10/2016 07:47	WG870882
Sulfate	3320		7.74	5.00	500	100	05/10/2016 16:22	WG870882

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00917	J	0.00125	0.00200	0.0100	5	05/06/2016 22:12	WG869318
Arsenic,Dissolved	0.00311	J	0.00125	0.00200	0.0100	5	05/07/2016 15:29	WG870083
Barium	0.0301		0.00180	0.00500	0.0250	5	05/06/2016 22:12	WG869318
Barium,Dissolved	0.0252		0.00180	0.00500	0.0250	5	05/07/2016 15:29	WG870083
Calcium	1030		0.230	1.00	5.00	5	05/06/2016 22:12	WG869318
Chromium	0.0188		0.00270	0.00200	0.0100	5	05/06/2016 22:12	WG869318
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:29	WG870083
Iron	9.67		0.0750	0.100	0.500	5	05/06/2016 22:12	WG869318
Iron,Dissolved	3.72		0.0750	0.100	0.500	5	05/07/2016 15:29	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 22:12	WG869318
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 15:29	WG870083
Manganese	2.94		0.00125	0.00500	0.0250	5	05/06/2016 22:12	WG869318
Manganese,Dissolved	2.64		0.00125	0.00500	0.0250	5	05/07/2016 15:29	WG870083
Potassium	6.54		0.185	1.00	5.00	5	05/06/2016 22:12	WG869318
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 22:12	WG869318
Selenium,Dissolved	0.00216	J	0.00190	0.00200	0.0100	5	05/07/2016 15:29	WG870083
Sodium	2090		0.550	1.00	5.00	5	05/06/2016 22:12	WG869318

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/04/2016 12:53	WG868989
Benzene	U		0.000331	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Bromoform	U		0.000469	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Bromomethane	U		0.000866	0.00500	0.00500	1	05/04/2016 12:53	WG868989
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/04/2016 12:53	WG868989
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Chloroethane	U		0.000453	0.00500	0.00500	1	05/04/2016 12:53	WG868989
Chloroform	U		0.000324	0.00500	0.00500	1	05/04/2016 12:53	WG868989
Chloromethane	U		0.000276	0.00250	0.00250	1	05/04/2016 12:53	WG868989
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/04/2016 12:53	WG868989
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/04/2016 12:53	WG868989





Collected date/time: 04/27/16 15:20

L832488

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/04/2016 12:53	WG868989
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:53	WG868989
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/04/2016 12:53	WG868989
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/04/2016 12:53	WG868989
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/04/2016 12:53	WG868989
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/04/2016 12:53	WG868989
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/04/2016 12:53	WG868989
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/04/2016 12:53	WG868989
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/04/2016 12:53	WG868989
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/04/2016 12:53	WG868989
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/04/2016 12:53	WG868989
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/04/2016 12:53	WG868989
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Naphthalene	U		0.00100	0.00500	0.00500	1	05/04/2016 12:53	WG868989
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Styrene	U		0.000307	0.00100	0.00100	1	05/04/2016 12:53	WG868989
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/04/2016 12:53	WG868989
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Toluene	U		0.000780	0.00500	0.00500	1	05/04/2016 12:53	WG868989
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/04/2016 12:53	WG868989
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/04/2016 12:53	WG868989
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/04/2016 12:53	WG868989
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/04/2016 12:53	WG868989
o-Xylene	U		0.000341	0.00100	0.00100	1	05/04/2016 12:53	WG868989
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/04/2016 12:53	WG868989
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/04/2016 12:53	WG868989
(S) Toluene-d8	101				90.0-115		05/04/2016 12:53	WG868989
(S) Dibromofluoromethane	101				79.0-121		05/04/2016 12:53	WG868989
(S) 4-Bromofluorobenzene	88.0				80.1-120		05/04/2016 12:53	WG868989

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.163		0.0247	0.100	0.100	1	05/06/2016 00:27	WG869613
(S) o-Terphenyl	107				50.0-150		05/06/2016 00:27	WG869613



WG869544

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133877-1 05/04/16 05:11

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

L832488-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832488-01 05/04/16 05:11 • (DUP) R3133877-4 05/04/16 05:11

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	9100	9460	1	3.88		5

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

(LCS) R3133877-2 05/04/16 05:11 • (LCSD) R3133877-3 05/04/16 05:11

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 %
Dissolved Solids	8800	8730	8810	99.2	100	85.0-115			0.912	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
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WG869546

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832488-11,12,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133883-1 05/04/16 05:57

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

L832488-11 Original Sample (OS) • Duplicate (DUP)

(OS) L832488-11 05/04/16 05:57 • (DUP) R3133883-4 05/04/16 05:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	5940	5770	1	2.90		5

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

(LCS) R3133883-2 05/04/16 05:57 • (LCSD) R3133883-3 05/04/16 05:57

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 %
Dissolved Solids	8800	8510	8780	96.7	99.8	85.0-115			3.12	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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WG870059

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134522-1 05/06/16 15:21

Analyte	MB Result mg/l	MB Qualifier mg/l	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	0.0230		0.0197	0.100

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

L832472-35 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-35 05/06/16 15:26 • (DUP) R3134522-4 05/06/16 15:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.222	ND	10	19.0	J	20

L832546-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832546-01 05/06/16 15:51 • (DUP) R3134522-6 05/06/16 15:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.62	1.62	1	0.000		20

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

(LCS) R3134522-2 05/06/16 15:22 • (LCSD) R3134522-3 05/06/16 15:23

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 %
Nitrate-Nitrite	5.00	4.95	4.92	99.0	98.0	90.0-110			1.00	20

L832472-36 Original Sample (OS) • Matrix Spike (MS)

(OS) L832472-36 05/06/16 15:28 • (MS) R3134522-5 05/06/16 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.715	39.4	77.0	10	90.0-110	J6

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,14

ONE LAB. NATIONWIDE.



L832603-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-01 05/06/16 15:53 • (MS) R3134522-7 05/06/16 15:58 • (MSD) R3134522-8 05/06/16 15:59

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	0.0490	4.68	4.49	93.0	89.0	1	90.0-110		J6	4.00	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832488-11,12

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135460-1 05/10/16 17:30

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

L832641-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832641-01 05/10/16 17:47 • (DUP) R3135460-4 05/10/16 17:48

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier %	DUP RPD Limits %
Nitrate-Nitrite	1.27	1.26	1	1.00		20

L832795-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832795-02 05/10/16 17:59 • (DUP) R3135460-6 05/10/16 18:01

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier %	DUP RPD Limits %
Nitrate-Nitrite	0.451	0.456	1	1.00		20

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

(LCS) R3135460-2 05/10/16 17:31 • (LCSD) R3135460-3 05/10/16 17:32

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 %
Nitrate-Nitrite	5.00	4.88	4.84	98.0	97.0	90.0-110			1.00	20

L832641-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832641-02 05/10/16 17:49 • (MS) R3135460-5 05/10/16 17:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier %
Nitrate-Nitrite	5.00	1.26	5.82	91.0	1	90.0-110	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832488-11,12

ONE LAB. NATIONWIDE.



L832800-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832800-01 05/10/16 18:05 • (MS) R3135460-7 05/10/16 18:10 • (MSD) R3135460-8 05/10/16 18:11

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	%	%		%			%	%
Nitrate-Nitrite	5.00	ND	4.64	4.67	91.0	91.0	1	90.0-110			1.00	20

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

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136016-1 05/09/16 23:45

	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

L832488-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832488-01 05/10/16 03:48 • (DUP) R3136016-4 05/10/16 04:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	2.56	2.53	1	1		15

L832488-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832488-01 05/10/16 11:35 • (DUP) R3136016-6 05/10/16 11:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	3690	3620	100	2		15
Sulfate	2510	2500	100	0		15

Original Sample (OS) • Duplicate (DUP)

(OS) • (DUP) R3136016-7 05/10/16 16:54

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride		559	10	2		15
Fluoride		0.553	10	6	J	15
Sulfate		155	10	5		15

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

(LCS) R3136016-2 05/10/16 00:01 • (LCSD) R3136016-3 05/10/16 00:17

	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	40.2	39.7	100	99	80-120			1	15
Fluoride	8.00	8.00	7.93	100	99	80-120			1	15

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG870882

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,14

ONE LAB. NATIONWIDE.



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

(LCS) R3136016-2 05/10/16 00:01 • (LCSD) R3136016-3 05/10/16 00:17										
	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	%	%	%			%	%
Sulfate	40.0	40.2	39.8	100	99	80-120			1	15

L832488-14 Original Sample (OS) • Matrix Spike (MS)

(OS) L832488-14 05/10/16 07:47 • (MS) R3136016-5 05/10/16 09:50							
	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	0.603	4.08	70	1	80-120	<u>J6</u>

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3136016-8 05/10/16 17:25 • (MSD) R3136016-9 05/10/16 17:41

	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	%	%		%			%	%
Chloride	50.0		49.3	49.3	99	99	1	80-120			0	15
Fluoride	5.00		4.86	4.89	97	98	1	80-120			1	15
Sulfate	50.0		49.2	49.2	98	98	1	80-120			0	15

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832488-05,11

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136920-1 05/15/16 05:48

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

L832644-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832644-02 05/15/16 22:08 • (DUP) R3136920-5 05/15/16 22:23

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6.31	6.26	1	1		15

L832644-09 Original Sample (OS) • Duplicate (DUP)

(OS) L832644-09 05/16/16 00:37 • (DUP) R3136920-6 05/16/16 00:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4.92	4.87	1	1		15

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

(LCS) R3136920-2 05/15/16 06:03 • (LCSD) R3136920-3 05/15/16 06:18

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 %
Chloride	40.0	39.2	39.2	98	98	80-120			0	15
Fluoride	8.00	7.90	7.97	99	100	80-120			1	15
Sulfate	40.0	39.7	39.7	99	99	80-120			0	15

L832644-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L832644-01 05/15/16 20:38 • (MS) R3136920-4 05/15/16 21:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	6.62	16.3	19	1	80-120	J6

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832488-05,11

ONE LAB. NATIONWIDE. 

L832644-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832644-12 05/16/16 01:08 • (MS) R3136920-7 05/16/16 01:22 • (MSD) R3136920-8 05/16/16 01:37												
	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	50.0	6.37	16.2	16.0	20	19	1	80-120	J6	J6	1	15

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

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134607-1 05/06/16 20:46

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	0.0807		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	0.0188		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.000451		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134607-2 05/06/16 20:49 • (LCSD) R3134607-3 05/06/16 20:51

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	0.0508	0.0521	102	104	80-120			2	20
Barium	0.0500	0.0533	0.0507	107	101	80-120			5	20
Calcium	5.00	5.24	5.21	105	104	80-120			1	20
Chromium	0.0500	0.0519	0.0507	104	101	80-120			2	20
Iron	5.00	5.07	4.96	101	99	80-120			2	20
Lead	0.0500	0.0519	0.0516	104	103	80-120			1	20
Manganese	0.0500	0.0519	0.0503	104	101	80-120			3	20
Potassium	5.00	5.08	5.01	102	100	80-120			2	20
Selenium	0.0500	0.0505	0.0501	101	100	80-120			1	20
Sodium	5.00	5.11	5.07	102	101	80-120			1	20

L832488-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832488-12 05/06/16 20:54 • (MS) R3134607-5 05/06/16 20:59 • (MSD) R3134607-6 05/06/16 21:02

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 %
Arsenic	0.0100	0.0106	0.0724	0.0674	124	114	5	75-125			7	20
Barium	0.0100	0.0200	0.0795	0.0765	119	113	5	75-125			4	20
Calcium	1.00	728	723	691	0	0	5	75-125	√	√	5	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,14

ONE LAB. NATIONWIDE.



L832488-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832488-12 05/06/16 20:54 • (MS) R3134607-5 05/06/16 20:59 • (MSD) R3134607-6 05/06/16 21:02

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	%	%		%			%	%
Chromium	0.0100	U	0.0570	0.0536	114	107	5	75-125			6	20
Potassium	1.00	27.9	34.8	32.1	138	84	5	75-125	√		8	20
Iron	1.00	4.56	10.2	9.59	113	101	5	75-125			6	20
Lead	0.0100	U	0.0572	0.0546	114	109	5	75-125			5	20
Manganese	0.0100	2.70	2.81	2.66	223	0	5	75-125	√	√	5	20
Selenium	0.0100	U	0.0584	0.0563	117	113	5	75-125			4	20
Sodium	1.00	3230	3300	3120	1300	0	5	75-125	√	√	5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134748-1 05/07/16 14:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000535		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

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

(LCS) R3134748-2 05/07/16 14:38 • (LCSD) R3134748-3 05/07/16 14:41

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 %
Arsenic,Dissolved	0.0500	0.0432	0.0440	86	88	80-120			2	20
Barium,Dissolved	0.0500	0.0473	0.0477	95	95	80-120			1	20
Chromium,Dissolved	0.0500	0.0459	0.0473	92	95	80-120			3	20
Iron,Dissolved	5.00	4.48	4.67	90	93	80-120			4	20
Lead,Dissolved	0.0500	0.0457	0.0463	91	93	80-120			1	20
Manganese,Dissolved	0.0500	0.0457	0.0471	91	94	80-120			3	20
Selenium,Dissolved	0.0500	0.0447	0.0464	89	93	80-120			4	20

L832488-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832488-12 05/07/16 14:44 • (MS) R3134748-5 05/07/16 14:49 • (MSD) R3134748-6 05/07/16 14:52

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,Dissolved	0.0100	0.00841	0.0637	0.0631	111	109	5	75-125			1	20
Barium,Dissolved	0.0100	0.0178	0.0675	0.0717	99	108	5	75-125			6	20
Chromium,Dissolved	0.0100	U	0.0537	0.0526	107	105	5	75-125			2	20
Iron,Dissolved	1.00	3.82	9.17	9.28	107	109	5	75-125			1	20
Lead,Dissolved	0.0100	U	0.0539	0.0533	108	107	5	75-125			1	20
Manganese,Dissolved	0.0100	2.39	2.59	2.63	401	479	5	75-125	<u>V</u>	<u>V</u>	1	20
Selenium,Dissolved	0.0100	0.00215	0.0557	0.0575	107	111	5	75-125			3	20

ACCOUNT:  
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1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869046

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

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133660-3 05/03/16 19:07				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	0.0316		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	93.4			62.0-128

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

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

(LCS) R3133660-1 05/03/16 18:01 • (LCSD) R3133660-2 05/03/16 18:23										
	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	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.37	5.38	97.6	97.8	67.0-132			0.180	20
(S) a,a,a-Trifluorotoluene(FID)				101	101	62.0-128				

L832472-37 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-37 05/03/16 22:39 • (MS) R3133660-4 05/03/16 23:45 • (MSD) R3133660-5 05/04/16 00:07												
	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	%	%		%			%	%
TPH (GC/FID) Low Fraction	5.50	0.203	4.04	4.23	69.7	73.3	1	50.0-143			4.78	20
(S) a,a,a-Trifluorotoluene(FID)					98.4	98.7		62.0-128				

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

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,13,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134151-3 05/04/16 06:39

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

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Cp

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Tc

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

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,13,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134151-3 05/04/16 06:39

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	100			90.0-115
(S) Dibromofluoromethane	99.4			79.0-121
(S) 4-Bromofluorobenzene	89.9			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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

(LCS) R3134151-1 05/04/16 05:17 • (LCSD) R3134151-2 05/04/16 05:38

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	0.0985	0.103	78.8	82.0	28.7-175			3.97	20.9
Benzene	0.0250	0.0262	0.0255	105	102	73.0-122			2.50	20
Bromodichloromethane	0.0250	0.0239	0.0237	95.5	94.8	75.5-121			0.740	20
Bromoform	0.0250	0.0245	0.0253	98.0	101	71.5-131			3.25	20
Bromomethane	0.0250	0.0333	0.0338	133	135	22.4-187			1.65	20
n-Butylbenzene	0.0250	0.0251	0.0248	100	99.2	75.9-134			1.22	20
sec-Butylbenzene	0.0250	0.0231	0.0233	92.5	93.0	80.6-126			0.610	20
Carbon disulfide	0.0250	0.0267	0.0267	107	107	53.0-134			0.350	20
Carbon tetrachloride	0.0250	0.0208	0.0209	83.4	83.5	70.9-129			0.180	20
Chlorobenzene	0.0250	0.0251	0.0248	100	99.3	79.7-122			0.870	20
Chlorodibromomethane	0.0250	0.0245	0.0249	98.1	99.7	78.2-124			1.56	20
Chloroethane	0.0250	0.0334	0.0341	134	136	41.2-153			2.08	20
Chloroform	0.0250	0.0243	0.0241	97.1	96.5	73.2-125			0.610	20
Chloromethane	0.0250	0.0301	0.0298	120	119	55.8-134			0.740	20
1,2-Dibromoethane	0.0250	0.0245	0.0246	97.8	98.6	79.8-122			0.790	20
1,1-Dichloroethane	0.0250	0.0268	0.0265	107	106	71.7-127			1.14	20

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

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,13,14

ONE LAB. NATIONWIDE.



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

(LCS) R3134151-1 05/04/16 05:17 • (LCSD) R3134151-2 05/04/16 05:38

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	0.0232	0.0235	93.0	94.0	65.3-126			1.05	20
1,1-Dichloroethene	0.0250	0.0277	0.0275	111	110	59.9-137			0.430	20
cis-1,2-Dichloroethene	0.0250	0.0260	0.0255	104	102	77.3-122			2.04	20
trans-1,2-Dichloroethene	0.0250	0.0257	0.0254	103	101	72.6-125			1.17	20
1,2-Dichloropropane	0.0250	0.0279	0.0280	112	112	77.4-125			0.260	20
cis-1,3-Dichloropropene	0.0250	0.0266	0.0269	106	107	77.7-124			0.960	20
trans-1,3-Dichloropropene	0.0250	0.0262	0.0265	105	106	73.5-127			1.29	20
Ethylbenzene	0.0250	0.0249	0.0245	99.7	97.8	80.9-121			1.95	20
2-Hexanone	0.125	0.134	0.139	107	111	59.4-151			3.44	20
Isopropylbenzene	0.0250	0.0240	0.0236	95.9	94.5	81.6-124			1.43	20
p-Isopropyltoluene	0.0250	0.0237	0.0237	94.7	95.0	77.6-129			0.310	20
2-Butanone (MEK)	0.125	0.128	0.133	102	107	46.4-155			4.17	20
Methylene Chloride	0.0250	0.0253	0.0249	101	99.8	69.5-120			1.34	20
4-Methyl-2-pentanone (MIBK)	0.125	0.142	0.150	113	120	63.3-138			5.45	20
Methyl tert-butyl ether	0.0250	0.0236	0.0245	94.4	97.9	70.1-125			3.64	20
Naphthalene	0.0250	0.0229	0.0233	91.5	93.1	69.7-134			1.79	20
n-Propylbenzene	0.0250	0.0249	0.0244	99.8	97.6	81.9-122			2.19	20
Styrene	0.0250	0.0253	0.0249	101	99.7	79.9-124			1.63	20
1,1,1,2-Tetrachloroethane	0.0250	0.0246	0.0247	98.5	98.9	78.5-125			0.420	20
1,1,2,2-Tetrachloroethane	0.0250	0.0234	0.0244	93.6	97.6	79.3-123			4.19	20
Tetrachloroethene	0.0250	0.0244	0.0238	97.7	95.1	73.5-130			2.66	20
Toluene	0.0250	0.0249	0.0248	99.4	99.1	77.9-116			0.300	20
1,1,1-Trichloroethane	0.0250	0.0231	0.0237	92.2	94.9	71.1-129			2.81	20
1,1,2-Trichloroethane	0.0250	0.0238	0.0244	95.2	97.4	81.6-120			2.33	20
Trichloroethene	0.0250	0.0248	0.0244	99.4	97.4	79.5-121			1.97	20
1,2,4-Trimethylbenzene	0.0250	0.0234	0.0230	93.6	92.2	79.0-122			1.57	20
1,3,5-Trimethylbenzene	0.0250	0.0230	0.0231	92.2	92.3	81.0-123			0.170	20
Vinyl chloride	0.0250	0.0304	0.0299	122	119	61.5-134			1.74	20
Xylenes, Total	0.0750	0.0740	0.0726	98.6	96.8	79.2-122			1.84	20
o-Xylene	0.0250	0.0243	0.0240	97.3	96.0	79.1-123			1.31	20
m&p-Xylenes	0.0500	0.0497	0.0486	99.3	97.3	78.5-122			2.10	20
(S) Toluene-d8				99.6	100	90.0-115				
(S) Dibromofluoromethane				100	101	79.0-121				
(S) 4-Bromofluorobenzene				86.9	86.7	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

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8Al

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

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,13,14

ONE LAB. NATIONWIDE.



L832524-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832524-08 05/04/16 07:30 • (MS) R3134151-4 05/04/16 07:51 • (MSD) R3134151-5 05/04/16 08:12

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	%	%		%			%	%
Acetone	0.125	U	0.0571	0.0609	45.7	48.7	1	25.0-156			6.51	21.5
Benzene	0.0250	0.00200	0.0241	0.0246	88.2	90.4	1	58.6-133			2.21	20
Bromodichloromethane	0.0250	U	0.0209	0.0221	83.5	88.3	1	69.2-127			5.66	20
Bromoform	0.0250	U	0.0218	0.0236	87.1	94.6	1	66.3-140			8.25	20
Bromomethane	0.0250	U	0.0260	0.0270	104	108	1	16.6-183			3.94	20.5
n-Butylbenzene	0.0250	U	0.0222	0.0231	88.8	92.3	1	64.8-145			3.91	20
sec-Butylbenzene	0.0250	U	0.0202	0.0210	81.0	84.0	1	66.8-139			3.65	20
Carbon disulfide	0.0250	U	0.0197	0.0200	78.8	80.2	1	34.9-138			1.64	20
Carbon tetrachloride	0.0250	U	0.0176	0.0182	70.5	72.9	1	60.6-139			3.32	20
Chlorobenzene	0.0250	U	0.0218	0.0225	87.1	90.1	1	70.1-130			3.31	20
Chlorodibromomethane	0.0250	U	0.0214	0.0224	85.4	89.6	1	71.6-132			4.82	20
Chloroethane	0.0250	U	0.0282	0.0289	113	116	1	33.3-155			2.40	20
Chloroform	0.0250	U	0.0218	0.0223	87.1	89.0	1	66.1-133			2.14	20
Chloromethane	0.0250	U	0.0233	0.0240	93.0	96.0	1	40.7-139			3.18	20
1,2-Dibromoethane	0.0250	U	0.0216	0.0228	86.4	91.3	1	73.8-131			5.56	20
1,1-Dichloroethane	0.0250	U	0.0236	0.0242	94.3	97.0	1	64.0-134			2.82	20
1,2-Dichloroethane	0.0250	U	0.0211	0.0215	84.4	86.1	1	60.7-132			2.00	20
1,1-Dichloroethene	0.0250	U	0.0238	0.0241	95.1	96.5	1	48.8-144			1.53	20
cis-1,2-Dichloroethene	0.0250	U	0.0228	0.0232	91.4	92.9	1	60.6-136			1.63	20
trans-1,2-Dichloroethene	0.0250	U	0.0217	0.0217	86.7	86.9	1	61.0-132			0.230	20
1,2-Dichloropropane	0.0250	U	0.0247	0.0254	98.7	102	1	69.7-130			2.83	20
cis-1,3-Dichloropropene	0.0250	U	0.0232	0.0245	92.7	98.0	1	71.1-129			5.66	20
trans-1,3-Dichloropropene	0.0250	U	0.0233	0.0246	93.0	98.4	1	66.3-136			5.61	20
Ethylbenzene	0.0250	0.00213	0.0241	0.0243	87.7	88.6	1	62.7-136			0.910	20
2-Hexanone	0.125	U	0.102	0.108	81.7	86.5	1	59.4-154			5.74	20.1
Isopropylbenzene	0.0250	U	0.0207	0.0215	82.7	86.0	1	67.4-136			3.86	20
p-Isopropyltoluene	0.0250	U	0.0207	0.0215	83.0	85.9	1	62.8-143			3.46	20
2-Butanone (MEK)	0.125	U	0.0921	0.0968	73.7	77.4	1	45.0-156			4.91	20.8
Methylene Chloride	0.0250	U	0.0218	0.0222	87.3	88.7	1	61.5-125			1.60	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.133	0.140	106	112	1	60.7-150			5.52	20
Methyl tert-butyl ether	0.0250	U	0.0213	0.0223	85.1	89.1	1	61.4-136			4.66	20
Naphthalene	0.0250	U	0.0199	0.0222	79.5	88.8	1	61.8-143			11.0	20
n-Propylbenzene	0.0250	0.000377	0.0216	0.0225	85.1	88.6	1	63.2-139			4.01	20
Styrene	0.0250	U	0.0219	0.0227	87.4	90.8	1	68.2-133			3.85	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0216	0.0223	86.3	89.0	1	70.5-132			3.08	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0216	0.0233	86.5	93.1	1	64.9-145			7.32	20

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

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,13,14

ONE LAB. NATIONWIDE.



L832524-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832524-08 05/04/16 07:30 • (MS) R3134151-4 05/04/16 07:51 • (MSD) R3134151-5 05/04/16 08:12

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 %
Tetrachloroethene	0.0250	U	0.0206	0.0211	82.5	84.5	1	57.4-141			2.48	20
Toluene	0.0250	U	0.0219	0.0228	87.6	91.0	1	67.8-124			3.78	20
1,1,1-Trichloroethane	0.0250	U	0.0197	0.0203	79.0	81.1	1	58.7-134			2.70	20
1,1,2-Trichloroethane	0.0250	U	0.0217	0.0225	86.7	89.9	1	74.1-130			3.67	20
Trichloroethene	0.0250	U	0.0210	0.0217	84.1	86.7	1	48.9-148			3.07	20
1,2,4-Trimethylbenzene	0.0250	0.00596	0.0259	0.0266	79.6	82.7	1	60.5-137			2.89	20
1,3,5-Trimethylbenzene	0.0250	0.000768	0.0208	0.0213	80.0	82.2	1	67.9-134			2.63	20
Vinyl chloride	0.0250	U	0.0243	0.0249	97.3	99.4	1	44.3-143			2.15	20
Xylenes, Total	0.0750	0.00361	0.0670	0.0688	84.5	86.9	1	65.6-133			2.65	20
o-Xylene	0.0250	0.00124	0.0222	0.0229	84.0	86.7	1	67.1-133			2.95	20
m&p-Xylenes	0.0500	0.00237	0.0448	0.0459	84.8	87.1	1	64.1-133			2.49	20
(S) Toluene-d8					99.4	99.9		90.0-115				
(S) Dibromofluoromethane					102	101		79.0-121				
(S) 4-Bromofluorobenzene					86.1	85.6		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832488

DATE/TIME:  
05/17/16 20:49

PAGE:  
53 of 58

WG869613

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832488-01,02,03,04,05,06,07,08,09,10,11,12,14

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133989-1 05/04/16 12:53

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	93.7			50.0-150

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

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832488

DATE/TIME:  
05/17/16 20:49

PAGE:  
54 of 58



## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Sample Detection Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> GI

<sup>8</sup> AI

<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



<b>Company Name/Address:</b> <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		<b>Billing Information:</b> <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		<b>Analysis / Container / Preservative</b>										<b>Chain of Custody</b> Page <u>1</u> of <u>2</u>											
<b>Report to:</b> jspeer@trcsolutions.com		<b>Email To:</b> jspeer@trcsolutions.com												 <b>ESC</b> L.A.B. S.C.I.E.N.C.E.S. YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-759-5858 Phone: 800-767-5859 Fax: 615-758-5859											
<b>Project Description:</b> EP Spring 2016 - Team C-JH		<b>City/State Collected:</b> Artesia, NM												L# <u>1842488</u> <b>B202</b>											
<b>Phone:</b> 512-684-3170 <b>Fax:</b>		<b>Client Project #</b> Navajo- Artesia		<b>Lab Project #</b> TRCATX-EP SPRING												Accnum: TRCATX Template: T111232 Prelogin: P549272 TSR: Chris McCord Cooler: 4/7/16 20									
<b>Collected by (print):</b> Scott Ude + Hans Johnson		<b>Site/Facility ID #</b> Navajo- Artesia		<b>P.O. #</b>												Shipped Via:									
<b>Collected by (signature):</b> Scott Ude		<b>Rush? (Lab MUST Be Notified)</b> <input type="checkbox"/> Same Day ..... 200% <input type="checkbox"/> Next Day ..... 100% <input type="checkbox"/> Two Day ..... 50% <input type="checkbox"/> Three Day ..... 25%		<b>Date Results Needed</b> Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes		<b>No. of Cntrs</b>												Rem./Contaminant      Sample # (lab only)							
<b>Immediately Packed on Ice</b> <input type="checkbox"/> N <input checked="" type="checkbox"/> Y																									
<b>Sample ID</b>		<b>Comp (Grab)</b>		<b>Matrix *</b>		<b>Depth</b>		<b>Date</b>		<b>Time</b>		<b>No. of Cntrs</b>		<b>Analysis / Container / Preservative</b>										<b>Rem./Contaminant</b>	
MW-120				GW				4/27/16		1420		12		DRO - 40ml Amb-HCl-BT GRO - 40ml Amb-HCl V8260 - 40ml Amb-HCl Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500ml HDPE-HNO3 Cyanide (CN) - 250ml HDPE Amb-NaOH Cations-Total Ca, K, Na - 500ml HDPE-HNO3 Anions- Chloride, Fluoride, Sulfate- 125ml HDPE-NoPres Nitrate/Nitrite (NO2NO3) - 250ml HDPE-H2SO4 TDS - 250ml HDPE-NoPres Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V										-01	
MW-81								4/27/16		1510		1												02	
MW-80								4/27/16		1600		1												03	
MW-84								4/27/16		1655		1												04	
MW-82								4/27/16		1750		1												05	
MW-78								4/27/16		1730		1												06	
MW-77								4/27/16		1430		1												07	
MW-76								4/27/16		1640		1												08	
MW-3								4/27/16		1525		1												09	
DUP-EP-03								4/27/16		1200		1												10	
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other														pH _____ Temp _____ Flow _____ Other _____										Hold # _____	
Remarks: Log all metals by 6020. Dissolved metals are field filtered.														Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____										Condition: (lab use only) JW	
Relinquished by: (Signature) Scott Ude		Date: 4/28/16		Time: 0900		Received by: (Signature)		Temp: _____ °C 3.1		Bottles Received: 155		COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA		pH Checked: _____ NCF: _____											
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Date:		Time:		pH Checked:		NCF:											
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Date:		Time:		pH Checked:		NCF:											

Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752				Billing Information: <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095				Analysis / Container / Preservative <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           DRO - 40ml/Amb-HCl-BT            GRO - 40ml/Amb-HCl            V8260 - 40ml/Amb-HCl            Tot./Diss. As,Ba,Cr,Fe,Pb,Mn,Se - 500ml/HDPE-HNO3            Cyanide (CN) - 250ml/HDPE-Amb-NaOH            Cations-Total Ca, K, Na - 500ml/HDPE-HNO3            Anions- Chloride, Fluoride, Sulfate- 125ml/HDPE-NoPres            Nitrate/Nitrite (NO2/NO3) - 250ml/HDPE-H2SO4            TDS - 250ml/HDPE-NoPres         </div> <div style="width: 45%;">           Chain of Custody Page 2 of 2    <b>ESC</b>            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# <b>L832488</b>            Table #            Acctnum: TRCATX            Template: T111231            Prelogin: P549243            TSR: <b>Chris McCord</b>            Cooler: <b>4/7/16 AD</b>            Shipped Via:            Rem/Contaminant    Sample # (lab only)  <div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample ID</th> <th>Comp/Grab</th> <th>Matrix *</th> <th>Depth</th> <th>Date</th> <th>Time</th> <th>No. of Cntrs</th> <th>DRO</th> <th>GRO</th> <th>V8260</th> <th>Tot./Diss.</th> <th>Cyanide</th> <th>Cations</th> <th>Anions</th> <th>Nitrate</th> <th>TDS</th> </tr> </thead> <tbody> <tr> <td>MW-75</td> <td>↓</td> <td>GW</td> <td></td> <td>4/27/16</td> <td>1710</td> <td>12</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>MW-87</td> <td>↓</td> <td></td> <td></td> <td>4/27/16</td> <td>1615</td> <td>12</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>Trip Blank-EP-03</td> <td>↓</td> <td></td> <td></td> <td>4/27/16</td> <td>-</td> <td>1</td> <td></td> <td></td> <td>✓</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MW-1R</td> <td>↓</td> <td>↓</td> <td></td> <td>4/27/16</td> <td>1520</td> <td>10</td> <td>✓</td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </tbody> </table> </div> <div style="width: 15%;"> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">-11</td> </tr> <tr> <td style="text-align: center;">12</td> </tr> <tr> <td style="text-align: center;">13</td> </tr> <tr> <td style="text-align: center;">14</td> </tr> </table> </div> </div> </div> </div>										Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DRO	GRO	V8260	Tot./Diss.	Cyanide	Cations	Anions	Nitrate	TDS	MW-75	↓	GW		4/27/16	1710	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	MW-87	↓			4/27/16	1615	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	Trip Blank-EP-03	↓			4/27/16	-	1			✓							MW-1R	↓	↓		4/27/16	1520	10	✓		✓	✓	✓	✓	✓	✓	✓	-11	12	13	14
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DRO	GRO	V8260	Tot./Diss.	Cyanide	Cations	Anions	Nitrate	TDS																																																																																						
MW-75	↓	GW		4/27/16	1710	12	✓	✓	✓	✓	✓	✓	✓	✓	✓																																																																																						
MW-87	↓			4/27/16	1615	12	✓	✓	✓	✓	✓	✓	✓	✓	✓																																																																																						
Trip Blank-EP-03	↓			4/27/16	-	1			✓																																																																																												
MW-1R	↓	↓		4/27/16	1520	10	✓		✓	✓	✓	✓	✓	✓	✓																																																																																						
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Report to: jspeer@trcsolutions.com				Email To: jspeer@trcsolutions.com				City/State Collected: <b>Artesia, NM</b>																																																																																													
Project Description: <b>EP Spring 2016 - Team B CJH</b>				Lab Project # <b>TRCATX-EP SPRING</b>				P.O. #																																																																																													
Phone: 512-684-3170 Fax:				Client Project #				Site/Facility ID # <b>Navajo- Artesia</b>																																																																																													
Collected by (print): <b>Seth Ude + HMI Team</b>				Collected by (signature): <b>Seth Ude</b>				Rush? (Lab MUST Be Notified) Same Day ..... 200% Next Day ..... 100% Two Day ..... 50% Three Day ..... 25%				Date Results Needed Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes																																																																																									
Immediately Packed on Ice <input type="checkbox"/> N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				No. of Cntrs																																																																																																	

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

Remarks: **Log all metals by 6020. Dissolved metals are field filtered.**

Relinquished by: (Signature) <b>Seth Ude</b>	Date: <b>4/28/16</b>	Time: <b>0900</b>	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Hold #
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: <b>3.1</b> °C Bottles Received: <b>155</b>	Condition: (lab use only) <b>SW7</b>
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <b>Trish L...</b>	Date: <b>4/29/16</b> Time: <b>0958</b>	COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA pH Checked: <b>&lt;2</b> NCF:



## TRC Solutions - Austin, TX

Sample Delivery Group: L832603  
Samples Received: 04/30/2016  
Project Number: 249545.0000.0000 000  
Description: REST Spring 2016  
Site: REST - NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

Entire Report Reviewed By:



Mark W. Beasley  
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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<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-65 L832603-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 15:15

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 14:51	JD
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 14:35	JD
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	5	05/03/16 22:12	05/05/16 17:44	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	10	05/03/16 10:48	05/03/16 10:48	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	10	05/05/16 06:51	05/05/16 06:51	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	100	05/06/16 14:29	05/06/16 14:29	BMB
Wet Chemistry by Method 353.2	WG870059	1	05/06/16 15:53	05/06/16 15:53	ASK
Wet Chemistry by Method 9056A	WG870883	1	05/09/16 18:51	05/09/16 18:51	CM
Wet Chemistry by Method 9056A	WG870883	50	05/09/16 19:07	05/09/16 19:07	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

RW-5R L832603-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 16:00

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:01	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 14:37	JD
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 14:23	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	20	05/05/16 07:11	05/05/16 07:11	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:24	05/09/16 14:24	DR
Wet Chemistry by Method 9056A	WG870883	1	05/09/16 20:11	05/09/16 20:11	CM
Wet Chemistry by Method 9056A	WG870883	50	05/09/16 19:23	05/09/16 19:23	CM

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-102 L832603-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 16:45

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:03	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 14:39	JD
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 14:41	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	10	05/03/16 11:09	05/03/16 11:09	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	100	05/05/16 07:31	05/05/16 07:31	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 15:03	05/09/16 15:03	DR
Wet Chemistry by Method 9056A	WG870883	1	05/09/16 20:27	05/09/16 20:27	CM
Wet Chemistry by Method 9056A	WG870883	50	05/09/16 20:43	05/09/16 20:43	CM

RW-6R L832603-04 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 17:40

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:05	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 14:49	JD
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 14:59	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	1	05/05/16 07:51	05/05/16 07:51	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	25	05/06/16 14:53	05/06/16 14:53	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 15:04	05/09/16 15:04	DR
Wet Chemistry by Method 9056A	WG870883	1	05/09/16 20:58	05/09/16 20:58	CM
Wet Chemistry by Method 9056A	WG870883	50	05/09/16 21:14	05/09/16 21:14	CM
Wet Chemistry by Method 9056A	WG871228	5	05/10/16 22:56	05/10/16 22:56	SAM

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



RW-4R L832603-05 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 18:30

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:13	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 15:43	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 15:18	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	1	05/06/16 15:17	05/06/16 15:17	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 15:06	05/09/16 15:06	DR
Wet Chemistry by Method 9056A	WG870883	1	05/09/16 21:30	05/09/16 21:30	CM
Wet Chemistry by Method 9056A	WG870883	50	05/09/16 21:46	05/09/16 21:46	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

RW-2R L832603-06 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 17:40

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:15	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 15:45	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	5	05/03/16 22:12	05/06/16 04:25	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	25	05/03/16 11:30	05/03/16 11:30	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	50	05/06/16 15:42	05/06/16 15:42	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 15:07	05/09/16 15:07	DR
Wet Chemistry by Method 9056A	WG870883	1	05/09/16 22:02	05/09/16 22:02	CM
Wet Chemistry by Method 9056A	WG870883	50	05/09/16 22:18	05/09/16 22:18	CM

MW-62 L832603-07 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 16:50

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:44	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 15:47	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 15:36	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	25	05/03/16 11:50	05/03/16 11:50	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	25	05/06/16 16:06	05/06/16 16:06	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:35	05/09/16 14:35	DR
Wet Chemistry by Method 9056A	WG870883	1	05/09/16 23:06	05/09/16 23:06	CM
Wet Chemistry by Method 9056A	WG870883	50	05/09/16 23:22	05/09/16 23:22	CM

MW-43 L832603-08 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 15:55

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:43	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:36	TRB
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:20	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 15:50	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 09:57	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 11:53	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 15:54	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	50	05/03/16 12:11	05/03/16 12:11	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	250	05/05/16 09:10	05/05/16 09:10	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:36	05/09/16 14:36	DR

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## MW-43 L832603-08 GW

			Collected by SU / HM1 Team	Collected date/time 04/28/16 15:55	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG870883	1	05/09/16 23:37	05/09/16 23:37	CM
Wet Chemistry by Method 9056A	WG870883	50	05/09/16 23:52	05/09/16 23:52	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:32	05/06/16 02:32	NJM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## RW-10 L832603-09 GW

			Collected by SU / HM1 Team	Collected date/time 04/28/16 15:10	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869820	1	05/05/16 02:58	05/05/16 04:07	JM
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:22	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 15:52	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 16:13	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	5	05/03/16 12:32	05/03/16 12:32	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	1	05/05/16 06:32	05/05/16 06:32	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:37	05/09/16 14:37	DR
Wet Chemistry by Method 9056A	WG871228	1	05/10/16 23:39	05/10/16 23:39	SAM
Wet Chemistry by Method 9056A	WG871228	50	05/10/16 23:54	05/10/16 23:54	SAM

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## MW-39 L832603-10 GW

			Collected by SU / HM1 Team	Collected date/time 04/28/16 14:25	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:24	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 15:54	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	5	05/03/16 22:12	05/06/16 12:07	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	5	05/03/16 12:53	05/03/16 12:53	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	25	05/05/16 09:29	05/05/16 09:29	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:38	05/09/16 14:38	DR
Wet Chemistry by Method 9056A	WG871228	1	05/11/16 00:08	05/11/16 00:08	SAM
Wet Chemistry by Method 9056A	WG871228	50	05/11/16 00:23	05/11/16 00:23	SAM

## MW-29 L832603-11 GW

			Collected by SU / HM1 Team	Collected date/time 04/28/16 14:55	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:26	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 15:57	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 16:49	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	1	05/03/16 10:27	05/03/16 10:27	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	1	05/06/16 12:53	05/06/16 12:53	BMB
Wet Chemistry by Method 353.2	WG870062	1	05/09/16 14:39	05/09/16 14:39	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 10:57	05/16/16 10:57	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 09:50	05/16/16 09:50	CM

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-61 L832603-12 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 18:30

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:29	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 15:59	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 17:07	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	10	05/03/16 13:14	05/03/16 13:14	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	5	05/06/16 16:30	05/06/16 16:30	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:41	05/09/16 14:41	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 11:10	05/16/16 11:10	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 11:24	05/16/16 11:24	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-105 L832603-13 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 17:25

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:31	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 16:11	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	5	05/03/16 22:12	05/06/16 04:44	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	25	05/03/16 13:35	05/03/16 13:35	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	250	05/05/16 10:28	05/05/16 10:28	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:42	05/09/16 14:42	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 11:37	05/16/16 11:37	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 11:51	05/16/16 11:51	CSU

RW-#16B L832603-14 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 16:35

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:33	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 16:13	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 17:26	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	1	05/05/16 10:48	05/05/16 10:48	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:47	05/09/16 14:47	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 12:04	05/16/16 12:04	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 12:17	05/16/16 12:17	CM

RW-9 L832603-15 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 15:45

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:47	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 16:15	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 19:16	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	10	05/03/16 13:56	05/03/16 13:56	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	5	05/06/16 16:54	05/06/16 16:54	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:48	05/09/16 14:48	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 12:31	05/16/16 12:31	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 19:10	05/16/16 19:10	CSU

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-58 L832603-16 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 18:20

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:45	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:39	TRB
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:49	JD
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 16:18	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:02	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 11:57	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 19:34	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	10	05/05/16 11:28	05/05/16 11:28	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	50	05/06/16 17:18	05/06/16 17:18	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:50	05/09/16 14:50	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 13:11	05/16/16 13:11	CM
Wet Chemistry by Method 9056A	WG871015	10	05/16/16 20:04	05/16/16 20:04	CSU
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 13:24	05/16/16 13:24	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:35	05/06/16 02:35	NJM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-136 L832603-17 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 15:20

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:13	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:41	TRB
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:52	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 16:20	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:06	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:02	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 19:52	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	1	05/03/16 14:17	05/03/16 14:17	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	1	05/05/16 11:48	05/05/16 11:48	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 14:52	05/09/16 14:52	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 13:38	05/16/16 13:38	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 13:51	05/16/16 13:51	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:38	05/06/16 02:38	NJM

KWB-2R L832603-18 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 17:25

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:54	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 16:22	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 20:11	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	1	05/06/16 17:42	05/06/16 17:42	BMB
Wet Chemistry by Method 353.2	WG870062	1	05/09/16 14:53	05/09/16 14:53	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 14:05	05/16/16 14:05	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 14:18	05/16/16 14:18	CM

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



KWB-13 L832603-19 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 16:20

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869821	1	05/05/16 10:34	05/05/16 11:33	MMF
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:47	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:26	TRB
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:56	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/11/16 16:27	JDG
Metals (ICPMS) by Method 6020	WG870082	5	05/05/16 14:36	05/18/16 15:53	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:11	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:07	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 20:29	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868995	1	05/05/16 12:27	05/05/16 12:27	DAH
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 15:00	05/09/16 15:00	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 14:31	05/16/16 14:31	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 14:45	05/16/16 14:45	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:44	05/06/16 02:44	NJM

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

RW-12R L832603-20 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 17:50

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869825	1	05/05/16 13:36	05/05/16 14:25	MMF
Metals (ICP) by Method 6010B	WG873945	1	05/19/16 17:01	05/19/16 21:25	LTB
Metals (ICP) by Method 6010B	WG873946	1	05/19/16 17:08	05/19/16 22:01	LTB
Metals (ICPMS) by Method 6020	WG869319	5	05/05/16 10:21	05/05/16 15:59	JDG
Metals (ICPMS) by Method 6020	WG870082	10	05/05/16 14:36	05/11/16 15:13	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869610	1	05/03/16 22:12	05/05/16 20:47	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870521	5	05/06/16 18:06	05/06/16 18:06	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 15:01	05/09/16 15:01	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 15:39	05/16/16 15:39	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 14:58	05/16/16 14:58	CM

MW-113 L832603-21 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 16:40

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869825	1	05/05/16 13:36	05/05/16 14:25	MMF
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:10	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 13:35	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 15:22	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	1	05/03/16 14:38	05/03/16 14:38	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 05:34	05/05/16 05:34	BMB
Wet Chemistry by Method 353.2	WG870062	10	05/09/16 15:02	05/09/16 15:02	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 15:52	05/16/16 15:52	CM
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 16:19	05/16/16 16:19	CSU

EB-REST-01 L832603-22 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 16:55

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869825	1	05/05/16 13:36	05/05/16 14:25	MMF
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 09:41	LAT
Metals (ICPMS) by Method 6020	WG870081	1	05/05/16 13:53	05/09/16 10:10	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 15:38	JNS

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# SAMPLE SUMMARY

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## EB-REST-01 L832603-22 GW

			Collected by SU / HM1 Team	Collected date/time 04/28/16 16:55	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869702	1	05/04/16 18:06	05/04/16 18:06	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 06:43	05/05/16 06:43	BMB
Wet Chemistry by Method 353.2	WG870487	1	05/09/16 16:11	05/09/16 16:11	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 17:10	05/16/16 17:10	CSU

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## DUP-REST-01 L832603-23 GW

			Collected by SU / HM1 Team	Collected date/time 04/28/16 15:00	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869825	1	05/05/16 13:36	05/05/16 14:25	MMF
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:13	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 13:47	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 15:55	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	1	05/03/16 15:19	05/03/16 15:19	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 07:00	05/05/16 07:00	BMB
Wet Chemistry by Method 353.2	WG870487	1	05/09/16 16:14	05/09/16 16:14	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 18:30	05/16/16 18:30	CSU
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 17:50	05/16/16 17:50	CSU

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## MW-60 L832603-24 GW

			Collected by SU / HM1 Team	Collected date/time 04/29/16 08:25	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:50	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:44	TRB
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:16	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 13:49	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:16	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:12	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 16:11	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869995	1	05/05/16 05:32	05/05/16 05:32	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870398	1	05/06/16 00:39	05/06/16 00:39	LRL
Wet Chemistry by Method 353.2	WG870487	1	05/09/16 16:16	05/09/16 16:16	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 18:43	05/16/16 18:43	CSU
Wet Chemistry by Method 9056A	WG871015	50	05/16/16 18:57	05/16/16 18:57	NJM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:47	05/06/16 02:47	NJM

## EB-REST-04 L832603-25 GW

			Collected by SU / HM1 Team	Collected date/time 04/29/16 09:10	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:52	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:47	TRB
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:18	LAT
Metals (ICPMS) by Method 6020	WG870081	1	05/05/16 13:53	05/09/16 10:13	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:21	LAT
Metals (ICPMS) by Method 6020	WG870591	1	05/06/16 16:27	05/09/16 13:00	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 16:27	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	1	05/03/16 16:01	05/03/16 16:01	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 07:35	05/05/16 07:35	BMB

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## EB-REST-04 L832603-25 GW

			Collected by SU / HM1 Team	Collected date/time 04/29/16 09:10	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 353.2	WG870487	1	05/09/16 16:17	05/09/16 16:17	DR
Wet Chemistry by Method 9056A	WG871015	1	05/16/16 19:24	05/16/16 19:24	CSU
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:56	05/06/16 02:56	NJM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## DUP-REST-04 L832603-26 GW

			Collected by SU / HM1 Team	Collected date/time 04/29/16 10:00	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 12:54	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:54	TRB
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:21	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 13:59	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:26	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:21	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 16:44	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869995	1	05/05/16 05:54	05/05/16 05:54	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 07:52	05/05/16 07:52	BMB
Wet Chemistry by Method 353.2	WG870487	1	05/09/16 16:24	05/09/16 16:24	DR
Wet Chemistry by Method 9056A	WG871034	1	05/10/16 21:49	05/10/16 21:49	CM
Wet Chemistry by Method 9056A	WG871034	50	05/10/16 22:08	05/10/16 22:08	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:59	05/06/16 02:59	NJM

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## MW-107 L832603-27 GW

			Collected by SU / HM1 Team	Collected date/time 04/29/16 11:05	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:24	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:01	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 17:00	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	1	05/03/16 18:41	05/03/16 18:41	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 08:09	05/05/16 08:09	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870398	50	05/06/16 01:01	05/06/16 01:01	LRL
Wet Chemistry by Method 353.2	WG870487	10	05/09/16 16:18	05/09/16 16:18	DR
Wet Chemistry by Method 9056A	WG871034	1	05/10/16 22:24	05/10/16 22:24	CM
Wet Chemistry by Method 9056A	WG871034	50	05/10/16 22:40	05/10/16 22:40	CM

## MW-59 L832603-28 GW

			Collected by SU / HM1 Team	Collected date/time 04/29/16 10:15	Received date/time 04/30/16 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:26	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:04	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 17:17	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869047	1	05/03/16 19:02	05/03/16 19:02	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 08:27	05/05/16 08:27	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870398	1	05/06/16 01:24	05/06/16 01:24	LRL
Wet Chemistry by Method 353.2	WG870487	10	05/09/16 16:19	05/09/16 16:19	DR
Wet Chemistry by Method 9056A	WG871034	1	05/10/16 23:59	05/10/16 23:59	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 00:15	05/11/16 00:15	CM

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-52 L832603-29 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 10:50

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 13:01	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:57	TRB
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:29	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:06	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:30	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:26	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 17:33	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 01:09	05/03/16 01:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 08:44	05/05/16 08:44	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:26	05/10/16 09:26	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 00:31	05/11/16 00:31	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 00:47	05/11/16 00:47	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 03:08	05/06/16 03:08	NJM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-109 L832603-30 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 10:05

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:32	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:08	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 17:50	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 01:30	05/03/16 01:30	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	5	05/05/16 09:01	05/05/16 09:01	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:27	05/10/16 09:27	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 01:03	05/11/16 01:03	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 01:19	05/11/16 01:19	CM

MW-110 L832603-31 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 09:20

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:34	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:11	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 18:06	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 01:52	05/03/16 01:52	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 09:18	05/05/16 09:18	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:28	05/10/16 09:28	DR
Wet Chemistry by Method 9056A	WG871034	1	05/10/16 22:55	05/10/16 22:55	CM
Wet Chemistry by Method 9056A	WG872424	50	05/15/16 20:23	05/15/16 20:23	CM

MW-128 L832603-32 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 11:25

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870203	1	05/06/16 22:55	05/06/16 23:56	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:46	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:13	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 19:29	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 02:13	05/03/16 02:13	JAH

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

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SDG:

L832603

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-128 L832603-32 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 11:25

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 09:36	05/05/16 09:36	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870398	20	05/06/16 01:46	05/06/16 01:46	LRL
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:29	05/10/16 09:29	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 01:35	05/11/16 01:35	CM
Wet Chemistry by Method 9056A	WG872424	10	05/15/16 21:38	05/15/16 21:38	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

MW-28 L832603-33 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 10:25

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 13:03	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 16:59	TRB
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:48	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:16	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:48	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:41	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	5	05/03/16 22:13	05/07/16 15:02	AAT
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	10	05/03/16 02:34	05/03/16 02:34	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	10	05/05/16 09:53	05/05/16 09:53	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:31	05/10/16 09:31	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 02:54	05/11/16 02:54	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 03:10	05/11/16 03:10	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 03:11	05/06/16 03:11	NJM

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-66 L832603-34 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 09:40

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Mercury by Method 7470A	WG869207	1	05/03/16 12:30	05/04/16 13:06	NJB
Mercury by Method 7470A	WG869861	1	05/04/16 18:28	05/05/16 17:02	TRB
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:51	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:18	JDG
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:52	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:45	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 20:02	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 02:56	05/03/16 02:56	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	10	05/05/16 10:10	05/05/16 10:10	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870398	100	05/06/16 02:08	05/06/16 02:08	LRL
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:36	05/10/16 09:36	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 03:26	05/11/16 03:26	CM
Wet Chemistry by Method 9056A	WG871034	10	05/11/16 03:42	05/11/16 03:42	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 03:14	05/06/16 03:14	NJM

TRIP BLANK-REST-04 L832603-35 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 00:00

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 05:16	05/05/16 05:16	BMB

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-99 L832603-36 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 08:45

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:54	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:25	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 20:19	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	10	05/03/16 03:17	05/03/16 03:17	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	10	05/05/16 10:27	05/05/16 10:27	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870398	100	05/06/16 02:30	05/06/16 02:30	LRL
Wet Chemistry by Method 353.2	WG870500	1	05/10/16 10:05	05/10/16 10:05	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 03:58	05/11/16 03:58	CM
Wet Chemistry by Method 9056A	WG871034	10	05/11/16 04:14	05/11/16 04:14	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

RW-#17A L832603-37 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 09:40

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:56	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:27	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 20:35	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 03:55	05/03/16 03:55	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 10:45	05/05/16 10:45	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:39	05/10/16 09:39	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 04:30	05/11/16 04:30	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 04:46	05/11/16 04:46	CM

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-135 L832603-38 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 11:25

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 10:59	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:30	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 20:52	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 04:16	05/03/16 04:16	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 11:02	05/05/16 11:02	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:40	05/10/16 09:40	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 05:33	05/11/16 05:33	CM
Wet Chemistry by Method 9056A	WG871034	100	05/11/16 05:49	05/11/16 05:49	CM

MW-115 L832603-39 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 08:50

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 11:02	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:32	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 21:08	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 04:38	05/03/16 04:38	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 11:19	05/05/16 11:19	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:41	05/10/16 09:41	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 06:37	05/11/16 06:37	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 06:53	05/11/16 06:53	CM

ACCOUNT:

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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-114 L832603-40 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 09:45

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 11:04	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:34	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 21:25	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 04:59	05/03/16 04:59	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868996	1	05/05/16 11:36	05/05/16 11:36	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:43	05/10/16 09:43	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 07:41	05/11/16 07:41	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 08:29	05/11/16 08:29	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-125 L832603-41 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 08:55

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Metals (ICPMS) by Method 6020	WG869320	5	05/02/16 22:26	05/06/16 11:07	LAT
Metals (ICPMS) by Method 6020	WG870081	5	05/05/16 13:53	05/07/16 14:37	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869611	1	05/03/16 22:13	05/05/16 21:42	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 05:21	05/03/16 05:21	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868993	1	05/05/16 00:48	05/05/16 00:48	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:44	05/10/16 09:44	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 08:44	05/11/16 08:44	CM
Wet Chemistry by Method 9056A	WG872424	50	05/15/16 21:53	05/15/16 21:53	CM

MW-116 L832603-42 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 09:45

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 19:15	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:37	LAT
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/09/16 15:05	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869613	1	05/03/16 22:14	05/06/16 00:46	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 05:42	05/03/16 05:42	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868993	1	05/05/16 01:08	05/05/16 01:08	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:49	05/10/16 09:49	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 09:16	05/11/16 09:16	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 09:32	05/11/16 09:32	CM

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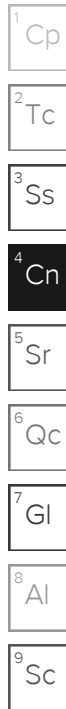
All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. 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.

Mark W. Beasley  
Technical Service Representative

### Sample Narrative

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L832603-20 - Selenium was analyzed by ICP 6010 due to matrix interference by ICPMS 6020







## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1750		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0490	J J6	0.0197	0.100	0.100	1	05/06/2016 15:53	WG870059

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	394		2.60	1.00	50.0	50	05/09/2016 19:07	WG870883
Fluoride	1.28		0.00990	0.100	0.100	1	05/09/2016 18:51	WG870883
Sulfate	0.323	J	0.0774	5.00	5.00	1	05/09/2016 18:51	WG870883

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0142		0.00125	0.00200	0.0100	5	05/05/2016 14:51	WG869319
Arsenic,Dissolved	0.0128		0.00125	0.00200	0.0100	5	05/11/2016 14:35	WG870082
Barium	3.42	V	0.00180	0.00500	0.0250	5	05/05/2016 14:51	WG869319
Barium,Dissolved	3.30		0.00180	0.00500	0.0250	5	05/11/2016 14:35	WG870082
Calcium	155	V	0.230	1.00	5.00	5	05/05/2016 14:51	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 14:51	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 14:35	WG870082
Iron	2.09		0.0750	0.100	0.500	5	05/05/2016 14:51	WG869319
Iron,Dissolved	2.03		0.0750	0.100	0.500	5	05/11/2016 14:35	WG870082
Lead	0.00124	J	0.00120	0.00200	0.0100	5	05/05/2016 14:51	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 14:35	WG870082
Manganese	0.748	V	0.00125	0.00500	0.0250	5	05/05/2016 14:51	WG869319
Manganese,Dissolved	0.750		0.00125	0.00500	0.0250	5	05/11/2016 14:35	WG870082
Potassium	0.691	J	0.185	1.00	5.00	5	05/05/2016 14:51	WG869319
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 14:51	WG869319
Selenium,Dissolved	0.00698	J	0.00190	0.00200	0.0100	5	05/11/2016 14:35	WG870082
Sodium	311	V	0.550	1.00	5.00	5	05/05/2016 14:51	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	19.6		0.314	0.100	1.00	10	05/03/2016 10:48	WG869047
(S) a,a,a-Trifluorotoluene(FID)	90.5				62.0-128		05/03/2016 10:48	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.100	0.0500	0.500	10	05/05/2016 06:51	WG868995
Benzene	9.73		0.0331	0.00100	0.100	100	05/06/2016 14:29	WG870521
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Bromoform	U		0.00469	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Bromomethane	U		0.00866	0.00500	0.0500	10	05/05/2016 06:51	WG868995
n-Butylbenzene	0.00732	J	0.00361	0.00100	0.0100	10	05/05/2016 06:51	WG868995
sec-Butylbenzene	0.00821	J	0.00365	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Carbon disulfide	U		0.00275	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/05/2016 06:51	WG868995



Collected date/time: 04/28/16 15:15

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Chloroethane	U		0.00453	0.00500	0.0500	10	05/05/2016 06:51	WG868995
Chloroform	U		0.00324	0.00500	0.0500	10	05/05/2016 06:51	WG868995
Chloromethane	U		0.00276	0.00250	0.0250	10	05/05/2016 06:51	WG868995
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 06:51	WG868995
cis-1,2-Dichloroethene	U		0.00260	0.00100	0.0100	10	05/05/2016 06:51	WG868995
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/05/2016 06:51	WG868995
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/05/2016 06:51	WG868995
trans-1,3-Dichloropropene	U		0.00419	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Ethylbenzene	0.288		0.00384	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Isopropylbenzene	0.0444		0.00326	0.00100	0.0100	10	05/05/2016 06:51	WG868995
p-Isopropyltoluene	U		0.00350	0.00100	0.0100	10	05/05/2016 06:51	WG868995
2-Butanone (MEK)	U		0.0393	0.0100	0.100	10	05/05/2016 06:51	WG868995
2-Hexanone	U		0.0382	0.0100	0.100	10	05/05/2016 06:51	WG868995
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/05/2016 06:51	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/05/2016 06:51	WG868995
Methyl tert-butyl ether	3.71		0.0367	0.00100	0.100	100	05/06/2016 14:29	WG870521
Naphthalene	0.155		0.0100	0.00500	0.0500	10	05/05/2016 06:51	WG868995
n-Propylbenzene	0.0577		0.00349	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Styrene	U		0.00307	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Toluene	0.0211	J	0.00780	0.00500	0.0500	10	05/05/2016 06:51	WG868995
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,2,4-Trimethylbenzene	0.0309		0.00373	0.00100	0.0100	10	05/05/2016 06:51	WG868995
1,3,5-Trimethylbenzene	0.0165		0.00387	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/05/2016 06:51	WG868995
o-Xylene	0.0149		0.00341	0.00100	0.0100	10	05/05/2016 06:51	WG868995
m&p-Xylene	0.0822		0.00719	0.00100	0.0100	10	05/05/2016 06:51	WG868995
Xylenes, Total	0.0971		0.0106	0.00300	0.0300	10	05/05/2016 06:51	WG868995
(S) Toluene-d8	102				90.0-115		05/05/2016 06:51	WG868995
(S) Toluene-d8	108				90.0-115		05/06/2016 14:29	WG870521
(S) Dibromofluoromethane	114				79.0-121		05/06/2016 14:29	WG870521
(S) Dibromofluoromethane	162	J1			79.0-121		05/05/2016 06:51	WG868995
(S) 4-Bromofluorobenzene	97.4				80.1-120		05/05/2016 06:51	WG868995
(S) 4-Bromofluorobenzene	101				80.1-120		05/06/2016 14:29	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	10.6		0.124	0.100	0.500	5	05/05/2016 17:44	WG869610
(S) o-Terphenyl	135				50.0-150		05/05/2016 17:44	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	399		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.495	J	0.197	0.100	1.00	10	05/09/2016 14:24	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	262		2.60	1.00	50.0	50	05/09/2016 19:23	WG870883
Fluoride	0.564		0.00990	0.100	0.100	1	05/09/2016 20:11	WG870883
Sulfate	0.655	J	0.0774	5.00	5.00	1	05/09/2016 20:11	WG870883

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00183	J	0.00125	0.00200	0.0100	5	05/05/2016 15:01	WG869319
Arsenic,Dissolved	0.00182	J	0.00125	0.00200	0.0100	5	05/11/2016 14:37	WG870082
Barium	0.0282		0.00180	0.00500	0.0250	5	05/05/2016 15:01	WG869319
Barium,Dissolved	0.0307		0.00180	0.00500	0.0250	5	05/11/2016 14:37	WG870082
Calcium	4.61	J	0.230	1.00	5.00	5	05/05/2016 15:01	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:01	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 14:37	WG870082
Iron	U		0.0750	0.100	0.500	5	05/05/2016 15:01	WG869319
Iron,Dissolved	0.146	J	0.0750	0.100	0.500	5	05/11/2016 14:37	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:01	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 14:37	WG870082
Manganese	0.0191	J	0.00125	0.00500	0.0250	5	05/05/2016 15:01	WG869319
Manganese,Dissolved	0.0193	J	0.00125	0.00500	0.0250	5	05/11/2016 14:37	WG870082
Potassium	0.364	J	0.185	1.00	5.00	5	05/05/2016 15:01	WG869319
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 15:01	WG869319
Selenium,Dissolved	0.00542	J	0.00190	0.00200	0.0100	5	05/11/2016 14:37	WG870082
Sodium	203		0.550	1.00	5.00	5	05/05/2016 15:01	WG869319

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.200	0.0500	1.00	20	05/05/2016 07:11	WG868995
Benzene	3.48		0.00662	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Bromodichloromethane	U		0.00760	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Bromoform	U		0.00938	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Bromomethane	U		0.0173	0.00500	0.100	20	05/05/2016 07:11	WG868995
n-Butylbenzene	0.0117	J	0.00722	0.00100	0.0200	20	05/05/2016 07:11	WG868995
sec-Butylbenzene	0.0130	J	0.00730	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Carbon disulfide	U		0.00550	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Carbon tetrachloride	U		0.00758	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Chlorobenzene	U		0.00696	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Chlorodibromomethane	U		0.00654	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Chloroethane	U		0.00906	0.00500	0.100	20	05/05/2016 07:11	WG868995
Chloroform	U		0.00648	0.00500	0.100	20	05/05/2016 07:11	WG868995
Chloromethane	U		0.00552	0.00250	0.0500	20	05/05/2016 07:11	WG868995
1,2-Dibromoethane	U		0.00762	0.00100	0.0200	20	05/05/2016 07:11	WG868995
1,1-Dichloroethane	U		0.00518	0.00100	0.0200	20	05/05/2016 07:11	WG868995



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.00722	0.00100	0.0200	20	05/05/2016 07:11	WG868995
1,1-Dichloroethene	U		0.00796	0.00100	0.0200	20	05/05/2016 07:11	WG868995
cis-1,2-Dichloroethene	U		0.00520	0.00100	0.0200	20	05/05/2016 07:11	WG868995
trans-1,2-Dichloroethene	U		0.00792	0.00100	0.0200	20	05/05/2016 07:11	WG868995
1,2-Dichloropropane	U		0.00612	0.00100	0.0200	20	05/05/2016 07:11	WG868995
cis-1,3-Dichloropropene	U		0.00836	0.00100	0.0200	20	05/05/2016 07:11	WG868995
trans-1,3-Dichloropropene	U		0.00838	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Ethylbenzene	1.20		0.00768	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Isopropylbenzene	0.0643		0.00652	0.00100	0.0200	20	05/05/2016 07:11	WG868995
p-Isopropyltoluene	U		0.00700	0.00100	0.0200	20	05/05/2016 07:11	WG868995
2-Butanone (MEK)	U		0.0786	0.0100	0.200	20	05/05/2016 07:11	WG868995
2-Hexanone	U		0.0764	0.0100	0.200	20	05/05/2016 07:11	WG868995
Methylene Chloride	U		0.0200	0.00500	0.100	20	05/05/2016 07:11	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.0428	0.0100	0.200	20	05/05/2016 07:11	WG868995
Methyl tert-butyl ether	1.64		0.00734	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Naphthalene	0.205		0.0200	0.00500	0.100	20	05/05/2016 07:11	WG868995
n-Propylbenzene	0.110		0.00698	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Styrene	U		0.00614	0.00100	0.0200	20	05/05/2016 07:11	WG868995
1,1,1,2-Tetrachloroethane	U		0.00770	0.00100	0.0200	20	05/05/2016 07:11	WG868995
1,1,2,2-Tetrachloroethane	U		0.00260	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Tetrachloroethene	U		0.00744	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Toluene	2.51		0.0156	0.00500	0.100	20	05/05/2016 07:11	WG868995
1,1,1-Trichloroethane	U		0.00638	0.00100	0.0200	20	05/05/2016 07:11	WG868995
1,1,2-Trichloroethane	U		0.00766	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Trichloroethene	U		0.00796	0.00100	0.0200	20	05/05/2016 07:11	WG868995
1,2,4-Trimethylbenzene	0.437		0.00746	0.00100	0.0200	20	05/05/2016 07:11	WG868995
1,3,5-Trimethylbenzene	0.100		0.00774	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Vinyl chloride	U		0.00518	0.00100	0.0200	20	05/05/2016 07:11	WG868995
o-Xylene	0.570		0.00682	0.00100	0.0200	20	05/05/2016 07:11	WG868995
m&p-Xylene	1.68		0.0144	0.00100	0.0200	20	05/05/2016 07:11	WG868995
Xylenes, Total	2.25		0.0212	0.00300	0.0600	20	05/05/2016 07:11	WG868995
(S) Toluene-d8	100				90.0-115		05/05/2016 07:11	WG868995
(S) Dibromofluoromethane	109				79.0-121		05/05/2016 07:11	WG868995
(S) 4-Bromofluorobenzene	95.7				80.1-120		05/05/2016 07:11	WG868995

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7.39		0.0247	0.100	0.100	1	05/05/2016 14:23	WG869610
(S) o-Terphenyl	125				50.0-150		05/05/2016 14:23	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1530		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.339	J	0.197	0.100	1.00	10	05/09/2016 15:03	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	245		2.60	1.00	50.0	50	05/09/2016 20:43	WG870883
Fluoride	0.901		0.00990	0.100	0.100	1	05/09/2016 20:27	WG870883
Sulfate	2.35	J	0.0774	5.00	5.00	1	05/09/2016 20:27	WG870883

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0117		0.00125	0.00200	0.0100	5	05/05/2016 15:03	WG869319
Arsenic,Dissolved	0.0109		0.00125	0.00200	0.0100	5	05/11/2016 14:39	WG870082
Barium	7.71		0.00180	0.00500	0.0250	5	05/05/2016 15:03	WG869319
Barium,Dissolved	7.68		0.00180	0.00500	0.0250	5	05/11/2016 14:39	WG870082
Calcium	127		0.230	1.00	5.00	5	05/05/2016 15:03	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:03	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 14:39	WG870082
Iron	0.222	J	0.0750	0.100	0.500	5	05/05/2016 15:03	WG869319
Iron,Dissolved	0.100	J	0.0750	0.100	0.500	5	05/11/2016 14:39	WG870082
Lead	0.00339	J	0.00120	0.00200	0.0100	5	05/05/2016 15:03	WG869319
Lead,Dissolved	0.00205	J	0.00120	0.00200	0.0100	5	05/11/2016 14:39	WG870082
Manganese	0.0308		0.00125	0.00500	0.0250	5	05/05/2016 15:03	WG869319
Manganese,Dissolved	0.0321		0.00125	0.00500	0.0250	5	05/11/2016 14:39	WG870082
Potassium	0.372	J	0.185	1.00	5.00	5	05/05/2016 15:03	WG869319
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 15:03	WG869319
Selenium,Dissolved	0.00549	J	0.00190	0.00200	0.0100	5	05/11/2016 14:39	WG870082
Sodium	437		0.550	1.00	5.00	5	05/05/2016 15:03	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	26.2		0.314	0.100	1.00	10	05/03/2016 11:09	WG869047
(S) a,a,a-Trifluorotoluene(FID)	89.5				62.0-128		05/03/2016 11:09	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		1.00	0.0500	5.00	100	05/05/2016 07:31	WG868995
Benzene	10.8		0.0331	0.00100	0.100	100	05/05/2016 07:31	WG868995
Bromodichloromethane	U		0.0380	0.00100	0.100	100	05/05/2016 07:31	WG868995
Bromoform	U		0.0469	0.00100	0.100	100	05/05/2016 07:31	WG868995
Bromomethane	U		0.0866	0.00500	0.500	100	05/05/2016 07:31	WG868995
n-Butylbenzene	U		0.0361	0.00100	0.100	100	05/05/2016 07:31	WG868995
sec-Butylbenzene	U		0.0365	0.00100	0.100	100	05/05/2016 07:31	WG868995
Carbon disulfide	U		0.0275	0.00100	0.100	100	05/05/2016 07:31	WG868995
Carbon tetrachloride	U		0.0379	0.00100	0.100	100	05/05/2016 07:31	WG868995



Collected date/time: 04/28/16 16:45

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.0348	0.00100	0.100	100	05/05/2016 07:31	WG868995
Chlorodibromomethane	U		0.0327	0.00100	0.100	100	05/05/2016 07:31	WG868995
Chloroethane	U		0.0453	0.00500	0.500	100	05/05/2016 07:31	WG868995
Chloroform	U		0.0324	0.00500	0.500	100	05/05/2016 07:31	WG868995
Chloromethane	U		0.0276	0.00250	0.250	100	05/05/2016 07:31	WG868995
1,2-Dibromoethane	U		0.0381	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,1-Dichloroethane	U		0.0259	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,2-Dichloroethane	U		0.0361	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,1-Dichloroethene	U		0.0398	0.00100	0.100	100	05/05/2016 07:31	WG868995
cis-1,2-Dichloroethene	U		0.0260	0.00100	0.100	100	05/05/2016 07:31	WG868995
trans-1,2-Dichloroethene	U		0.0396	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,2-Dichloropropane	U		0.0306	0.00100	0.100	100	05/05/2016 07:31	WG868995
cis-1,3-Dichloropropene	U		0.0418	0.00100	0.100	100	05/05/2016 07:31	WG868995
trans-1,3-Dichloropropene	U		0.0419	0.00100	0.100	100	05/05/2016 07:31	WG868995
Ethylbenzene	0.858		0.0384	0.00100	0.100	100	05/05/2016 07:31	WG868995
Isopropylbenzene	0.0503	U	0.0326	0.00100	0.100	100	05/05/2016 07:31	WG868995
p-Isopropyltoluene	U		0.0350	0.00100	0.100	100	05/05/2016 07:31	WG868995
2-Butanone (MEK)	U		0.393	0.0100	1.00	100	05/05/2016 07:31	WG868995
2-Hexanone	U		0.382	0.0100	1.00	100	05/05/2016 07:31	WG868995
Methylene Chloride	U		0.100	0.00500	0.500	100	05/05/2016 07:31	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.214	0.0100	1.00	100	05/05/2016 07:31	WG868995
Methyl tert-butyl ether	2.07		0.0367	0.00100	0.100	100	05/05/2016 07:31	WG868995
Naphthalene	0.278	U	0.100	0.00500	0.500	100	05/05/2016 07:31	WG868995
n-Propylbenzene	0.0846	U	0.0349	0.00100	0.100	100	05/05/2016 07:31	WG868995
Styrene	U		0.0307	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,1,1,2-Tetrachloroethane	U		0.0385	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,1,2,2-Tetrachloroethane	U		0.0130	0.00100	0.100	100	05/05/2016 07:31	WG868995
Tetrachloroethene	U		0.0372	0.00100	0.100	100	05/05/2016 07:31	WG868995
Toluene	0.541		0.0780	0.00500	0.500	100	05/05/2016 07:31	WG868995
1,1,1-Trichloroethane	U		0.0319	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,1,2-Trichloroethane	U		0.0383	0.00100	0.100	100	05/05/2016 07:31	WG868995
Trichloroethene	U		0.0398	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,2,4-Trimethylbenzene	0.402		0.0373	0.00100	0.100	100	05/05/2016 07:31	WG868995
1,3,5-Trimethylbenzene	0.110		0.0387	0.00100	0.100	100	05/05/2016 07:31	WG868995
Vinyl chloride	U		0.0259	0.00100	0.100	100	05/05/2016 07:31	WG868995
o-Xylene	0.0881	U	0.0341	0.00100	0.100	100	05/05/2016 07:31	WG868995
m&p-Xylene	0.544		0.0719	0.00100	0.100	100	05/05/2016 07:31	WG868995
Xylenes, Total	0.632		0.106	0.00300	0.300	100	05/05/2016 07:31	WG868995
(S) Toluene-d8	100				90.0-115		05/05/2016 07:31	WG868995
(S) Dibromofluoromethane	106				79.0-121		05/05/2016 07:31	WG868995
(S) 4-Bromofluorobenzene	97.4				80.1-120		05/05/2016 07:31	WG868995

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	9.69		0.0247	0.100	0.100	1	05/05/2016 14:41	WG869610
(S) o-Terphenyl	108				50.0-150		05/05/2016 14:41	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1470		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.485	J P1	0.197	0.100	1.00	10	05/09/2016 15:04	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	405		2.60	1.00	50.0	50	05/09/2016 21:14	WG870883
Fluoride	0.747		0.00990	0.100	0.100	1	05/09/2016 20:58	WG870883
Sulfate	104		0.387	5.00	25.0	5	05/10/2016 22:56	WG871228

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0712		0.00125	0.00200	0.0100	5	05/05/2016 15:05	WG869319
Arsenic,Dissolved	0.0615		0.00125	0.00200	0.0100	5	05/11/2016 14:49	WG870082
Barium	0.480		0.00180	0.00500	0.0250	5	05/05/2016 15:05	WG869319
Barium,Dissolved	0.384		0.00180	0.00500	0.0250	5	05/11/2016 14:49	WG870082
Calcium	191		0.230	1.00	5.00	5	05/05/2016 15:05	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:05	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 14:49	WG870082
Iron	3.70		0.0750	0.100	0.500	5	05/05/2016 15:05	WG869319
Iron,Dissolved	3.37		0.0750	0.100	0.500	5	05/11/2016 14:49	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:05	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 14:49	WG870082
Manganese	0.553		0.00125	0.00500	0.0250	5	05/05/2016 15:05	WG869319
Manganese,Dissolved	0.537		0.00125	0.00500	0.0250	5	05/11/2016 14:49	WG870082
Potassium	0.356	J	0.185	1.00	5.00	5	05/05/2016 15:05	WG869319
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 15:05	WG869319
Selenium,Dissolved	0.00213	J	0.00190	0.00200	0.0100	5	05/11/2016 14:49	WG870082
Sodium	226		0.550	1.00	5.00	5	05/05/2016 15:05	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 07:51	WG868995
Benzene	0.218		0.00828	0.00100	0.0250	25	05/06/2016 14:53	WG870521
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 07:51	WG868995
n-Butylbenzene	0.00138		0.000361	0.00100	0.00100	1	05/05/2016 07:51	WG868995
sec-Butylbenzene	0.00590		0.000365	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 07:51	WG868995
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 07:51	WG868995
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 07:51	WG868995
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 07:51	WG868995
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 07:51	WG868995



Collected date/time: 04/28/16 17:40

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 07:51	WG868995
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:51	WG868995
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 07:51	WG868995
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 07:51	WG868995
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 07:51	WG868995
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 07:51	WG868995
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Ethylbenzene	0.00474		0.000384	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Isopropylbenzene	0.00797		0.000326	0.00100	0.00100	1	05/05/2016 07:51	WG868995
p-Isopropyltoluene	0.000401	U	0.000350	0.00100	0.00100	1	05/05/2016 07:51	WG868995
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 07:51	WG868995
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 07:51	WG868995
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 07:51	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 07:51	WG868995
Methyl tert-butyl ether	2.68		0.00918	0.00100	0.0250	25	05/06/2016 14:53	WG870521
Naphthalene	0.00574		0.00100	0.00500	0.00500	1	05/05/2016 07:51	WG868995
n-Propylbenzene	0.00731		0.000349	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 07:51	WG868995
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 07:51	WG868995
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Toluene	0.00683		0.000780	0.00500	0.00500	1	05/05/2016 07:51	WG868995
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 07:51	WG868995
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:51	WG868995
1,2,4-Trimethylbenzene	0.00555		0.000373	0.00100	0.00100	1	05/05/2016 07:51	WG868995
1,3,5-Trimethylbenzene	0.00111		0.000387	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 07:51	WG868995
o-Xylene	0.00275		0.000341	0.00100	0.00100	1	05/05/2016 07:51	WG868995
m&p-Xylene	0.00472		0.000719	0.00100	0.00100	1	05/05/2016 07:51	WG868995
Xylenes, Total	0.00747		0.00106	0.00300	0.00300	1	05/05/2016 07:51	WG868995
(S) Toluene-d8	102				90.0-115		05/05/2016 07:51	WG868995
(S) Toluene-d8	106				90.0-115		05/06/2016 14:53	WG870521
(S) Dibromofluoromethane	113				79.0-121		05/06/2016 14:53	WG870521
(S) Dibromofluoromethane	111				79.0-121		05/05/2016 07:51	WG868995
(S) 4-Bromofluorobenzene	97.7				80.1-120		05/05/2016 07:51	WG868995
(S) 4-Bromofluorobenzene	102				80.1-120		05/06/2016 14:53	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4.20		0.0247	0.100	0.100	1	05/05/2016 14:59	WG869610
(S) o-Terphenyl	109				50.0-150		05/05/2016 14:59	WG869610





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1810		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.346	J	0.197	0.100	1.00	10	05/09/2016 15:06	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	351		2.60	1.00	50.0	50	05/09/2016 21:46	WG870883
Fluoride	1.06		0.00990	0.100	0.100	1	05/09/2016 21:30	WG870883
Sulfate	470		3.87	5.00	250	50	05/09/2016 21:46	WG870883

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00440	J	0.00125	0.00200	0.0100	5	05/05/2016 15:13	WG869319
Arsenic,Dissolved	0.00323	J	0.00125	0.00200	0.0100	5	05/11/2016 15:43	WG870082
Barium	0.0623		0.00180	0.00500	0.0250	5	05/05/2016 15:13	WG869319
Barium,Dissolved	0.0564		0.00180	0.00500	0.0250	5	05/11/2016 15:43	WG870082
Calcium	207		0.230	1.00	5.00	5	05/05/2016 15:13	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:13	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 15:43	WG870082
Iron	0.181	J	0.0750	0.100	0.500	5	05/05/2016 15:13	WG869319
Iron,Dissolved	0.119	J	0.0750	0.100	0.500	5	05/11/2016 15:43	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:13	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 15:43	WG870082
Manganese	0.0728		0.00125	0.00500	0.0250	5	05/05/2016 15:13	WG869319
Manganese,Dissolved	0.0702		0.00125	0.00500	0.0250	5	05/11/2016 15:43	WG870082
Potassium	2.00	J	0.185	1.00	5.00	5	05/05/2016 15:13	WG869319
Selenium	U		0.00190	0.00200	0.0100	5	05/05/2016 15:13	WG869319
Selenium,Dissolved	0.00236	J	0.00190	0.00200	0.0100	5	05/11/2016 15:43	WG870082
Sodium	290		0.550	1.00	5.00	5	05/05/2016 15:13	WG869319

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/06/2016 15:17	WG870521
Benzene	0.0140		0.000331	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Bromoform	U		0.000469	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Bromomethane	U		0.000866	0.00500	0.00500	1	05/06/2016 15:17	WG870521
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/06/2016 15:17	WG870521
sec-Butylbenzene	0.00269		0.000365	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Carbon disulfide	0.000466	J	0.000275	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Chloroethane	U		0.000453	0.00500	0.00500	1	05/06/2016 15:17	WG870521
Chloroform	U		0.000324	0.00500	0.00500	1	05/06/2016 15:17	WG870521
Chloromethane	U		0.000276	0.00250	0.00250	1	05/06/2016 15:17	WG870521
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/06/2016 15:17	WG870521
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/06/2016 15:17	WG870521



Collected date/time: 04/28/16 18:30

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/06/2016 15:17	WG870521
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 15:17	WG870521
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/06/2016 15:17	WG870521
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/06/2016 15:17	WG870521
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/06/2016 15:17	WG870521
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/06/2016 15:17	WG870521
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Isopropylbenzene	0.00999		0.000326	0.00100	0.00100	1	05/06/2016 15:17	WG870521
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/06/2016 15:17	WG870521
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/06/2016 15:17	WG870521
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/06/2016 15:17	WG870521
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/06/2016 15:17	WG870521
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/06/2016 15:17	WG870521
Methyl tert-butyl ether	0.191		0.000367	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Naphthalene	U		0.00100	0.00500	0.00500	1	05/06/2016 15:17	WG870521
n-Propylbenzene	0.00118		0.000349	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Styrene	U		0.000307	0.00100	0.00100	1	05/06/2016 15:17	WG870521
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/06/2016 15:17	WG870521
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Toluene	U		0.000780	0.00500	0.00500	1	05/06/2016 15:17	WG870521
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/06/2016 15:17	WG870521
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 15:17	WG870521
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/06/2016 15:17	WG870521
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/06/2016 15:17	WG870521
o-Xylene	U		0.000341	0.00100	0.00100	1	05/06/2016 15:17	WG870521
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/06/2016 15:17	WG870521
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/06/2016 15:17	WG870521
(S) Toluene-d8	107				90.0-115		05/06/2016 15:17	WG870521
(S) Dibromofluoromethane	114				79.0-121		05/06/2016 15:17	WG870521
(S) 4-Bromofluorobenzene	99.8				80.1-120		05/06/2016 15:17	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5.03		0.0247	0.100	0.100	1	05/05/2016 15:18	WG869610
(S) o-Terphenyl	114				50.0-150		05/05/2016 15:18	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3810		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.281	J	0.197	0.100	1.00	10	05/09/2016 15:07	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	430		2.60	1.00	50.0	50	05/09/2016 22:18	WG870883
Fluoride	2.09		0.00990	0.100	0.100	1	05/09/2016 22:02	WG870883
Sulfate	2200		3.87	5.00	250	50	05/09/2016 22:18	WG870883

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00552	J	0.00125	0.00200	0.0100	5	05/05/2016 15:15	WG869319
Arsenic,Dissolved	0.00883	J	0.00125	0.00200	0.0100	5	05/11/2016 15:45	WG870082
Barium	0.171		0.00180	0.00500	0.0250	5	05/05/2016 15:15	WG869319
Barium,Dissolved	0.0206	J	0.00180	0.00500	0.0250	5	05/11/2016 15:45	WG870082
Calcium	875		0.230	1.00	5.00	5	05/05/2016 15:15	WG869319
Chromium	0.00750	J	0.00270	0.00200	0.0100	5	05/05/2016 15:15	WG869319
Chromium,Dissolved	0.00400	B J	0.00270	0.00200	0.0100	5	05/11/2016 15:45	WG870082
Iron	2.25		0.0750	0.100	0.500	5	05/05/2016 15:15	WG869319
Iron,Dissolved	0.770		0.0750	0.100	0.500	5	05/11/2016 15:45	WG870082
Lead	0.0153		0.00120	0.00200	0.0100	5	05/05/2016 15:15	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 15:45	WG870082
Manganese	0.0705		0.00125	0.00500	0.0250	5	05/05/2016 15:15	WG869319
Manganese,Dissolved	0.0466		0.00125	0.00500	0.0250	5	05/11/2016 15:45	WG870082
Potassium	5.80		0.185	1.00	5.00	5	05/05/2016 15:15	WG869319
Selenium	0.422		0.00190	0.00200	0.0100	5	05/05/2016 15:15	WG869319
Selenium,Dissolved	0.00516	J	0.00190	0.00200	0.0100	5	05/11/2016 15:45	WG870082
Sodium	396		0.550	1.00	5.00	5	05/05/2016 15:15	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	20.8		0.785	0.100	2.50	25	05/03/2016 11:30	WG869047
(S) a,a,a-Trifluorotoluene(FID)	92.7				62.0-128		05/03/2016 11:30	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.500	0.0500	2.50	50	05/06/2016 15:42	WG870521
Benzene	5.86		0.0166	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Bromodichloromethane	U		0.0190	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Bromoform	U		0.0234	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Bromomethane	U		0.0433	0.00500	0.250	50	05/06/2016 15:42	WG870521
n-Butylbenzene	U		0.0180	0.00100	0.0500	50	05/06/2016 15:42	WG870521
sec-Butylbenzene	U		0.0182	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Carbon disulfide	0.0186	J	0.0138	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Carbon tetrachloride	U		0.0190	0.00100	0.0500	50	05/06/2016 15:42	WG870521



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.0174	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Chlorodibromomethane	U		0.0164	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Chloroethane	U		0.0226	0.00500	0.250	50	05/06/2016 15:42	WG870521
Chloroform	U		0.0162	0.00500	0.250	50	05/06/2016 15:42	WG870521
Chloromethane	U		0.0138	0.00250	0.125	50	05/06/2016 15:42	WG870521
1,2-Dibromoethane	U		0.0190	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,1-Dichloroethane	U		0.0130	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,2-Dichloroethane	U		0.0180	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,1-Dichloroethene	U		0.0199	0.00100	0.0500	50	05/06/2016 15:42	WG870521
cis-1,2-Dichloroethene	0.555		0.0130	0.00100	0.0500	50	05/06/2016 15:42	WG870521
trans-1,2-Dichloroethene	U		0.0198	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,2-Dichloropropane	U		0.0153	0.00100	0.0500	50	05/06/2016 15:42	WG870521
cis-1,3-Dichloropropene	U		0.0209	0.00100	0.0500	50	05/06/2016 15:42	WG870521
trans-1,3-Dichloropropene	U		0.0210	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Ethylbenzene	0.591		0.0192	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Isopropylbenzene	0.0332	U	0.0163	0.00100	0.0500	50	05/06/2016 15:42	WG870521
p-Isopropyltoluene	U		0.0175	0.00100	0.0500	50	05/06/2016 15:42	WG870521
2-Butanone (MEK)	U		0.196	0.0100	0.500	50	05/06/2016 15:42	WG870521
2-Hexanone	U		0.191	0.0100	0.500	50	05/06/2016 15:42	WG870521
Methylene Chloride	U		0.0500	0.00500	0.250	50	05/06/2016 15:42	WG870521
4-Methyl-2-pentanone (MIBK)	U		0.107	0.0100	0.500	50	05/06/2016 15:42	WG870521
Methyl tert-butyl ether	0.0226	U	0.0184	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Naphthalene	0.145	U	0.0500	0.00500	0.250	50	05/06/2016 15:42	WG870521
n-Propylbenzene	0.0412	U	0.0174	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Styrene	U		0.0154	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,1,1,2-Tetrachloroethane	U		0.0192	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,1,2,2-Tetrachloroethane	U		0.00650	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Tetrachloroethene	U		0.0186	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Toluene	0.0569	U	0.0390	0.00500	0.250	50	05/06/2016 15:42	WG870521
1,1,1-Trichloroethane	U		0.0160	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,1,2-Trichloroethane	U		0.0192	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Trichloroethene	0.0285	U	0.0199	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,2,4-Trimethylbenzene	0.188		0.0186	0.00100	0.0500	50	05/06/2016 15:42	WG870521
1,3,5-Trimethylbenzene	0.0419	U	0.0194	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Vinyl chloride	U		0.0130	0.00100	0.0500	50	05/06/2016 15:42	WG870521
o-Xylene	0.0461	U	0.0170	0.00100	0.0500	50	05/06/2016 15:42	WG870521
m&p-Xylene	0.253		0.0360	0.00100	0.0500	50	05/06/2016 15:42	WG870521
Xylenes, Total	0.299		0.0530	0.00300	0.150	50	05/06/2016 15:42	WG870521
(S) Toluene-d8	108				90.0-115		05/06/2016 15:42	WG870521
(S) Dibromofluoromethane	114				79.0-121		05/06/2016 15:42	WG870521
(S) 4-Bromofluorobenzene	99.1				80.1-120		05/06/2016 15:42	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	17.3		0.124	0.100	0.500	5	05/06/2016 04:25	WG869610
(S) o-Terphenyl	152	U			50.0-150		05/06/2016 04:25	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3830		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.322	J	0.197	0.100	1.00	10	05/09/2016 14:35	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	276		2.60	1.00	50.0	50	05/09/2016 23:22	WG870883
Fluoride	1.92		0.00990	0.100	0.100	1	05/09/2016 23:06	WG870883
Sulfate	1850		3.87	5.00	250	50	05/09/2016 23:22	WG870883

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00321	J	0.00125	0.00200	0.0100	5	05/05/2016 15:44	WG869319
Arsenic,Dissolved	0.00286	J	0.00125	0.00200	0.0100	5	05/11/2016 15:47	WG870082
Barium	0.0390		0.00180	0.00500	0.0250	5	05/05/2016 15:44	WG869319
Barium,Dissolved	0.0329		0.00180	0.00500	0.0250	5	05/11/2016 15:47	WG870082
Calcium	481		0.230	1.00	5.00	5	05/05/2016 15:44	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:44	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 15:47	WG870082
Iron	U		0.0750	0.100	0.500	5	05/05/2016 15:44	WG869319
Iron,Dissolved	0.152	J	0.0750	0.100	0.500	5	05/11/2016 15:47	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:44	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 15:47	WG870082
Manganese	U		0.00125	0.00500	0.0250	5	05/05/2016 15:44	WG869319
Manganese,Dissolved	0.00388	B J	0.00125	0.00500	0.0250	5	05/11/2016 15:47	WG870082
Potassium	1.42	J	0.185	1.00	5.00	5	05/05/2016 15:44	WG869319
Selenium	0.00935	J	0.00190	0.00200	0.0100	5	05/05/2016 15:44	WG869319
Selenium,Dissolved	0.00392	J	0.00190	0.00200	0.0100	5	05/11/2016 15:47	WG870082
Sodium	456		0.550	1.00	5.00	5	05/05/2016 15:44	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	7.81		0.785	0.100	2.50	25	05/03/2016 11:50	WG869047
(S) a,a,a-Trifluorotoluene(FID)	96.5				62.0-128		05/03/2016 11:50	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.250	0.0500	1.25	25	05/06/2016 16:06	WG870521
Benzene	1.12		0.00828	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Bromodichloromethane	U		0.00950	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Bromoform	U		0.0117	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Bromomethane	U		0.0216	0.00500	0.125	25	05/06/2016 16:06	WG870521
n-Butylbenzene	U		0.00902	0.00100	0.0250	25	05/06/2016 16:06	WG870521
sec-Butylbenzene	U		0.00912	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Carbon disulfide	0.00903	J	0.00688	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Carbon tetrachloride	U		0.00948	0.00100	0.0250	25	05/06/2016 16:06	WG870521



Collected date/time: 04/28/16 16:50

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00870	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Chlorodibromomethane	U		0.00818	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Chloroethane	U		0.0113	0.00500	0.125	25	05/06/2016 16:06	WG870521
Chloroform	U		0.00810	0.00500	0.125	25	05/06/2016 16:06	WG870521
Chloromethane	U		0.00690	0.00250	0.0625	25	05/06/2016 16:06	WG870521
1,2-Dibromoethane	U		0.00952	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,1-Dichloroethane	U		0.00648	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,2-Dichloroethane	U		0.00902	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,1-Dichloroethene	U		0.00995	0.00100	0.0250	25	05/06/2016 16:06	WG870521
cis-1,2-Dichloroethene	U		0.00650	0.00100	0.0250	25	05/06/2016 16:06	WG870521
trans-1,2-Dichloroethene	U		0.00990	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,2-Dichloropropane	U		0.00765	0.00100	0.0250	25	05/06/2016 16:06	WG870521
cis-1,3-Dichloropropene	U		0.0104	0.00100	0.0250	25	05/06/2016 16:06	WG870521
trans-1,3-Dichloropropene	U		0.0105	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Ethylbenzene	0.356		0.00960	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Isopropylbenzene	0.0729		0.00815	0.00100	0.0250	25	05/06/2016 16:06	WG870521
p-Isopropyltoluene	U		0.00875	0.00100	0.0250	25	05/06/2016 16:06	WG870521
2-Butanone (MEK)	U		0.0982	0.0100	0.250	25	05/06/2016 16:06	WG870521
2-Hexanone	U		0.0955	0.0100	0.250	25	05/06/2016 16:06	WG870521
Methylene Chloride	U		0.0250	0.00500	0.125	25	05/06/2016 16:06	WG870521
4-Methyl-2-pentanone (MIBK)	U		0.0535	0.0100	0.250	25	05/06/2016 16:06	WG870521
Methyl tert-butyl ether	U		0.00918	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Naphthalene	0.236		0.0250	0.00500	0.125	25	05/06/2016 16:06	WG870521
n-Propylbenzene	0.132		0.00872	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Styrene	U		0.00768	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,1,1,2-Tetrachloroethane	U		0.00962	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,1,2,2-Tetrachloroethane	U		0.00325	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Tetrachloroethene	U		0.00930	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Toluene	U		0.0195	0.00500	0.125	25	05/06/2016 16:06	WG870521
1,1,1-Trichloroethane	U		0.00798	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,1,2-Trichloroethane	U		0.00958	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Trichloroethene	U		0.00995	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,2,4-Trimethylbenzene	0.502		0.00932	0.00100	0.0250	25	05/06/2016 16:06	WG870521
1,3,5-Trimethylbenzene	0.114		0.00968	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Vinyl chloride	U		0.00648	0.00100	0.0250	25	05/06/2016 16:06	WG870521
o-Xylene	U		0.00852	0.00100	0.0250	25	05/06/2016 16:06	WG870521
m&p-Xylene	1.80		0.0180	0.00100	0.0250	25	05/06/2016 16:06	WG870521
Xylenes, Total	1.80		0.0265	0.00300	0.0750	25	05/06/2016 16:06	WG870521
(S) Toluene-d8	107				90.0-115		05/06/2016 16:06	WG870521
(S) Dibromofluoromethane	113				79.0-121		05/06/2016 16:06	WG870521
(S) 4-Bromofluorobenzene	103				80.1-120		05/06/2016 16:06	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7.54		0.0247	0.100	0.100	1	05/05/2016 15:36	WG869610
(S) o-Terphenyl	130				50.0-150		05/05/2016 15:36	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Dissolved Solids	4820		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.270	J	0.197	0.100	1.00	10	05/09/2016 14:36	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Chloride	1010		2.60	1.00	50.0	50	05/09/2016 23:52	WG870883
Fluoride	2.27		0.00990	0.100	0.100	1	05/09/2016 23:37	WG870883
Sulfate	747		3.87	5.00	250	50	05/09/2016 23:52	WG870883

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 02:32	WG869397

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:36	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:43	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis date / time	Batch
Arsenic	0.0106		0.00125	0.00200	0.0100	5	05/05/2016 15:20	WG869319
Arsenic,Dissolved	0.0128		0.00125	0.00200	0.0100	5	05/11/2016 15:50	WG870082
Barium	0.251		0.00180	0.00500	0.0250	5	05/05/2016 15:20	WG869319
Barium,Dissolved	0.0745		0.00180	0.00500	0.0250	5	05/11/2016 15:50	WG870082
Boron	1.78		0.0150	0.0200	0.200	10	05/07/2016 09:57	WG870589
Boron,Dissolved	1.65		0.0150	0.0200	0.200	10	05/09/2016 11:53	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/05/2016 15:20	WG869319
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/11/2016 15:50	WG870082
Calcium	178		0.230	1.00	5.00	5	05/05/2016 15:20	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:20	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 15:50	WG870082
Cobalt	U		0.00130	0.00200	0.0100	5	05/05/2016 15:20	WG869319
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/11/2016 15:50	WG870082
Iron	0.163	J	0.0750	0.100	0.500	5	05/05/2016 15:20	WG869319
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/11/2016 15:50	WG870082
Lead	0.00151	J	0.00120	0.00200	0.0100	5	05/05/2016 15:20	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 15:50	WG870082
Manganese	0.274		0.00125	0.00500	0.0250	5	05/05/2016 15:20	WG869319
Manganese,Dissolved	0.290		0.00125	0.00500	0.0250	5	05/11/2016 15:50	WG870082
Nickel	0.00625	J	0.00350	0.00200	0.0200	10	05/07/2016 09:57	WG870589
Nickel,Dissolved	0.00561	B J	0.00175	0.00200	0.0100	5	05/11/2016 15:50	WG870082
Potassium	0.956	J	0.185	1.00	5.00	5	05/05/2016 15:20	WG869319
Selenium	0.205		0.00190	0.00200	0.0100	5	05/05/2016 15:20	WG869319
Selenium,Dissolved	0.00670	J	0.00190	0.00200	0.0100	5	05/11/2016 15:50	WG870082
Sodium	812		0.550	1.00	5.00	5	05/05/2016 15:20	WG869319



Collected date/time: 04/28/16 15:55

L832603

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/05/2016 15:20	WG869319
Uranium,Dissolved	U		0.00165	0.0100	0.0500	5	05/11/2016 15:50	WG870082
Vanadium	0.00455	J	0.000900	0.00500	0.0250	5	05/05/2016 15:20	WG869319
Vanadium,Dissolved	0.00283	J	0.000900	0.00500	0.0250	5	05/11/2016 15:50	WG870082

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	31.6		1.57	0.100	5.00	50	05/03/2016 12:11	WG869047
(S) a,a,a-Trifluorotoluene(FID)	95.8				62.0-128		05/03/2016 12:11	WG869047

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		2.50	0.0500	12.5	250	05/05/2016 09:10	WG868995
Benzene	12.4		0.0828	0.00100	0.250	250	05/05/2016 09:10	WG868995
Bromodichloromethane	U		0.0950	0.00100	0.250	250	05/05/2016 09:10	WG868995
Bromoform	U		0.117	0.00100	0.250	250	05/05/2016 09:10	WG868995
Bromomethane	U		0.216	0.00500	1.25	250	05/05/2016 09:10	WG868995
n-Butylbenzene	U		0.0902	0.00100	0.250	250	05/05/2016 09:10	WG868995
sec-Butylbenzene	U		0.0912	0.00100	0.250	250	05/05/2016 09:10	WG868995
Carbon disulfide	U		0.0688	0.00100	0.250	250	05/05/2016 09:10	WG868995
Carbon tetrachloride	U		0.0948	0.00100	0.250	250	05/05/2016 09:10	WG868995
Chlorobenzene	U		0.0870	0.00100	0.250	250	05/05/2016 09:10	WG868995
Chlorodibromomethane	U		0.0818	0.00100	0.250	250	05/05/2016 09:10	WG868995
Chloroethane	U		0.113	0.00500	1.25	250	05/05/2016 09:10	WG868995
Chloroform	U		0.0810	0.00500	1.25	250	05/05/2016 09:10	WG868995
Chloromethane	U		0.0690	0.00250	0.625	250	05/05/2016 09:10	WG868995
1,2-Dibromoethane	U		0.0952	0.00100	0.250	250	05/05/2016 09:10	WG868995
1,1-Dichloroethane	U		0.0648	0.00100	0.250	250	05/05/2016 09:10	WG868995
1,2-Dichloroethane	U		0.0902	0.00100	0.250	250	05/05/2016 09:10	WG868995
1,1-Dichloroethene	U		0.0995	0.00100	0.250	250	05/05/2016 09:10	WG868995
cis-1,2-Dichloroethene	U		0.0650	0.00100	0.250	250	05/05/2016 09:10	WG868995
trans-1,2-Dichloroethene	U		0.0990	0.00100	0.250	250	05/05/2016 09:10	WG868995
1,2-Dichloropropane	U		0.0765	0.00100	0.250	250	05/05/2016 09:10	WG868995
cis-1,3-Dichloropropene	U		0.104	0.00100	0.250	250	05/05/2016 09:10	WG868995
trans-1,3-Dichloropropene	U		0.105	0.00100	0.250	250	05/05/2016 09:10	WG868995
Ethylbenzene	0.968		0.0960	0.00100	0.250	250	05/05/2016 09:10	WG868995
Isopropylbenzene	U		0.0815	0.00100	0.250	250	05/05/2016 09:10	WG868995
p-Isopropyltoluene	U		0.0875	0.00100	0.250	250	05/05/2016 09:10	WG868995
2-Butanone (MEK)	U		0.982	0.0100	2.50	250	05/05/2016 09:10	WG868995
2-Hexanone	U		0.955	0.0100	2.50	250	05/05/2016 09:10	WG868995
Methylene Chloride	U		0.250	0.00500	1.25	250	05/05/2016 09:10	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.535	0.0100	2.50	250	05/05/2016 09:10	WG868995
Methyl tert-butyl ether	U		0.0918	0.00100	0.250	250	05/05/2016 09:10	WG868995
Naphthalene	U		0.250	0.00500	1.25	250	05/05/2016 09:10	WG868995
n-Propylbenzene	0.110	J	0.0872	0.00100	0.250	250	05/05/2016 09:10	WG868995
Styrene	U		0.0768	0.00100	0.250	250	05/05/2016 09:10	WG868995
1,1,1,2-Tetrachloroethane	U		0.0962	0.00100	0.250	250	05/05/2016 09:10	WG868995
1,1,2,2-Tetrachloroethane	U		0.0325	0.00100	0.250	250	05/05/2016 09:10	WG868995
Tetrachloroethene	U		0.0930	0.00100	0.250	250	05/05/2016 09:10	WG868995
Toluene	1.66		0.195	0.00500	1.25	250	05/05/2016 09:10	WG868995
1,1,1-Trichloroethane	U		0.0798	0.00100	0.250	250	05/05/2016 09:10	WG868995
1,1,2-Trichloroethane	U		0.0958	0.00100	0.250	250	05/05/2016 09:10	WG868995
Trichloroethene	U		0.0995	0.00100	0.250	250	05/05/2016 09:10	WG868995

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc





Collected date/time: 04/28/16 15:55

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	0.502		0.0932	0.00100	0.250	250	05/05/2016 09:10	WG868995
1,3,5-Trimethylbenzene	0.112	J	0.0968	0.00100	0.250	250	05/05/2016 09:10	WG868995
Vinyl chloride	U		0.0648	0.00100	0.250	250	05/05/2016 09:10	WG868995
o-Xylene	0.626		0.0852	0.00100	0.250	250	05/05/2016 09:10	WG868995
m&p-Xylene	1.23		0.180	0.00100	0.250	250	05/05/2016 09:10	WG868995
Xylenes, Total	1.86		0.265	0.00300	0.750	250	05/05/2016 09:10	WG868995
(S) Toluene-d8	100				90.0-115		05/05/2016 09:10	WG868995
(S) Dibromofluoromethane	105				79.0-121		05/05/2016 09:10	WG868995
(S) 4-Bromofluorobenzene	98.2				80.1-120		05/05/2016 09:10	WG868995

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	6.24		0.0247	0.100	0.100	1	05/05/2016 15:54	WG869610
(S) o-Terphenyl	102				50.0-150		05/05/2016 15:54	WG869610

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 mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3330		2.82	10.0	10.0	1	05/05/2016 04:07	WG869820

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.21		0.197	0.100	1.00	10	05/09/2016 14:37	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	159		2.60	1.00	50.0	50	05/10/2016 23:54	WG871228
Fluoride	4.28		0.00990	0.100	0.100	1	05/10/2016 23:39	WG871228
Sulfate	2040		3.87	5.00	250	50	05/10/2016 23:54	WG871228

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00175	J	0.00125	0.00200	0.0100	5	05/05/2016 15:22	WG869319
Arsenic,Dissolved	U		0.00125	0.00200	0.0100	5	05/11/2016 15:52	WG870082
Barium	0.0372		0.00180	0.00500	0.0250	5	05/05/2016 15:22	WG869319
Barium,Dissolved	0.0324		0.00180	0.00500	0.0250	5	05/11/2016 15:52	WG870082
Calcium	638		0.230	1.00	5.00	5	05/05/2016 15:22	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:22	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 15:52	WG870082
Iron	1.27		0.0750	0.100	0.500	5	05/05/2016 15:22	WG869319
Iron,Dissolved	0.0776	J	0.0750	0.100	0.500	5	05/11/2016 15:52	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:22	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 15:52	WG870082
Manganese	0.266		0.00125	0.00500	0.0250	5	05/05/2016 15:22	WG869319
Manganese,Dissolved	0.237		0.00125	0.00500	0.0250	5	05/11/2016 15:52	WG870082
Potassium	13.2		0.185	1.00	5.00	5	05/05/2016 15:22	WG869319
Selenium	0.0404		0.00190	0.00200	0.0100	5	05/05/2016 15:22	WG869319
Selenium,Dissolved	0.0121		0.00190	0.00200	0.0100	5	05/11/2016 15:52	WG870082
Sodium	176		0.550	1.00	5.00	5	05/05/2016 15:22	WG869319

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.157	0.100	0.500	5	05/03/2016 12:32	WG869047
(S) a,a,q-Trifluorotoluene(FID)	98.9				62.0-128		05/03/2016 12:32	WG869047

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 06:32	WG868995
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 06:32	WG868995
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 06:32	WG868995
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 06:32	WG868995



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 06:32	WG868995
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 06:32	WG868995
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 06:32	WG868995
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 06:32	WG868995
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 06:32	WG868995
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 06:32	WG868995
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 06:32	WG868995
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 06:32	WG868995
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 06:32	WG868995
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 06:32	WG868995
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 06:32	WG868995
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 06:32	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 06:32	WG868995
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 06:32	WG868995
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 06:32	WG868995
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 06:32	WG868995
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 06:32	WG868995
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 06:32	WG868995
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 06:32	WG868995
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 06:32	WG868995
(S) Toluene-d8	97.8				90.0-115		05/05/2016 06:32	WG868995
(S) Dibromofluoromethane	102				79.0-121		05/05/2016 06:32	WG868995
(S) 4-Bromofluorobenzene	97.5				80.1-120		05/05/2016 06:32	WG868995

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.66		0.0247	0.100	0.100	1	05/05/2016 16:13	WG869610
(S) o-Terphenyl	107				50.0-150		05/05/2016 16:13	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4010		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.530	J	0.197	0.100	1.00	10	05/09/2016 14:38	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	305		2.60	1.00	50.0	50	05/11/2016 00:23	WG871228
Fluoride	2.68		0.00990	0.100	0.100	1	05/11/2016 00:08	WG871228
Sulfate	951		3.87	5.00	250	50	05/11/2016 00:23	WG871228

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0195		0.00125	0.00200	0.0100	5	05/05/2016 15:24	WG869319
Arsenic,Dissolved	0.0176		0.00125	0.00200	0.0100	5	05/11/2016 15:54	WG870082
Barium	0.0209	J	0.00180	0.00500	0.0250	5	05/05/2016 15:24	WG869319
Barium,Dissolved	0.0192	J	0.00180	0.00500	0.0250	5	05/11/2016 15:54	WG870082
Calcium	113		0.230	1.00	5.00	5	05/05/2016 15:24	WG869319
Chromium	0.00407	J	0.00270	0.00200	0.0100	5	05/05/2016 15:24	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 15:54	WG870082
Iron	0.0932	J	0.0750	0.100	0.500	5	05/05/2016 15:24	WG869319
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/11/2016 15:54	WG870082
Lead	0.00124	J	0.00120	0.00200	0.0100	5	05/05/2016 15:24	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 15:54	WG870082
Manganese	0.0161	J	0.00125	0.00500	0.0250	5	05/05/2016 15:24	WG869319
Manganese,Dissolved	0.0166	J	0.00125	0.00500	0.0250	5	05/11/2016 15:54	WG870082
Potassium	0.459	J	0.185	1.00	5.00	5	05/05/2016 15:24	WG869319
Selenium	0.0192		0.00190	0.00200	0.0100	5	05/05/2016 15:24	WG869319
Selenium,Dissolved	0.00222	J	0.00190	0.00200	0.0100	5	05/11/2016 15:54	WG870082
Sodium	1290		0.550	1.00	5.00	5	05/05/2016 15:24	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	5.16		0.157	0.100	0.500	5	05/03/2016 12:53	WG869047
(S) a,a,a-Trifluorotoluene(FID)	87.0				62.0-128		05/03/2016 12:53	WG869047

## Sample Narrative:

8015D/GRO L832603-10 WG869047: Sample cannot be ran at a lower dilution due to foaming.

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.250	0.0500	1.25	25	05/05/2016 09:29	WG868995
Benzene	2.14		0.00828	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Bromodichloromethane	U		0.00950	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Bromoform	U		0.0117	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Bromomethane	U		0.0216	0.00500	0.125	25	05/05/2016 09:29	WG868995
n-Butylbenzene	U		0.00902	0.00100	0.0250	25	05/05/2016 09:29	WG868995



Collected date/time: 04/28/16 14:25

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
sec-Butylbenzene	U		0.00912	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Carbon disulfide	U		0.00688	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Carbon tetrachloride	U		0.00948	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Chlorobenzene	U		0.00870	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Chlorodibromomethane	U		0.00818	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Chloroethane	U		0.0113	0.00500	0.125	25	05/05/2016 09:29	WG868995
Chloroform	U		0.00810	0.00500	0.125	25	05/05/2016 09:29	WG868995
Chloromethane	U		0.00690	0.00250	0.0625	25	05/05/2016 09:29	WG868995
1,2-Dibromoethane	U		0.00952	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,1-Dichloroethane	U		0.00648	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,2-Dichloroethane	U		0.00902	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,1-Dichloroethene	U		0.00995	0.00100	0.0250	25	05/05/2016 09:29	WG868995
cis-1,2-Dichloroethene	U		0.00650	0.00100	0.0250	25	05/05/2016 09:29	WG868995
trans-1,2-Dichloroethene	U		0.00990	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,2-Dichloropropane	U		0.00765	0.00100	0.0250	25	05/05/2016 09:29	WG868995
cis-1,3-Dichloropropene	U		0.0104	0.00100	0.0250	25	05/05/2016 09:29	WG868995
trans-1,3-Dichloropropene	U		0.0105	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Ethylbenzene	0.0211	U	0.00960	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Isopropylbenzene	0.0339		0.00815	0.00100	0.0250	25	05/05/2016 09:29	WG868995
p-Isopropyltoluene	U		0.00875	0.00100	0.0250	25	05/05/2016 09:29	WG868995
2-Butanone (MEK)	U		0.0982	0.0100	0.250	25	05/05/2016 09:29	WG868995
2-Hexanone	U		0.0955	0.0100	0.250	25	05/05/2016 09:29	WG868995
Methylene Chloride	U		0.0250	0.00500	0.125	25	05/05/2016 09:29	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.0535	0.0100	0.250	25	05/05/2016 09:29	WG868995
Methyl tert-butyl ether	U		0.00918	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Naphthalene	U		0.0250	0.00500	0.125	25	05/05/2016 09:29	WG868995
n-Propylbenzene	0.0386		0.00872	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Styrene	U		0.00768	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,1,1,2-Tetrachloroethane	U		0.00962	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,1,2,2-Tetrachloroethane	U		0.00325	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Tetrachloroethene	U		0.00930	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Toluene	0.0293	U	0.0195	0.00500	0.125	25	05/05/2016 09:29	WG868995
1,1,1-Trichloroethane	U		0.00798	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,1,2-Trichloroethane	U		0.00958	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Trichloroethene	U		0.00995	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,2,4-Trimethylbenzene	0.0526		0.00932	0.00100	0.0250	25	05/05/2016 09:29	WG868995
1,3,5-Trimethylbenzene	U		0.00968	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Vinyl chloride	U		0.00648	0.00100	0.0250	25	05/05/2016 09:29	WG868995
o-Xylene	0.0365		0.00852	0.00100	0.0250	25	05/05/2016 09:29	WG868995
m&p-Xylene	0.145		0.0180	0.00100	0.0250	25	05/05/2016 09:29	WG868995
Xylenes, Total	0.181		0.0265	0.00300	0.0750	25	05/05/2016 09:29	WG868995
(S) Toluene-d8	100				90.0-115		05/05/2016 09:29	WG868995
(S) Dibromofluoromethane	104				79.0-121		05/05/2016 09:29	WG868995
(S) 4-Bromofluorobenzene	97.5				80.1-120		05/05/2016 09:29	WG868995

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	12.5		0.124	0.100	0.500	5	05/06/2016 12:07	WG869610
(S) o-Terphenyl	127				50.0-150		05/06/2016 12:07	WG869610



Collected date/time: 04/28/16 14:55

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## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3830		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.105	J6	0.0197	0.100	0.100	1	05/09/2016 14:39	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	134		2.60	1.00	50.0	50	05/16/2016 09:50	WG871015
Fluoride	1.04		0.00990	0.100	0.100	1	05/16/2016 10:57	WG871015
Sulfate	2620		3.87	5.00	250	50	05/16/2016 09:50	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	U		0.00125	0.00200	0.0100	5	05/05/2016 15:26	WG869319
Arsenic,Dissolved	U		0.00125	0.00200	0.0100	5	05/11/2016 15:57	WG870082
Barium	0.0182	J	0.00180	0.00500	0.0250	5	05/05/2016 15:26	WG869319
Barium,Dissolved	0.0210	J	0.00180	0.00500	0.0250	5	05/11/2016 15:57	WG870082
Calcium	465		0.230	1.00	5.00	5	05/05/2016 15:26	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:26	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 15:57	WG870082
Iron	U		0.0750	0.100	0.500	5	05/05/2016 15:26	WG869319
Iron,Dissolved	0.185	J	0.0750	0.100	0.500	5	05/11/2016 15:57	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:26	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 15:57	WG870082
Manganese	0.485		0.00125	0.00500	0.0250	5	05/05/2016 15:26	WG869319
Manganese,Dissolved	0.487		0.00125	0.00500	0.0250	5	05/11/2016 15:57	WG870082
Potassium	1.29	J	0.185	1.00	5.00	5	05/05/2016 15:26	WG869319
Selenium	0.0141		0.00190	0.00200	0.0100	5	05/05/2016 15:26	WG869319
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/11/2016 15:57	WG870082
Sodium	210		0.550	1.00	5.00	5	05/05/2016 15:26	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 10:27	WG869047
(S) a,a,a-Trifluorotoluene(FID)	97.3				62.0-128		05/03/2016 10:27	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/06/2016 12:53	WG870521
Benzene	U		0.000331	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Bromoform	U		0.000469	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Bromomethane	U		0.000866	0.00500	0.00500	1	05/06/2016 12:53	WG870521
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/06/2016 12:53	WG870521
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Carbon disulfide	0.000551	J	0.000275	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/06/2016 12:53	WG870521



Collected date/time: 04/28/16 14:55

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Chloroethane	U		0.000453	0.00500	0.00500	1	05/06/2016 12:53	WG870521
Chloroform	U		0.000324	0.00500	0.00500	1	05/06/2016 12:53	WG870521
Chloromethane	U		0.000276	0.00250	0.00250	1	05/06/2016 12:53	WG870521
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 12:53	WG870521
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/06/2016 12:53	WG870521
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/06/2016 12:53	WG870521
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/06/2016 12:53	WG870521
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/06/2016 12:53	WG870521
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/06/2016 12:53	WG870521
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/06/2016 12:53	WG870521
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/06/2016 12:53	WG870521
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/06/2016 12:53	WG870521
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/06/2016 12:53	WG870521
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Naphthalene	U		0.00100	0.00500	0.00500	1	05/06/2016 12:53	WG870521
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Styrene	U		0.000307	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Toluene	U		0.000780	0.00500	0.00500	1	05/06/2016 12:53	WG870521
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/06/2016 12:53	WG870521
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/06/2016 12:53	WG870521
o-Xylene	U		0.000341	0.00100	0.00100	1	05/06/2016 12:53	WG870521
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/06/2016 12:53	WG870521
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/06/2016 12:53	WG870521
(S) Toluene-d8	107				90.0-115		05/06/2016 12:53	WG870521
(S) Dibromofluoromethane	115				79.0-121		05/06/2016 12:53	WG870521
(S) 4-Bromofluorobenzene	99.6				80.1-120		05/06/2016 12:53	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.27		0.0247	0.100	0.100	1	05/05/2016 16:49	WG869610
(S) o-Terphenyl	121				50.0-150		05/05/2016 16:49	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2680		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.552	J	0.197	0.100	1.00	10	05/09/2016 14:41	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	240		2.60	1.00	50.0	50	05/16/2016 11:24	WG871015
Fluoride	2.65		0.00990	0.100	0.100	1	05/16/2016 11:10	WG871015
Sulfate	2120		3.87	5.00	250	50	05/16/2016 11:24	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	U		0.00125	0.00200	0.0100	5	05/05/2016 15:29	WG869319
Arsenic,Dissolved	U		0.00125	0.00200	0.0100	5	05/11/2016 15:59	WG870082
Barium	0.0192	J	0.00180	0.00500	0.0250	5	05/05/2016 15:29	WG869319
Barium,Dissolved	0.0205	J	0.00180	0.00500	0.0250	5	05/11/2016 15:59	WG870082
Calcium	439		0.230	1.00	5.00	5	05/05/2016 15:29	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:29	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 15:59	WG870082
Iron	U		0.0750	0.100	0.500	5	05/05/2016 15:29	WG869319
Iron,Dissolved	0.103	J	0.0750	0.100	0.500	5	05/11/2016 15:59	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:29	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 15:59	WG870082
Manganese	0.0664		0.00125	0.00500	0.0250	5	05/05/2016 15:29	WG869319
Manganese,Dissolved	0.0620		0.00125	0.00500	0.0250	5	05/11/2016 15:59	WG870082
Potassium	2.82	J	0.185	1.00	5.00	5	05/05/2016 15:29	WG869319
Selenium	0.0101		0.00190	0.00200	0.0100	5	05/05/2016 15:29	WG869319
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/11/2016 15:59	WG870082
Sodium	278		0.550	1.00	5.00	5	05/05/2016 15:29	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	2.60		0.314	0.100	1.00	10	05/03/2016 13:14	WG869047
(S) a,a,q-Trifluorotoluene(FID)	91.6				62.0-128		05/03/2016 13:14	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0500	0.0500	0.250	5	05/06/2016 16:30	WG870521
Benzene	0.493		0.00166	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Bromodichloromethane	U		0.00190	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Bromoform	U		0.00234	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Bromomethane	U		0.00433	0.00500	0.0250	5	05/06/2016 16:30	WG870521
n-Butylbenzene	0.00378	J	0.00180	0.00100	0.00500	5	05/06/2016 16:30	WG870521
sec-Butylbenzene	0.00730		0.00182	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Carbon disulfide	0.00218	J	0.00138	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Carbon tetrachloride	U		0.00190	0.00100	0.00500	5	05/06/2016 16:30	WG870521





Collected date/time: 04/28/16 18:30

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00174	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Chlorodibromomethane	U		0.00164	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Chloroethane	U		0.00226	0.00500	0.0250	5	05/06/2016 16:30	WG870521
Chloroform	U		0.00162	0.00500	0.0250	5	05/06/2016 16:30	WG870521
Chloromethane	U		0.00138	0.00250	0.0125	5	05/06/2016 16:30	WG870521
1,2-Dibromoethane	U		0.00190	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,1-Dichloroethane	U		0.00130	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,2-Dichloroethane	U		0.00180	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,1-Dichloroethene	U		0.00199	0.00100	0.00500	5	05/06/2016 16:30	WG870521
cis-1,2-Dichloroethene	U		0.00130	0.00100	0.00500	5	05/06/2016 16:30	WG870521
trans-1,2-Dichloroethene	U		0.00198	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,2-Dichloropropane	U		0.00153	0.00100	0.00500	5	05/06/2016 16:30	WG870521
cis-1,3-Dichloropropene	U		0.00209	0.00100	0.00500	5	05/06/2016 16:30	WG870521
trans-1,3-Dichloropropene	U		0.00210	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Ethylbenzene	0.0292		0.00192	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Isopropylbenzene	0.0787		0.00163	0.00100	0.00500	5	05/06/2016 16:30	WG870521
p-Isopropyltoluene	0.00375	U	0.00175	0.00100	0.00500	5	05/06/2016 16:30	WG870521
2-Butanone (MEK)	U		0.0196	0.0100	0.0500	5	05/06/2016 16:30	WG870521
2-Hexanone	U		0.0191	0.0100	0.0500	5	05/06/2016 16:30	WG870521
Methylene Chloride	U		0.00500	0.00500	0.0250	5	05/06/2016 16:30	WG870521
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0100	0.0500	5	05/06/2016 16:30	WG870521
Methyl tert-butyl ether	U		0.00184	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Naphthalene	0.0340		0.00500	0.00500	0.0250	5	05/06/2016 16:30	WG870521
n-Propylbenzene	0.110		0.00174	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Styrene	U		0.00154	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,1,1,2-Tetrachloroethane	U		0.00192	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,1,2,2-Tetrachloroethane	U		0.000650	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Tetrachloroethene	U		0.00186	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Toluene	0.0185	U	0.00390	0.00500	0.0250	5	05/06/2016 16:30	WG870521
1,1,1-Trichloroethane	U		0.00160	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,1,2-Trichloroethane	U		0.00192	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Trichloroethene	U		0.00199	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,2,4-Trimethylbenzene	0.139		0.00186	0.00100	0.00500	5	05/06/2016 16:30	WG870521
1,3,5-Trimethylbenzene	U		0.00194	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Vinyl chloride	U		0.00130	0.00100	0.00500	5	05/06/2016 16:30	WG870521
o-Xylene	0.00263	U	0.00170	0.00100	0.00500	5	05/06/2016 16:30	WG870521
m&p-Xylene	0.223		0.00360	0.00100	0.00500	5	05/06/2016 16:30	WG870521
Xylenes, Total	0.226		0.00530	0.00300	0.0150	5	05/06/2016 16:30	WG870521
(S) Toluene-d8	108				90.0-115		05/06/2016 16:30	WG870521
(S) Dibromofluoromethane	112				79.0-121		05/06/2016 16:30	WG870521
(S) 4-Bromofluorobenzene	99.3				80.1-120		05/06/2016 16:30	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.59		0.0247	0.100	0.100	1	05/05/2016 17:07	WG869610
(S) o-Terphenyl	120				50.0-150		05/05/2016 17:07	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1300		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.414	J	0.197	0.100	1.00	10	05/09/2016 14:42	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	42.0		0.0519	1.00	1.00	1	05/16/2016 11:37	WG871015
Fluoride	1.48		0.00990	0.100	0.100	1	05/16/2016 11:37	WG871015
Sulfate	278		3.87	5.00	250	50	05/16/2016 11:51	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0197		0.00125	0.00200	0.0100	5	05/05/2016 15:31	WG869319
Arsenic,Dissolved	0.0139		0.00125	0.00200	0.0100	5	05/11/2016 16:11	WG870082
Barium	1.31		0.00180	0.00500	0.0250	5	05/05/2016 15:31	WG869319
Barium,Dissolved	1.22		0.00180	0.00500	0.0250	5	05/11/2016 16:11	WG870082
Calcium	257		0.230	1.00	5.00	5	05/05/2016 15:31	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:31	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 16:11	WG870082
Iron	0.286	J	0.0750	0.100	0.500	5	05/05/2016 15:31	WG869319
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/11/2016 16:11	WG870082
Lead	0.00176	J	0.00120	0.00200	0.0100	5	05/05/2016 15:31	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 16:11	WG870082
Manganese	0.195		0.00125	0.00500	0.0250	5	05/05/2016 15:31	WG869319
Manganese,Dissolved	0.188		0.00125	0.00500	0.0250	5	05/11/2016 16:11	WG870082
Potassium	4.55	J	0.185	1.00	5.00	5	05/05/2016 15:31	WG869319
Selenium	0.00947	J	0.00190	0.00200	0.0100	5	05/05/2016 15:31	WG869319
Selenium,Dissolved	0.00327	J	0.00190	0.00200	0.0100	5	05/11/2016 16:11	WG870082
Sodium	52.6		0.550	1.00	5.00	5	05/05/2016 15:31	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	33.6		0.785	0.100	2.50	25	05/03/2016 13:35	WG869047
(S) a,a,a-Trifluorotoluene(FID)	91.8				62.0-128		05/03/2016 13:35	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		2.50	0.0500	12.5	250	05/05/2016 10:28	WG868995
Benzene	13.5		0.0828	0.00100	0.250	250	05/05/2016 10:28	WG868995
Bromodichloromethane	U		0.0950	0.00100	0.250	250	05/05/2016 10:28	WG868995
Bromoform	U		0.117	0.00100	0.250	250	05/05/2016 10:28	WG868995
Bromomethane	U		0.216	0.00500	1.25	250	05/05/2016 10:28	WG868995
n-Butylbenzene	U		0.0902	0.00100	0.250	250	05/05/2016 10:28	WG868995
sec-Butylbenzene	U		0.0912	0.00100	0.250	250	05/05/2016 10:28	WG868995
Carbon disulfide	U		0.0688	0.00100	0.250	250	05/05/2016 10:28	WG868995
Carbon tetrachloride	U		0.0948	0.00100	0.250	250	05/05/2016 10:28	WG868995



Collected date/time: 04/28/16 17:25

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.0870	0.00100	0.250	250	05/05/2016 10:28	WG868995
Chlorodibromomethane	U		0.0818	0.00100	0.250	250	05/05/2016 10:28	WG868995
Chloroethane	U		0.113	0.00500	1.25	250	05/05/2016 10:28	WG868995
Chloroform	U		0.0810	0.00500	1.25	250	05/05/2016 10:28	WG868995
Chloromethane	U		0.0690	0.00250	0.625	250	05/05/2016 10:28	WG868995
1,2-Dibromoethane	U		0.0952	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,1-Dichloroethane	U		0.0648	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,2-Dichloroethane	U		0.0902	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,1-Dichloroethene	U		0.0995	0.00100	0.250	250	05/05/2016 10:28	WG868995
cis-1,2-Dichloroethene	U		0.0650	0.00100	0.250	250	05/05/2016 10:28	WG868995
trans-1,2-Dichloroethene	U		0.0990	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,2-Dichloropropane	U		0.0765	0.00100	0.250	250	05/05/2016 10:28	WG868995
cis-1,3-Dichloropropene	U		0.104	0.00100	0.250	250	05/05/2016 10:28	WG868995
trans-1,3-Dichloropropene	U		0.105	0.00100	0.250	250	05/05/2016 10:28	WG868995
Ethylbenzene	2.02		0.0960	0.00100	0.250	250	05/05/2016 10:28	WG868995
Isopropylbenzene	0.104	U	0.0815	0.00100	0.250	250	05/05/2016 10:28	WG868995
p-Isopropyltoluene	U		0.0875	0.00100	0.250	250	05/05/2016 10:28	WG868995
2-Butanone (MEK)	U		0.982	0.0100	2.50	250	05/05/2016 10:28	WG868995
2-Hexanone	U		0.955	0.0100	2.50	250	05/05/2016 10:28	WG868995
Methylene Chloride	U		0.250	0.00500	1.25	250	05/05/2016 10:28	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.535	0.0100	2.50	250	05/05/2016 10:28	WG868995
Methyl tert-butyl ether	U		0.0918	0.00100	0.250	250	05/05/2016 10:28	WG868995
Naphthalene	U		0.250	0.00500	1.25	250	05/05/2016 10:28	WG868995
n-Propylbenzene	0.104	U	0.0872	0.00100	0.250	250	05/05/2016 10:28	WG868995
Styrene	U		0.0768	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,1,1,2-Tetrachloroethane	U		0.0962	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,1,2,2-Tetrachloroethane	U		0.0325	0.00100	0.250	250	05/05/2016 10:28	WG868995
Tetrachloroethene	U		0.0930	0.00100	0.250	250	05/05/2016 10:28	WG868995
Toluene	U		0.195	0.00500	1.25	250	05/05/2016 10:28	WG868995
1,1,1-Trichloroethane	U		0.0798	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,1,2-Trichloroethane	U		0.0958	0.00100	0.250	250	05/05/2016 10:28	WG868995
Trichloroethene	U		0.0995	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,2,4-Trimethylbenzene	0.103	U	0.0932	0.00100	0.250	250	05/05/2016 10:28	WG868995
1,3,5-Trimethylbenzene	U		0.0968	0.00100	0.250	250	05/05/2016 10:28	WG868995
Vinyl chloride	U		0.0648	0.00100	0.250	250	05/05/2016 10:28	WG868995
o-Xylene	U		0.0852	0.00100	0.250	250	05/05/2016 10:28	WG868995
m&p-Xylene	0.379		0.180	0.00100	0.250	250	05/05/2016 10:28	WG868995
Xylenes, Total	0.379	U	0.265	0.00300	0.750	250	05/05/2016 10:28	WG868995
(S) Toluene-d8	99.8				90.0-115		05/05/2016 10:28	WG868995
(S) Dibromofluoromethane	104				79.0-121		05/05/2016 10:28	WG868995
(S) 4-Bromofluorobenzene	95.4				80.1-120		05/05/2016 10:28	WG868995

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	21.2		0.124	0.100	0.500	5	05/06/2016 04:44	WG869610
(S) o-Terphenyl	130				50.0-150		05/06/2016 04:44	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5610		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2.45		0.197	0.100	1.00	10	05/09/2016 14:47	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	416		2.60	1.00	50.0	50	05/16/2016 12:17	WG871015
Fluoride	3.01		0.00990	0.100	0.100	1	05/16/2016 12:04	WG871015
Sulfate	3360		3.87	5.00	250	50	05/16/2016 12:17	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0115		0.00125	0.00200	0.0100	5	05/05/2016 15:33	WG869319
Arsenic,Dissolved	0.0122		0.00125	0.00200	0.0100	5	05/11/2016 16:13	WG870082
Barium	0.0138	J	0.00180	0.00500	0.0250	5	05/05/2016 15:33	WG869319
Barium,Dissolved	0.0126	J	0.00180	0.00500	0.0250	5	05/11/2016 16:13	WG870082
Calcium	604		0.230	1.00	5.00	5	05/05/2016 15:33	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:33	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 16:13	WG870082
Iron	U		0.0750	0.100	0.500	5	05/05/2016 15:33	WG869319
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/11/2016 16:13	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:33	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 16:13	WG870082
Manganese	0.406		0.00125	0.00500	0.0250	5	05/05/2016 15:33	WG869319
Manganese,Dissolved	0.379		0.00125	0.00500	0.0250	5	05/11/2016 16:13	WG870082
Potassium	1.15	J	0.185	1.00	5.00	5	05/05/2016 15:33	WG869319
Selenium	0.0223		0.00190	0.00200	0.0100	5	05/05/2016 15:33	WG869319
Selenium,Dissolved	0.00842	J	0.00190	0.00200	0.0100	5	05/11/2016 16:13	WG870082
Sodium	502		0.550	1.00	5.00	5	05/05/2016 15:33	WG869319

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 10:48	WG868995
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 10:48	WG868995
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 10:48	WG868995
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 10:48	WG868995
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 10:48	WG868995
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 10:48	WG868995
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 10:48	WG868995
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 10:48	WG868995



Collected date/time: 04/28/16 16:35

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 10:48	WG868995
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 10:48	WG868995
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 10:48	WG868995
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 10:48	WG868995
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 10:48	WG868995
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 10:48	WG868995
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 10:48	WG868995
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 10:48	WG868995
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 10:48	WG868995
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 10:48	WG868995
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 10:48	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 10:48	WG868995
Methyl tert-butyl ether	0.0186		0.000367	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 10:48	WG868995
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 10:48	WG868995
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 10:48	WG868995
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 10:48	WG868995
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 10:48	WG868995
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 10:48	WG868995
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 10:48	WG868995
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 10:48	WG868995
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 10:48	WG868995
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 10:48	WG868995
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 10:48	WG868995
(S) Toluene-d8	101				90.0-115		05/05/2016 10:48	WG868995
(S) Dibromofluoromethane	104				79.0-121		05/05/2016 10:48	WG868995
(S) 4-Bromofluorobenzene	96.3				80.1-120		05/05/2016 10:48	WG868995

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2.29		0.0247	0.100	0.100	1	05/05/2016 17:26	WG869610
(S) o-Terphenyl	112				50.0-150		05/05/2016 17:26	WG869610

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3370		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	1.73		0.197	0.100	1.00	10	05/09/2016 14:48	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	313		2.60	1.00	50.0	50	05/16/2016 19:10	WG871015
Fluoride	1.69		0.00990	0.100	0.100	1	05/16/2016 12:31	WG871015
Sulfate	1440		3.87	5.00	250	50	05/16/2016 19:10	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00476	J	0.00125	0.00200	0.0100	5	05/05/2016 15:47	WG869319
Arsenic,Dissolved	0.00328	J	0.00125	0.00200	0.0100	5	05/11/2016 16:15	WG870082
Barium	0.0550		0.00180	0.00500	0.0250	5	05/05/2016 15:47	WG869319
Barium,Dissolved	0.0453		0.00180	0.00500	0.0250	5	05/11/2016 16:15	WG870082
Calcium	336		0.230	1.00	5.00	5	05/05/2016 15:47	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:47	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 16:15	WG870082
Iron	0.169	J	0.0750	0.100	0.500	5	05/05/2016 15:47	WG869319
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/11/2016 16:15	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:47	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 16:15	WG870082
Manganese	0.441		0.00125	0.00500	0.0250	5	05/05/2016 15:47	WG869319
Manganese,Dissolved	0.397		0.00125	0.00500	0.0250	5	05/11/2016 16:15	WG870082
Potassium	1.96	J	0.185	1.00	5.00	5	05/05/2016 15:47	WG869319
Selenium	0.00735	J	0.00190	0.00200	0.0100	5	05/05/2016 15:47	WG869319
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/11/2016 16:15	WG870082
Sodium	356		0.550	1.00	5.00	5	05/05/2016 15:47	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.492	J	0.314	0.100	1.00	10	05/03/2016 13:56	WG869047
(S) a,a,a-Trifluorotoluene(FID)	91.9				62.0-128		05/03/2016 13:56	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0500	0.0500	0.250	5	05/06/2016 16:54	WG870521
Benzene	0.466		0.00166	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Bromodichloromethane	U		0.00190	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Bromoform	U		0.00234	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Bromomethane	U		0.00433	0.00500	0.0250	5	05/06/2016 16:54	WG870521
n-Butylbenzene	0.00303	J	0.00180	0.00100	0.00500	5	05/06/2016 16:54	WG870521
sec-Butylbenzene	0.0126		0.00182	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Carbon disulfide	0.00169	J	0.00138	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Carbon tetrachloride	U		0.00190	0.00100	0.00500	5	05/06/2016 16:54	WG870521



Collected date/time: 04/28/16 15:45

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00174	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Chlorodibromomethane	U		0.00164	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Chloroethane	U		0.00226	0.00500	0.0250	5	05/06/2016 16:54	WG870521
Chloroform	U		0.00162	0.00500	0.0250	5	05/06/2016 16:54	WG870521
Chloromethane	U		0.00138	0.00250	0.0125	5	05/06/2016 16:54	WG870521
1,2-Dibromoethane	U		0.00190	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,1-Dichloroethane	U		0.00130	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,2-Dichloroethane	U		0.00180	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,1-Dichloroethene	U		0.00199	0.00100	0.00500	5	05/06/2016 16:54	WG870521
cis-1,2-Dichloroethene	U		0.00130	0.00100	0.00500	5	05/06/2016 16:54	WG870521
trans-1,2-Dichloroethene	U		0.00198	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,2-Dichloropropane	U		0.00153	0.00100	0.00500	5	05/06/2016 16:54	WG870521
cis-1,3-Dichloropropene	U		0.00209	0.00100	0.00500	5	05/06/2016 16:54	WG870521
trans-1,3-Dichloropropene	U		0.00210	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Ethylbenzene	0.00775		0.00192	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Isopropylbenzene	0.0698		0.00163	0.00100	0.00500	5	05/06/2016 16:54	WG870521
p-Isopropyltoluene	U		0.00175	0.00100	0.00500	5	05/06/2016 16:54	WG870521
2-Butanone (MEK)	U		0.0196	0.0100	0.0500	5	05/06/2016 16:54	WG870521
2-Hexanone	U		0.0191	0.0100	0.0500	5	05/06/2016 16:54	WG870521
Methylene Chloride	U		0.00500	0.00500	0.0250	5	05/06/2016 16:54	WG870521
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0100	0.0500	5	05/06/2016 16:54	WG870521
Methyl tert-butyl ether	0.00656		0.00184	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Naphthalene	0.00554	U	0.00500	0.00500	0.0250	5	05/06/2016 16:54	WG870521
n-Propylbenzene	0.0367		0.00174	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Styrene	U		0.00154	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,1,1,2-Tetrachloroethane	U		0.00192	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,1,2,2-Tetrachloroethane	U		0.000650	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Tetrachloroethene	U		0.00186	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Toluene	U		0.00390	0.00500	0.0250	5	05/06/2016 16:54	WG870521
1,1,1-Trichloroethane	U		0.00160	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,1,2-Trichloroethane	U		0.00192	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Trichloroethene	U		0.00199	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,2,4-Trimethylbenzene	0.0283		0.00186	0.00100	0.00500	5	05/06/2016 16:54	WG870521
1,3,5-Trimethylbenzene	U		0.00194	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Vinyl chloride	U		0.00130	0.00100	0.00500	5	05/06/2016 16:54	WG870521
o-Xylene	U		0.00170	0.00100	0.00500	5	05/06/2016 16:54	WG870521
m&p-Xylene	0.0708		0.00360	0.00100	0.00500	5	05/06/2016 16:54	WG870521
Xylenes, Total	0.0708		0.00530	0.00300	0.0150	5	05/06/2016 16:54	WG870521
(S) Toluene-d8	108				90.0-115		05/06/2016 16:54	WG870521
(S) Dibromofluoromethane	114				79.0-121		05/06/2016 16:54	WG870521
(S) 4-Bromofluorobenzene	101				80.1-120		05/06/2016 16:54	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3.44		0.0247	0.100	0.100	1	05/05/2016 19:16	WG869610
(S) o-Terphenyl	123				50.0-150		05/05/2016 19:16	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1510		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.518	J	0.197	0.100	1.00	10	05/09/2016 14:50	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	278	J	130	1.00	2500	50	05/16/2016 13:24	WG871015
Fluoride	1.24		0.00990	0.100	0.100	1	05/16/2016 13:11	WG871015
Sulfate	134		0.774	5.00	50.0	10	05/16/2016 20:04	WG871015

## Wet Chemistry by Method D 7511-09e2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 02:35	WG869397

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:39	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:45	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0135		0.00125	0.00200	0.0100	5	05/05/2016 15:49	WG869319
Arsenic,Dissolved	0.0109		0.00125	0.00200	0.0100	5	05/11/2016 16:18	WG870082
Barium	0.744		0.00180	0.00500	0.0250	5	05/05/2016 15:49	WG869319
Barium,Dissolved	0.632		0.00180	0.00500	0.0250	5	05/11/2016 16:18	WG870082
Boron	0.518		0.0150	0.0200	0.200	10	05/07/2016 10:02	WG870589
Boron,Dissolved	0.519		0.0150	0.0200	0.200	10	05/09/2016 11:57	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/05/2016 15:49	WG869319
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/11/2016 16:18	WG870082
Calcium	262		0.230	1.00	5.00	5	05/05/2016 15:49	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:49	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 16:18	WG870082
Cobalt	U		0.00130	0.00200	0.0100	5	05/05/2016 15:49	WG869319
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/11/2016 16:18	WG870082
Iron	1.06		0.0750	0.100	0.500	5	05/05/2016 15:49	WG869319
Iron,Dissolved	0.429	J	0.0750	0.100	0.500	5	05/11/2016 16:18	WG870082
Lead	0.00297	J	0.00120	0.00200	0.0100	5	05/05/2016 15:49	WG869319
Lead,Dissolved	0.00166	J	0.00120	0.00200	0.0100	5	05/11/2016 16:18	WG870082
Manganese	0.391		0.00125	0.00500	0.0250	5	05/05/2016 15:49	WG869319
Manganese,Dissolved	0.357		0.00125	0.00500	0.0250	5	05/11/2016 16:18	WG870082
Nickel	U		0.00175	0.00200	0.0100	5	05/05/2016 15:49	WG869319
Nickel,Dissolved	0.00864	B J	0.00175	0.00200	0.0100	5	05/11/2016 16:18	WG870082
Potassium	0.421	J	0.185	1.00	5.00	5	05/05/2016 15:49	WG869319
Selenium	0.00524	J	0.00190	0.00200	0.0100	5	05/05/2016 15:49	WG869319
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/11/2016 16:18	WG870082
Sodium	123		0.550	1.00	5.00	5	05/05/2016 15:49	WG869319





Collected date/time: 04/28/16 18:20

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## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/05/2016 15:49	WG869319
Uranium,Dissolved	U		0.00165	0.0100	0.0500	5	05/11/2016 16:18	WG870082
Vanadium	0.00259	U	0.000900	0.00500	0.0250	5	05/05/2016 15:49	WG869319
Vanadium,Dissolved	0.00201	U	0.000900	0.00500	0.0250	5	05/11/2016 16:18	WG870082

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.100	0.0500	0.500	10	05/05/2016 11:28	WG868995
Benzene	4.12		0.0166	0.00100	0.0500	50	05/06/2016 17:18	WG870521
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Bromoform	U		0.00469	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Bromomethane	U		0.00866	0.00500	0.0500	10	05/05/2016 11:28	WG868995
n-Butylbenzene	0.00944	U	0.00361	0.00100	0.0100	10	05/05/2016 11:28	WG868995
sec-Butylbenzene	0.0112		0.00365	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Carbon disulfide	U		0.00275	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Chloroethane	U		0.00453	0.00500	0.0500	10	05/05/2016 11:28	WG868995
Chloroform	U		0.00324	0.00500	0.0500	10	05/05/2016 11:28	WG868995
Chloromethane	U		0.00276	0.00250	0.0250	10	05/05/2016 11:28	WG868995
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 11:28	WG868995
cis-1,2-Dichloroethene	U		0.00260	0.00100	0.0100	10	05/05/2016 11:28	WG868995
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/05/2016 11:28	WG868995
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/05/2016 11:28	WG868995
trans-1,3-Dichloropropene	U		0.00419	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Ethylbenzene	1.11		0.00384	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Isopropylbenzene	0.0594		0.00326	0.00100	0.0100	10	05/05/2016 11:28	WG868995
p-Isopropyltoluene	0.00813	U	0.00350	0.00100	0.0100	10	05/05/2016 11:28	WG868995
2-Butanone (MEK)	U		0.0393	0.0100	0.100	10	05/05/2016 11:28	WG868995
2-Hexanone	U		0.0382	0.0100	0.100	10	05/05/2016 11:28	WG868995
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/05/2016 11:28	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/05/2016 11:28	WG868995
Methyl tert-butyl ether	0.200		0.00367	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Naphthalene	0.257		0.0100	0.00500	0.0500	10	05/05/2016 11:28	WG868995
n-Propylbenzene	0.105		0.00349	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Styrene	U		0.00307	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Toluene	0.00806	U	0.00780	0.00500	0.0500	10	05/05/2016 11:28	WG868995
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,2,4-Trimethylbenzene	0.753		0.00373	0.00100	0.0100	10	05/05/2016 11:28	WG868995
1,3,5-Trimethylbenzene	0.0179		0.00387	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/05/2016 11:28	WG868995
o-Xylene	0.0183		0.00341	0.00100	0.0100	10	05/05/2016 11:28	WG868995
m&p-Xylene	0.830		0.00719	0.00100	0.0100	10	05/05/2016 11:28	WG868995
Xylenes, Total	0.848		0.0106	0.00300	0.0300	10	05/05/2016 11:28	WG868995
(S) Toluene-d8	101				90.0-115		05/05/2016 11:28	WG868995

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



Collected date/time: 04/28/16 18:20

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

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
(S) Toluene-d8	108				90.0-115		05/06/2016 17:18	WG870521
(S) Dibromofluoromethane	113				79.0-121		05/06/2016 17:18	WG870521
(S) Dibromofluoromethane	125	J1			79.0-121		05/05/2016 11:28	WG868995
(S) 4-Bromofluorobenzene	95.4				80.1-120		05/05/2016 11:28	WG868995
(S) 4-Bromofluorobenzene	101				80.1-120		05/06/2016 17:18	WG870521

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	6.27		0.0247	0.100	0.100	1	05/05/2016 19:34	WG869610
(S) o-Terphenyl	128				50.0-150		05/05/2016 19:34	WG869610

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	4250		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	9.76		0.197	0.100	1.00	10	05/09/2016 14:52	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	336		2.60	1.00	50.0	50	05/16/2016 13:51	WG871015
Fluoride	1.23		0.00990	0.100	0.100	1	05/16/2016 13:38	WG871015
Sulfate	2870		3.87	5.00	250	50	05/16/2016 13:51	WG871015

## Wet Chemistry by Method D 7511-09e2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 02:38	WG869397

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:41	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:13	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00280	J	0.00125	0.00200	0.0100	5	05/05/2016 15:52	WG869319
Arsenic,Dissolved	0.00242	J	0.00125	0.00200	0.0100	5	05/11/2016 16:20	WG870082
Barium	0.0270		0.00180	0.00500	0.0250	5	05/05/2016 15:52	WG869319
Barium,Dissolved	0.0113	J	0.00180	0.00500	0.0250	5	05/11/2016 16:20	WG870082
Boron	0.695		0.0150	0.0200	0.200	10	05/07/2016 10:06	WG870589
Boron,Dissolved	0.661		0.0150	0.0200	0.200	10	05/09/2016 12:02	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/05/2016 15:52	WG869319
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/11/2016 16:20	WG870082
Calcium	699		0.230	1.00	5.00	5	05/05/2016 15:52	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:52	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 16:20	WG870082
Cobalt	0.00132	J	0.00130	0.00200	0.0100	5	05/05/2016 15:52	WG869319
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/11/2016 16:20	WG870082
Iron	0.599		0.0750	0.100	0.500	5	05/05/2016 15:52	WG869319
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/11/2016 16:20	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:52	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 16:20	WG870082
Manganese	0.0591		0.00125	0.00500	0.0250	5	05/05/2016 15:52	WG869319
Manganese,Dissolved	0.00291	B J	0.00125	0.00500	0.0250	5	05/11/2016 16:20	WG870082
Nickel	U		0.00350	0.00200	0.0200	10	05/07/2016 10:06	WG870589
Nickel,Dissolved	0.00772	B J	0.00175	0.00200	0.0100	5	05/11/2016 16:20	WG870082
Potassium	2.95	J	0.185	1.00	5.00	5	05/05/2016 15:52	WG869319
Selenium	0.0112		0.00190	0.00200	0.0100	5	05/05/2016 15:52	WG869319
Selenium,Dissolved	0.00664	J	0.00190	0.00200	0.0100	5	05/11/2016 16:20	WG870082
Sodium	149		0.550	1.00	5.00	5	05/05/2016 15:52	WG869319



## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.0702		0.00165	0.0100	0.0500	5	05/05/2016 15:52	WG869319
Uranium,Dissolved	0.0698		0.00165	0.0100	0.0500	5	05/11/2016 16:20	WG870082
Vanadium	0.0197	J	0.000900	0.00500	0.0250	5	05/05/2016 15:52	WG869319
Vanadium,Dissolved	0.0188	J	0.000900	0.00500	0.0250	5	05/11/2016 16:20	WG870082

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 14:17	WG869047
(S) a,a,a-Trifluorotoluene(FID)	98.5				62.0-128		05/03/2016 14:17	WG869047

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 11:48	WG868995
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 11:48	WG868995
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 11:48	WG868995
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 11:48	WG868995
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 11:48	WG868995
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 11:48	WG868995
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 11:48	WG868995
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 11:48	WG868995
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 11:48	WG868995
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 11:48	WG868995
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 11:48	WG868995
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 11:48	WG868995
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 11:48	WG868995
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 11:48	WG868995
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 11:48	WG868995
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 11:48	WG868995
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 11:48	WG868995
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 11:48	WG868995
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 11:48	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 11:48	WG868995
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 11:48	WG868995
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 11:48	WG868995
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 11:48	WG868995
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 11:48	WG868995
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 11:48	WG868995
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 11:48	WG868995

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/28/16 15:20

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	0.000416	J	0.000373	0.00100	0.00100	1	05/05/2016 11:48	WG868995
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 11:48	WG868995
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 11:48	WG868995
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 11:48	WG868995
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 11:48	WG868995
(S) Toluene-d8	99.8				90.0-115		05/05/2016 11:48	WG868995
(S) Dibromofluoromethane	102				79.0-121		05/05/2016 11:48	WG868995
(S) 4-Bromofluorobenzene	96.5				80.1-120		05/05/2016 11:48	WG868995

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.162		0.0247	0.100	0.100	1	05/05/2016 19:52	WG869610
(S) o-Terphenyl	106				50.0-150		05/05/2016 19:52	WG869610

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2910		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0340	J J6	0.0197	0.100	0.100	1	05/09/2016 14:53	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	207		2.60	1.00	50.0	50	05/16/2016 14:18	WG871015
Fluoride	0.485		0.00990	0.100	0.100	1	05/16/2016 14:05	WG871015
Sulfate	1460		3.87	5.00	250	50	05/16/2016 14:18	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00401	J	0.00125	0.00200	0.0100	5	05/05/2016 15:54	WG869319
Arsenic,Dissolved	0.00506	J	0.00125	0.00200	0.0100	5	05/11/2016 16:22	WG870082
Barium	0.0326		0.00180	0.00500	0.0250	5	05/05/2016 15:54	WG869319
Barium,Dissolved	0.0278		0.00180	0.00500	0.0250	5	05/11/2016 16:22	WG870082
Calcium	322		0.230	1.00	5.00	5	05/05/2016 15:54	WG869319
Chromium	U		0.00270	0.00200	0.0100	5	05/05/2016 15:54	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 16:22	WG870082
Iron	0.883		0.0750	0.100	0.500	5	05/05/2016 15:54	WG869319
Iron,Dissolved	1.17		0.0750	0.100	0.500	5	05/11/2016 16:22	WG870082
Lead	U		0.00120	0.00200	0.0100	5	05/05/2016 15:54	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 16:22	WG870082
Manganese	0.898		0.00125	0.00500	0.0250	5	05/05/2016 15:54	WG869319
Manganese,Dissolved	0.863		0.00125	0.00500	0.0250	5	05/11/2016 16:22	WG870082
Potassium	0.456	J	0.185	1.00	5.00	5	05/05/2016 15:54	WG869319
Selenium	0.00551	J	0.00190	0.00200	0.0100	5	05/05/2016 15:54	WG869319
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/11/2016 16:22	WG870082
Sodium	325		0.550	1.00	5.00	5	05/05/2016 15:54	WG869319

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/06/2016 17:42	WG870521
Benzene	0.0558		0.000331	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Bromoform	U		0.000469	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Bromomethane	U		0.000866	0.00500	0.00500	1	05/06/2016 17:42	WG870521
n-Butylbenzene	0.00205		0.000361	0.00100	0.00100	1	05/06/2016 17:42	WG870521
sec-Butylbenzene	0.00350		0.000365	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Carbon disulfide	0.000363	J	0.000275	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Chloroethane	U		0.000453	0.00500	0.00500	1	05/06/2016 17:42	WG870521
Chloroform	U		0.000324	0.00500	0.00500	1	05/06/2016 17:42	WG870521
Chloromethane	U		0.000276	0.00250	0.00250	1	05/06/2016 17:42	WG870521
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/06/2016 17:42	WG870521
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/06/2016 17:42	WG870521



Collected date/time: 04/28/16 17:25

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/06/2016 17:42	WG870521
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 17:42	WG870521
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/06/2016 17:42	WG870521
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/06/2016 17:42	WG870521
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/06/2016 17:42	WG870521
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/06/2016 17:42	WG870521
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Ethylbenzene	0.0483		0.000384	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Isopropylbenzene	0.0187		0.000326	0.00100	0.00100	1	05/06/2016 17:42	WG870521
p-Isopropyltoluene	0.000603	U	0.000350	0.00100	0.00100	1	05/06/2016 17:42	WG870521
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/06/2016 17:42	WG870521
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/06/2016 17:42	WG870521
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/06/2016 17:42	WG870521
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/06/2016 17:42	WG870521
Methyl tert-butyl ether	0.0231		0.000367	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Naphthalene	0.00806		0.00100	0.00500	0.00500	1	05/06/2016 17:42	WG870521
n-Propylbenzene	0.0314		0.000349	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Styrene	U		0.000307	0.00100	0.00100	1	05/06/2016 17:42	WG870521
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/06/2016 17:42	WG870521
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Toluene	0.00152	U	0.000780	0.00500	0.00500	1	05/06/2016 17:42	WG870521
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/06/2016 17:42	WG870521
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 17:42	WG870521
1,2,4-Trimethylbenzene	0.0497		0.000373	0.00100	0.00100	1	05/06/2016 17:42	WG870521
1,3,5-Trimethylbenzene	0.000489	U	0.000387	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/06/2016 17:42	WG870521
o-Xylene	0.00189		0.000341	0.00100	0.00100	1	05/06/2016 17:42	WG870521
m&p-Xylene	0.0496		0.000719	0.00100	0.00100	1	05/06/2016 17:42	WG870521
Xylenes, Total	0.0515		0.00106	0.00300	0.00300	1	05/06/2016 17:42	WG870521
(S) Toluene-d8	107				90.0-115		05/06/2016 17:42	WG870521
(S) Dibromofluoromethane	114				79.0-121		05/06/2016 17:42	WG870521
(S) 4-Bromofluorobenzene	97.8				80.1-120		05/06/2016 17:42	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.49		0.0247	0.100	0.100	1	05/05/2016 20:11	WG869610
(S) o-Terphenyl	114				50.0-150		05/05/2016 20:11	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3720		2.82	10.0	10.0	1	05/05/2016 11:33	WG869821

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	13.7		0.197	0.100	1.00	10	05/09/2016 15:00	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	148		2.60	1.00	50.0	50	05/16/2016 14:45	WG871015
Fluoride	0.630		0.00990	0.100	0.100	1	05/16/2016 14:31	WG871015
Sulfate	2500		3.87	5.00	250	50	05/16/2016 14:45	WG871015

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 02:44	WG869397

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:26	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:47	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00484	J	0.00125	0.00200	0.0100	5	05/05/2016 15:56	WG869319
Arsenic,Dissolved	0.00290	J	0.00125	0.00200	0.0100	5	05/11/2016 16:27	WG870082
Barium	0.0459		0.00180	0.00500	0.0250	5	05/05/2016 15:56	WG869319
Barium,Dissolved	0.0210	J	0.00180	0.00500	0.0250	5	05/11/2016 16:27	WG870082
Boron	0.384		0.0150	0.0200	0.200	10	05/07/2016 10:11	WG870589
Boron,Dissolved	0.416		0.0150	0.0200	0.200	10	05/09/2016 12:07	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/05/2016 15:56	WG869319
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/11/2016 16:27	WG870082
Calcium	626		0.230	1.00	5.00	5	05/05/2016 15:56	WG869319
Chromium	0.00621	J	0.00270	0.00200	0.0100	5	05/05/2016 15:56	WG869319
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/11/2016 16:27	WG870082
Cobalt	0.00161	J	0.00130	0.00200	0.0100	5	05/05/2016 15:56	WG869319
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/11/2016 16:27	WG870082
Iron	4.00		0.0750	0.100	0.500	5	05/05/2016 15:56	WG869319
Iron,Dissolved	0.483	J	0.0750	0.100	0.500	5	05/11/2016 16:27	WG870082
Lead	0.00403	J	0.00120	0.00200	0.0100	5	05/05/2016 15:56	WG869319
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/11/2016 16:27	WG870082
Manganese	0.0747		0.00125	0.00500	0.0250	5	05/05/2016 15:56	WG869319
Manganese,Dissolved	0.00842	B J	0.00125	0.00500	0.0250	5	05/11/2016 16:27	WG870082
Nickel	U		0.00350	0.00200	0.0200	10	05/07/2016 10:11	WG870589
Nickel,Dissolved	U		0.00175	0.00200	0.0100	5	05/18/2016 15:53	WG870082
Potassium	2.26	J	0.185	1.00	5.00	5	05/05/2016 15:56	WG869319
Selenium	0.0188		0.00190	0.00200	0.0100	5	05/05/2016 15:56	WG869319
Selenium,Dissolved	0.0140		0.00190	0.00200	0.0100	5	05/11/2016 16:27	WG870082
Sodium	258		0.550	1.00	5.00	5	05/05/2016 15:56	WG869319





## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.0261	U	0.00165	0.0100	0.0500	5	05/05/2016 15:56	WG869319
Uranium,Dissolved	0.0245	U	0.00165	0.0100	0.0500	5	05/11/2016 16:27	WG870082
Vanadium	0.0304		0.000900	0.00500	0.0250	5	05/05/2016 15:56	WG869319
Vanadium,Dissolved	0.0201	U	0.000900	0.00500	0.0250	5	05/11/2016 16:27	WG870082

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 12:27	WG868995
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 12:27	WG868995
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 12:27	WG868995
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 12:27	WG868995
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 12:27	WG868995
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 12:27	WG868995
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 12:27	WG868995
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 12:27	WG868995
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 12:27	WG868995
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 12:27	WG868995
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 12:27	WG868995
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 12:27	WG868995
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 12:27	WG868995
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 12:27	WG868995
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 12:27	WG868995
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 12:27	WG868995
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 12:27	WG868995
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 12:27	WG868995
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 12:27	WG868995
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 12:27	WG868995
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 12:27	WG868995
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 12:27	WG868995
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 12:27	WG868995
(S) Toluene-d8	101				90.0-115		05/05/2016 12:27	WG868995

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 mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
(S) Dibromofluoromethane	102				79.0-121		05/05/2016 12:27	WG868995
(S) 4-Bromofluorobenzene	97.3				80.1-120		05/05/2016 12:27	WG868995

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	0.0505	J	0.0247	0.100	0.100	1	05/05/2016 20:29	WG869610
(S) o-Terphenyl	101				50.0-150		05/05/2016 20:29	WG869610

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3130		2.82	10.0	10.0	1	05/05/2016 14:25	WG869825

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.326	J	0.197	0.100	1.00	10	05/09/2016 15:01	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	174		2.60	1.00	50.0	50	05/16/2016 14:58	WG871015
Fluoride	0.334		0.00990	0.100	0.100	1	05/16/2016 15:39	WG871015
Sulfate	1610		3.87	5.00	250	50	05/16/2016 14:58	WG871015

## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Selenium	U		0.00740	0.0100	0.0100	1	05/19/2016 21:25	WG873945
Selenium,Dissolved	U		0.00740	0.0100	0.0100	1	05/19/2016 22:01	WG873946

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	U		0.00125	0.00200	0.0100	5	05/05/2016 15:59	WG869319
Arsenic,Dissolved	U		0.00250	0.00200	0.0200	10	05/11/2016 15:13	WG870082
Barium	0.0512		0.00180	0.00500	0.0250	5	05/05/2016 15:59	WG869319
Barium,Dissolved	0.0398	J	0.00360	0.00500	0.0500	10	05/11/2016 15:13	WG870082
Calcium	448		0.230	1.00	5.00	5	05/05/2016 15:59	WG869319
Chromium	0.0453		0.00270	0.00200	0.0100	5	05/05/2016 15:59	WG869319
Chromium,Dissolved	0.0149	B J	0.00540	0.00200	0.0200	10	05/11/2016 15:13	WG870082
Iron	0.213	J	0.0750	0.100	0.500	5	05/05/2016 15:59	WG869319
Iron,Dissolved	U		0.150	0.100	1.00	10	05/11/2016 15:13	WG870082
Lead	0.00204	J	0.00120	0.00200	0.0100	5	05/05/2016 15:59	WG869319
Lead,Dissolved	0.00310	J	0.00240	0.00200	0.0200	10	05/11/2016 15:13	WG870082
Manganese	0.547		0.00125	0.00500	0.0250	5	05/05/2016 15:59	WG869319
Manganese,Dissolved	0.489		0.00250	0.00500	0.0500	10	05/11/2016 15:13	WG870082
Potassium	0.437	J	0.185	1.00	5.00	5	05/05/2016 15:59	WG869319
Sodium	181		0.550	1.00	5.00	5	05/05/2016 15:59	WG869319

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0500	0.0500	0.250	5	05/06/2016 18:06	WG870521
Benzene	0.424		0.00166	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Bromodichloromethane	U		0.00190	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Bromoform	U		0.00234	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Bromomethane	U		0.00433	0.00500	0.0250	5	05/06/2016 18:06	WG870521
n-Butylbenzene	U		0.00180	0.00100	0.00500	5	05/06/2016 18:06	WG870521
sec-Butylbenzene	0.00471	J	0.00182	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Carbon disulfide	0.00186	J	0.00138	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Carbon tetrachloride	U		0.00190	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Chlorobenzene	U		0.00174	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Chlorodibromomethane	U		0.00164	0.00100	0.00500	5	05/06/2016 18:06	WG870521



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.00226	0.00500	0.0250	5	05/06/2016 18:06	WG870521
Chloroform	U		0.00162	0.00500	0.0250	5	05/06/2016 18:06	WG870521
Chloromethane	U		0.00138	0.00250	0.0125	5	05/06/2016 18:06	WG870521
1,2-Dibromoethane	U		0.00190	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,1-Dichloroethane	U		0.00130	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,2-Dichloroethane	U		0.00180	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,1-Dichloroethene	U		0.00199	0.00100	0.00500	5	05/06/2016 18:06	WG870521
cis-1,2-Dichloroethene	U		0.00130	0.00100	0.00500	5	05/06/2016 18:06	WG870521
trans-1,2-Dichloroethene	U		0.00198	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,2-Dichloropropane	U		0.00153	0.00100	0.00500	5	05/06/2016 18:06	WG870521
cis-1,3-Dichloropropene	U		0.00209	0.00100	0.00500	5	05/06/2016 18:06	WG870521
trans-1,3-Dichloropropene	U		0.00210	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Ethylbenzene	0.00606		0.00192	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Isopropylbenzene	0.0359		0.00163	0.00100	0.00500	5	05/06/2016 18:06	WG870521
p-Isopropyltoluene	U		0.00175	0.00100	0.00500	5	05/06/2016 18:06	WG870521
2-Butanone (MEK)	U		0.0196	0.0100	0.0500	5	05/06/2016 18:06	WG870521
2-Hexanone	U		0.0191	0.0100	0.0500	5	05/06/2016 18:06	WG870521
Methylene Chloride	U		0.00500	0.00500	0.0250	5	05/06/2016 18:06	WG870521
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0100	0.0500	5	05/06/2016 18:06	WG870521
Methyl tert-butyl ether	0.00568		0.00184	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Naphthalene	U		0.00500	0.00500	0.0250	5	05/06/2016 18:06	WG870521
n-Propylbenzene	0.0482		0.00174	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Styrene	U		0.00154	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,1,1,2-Tetrachloroethane	U		0.00192	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,1,2,2-Tetrachloroethane	U		0.000650	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Tetrachloroethene	U		0.00186	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Toluene	U		0.00390	0.00500	0.0250	5	05/06/2016 18:06	WG870521
1,1,1-Trichloroethane	U		0.00160	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,1,2-Trichloroethane	U		0.00192	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Trichloroethene	U		0.00199	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,2,4-Trimethylbenzene	0.0145		0.00186	0.00100	0.00500	5	05/06/2016 18:06	WG870521
1,3,5-Trimethylbenzene	U		0.00194	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Vinyl chloride	U		0.00130	0.00100	0.00500	5	05/06/2016 18:06	WG870521
o-Xylene	U		0.00170	0.00100	0.00500	5	05/06/2016 18:06	WG870521
m&p-Xylene	0.0140		0.00360	0.00100	0.00500	5	05/06/2016 18:06	WG870521
Xylenes, Total	0.0140	U	0.00530	0.00300	0.0150	5	05/06/2016 18:06	WG870521
(S) Toluene-d8	107				90.0-115		05/06/2016 18:06	WG870521
(S) Dibromofluoromethane	112				79.0-121		05/06/2016 18:06	WG870521
(S) 4-Bromofluorobenzene	101				80.1-120		05/06/2016 18:06	WG870521

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.38		0.0247	0.100	0.100	1	05/05/2016 20:47	WG869610
(S) o-Terphenyl	113				50.0-150		05/05/2016 20:47	WG869610



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2370		2.82	10.0	10.0	1	05/05/2016 14:25	WG869825

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.393	J	0.197	0.100	1.00	10	05/09/2016 15:02	WG870062

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	199	P1	2.60	1.00	50.0	50	05/16/2016 16:19	WG871015
Fluoride	0.294	J3	0.00990	0.100	0.100	1	05/16/2016 15:52	WG871015
Sulfate	1090	P1	3.87	5.00	250	50	05/16/2016 16:19	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00282	J	0.00125	0.00200	0.0100	5	05/06/2016 10:10	WG869320
Arsenic,Dissolved	0.00282	J	0.00125	0.00200	0.0100	5	05/07/2016 13:35	WG870081
Barium	0.0251		0.00180	0.00500	0.0250	5	05/06/2016 10:10	WG869320
Barium,Dissolved	0.0218	J	0.00180	0.00500	0.0250	5	05/07/2016 13:35	WG870081
Calcium	314		0.230	1.00	5.00	5	05/06/2016 10:10	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:10	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 13:35	WG870081
Iron	0.270	J	0.0750	0.100	0.500	5	05/06/2016 10:10	WG869320
Iron,Dissolved	0.178	J	0.0750	0.100	0.500	5	05/07/2016 13:35	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 10:10	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 13:35	WG870081
Manganese	0.734		0.00125	0.00500	0.0250	5	05/06/2016 10:10	WG869320
Manganese,Dissolved	0.723	V	0.00125	0.00500	0.0250	5	05/07/2016 13:35	WG870081
Potassium	0.611	J	0.185	1.00	5.00	5	05/06/2016 10:10	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:10	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 13:35	WG870081
Sodium	154		0.550	1.00	5.00	5	05/06/2016 10:10	WG869320

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.581		0.0314	0.100	0.100	1	05/03/2016 14:38	WG869047
(S) a,a,a-Trifluorotoluene(FID)	93.5				62.0-128		05/03/2016 14:38	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 05:34	WG868996
Benzene	0.0136		0.000331	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 05:34	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 05:34	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 05:34	WG868996



Collected date/time: 04/28/16 16:40

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 05:34	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 05:34	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 05:34	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 05:34	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 05:34	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 05:34	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 05:34	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Ethylbenzene	0.00354		0.000384	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 05:34	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 05:34	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 05:34	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 05:34	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 05:34	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 05:34	WG868996
Methyl tert-butyl ether	0.0143		0.000367	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 05:34	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 05:34	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,2,4-Trimethylbenzene	0.000753	U	0.000373	0.00100	0.00100	1	05/05/2016 05:34	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 05:34	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 05:34	WG868996
m&p-Xylene	0.00518		0.000719	0.00100	0.00100	1	05/05/2016 05:34	WG868996
Xylenes, Total	0.00518		0.00106	0.00300	0.00300	1	05/05/2016 05:34	WG868996
(S) Toluene-d8	106				90.0-115		05/05/2016 05:34	WG868996
(S) Dibromofluoromethane	105				79.0-121		05/05/2016 05:34	WG868996
(S) 4-Bromofluorobenzene	107				80.1-120		05/05/2016 05:34	WG868996

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.156		0.0247	0.100	0.100	1	05/05/2016 15:22	WG869611
(S) o-Terphenyl	99.7				50.0-150		05/05/2016 15:22	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	32.0		2.82	10.0	10.0	1	05/05/2016 14:25	WG869825

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0770	J J6	0.0197	0.100	0.100	1	05/09/2016 16:11	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	U		0.0519	1.00	1.00	1	05/16/2016 17:10	WG871015
Fluoride	U		0.00990	0.100	0.100	1	05/16/2016 17:10	WG871015
Sulfate	U		0.0774	5.00	5.00	1	05/16/2016 17:10	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	U		0.00125	0.00200	0.0100	5	05/06/2016 09:41	WG869320
Arsenic,Dissolved	U		0.000250	0.00200	0.00200	1	05/09/2016 10:10	WG870081
Barium	U		0.00180	0.00500	0.0250	5	05/06/2016 09:41	WG869320
Barium,Dissolved	U		0.000360	0.00500	0.00500	1	05/09/2016 10:10	WG870081
Calcium	U		0.230	1.00	5.00	5	05/06/2016 09:41	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 09:41	WG869320
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/09/2016 10:10	WG870081
Iron	U		0.0750	0.100	0.500	5	05/06/2016 09:41	WG869320
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/09/2016 10:10	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 09:41	WG869320
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/09/2016 10:10	WG870081
Manganese	0.00146	J	0.00125	0.00500	0.0250	5	05/06/2016 09:41	WG869320
Manganese,Dissolved	0.000429	J	0.000250	0.00500	0.00500	1	05/09/2016 10:10	WG870081
Potassium	U		0.185	1.00	5.00	5	05/06/2016 09:41	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 09:41	WG869320
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/09/2016 10:10	WG870081
Sodium	U		0.550	1.00	5.00	5	05/06/2016 09:41	WG869320

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 18:06	WG869702
(S) a,a,a-Trifluorotoluene(FID)	99.2				62.0-128		05/04/2016 18:06	WG869702

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 06:43	WG868996
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 06:43	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 06:43	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 06:43	WG868996



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 06:43	WG868996
Chloroform	0.000632	U	0.000324	0.00500	0.00500	1	05/05/2016 06:43	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 06:43	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 06:43	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 06:43	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 06:43	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 06:43	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 06:43	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 06:43	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 06:43	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 06:43	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 06:43	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 06:43	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 06:43	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 06:43	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 06:43	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 06:43	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 06:43	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 06:43	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 06:43	WG868996
(S) Toluene-d8	105				90.0-115		05/05/2016 06:43	WG868996
(S) Dibromofluoromethane	107				79.0-121		05/05/2016 06:43	WG868996
(S) 4-Bromofluorobenzene	104				80.1-120		05/05/2016 06:43	WG868996

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0266	U	0.0247	0.100	0.100	1	05/05/2016 15:38	WG869611
(S) o-Terphenyl	96.6				50.0-150		05/05/2016 15:38	WG869611





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2400		2.82	10.0	10.0	1	05/05/2016 14:25	WG869825

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0480	J P1	0.0197	0.100	0.100	1	05/09/2016 16:14	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	207		2.60	1.00	50.0	50	05/16/2016 17:50	WG871015
Fluoride	0.389		0.00990	0.100	0.100	1	05/16/2016 18:30	WG871015
Sulfate	1080		3.87	5.00	250	50	05/16/2016 17:50	WG871015

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00306	J	0.00125	0.00200	0.0100	5	05/06/2016 10:13	WG869320
Arsenic,Dissolved	0.00251	J	0.00125	0.00200	0.0100	5	05/07/2016 13:47	WG870081
Barium	0.0289		0.00180	0.00500	0.0250	5	05/06/2016 10:13	WG869320
Barium,Dissolved	0.0233	J	0.00180	0.00500	0.0250	5	05/07/2016 13:47	WG870081
Calcium	327		0.230	1.00	5.00	5	05/06/2016 10:13	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:13	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 13:47	WG870081
Iron	0.347	J	0.0750	0.100	0.500	5	05/06/2016 10:13	WG869320
Iron,Dissolved	0.191	J	0.0750	0.100	0.500	5	05/07/2016 13:47	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 10:13	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 13:47	WG870081
Manganese	0.823		0.00125	0.00500	0.0250	5	05/06/2016 10:13	WG869320
Manganese,Dissolved	0.675		0.00125	0.00500	0.0250	5	05/07/2016 13:47	WG870081
Potassium	0.612	J	0.185	1.00	5.00	5	05/06/2016 10:13	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:13	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 13:47	WG870081
Sodium	167		0.550	1.00	5.00	5	05/06/2016 10:13	WG869320

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.627		0.0314	0.100	0.100	1	05/03/2016 15:19	WG869047
(S) a,a,q-Trifluorotoluene(FID)	92.9				62.0-128		05/03/2016 15:19	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 07:00	WG868996
Benzene	0.0148		0.000331	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 07:00	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 07:00	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 07:00	WG868996



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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 07:00	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 07:00	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 07:00	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:00	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 07:00	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 07:00	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 07:00	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Ethylbenzene	0.00364		0.000384	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 07:00	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 07:00	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 07:00	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 07:00	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 07:00	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 07:00	WG868996
Methyl tert-butyl ether	0.0143		0.000367	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 07:00	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 07:00	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,2,4-Trimethylbenzene	0.000813	U	0.000373	0.00100	0.00100	1	05/05/2016 07:00	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 07:00	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 07:00	WG868996
m&p-Xylene	0.00531		0.000719	0.00100	0.00100	1	05/05/2016 07:00	WG868996
Xylenes, Total	0.00531		0.00106	0.00300	0.00300	1	05/05/2016 07:00	WG868996
(S) Toluene-d8	108				90.0-115		05/05/2016 07:00	WG868996
(S) Dibromofluoromethane	108				79.0-121		05/05/2016 07:00	WG868996
(S) 4-Bromofluorobenzene	108				80.1-120		05/05/2016 07:00	WG868996

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.180		0.0247	0.100	0.100	1	05/05/2016 15:55	WG869611
(S) o-Terphenyl	97.7				50.0-150		05/05/2016 15:55	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3980		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0410	J	0.0197	0.100	0.100	1	05/09/2016 16:16	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	212		2.60	1.00	50.0	50	05/16/2016 18:57	WG871015
Fluoride	0.568		0.00990	0.100	0.100	1	05/16/2016 18:43	WG871015
Sulfate	2090		3.87	5.00	250	50	05/16/2016 18:57	WG871015

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 02:47	WG869397

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:44	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:50	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0111		0.00125	0.00200	0.0100	5	05/06/2016 10:16	WG869320
Arsenic,Dissolved	0.00902	J	0.00125	0.00200	0.0100	5	05/07/2016 13:49	WG870081
Barium	0.0203	J	0.00180	0.00500	0.0250	5	05/06/2016 10:16	WG869320
Barium,Dissolved	0.0184	J	0.00180	0.00500	0.0250	5	05/07/2016 13:49	WG870081
Boron	0.438		0.0150	0.0200	0.200	10	05/07/2016 10:16	WG870589
Boron,Dissolved	0.439		0.0150	0.0200	0.200	10	05/09/2016 12:12	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 10:16	WG869320
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/07/2016 13:49	WG870081
Calcium	446		0.230	1.00	5.00	5	05/06/2016 10:16	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:16	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 13:49	WG870081
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 10:16	WG869320
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/07/2016 13:49	WG870081
Iron	0.105	J	0.0750	0.100	0.500	5	05/06/2016 10:16	WG869320
Iron,Dissolved	0.139	J	0.0750	0.100	0.500	5	05/07/2016 13:49	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 10:16	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 13:49	WG870081
Manganese	0.364		0.00125	0.00500	0.0250	5	05/06/2016 10:16	WG869320
Manganese,Dissolved	0.333		0.00125	0.00500	0.0250	5	05/07/2016 13:49	WG870081
Nickel	U		0.00175	0.00200	0.0100	5	05/06/2016 10:16	WG869320
Nickel,Dissolved	U		0.00175	0.00200	0.0100	5	05/07/2016 13:49	WG870081
Potassium	0.624	J	0.185	1.00	5.00	5	05/06/2016 10:16	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:16	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 13:49	WG870081
Sodium	227		0.550	1.00	5.00	5	05/06/2016 10:16	WG869320



## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.00235	U	0.00165	0.0100	0.0500	5	05/06/2016 10:16	WG869320
Uranium,Dissolved	0.00241	U	0.00165	0.0100	0.0500	5	05/07/2016 13:49	WG870081
Vanadium	0.000910	U	0.000900	0.00500	0.0250	5	05/06/2016 10:16	WG869320
Vanadium,Dissolved	U		0.000900	0.00500	0.0250	5	05/07/2016 13:49	WG870081

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.575		0.0314	0.100	0.100	1	05/05/2016 05:32	WG869995
(S) a,a,a-Trifluorotoluene(FID)	90.6				62.0-128		05/05/2016 05:32	WG869995

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	0.0368	U	0.0100	0.0500	0.0500	1	05/06/2016 00:39	WG870398
Benzene	0.00473		0.000331	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Bromoform	U		0.000469	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Bromomethane	U		0.000866	0.00500	0.00500	1	05/06/2016 00:39	WG870398
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/06/2016 00:39	WG870398
sec-Butylbenzene	0.00309		0.000365	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Carbon disulfide	0.00442		0.000275	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Chloroethane	U		0.000453	0.00500	0.00500	1	05/06/2016 00:39	WG870398
Chloroform	U		0.000324	0.00500	0.00500	1	05/06/2016 00:39	WG870398
Chloromethane	U		0.000276	0.00250	0.00250	1	05/06/2016 00:39	WG870398
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/06/2016 00:39	WG870398
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/06/2016 00:39	WG870398
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/06/2016 00:39	WG870398
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 00:39	WG870398
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/06/2016 00:39	WG870398
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/06/2016 00:39	WG870398
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/06/2016 00:39	WG870398
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/06/2016 00:39	WG870398
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Ethylbenzene	0.000604	U	0.000384	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Isopropylbenzene	0.0194		0.000326	0.00100	0.00100	1	05/06/2016 00:39	WG870398
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/06/2016 00:39	WG870398
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/06/2016 00:39	WG870398
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/06/2016 00:39	WG870398
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/06/2016 00:39	WG870398
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/06/2016 00:39	WG870398
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Naphthalene	U		0.00100	0.00500	0.00500	1	05/06/2016 00:39	WG870398
n-Propylbenzene	0.00162		0.000349	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Styrene	U		0.000307	0.00100	0.00100	1	05/06/2016 00:39	WG870398
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/06/2016 00:39	WG870398
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Toluene	U		0.000780	0.00500	0.00500	1	05/06/2016 00:39	WG870398
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/06/2016 00:39	WG870398
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 00:39	WG870398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/29/16 08:25

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/06/2016 00:39	WG870398
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/06/2016 00:39	WG870398
o-Xylene	U		0.000341	0.00100	0.00100	1	05/06/2016 00:39	WG870398
m&p-Xylene	0.00283		0.000719	0.00100	0.00100	1	05/06/2016 00:39	WG870398
Xylenes, Total	0.00283	J	0.00106	0.00300	0.00300	1	05/06/2016 00:39	WG870398
(S) Toluene-d8	101				90.0-115		05/06/2016 00:39	WG870398
(S) Dibromofluoromethane	101				79.0-121		05/06/2016 00:39	WG870398
(S) 4-Bromofluorobenzene	96.6				80.1-120		05/06/2016 00:39	WG870398

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.21		0.0247	0.100	0.100	1	05/05/2016 16:11	WG869611
(S) o-Terphenyl	107				50.0-150		05/05/2016 16:11	WG869611

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	63.0		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0390	J	0.0197	0.100	0.100	1	05/09/2016 16:17	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	U		0.0519	1.00	1.00	1	05/16/2016 19:24	WG871015
Fluoride	U		0.00990	0.100	0.100	1	05/16/2016 19:24	WG871015
Sulfate	0.252	J	0.0774	5.00	5.00	1	05/16/2016 19:24	WG871015

## Wet Chemistry by Method D 7511-09e2

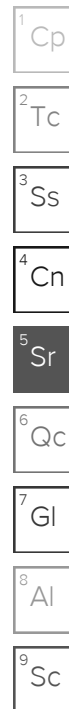
Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 02:56	WG869397

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:47	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:52	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	U		0.00125	0.00200	0.0100	5	05/06/2016 10:18	WG869320
Arsenic,Dissolved	U		0.000250	0.00200	0.00200	1	05/09/2016 10:13	WG870081
Barium	U		0.00180	0.00500	0.0250	5	05/06/2016 10:18	WG869320
Barium,Dissolved	U		0.000360	0.00500	0.00500	1	05/09/2016 10:13	WG870081
Boron	0.0795	J	0.0150	0.0200	0.200	10	05/07/2016 10:21	WG870589
Boron,Dissolved	0.0532		0.00150	0.0200	0.0200	1	05/09/2016 13:00	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 10:18	WG869320
Cadmium,Dissolved	U		0.000160	0.00100	0.00100	1	05/09/2016 10:13	WG870081
Calcium	U		0.230	1.00	5.00	5	05/06/2016 10:18	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:18	WG869320
Chromium,Dissolved	U		0.000540	0.00200	0.00200	1	05/09/2016 10:13	WG870081
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 10:18	WG869320
Cobalt,Dissolved	U		0.000260	0.00200	0.00200	1	05/09/2016 10:13	WG870081
Iron	U		0.0750	0.100	0.500	5	05/06/2016 10:18	WG869320
Iron,Dissolved	U		0.0150	0.100	0.100	1	05/09/2016 10:13	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 10:18	WG869320
Lead,Dissolved	U		0.000240	0.00200	0.00200	1	05/09/2016 10:13	WG870081
Manganese	0.00259	J	0.00125	0.00500	0.0250	5	05/06/2016 10:18	WG869320
Manganese,Dissolved	0.000440	J	0.000250	0.00500	0.00500	1	05/09/2016 10:13	WG870081
Nickel	U		0.00175	0.00200	0.0100	5	05/06/2016 10:18	WG869320
Nickel,Dissolved	0.000423	J	0.000350	0.00200	0.00200	1	05/09/2016 10:13	WG870081
Potassium	U		0.185	1.00	5.00	5	05/06/2016 10:18	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:18	WG869320
Selenium,Dissolved	U		0.000380	0.00200	0.00200	1	05/09/2016 10:13	WG870081
Sodium	U		0.550	1.00	5.00	5	05/06/2016 10:18	WG869320





## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/06/2016 10:18	WG869320
Uranium,Dissolved	U		0.000330	0.0100	0.0100	1	05/09/2016 10:13	WG870081
Vanadium	0.000912	U	0.000900	0.00500	0.0250	5	05/06/2016 10:18	WG869320
Vanadium,Dissolved	0.000317	U	0.000180	0.00500	0.00500	1	05/09/2016 10:13	WG870081

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 16:01	WG869047
(S) a,a,a-Trifluorotoluene(FID)	98.9				62.0-128		05/03/2016 16:01	WG869047

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 07:35	WG868996
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 07:35	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 07:35	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 07:35	WG868996
Chloroform	0.000701	U	0.000324	0.00500	0.00500	1	05/05/2016 07:35	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 07:35	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 07:35	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 07:35	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 07:35	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:35	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 07:35	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 07:35	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 07:35	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 07:35	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 07:35	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 07:35	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 07:35	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 07:35	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 07:35	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 07:35	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 07:35	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 07:35	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 07:35	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 07:35	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 07:35	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:35	WG868996

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/29/16 09:10

L832603

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

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 07:35	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 07:35	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 07:35	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 07:35	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 07:35	WG868996
(S) Toluene-d8	106				90.0-115		05/05/2016 07:35	WG868996
(S) Dibromofluoromethane	108				79.0-121		05/05/2016 07:35	WG868996
(S) 4-Bromofluorobenzene	105				80.1-120		05/05/2016 07:35	WG868996

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	U		0.0247	0.100	0.100	1	05/05/2016 16:27	WG869611
(S) o-Terphenyl	97.1				50.0-150		05/05/2016 16:27	WG869611

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





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3200		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.0650	J J6	0.0197	0.100	0.100	1	05/09/2016 16:24	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	190		2.60	1.00	50.0	50	05/10/2016 22:08	WG871034
Fluoride	1.00		0.00990	0.100	0.100	1	05/10/2016 21:49	WG871034
Sulfate	2140		3.87	5.00	250	50	05/10/2016 22:08	WG871034

## Wet Chemistry by Method D 7511-09e2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 02:59	WG869397

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:54	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 12:54	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0121		0.00125	0.00200	0.0100	5	05/06/2016 10:21	WG869320
Arsenic,Dissolved	0.00871	J	0.00125	0.00200	0.0100	5	05/07/2016 13:59	WG870081
Barium	0.0193	J	0.00180	0.00500	0.0250	5	05/06/2016 10:21	WG869320
Barium,Dissolved	0.0169	J	0.00180	0.00500	0.0250	5	05/07/2016 13:59	WG870081
Boron	0.449		0.0150	0.0200	0.200	10	05/07/2016 10:26	WG870589
Boron,Dissolved	0.431		0.0150	0.0200	0.200	10	05/09/2016 12:21	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 10:21	WG869320
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/07/2016 13:59	WG870081
Calcium	447		0.230	1.00	5.00	5	05/06/2016 10:21	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:21	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 13:59	WG870081
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 10:21	WG869320
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/07/2016 13:59	WG870081
Iron	0.165	J	0.0750	0.100	0.500	5	05/06/2016 10:21	WG869320
Iron,Dissolved	0.170	J	0.0750	0.100	0.500	5	05/07/2016 13:59	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 10:21	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 13:59	WG870081
Manganese	0.377		0.00125	0.00500	0.0250	5	05/06/2016 10:21	WG869320
Manganese,Dissolved	0.339		0.00125	0.00500	0.0250	5	05/07/2016 13:59	WG870081
Nickel	U		0.00175	0.00200	0.0100	5	05/06/2016 10:21	WG869320
Nickel,Dissolved	U		0.00175	0.00200	0.0100	5	05/07/2016 13:59	WG870081
Potassium	0.588	J	0.185	1.00	5.00	5	05/06/2016 10:21	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:21	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 13:59	WG870081
Sodium	226		0.550	1.00	5.00	5	05/06/2016 10:21	WG869320



Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.00254	U	0.00165	0.0100	0.0500	5	05/06/2016 10:21	WG869320
Uranium,Dissolved	0.00239	U	0.00165	0.0100	0.0500	5	05/07/2016 13:59	WG870081
Vanadium	0.00110	U	0.000900	0.00500	0.0250	5	05/06/2016 10:21	WG869320
Vanadium,Dissolved	0.00129	U	0.000900	0.00500	0.0250	5	05/07/2016 13:59	WG870081

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.396		0.0314	0.100	0.100	1	05/05/2016 05:54	WG869995
(S) a,a,a-Trifluorotoluene(FID)	90.5				62.0-128		05/05/2016 05:54	WG869995

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 07:52	WG868996
Benzene	0.00565		0.000331	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 07:52	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 07:52	WG868996
sec-Butylbenzene	0.00268		0.000365	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Carbon disulfide	0.000403	U	0.000275	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 07:52	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 07:52	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 07:52	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 07:52	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 07:52	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 07:52	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:52	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 07:52	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 07:52	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 07:52	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 07:52	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Ethylbenzene	0.000533	U	0.000384	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Isopropylbenzene	0.0162		0.000326	0.00100	0.00100	1	05/05/2016 07:52	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 07:52	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 07:52	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 07:52	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 07:52	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 07:52	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 07:52	WG868996
n-Propylbenzene	0.00159		0.000349	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 07:52	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 07:52	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 07:52	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 07:52	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:52	WG868996

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



Collected date/time: 04/29/16 10:00

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	0.000402	J	0.000373	0.00100	0.00100	1	05/05/2016 07:52	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 07:52	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 07:52	WG868996
m&p-Xylene	0.00272		0.000719	0.00100	0.00100	1	05/05/2016 07:52	WG868996
Xylenes, Total	0.00272	J	0.00106	0.00300	0.00300	1	05/05/2016 07:52	WG868996
(S) Toluene-d8	109				90.0-115		05/05/2016 07:52	WG868996
(S) Dibromofluoromethane	110				79.0-121		05/05/2016 07:52	WG868996
(S) 4-Bromofluorobenzene	103				80.1-120		05/05/2016 07:52	WG868996

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.19		0.0247	0.100	0.100	1	05/05/2016 16:44	WG869611
(S) o-Terphenyl	107				50.0-150		05/05/2016 16:44	WG869611

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1850		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.376	J	0.197	0.100	1.00	10	05/09/2016 16:18	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	277		2.60	1.00	50.0	50	05/10/2016 22:40	WG871034
Fluoride	1.67		0.00990	0.100	0.100	1	05/10/2016 22:24	WG871034
Sulfate	6.07		0.0774	5.00	5.00	1	05/10/2016 22:24	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0100		0.00125	0.00200	0.0100	5	05/06/2016 10:24	WG869320
Arsenic,Dissolved	0.00187	J	0.00125	0.00200	0.0100	5	05/07/2016 14:01	WG870081
Barium	10.2		0.00180	0.00500	0.0250	5	05/06/2016 10:24	WG869320
Barium,Dissolved	2.06		0.00180	0.00500	0.0250	5	05/07/2016 14:01	WG870081
Calcium	727		0.230	1.00	5.00	5	05/06/2016 10:24	WG869320
Chromium	0.00340	J	0.00270	0.00200	0.0100	5	05/06/2016 10:24	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:01	WG870081
Iron	1.78		0.0750	0.100	0.500	5	05/06/2016 10:24	WG869320
Iron,Dissolved	0.278	J	0.0750	0.100	0.500	5	05/07/2016 14:01	WG870081
Lead	0.00200	J	0.00120	0.00200	0.0100	5	05/06/2016 10:24	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:01	WG870081
Manganese	0.454		0.00125	0.00500	0.0250	5	05/06/2016 10:24	WG869320
Manganese,Dissolved	0.0956		0.00125	0.00500	0.0250	5	05/07/2016 14:01	WG870081
Potassium	3.22	J	0.185	1.00	5.00	5	05/06/2016 10:24	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:24	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:01	WG870081
Sodium	381		0.550	1.00	5.00	5	05/06/2016 10:24	WG869320

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	4.89		0.0314	0.100	0.100	1	05/03/2016 18:41	WG869047
(S) a,a,q-Trifluorotoluene(FID)	91.8				62.0-128		05/03/2016 18:41	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 08:09	WG868996
Benzene	1.28		0.0166	0.00100	0.0500	50	05/06/2016 01:01	WG870398
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 08:09	WG868996
n-Butylbenzene	0.000878	J	0.000361	0.00100	0.00100	1	05/05/2016 08:09	WG868996
sec-Butylbenzene	0.00613		0.000365	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 08:09	WG868996



Collected date/time: 04/29/16 11:05

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 08:09	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 08:09	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 08:09	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 08:09	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 08:09	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 08:09	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 08:09	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Ethylbenzene	0.00466		0.000384	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Isopropylbenzene	0.0417		0.000326	0.00100	0.00100	1	05/05/2016 08:09	WG868996
p-Isopropyltoluene	0.00123		0.000350	0.00100	0.00100	1	05/05/2016 08:09	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 08:09	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 08:09	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 08:09	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 08:09	WG868996
Methyl tert-butyl ether	2.44		0.0184	0.00100	0.0500	50	05/06/2016 01:01	WG870398
Naphthalene	0.00773		0.00100	0.00500	0.00500	1	05/05/2016 08:09	WG868996
n-Propylbenzene	0.0602		0.000349	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Toluene	0.00399	U	0.000780	0.00500	0.00500	1	05/05/2016 08:09	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,2,4-Trimethylbenzene	0.00111		0.000373	0.00100	0.00100	1	05/05/2016 08:09	WG868996
1,3,5-Trimethylbenzene	0.000591	U	0.000387	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 08:09	WG868996
o-Xylene	0.00145		0.000341	0.00100	0.00100	1	05/05/2016 08:09	WG868996
m&p-Xylene	0.00427		0.000719	0.00100	0.00100	1	05/05/2016 08:09	WG868996
Xylenes, Total	0.00572		0.00106	0.00300	0.00300	1	05/05/2016 08:09	WG868996
(S) Toluene-d8	108				90.0-115		05/05/2016 08:09	WG868996
(S) Toluene-d8	97.6				90.0-115		05/06/2016 01:01	WG870398
(S) Dibromofluoromethane	97.7				79.0-121		05/06/2016 01:01	WG870398
(S) Dibromofluoromethane	104				79.0-121		05/05/2016 08:09	WG868996
(S) 4-Bromofluorobenzene	101				80.1-120		05/05/2016 08:09	WG868996
(S) 4-Bromofluorobenzene	96.9				80.1-120		05/06/2016 01:01	WG870398

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	6.80		0.0247	0.100	0.100	1	05/05/2016 17:00	WG869611
(S) o-Terphenyl	97.0				50.0-150		05/05/2016 17:00	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3300		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.374	J	0.197	0.100	1.00	10	05/09/2016 16:19	WG870487

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	126		2.60	1.00	50.0	50	05/11/2016 00:15	WG871034
Fluoride	1.28		0.00990	0.100	0.100	1	05/10/2016 23:59	WG871034
Sulfate	1790		3.87	5.00	250	50	05/11/2016 00:15	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0763		0.00125	0.00200	0.0100	5	05/06/2016 10:26	WG869320
Arsenic,Dissolved	0.0145		0.00125	0.00200	0.0100	5	05/07/2016 14:04	WG870081
Barium	0.113		0.00180	0.00500	0.0250	5	05/06/2016 10:26	WG869320
Barium,Dissolved	0.0221	J	0.00180	0.00500	0.0250	5	05/07/2016 14:04	WG870081
Calcium	2370		0.230	1.00	5.00	5	05/06/2016 10:26	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:26	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:04	WG870081
Iron	0.976		0.0750	0.100	0.500	5	05/06/2016 10:26	WG869320
Iron,Dissolved	0.121	J	0.0750	0.100	0.500	5	05/07/2016 14:04	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 10:26	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:04	WG870081
Manganese	2.34		0.00125	0.00500	0.0250	5	05/06/2016 10:26	WG869320
Manganese,Dissolved	0.466		0.00125	0.00500	0.0250	5	05/07/2016 14:04	WG870081
Potassium	2.61	J	0.185	1.00	5.00	5	05/06/2016 10:26	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:26	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:04	WG870081
Sodium	711		0.550	1.00	5.00	5	05/06/2016 10:26	WG869320

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 19:02	WG869047
(S) a,a,a-Trifluorotoluene(FID)	96.6				62.0-128		05/03/2016 19:02	WG869047

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

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 08:27	WG868996
Benzene	0.00329		0.000331	0.00100	0.00100	1	05/06/2016 01:24	WG870398
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 08:27	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 08:27	WG868996
sec-Butylbenzene	0.00186		0.000365	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 08:27	WG868996



Collected date/time: 04/29/16 10:15

L832603

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 08:27	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 08:27	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 08:27	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 08:27	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 08:27	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 08:27	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 08:27	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Isopropylbenzene	0.0111		0.000326	0.00100	0.00100	1	05/05/2016 08:27	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 08:27	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 08:27	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 08:27	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 08:27	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 08:27	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/06/2016 01:24	WG870398
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 08:27	WG868996
n-Propylbenzene	0.000518	U	0.000349	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 08:27	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 08:27	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 08:27	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 08:27	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 08:27	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 08:27	WG868996
(S) Toluene-d8	106				90.0-115		05/05/2016 08:27	WG868996
(S) Toluene-d8	102				90.0-115		05/06/2016 01:24	WG870398
(S) Dibromofluoromethane	100				79.0-121		05/06/2016 01:24	WG870398
(S) Dibromofluoromethane	108				79.0-121		05/05/2016 08:27	WG868996
(S) 4-Bromofluorobenzene	104				80.1-120		05/05/2016 08:27	WG868996
(S) 4-Bromofluorobenzene	93.9				80.1-120		05/06/2016 01:24	WG870398

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.919		0.0247	0.100	0.100	1	05/05/2016 17:17	WG869611
(S) o-Terphenyl	105				50.0-150		05/05/2016 17:17	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1920		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	1.73		0.197	0.100	1.00	10	05/10/2016 09:26	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	160		2.60	1.00	50.0	50	05/11/2016 00:47	WG871034
Fluoride	1.79		0.00990	0.100	0.100	1	05/11/2016 00:31	WG871034
Sulfate	995		3.87	5.00	250	50	05/11/2016 00:47	WG871034

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 03:08	WG869397

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:57	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 13:01	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0193		0.00125	0.00200	0.0100	5	05/06/2016 10:29	WG869320
Arsenic,Dissolved	0.00370	J	0.00125	0.00200	0.0100	5	05/07/2016 14:06	WG870081
Barium	0.0436		0.00180	0.00500	0.0250	5	05/06/2016 10:29	WG869320
Barium,Dissolved	0.00904	J	0.00180	0.00500	0.0250	5	05/07/2016 14:06	WG870081
Boron	0.736		0.0150	0.0200	0.200	10	05/07/2016 10:30	WG870589
Boron,Dissolved	0.749		0.0150	0.0200	0.200	10	05/09/2016 12:26	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 10:29	WG869320
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/07/2016 14:06	WG870081
Calcium	778		0.230	1.00	5.00	5	05/06/2016 10:29	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:29	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:06	WG870081
Cobalt	0.00155	J	0.00130	0.00200	0.0100	5	05/06/2016 10:29	WG869320
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/07/2016 14:06	WG870081
Iron	0.158	J	0.0750	0.100	0.500	5	05/06/2016 10:29	WG869320
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 14:06	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 10:29	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:06	WG870081
Manganese	0.230		0.00125	0.00500	0.0250	5	05/06/2016 10:29	WG869320
Manganese,Dissolved	0.0350		0.00125	0.00500	0.0250	5	05/07/2016 14:06	WG870081
Nickel	0.0263		0.00175	0.00200	0.0100	5	05/06/2016 10:29	WG869320
Nickel,Dissolved	0.00641	J	0.00175	0.00200	0.0100	5	05/07/2016 14:06	WG870081
Potassium	1.20	J	0.185	1.00	5.00	5	05/06/2016 10:29	WG869320
Selenium	0.00545	J	0.00190	0.00200	0.0100	5	05/06/2016 10:29	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:06	WG870081
Sodium	1350		0.550	1.00	5.00	5	05/06/2016 10:29	WG869320

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc





## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.0438	U	0.00165	0.0100	0.0500	5	05/06/2016 10:29	WG869320
Uranium,Dissolved	0.00809	U	0.00165	0.0100	0.0500	5	05/07/2016 14:06	WG870081
Vanadium	0.123		0.000900	0.00500	0.0250	5	05/06/2016 10:29	WG869320
Vanadium,Dissolved	0.0260		0.000900	0.00500	0.0250	5	05/07/2016 14:06	WG870081

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 01:09	WG869048
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/03/2016 01:09	WG869048

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

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 08:44	WG868996
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 08:44	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 08:44	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 08:44	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 08:44	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 08:44	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 08:44	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 08:44	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 08:44	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 08:44	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 08:44	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 08:44	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 08:44	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 08:44	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 08:44	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 08:44	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 08:44	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 08:44	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 08:44	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 08:44	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 08:44	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 08:44	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 08:44	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 08:44	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 08:44	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 08:44	WG868996

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/29/16 10:50

L832603

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

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 08:44	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 08:44	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 08:44	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 08:44	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 08:44	WG868996
(S) Toluene-d8	104				90.0-115		05/05/2016 08:44	WG868996
(S) Dibromofluoromethane	106				79.0-121		05/05/2016 08:44	WG868996
(S) 4-Bromofluorobenzene	102				80.1-120		05/05/2016 08:44	WG868996

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	0.324		0.0247	0.100	0.100	1	05/05/2016 17:33	WG869611
(S) o-Terphenyl	102				50.0-150		05/05/2016 17:33	WG869611

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



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	2190		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.384	J	0.197	0.100	1.00	10	05/10/2016 09:27	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	204		2.60	1.00	50.0	50	05/11/2016 01:19	WG871034
Fluoride	1.90		0.00990	0.100	0.100	1	05/11/2016 01:03	WG871034
Sulfate	848		3.87	5.00	250	50	05/11/2016 01:19	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0331		0.00125	0.00200	0.0100	5	05/06/2016 10:32	WG869320
Arsenic,Dissolved	0.00707	J	0.00125	0.00200	0.0100	5	05/07/2016 14:08	WG870081
Barium	0.299		0.00180	0.00500	0.0250	5	05/06/2016 10:32	WG869320
Barium,Dissolved	0.0472		0.00180	0.00500	0.0250	5	05/07/2016 14:08	WG870081
Calcium	707		0.230	1.00	5.00	5	05/06/2016 10:32	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:32	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:08	WG870081
Iron	0.677		0.0750	0.100	0.500	5	05/06/2016 10:32	WG869320
Iron,Dissolved	0.0876	J	0.0750	0.100	0.500	5	05/07/2016 14:08	WG870081
Lead	0.00147	J	0.00120	0.00200	0.0100	5	05/06/2016 10:32	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:08	WG870081
Manganese	0.624		0.00125	0.00500	0.0250	5	05/06/2016 10:32	WG869320
Manganese,Dissolved	0.147		0.00125	0.00500	0.0250	5	05/07/2016 14:08	WG870081
Potassium	4.01	J	0.185	1.00	5.00	5	05/06/2016 10:32	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:32	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:08	WG870081
Sodium	2200		0.550	1.00	5.00	5	05/06/2016 10:32	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	1.93		0.0314	0.100	0.100	1	05/03/2016 01:30	WG869048
(S) a,a,a-Trifluorotoluene(FID)	86.0				62.0-128		05/03/2016 01:30	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0500	0.0500	0.250	5	05/05/2016 09:01	WG868996
Benzene	0.532		0.00166	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Bromodichloromethane	U		0.00190	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Bromoform	U		0.00234	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Bromomethane	U		0.00433	0.00500	0.0250	5	05/05/2016 09:01	WG868996
n-Butylbenzene	0.00210	J	0.00180	0.00100	0.00500	5	05/05/2016 09:01	WG868996
sec-Butylbenzene	0.00501		0.00182	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Carbon disulfide	U		0.00138	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Carbon tetrachloride	U		0.00190	0.00100	0.00500	5	05/05/2016 09:01	WG868996



Collected date/time: 04/29/16 10:05

L832603

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00174	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Chlorodibromomethane	U		0.00164	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Chloroethane	U		0.00226	0.00500	0.0250	5	05/05/2016 09:01	WG868996
Chloroform	U		0.00162	0.00500	0.0250	5	05/05/2016 09:01	WG868996
Chloromethane	U		0.00138	0.00250	0.0125	5	05/05/2016 09:01	WG868996
1,2-Dibromoethane	U		0.00190	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,1-Dichloroethane	U		0.00130	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,2-Dichloroethane	U		0.00180	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,1-Dichloroethene	U		0.00199	0.00100	0.00500	5	05/05/2016 09:01	WG868996
cis-1,2-Dichloroethene	U		0.00130	0.00100	0.00500	5	05/05/2016 09:01	WG868996
trans-1,2-Dichloroethene	U		0.00198	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,2-Dichloropropane	U		0.00153	0.00100	0.00500	5	05/05/2016 09:01	WG868996
cis-1,3-Dichloropropene	U		0.00209	0.00100	0.00500	5	05/05/2016 09:01	WG868996
trans-1,3-Dichloropropene	U		0.00210	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Ethylbenzene	0.00864		0.00192	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Isopropylbenzene	0.0375		0.00163	0.00100	0.00500	5	05/05/2016 09:01	WG868996
p-Isopropyltoluene	U		0.00175	0.00100	0.00500	5	05/05/2016 09:01	WG868996
2-Butanone (MEK)	U		0.0196	0.0100	0.0500	5	05/05/2016 09:01	WG868996
2-Hexanone	U		0.0191	0.0100	0.0500	5	05/05/2016 09:01	WG868996
Methylene Chloride	U		0.00500	0.00500	0.0250	5	05/05/2016 09:01	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0100	0.0500	5	05/05/2016 09:01	WG868996
Methyl tert-butyl ether	U		0.00184	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Naphthalene	U		0.00500	0.00500	0.0250	5	05/05/2016 09:01	WG868996
n-Propylbenzene	0.0359		0.00174	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Styrene	U		0.00154	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,1,1,2-Tetrachloroethane	U		0.00192	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,1,2,2-Tetrachloroethane	U		0.000650	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Tetrachloroethene	U		0.00186	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Toluene	0.00837	U	0.00390	0.00500	0.0250	5	05/05/2016 09:01	WG868996
1,1,1-Trichloroethane	U		0.00160	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,1,2-Trichloroethane	U		0.00192	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Trichloroethene	U		0.00199	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,2,4-Trimethylbenzene	0.00418	U	0.00186	0.00100	0.00500	5	05/05/2016 09:01	WG868996
1,3,5-Trimethylbenzene	U		0.00194	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Vinyl chloride	U		0.00130	0.00100	0.00500	5	05/05/2016 09:01	WG868996
o-Xylene	U		0.00170	0.00100	0.00500	5	05/05/2016 09:01	WG868996
m&p-Xylene	0.0142		0.00360	0.00100	0.00500	5	05/05/2016 09:01	WG868996
Xylenes, Total	0.0142	U	0.00530	0.00300	0.0150	5	05/05/2016 09:01	WG868996
(S) Toluene-d8	105				90.0-115		05/05/2016 09:01	WG868996
(S) Dibromofluoromethane	105				79.0-121		05/05/2016 09:01	WG868996
(S) 4-Bromofluorobenzene	103				80.1-120		05/05/2016 09:01	WG868996

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5.92		0.0247	0.100	0.100	1	05/05/2016 17:50	WG869611
(S) o-Terphenyl	132				50.0-150		05/05/2016 17:50	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1360		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.765	J	0.197	0.100	1.00	10	05/10/2016 09:28	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	99.0		0.0519	1.00	1.00	1	05/10/2016 22:55	WG871034
Fluoride	1.53		0.00990	0.100	0.100	1	05/10/2016 22:55	WG871034
Sulfate	2100		3.87	5.00	250	50	05/15/2016 20:23	WG872424

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0854		0.00125	0.00200	0.0100	5	05/06/2016 10:34	WG869320
Arsenic,Dissolved	0.0178		0.00125	0.00200	0.0100	5	05/07/2016 14:11	WG870081
Barium	0.300		0.00180	0.00500	0.0250	5	05/06/2016 10:34	WG869320
Barium,Dissolved	0.0519		0.00180	0.00500	0.0250	5	05/07/2016 14:11	WG870081
Calcium	555		0.230	1.00	5.00	5	05/06/2016 10:34	WG869320
Chromium	0.00399	J	0.00270	0.00200	0.0100	5	05/06/2016 10:34	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:11	WG870081
Iron	2.77		0.0750	0.100	0.500	5	05/06/2016 10:34	WG869320
Iron,Dissolved	0.330	J	0.0750	0.100	0.500	5	05/07/2016 14:11	WG870081
Lead	0.00565	J	0.00120	0.00200	0.0100	5	05/06/2016 10:34	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:11	WG870081
Manganese	6.26		0.00125	0.00500	0.0250	5	05/06/2016 10:34	WG869320
Manganese,Dissolved	1.25		0.00125	0.00500	0.0250	5	05/07/2016 14:11	WG870081
Potassium	1.19	J	0.185	1.00	5.00	5	05/06/2016 10:34	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:34	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:11	WG870081
Sodium	1380		0.550	1.00	5.00	5	05/06/2016 10:34	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	0.735		0.0314	0.100	0.100	1	05/03/2016 01:52	WG869048
(S) a,a,q-Trifluorotoluene(FID)	89.8				62.0-128		05/03/2016 01:52	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 09:18	WG868996
Benzene	0.0132		0.000331	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 09:18	WG868996
n-Butylbenzene	0.00224		0.000361	0.00100	0.00100	1	05/05/2016 09:18	WG868996
sec-Butylbenzene	0.00576		0.000365	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 09:18	WG868996



Collected date/time: 04/29/16 09:20

L832603

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 09:18	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 09:18	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 09:18	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 09:18	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 09:18	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 09:18	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 09:18	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Ethylbenzene	0.000927	U	0.000384	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Isopropylbenzene	0.0260		0.000326	0.00100	0.00100	1	05/05/2016 09:18	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 09:18	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 09:18	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 09:18	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 09:18	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 09:18	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 09:18	WG868996
n-Propylbenzene	0.0212		0.000349	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 09:18	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,2,4-Trimethylbenzene	0.000871	U	0.000373	0.00100	0.00100	1	05/05/2016 09:18	WG868996
1,3,5-Trimethylbenzene	0.000525	U	0.000387	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 09:18	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 09:18	WG868996
m&p-Xylene	0.000733	U	0.000719	0.00100	0.00100	1	05/05/2016 09:18	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 09:18	WG868996
(S) Toluene-d8	109				90.0-115		05/05/2016 09:18	WG868996
(S) Dibromofluoromethane	107				79.0-121		05/05/2016 09:18	WG868996
(S) 4-Bromofluorobenzene	96.6				80.1-120		05/05/2016 09:18	WG868996

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.55		0.0247	0.100	0.100	1	05/05/2016 18:06	WG869611
(S) o-Terphenyl	114				50.0-150		05/05/2016 18:06	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1580		2.82	10.0	10.0	1	05/06/2016 23:56	WG870203

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.28	P1	0.197	0.100	1.00	10	05/10/2016 09:29	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	266		0.519	1.00	10.0	10	05/15/2016 21:38	WG872424
Fluoride	1.22		0.00990	0.100	0.100	1	05/11/2016 01:35	WG871034
Sulfate	286		0.774	5.00	50.0	10	05/15/2016 21:38	WG872424

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.341		0.00125	0.00200	0.0100	5	05/06/2016 10:46	WG869320
Arsenic,Dissolved	0.0646		0.00125	0.00200	0.0100	5	05/07/2016 14:13	WG870081
Barium	0.372		0.00180	0.00500	0.0250	5	05/06/2016 10:46	WG869320
Barium,Dissolved	0.0812		0.00180	0.00500	0.0250	5	05/07/2016 14:13	WG870081
Calcium	1010		0.230	1.00	5.00	5	05/06/2016 10:46	WG869320
Chromium	0.00347	J	0.00270	0.00200	0.0100	5	05/06/2016 10:46	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:13	WG870081
Iron	15.4		0.0750	0.100	0.500	5	05/06/2016 10:46	WG869320
Iron,Dissolved	2.77		0.0750	0.100	0.500	5	05/07/2016 14:13	WG870081
Lead	0.00336	J	0.00120	0.00200	0.0100	5	05/06/2016 10:46	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:13	WG870081
Manganese	12.9		0.00125	0.00500	0.0250	5	05/06/2016 10:46	WG869320
Manganese,Dissolved	2.52		0.00125	0.00500	0.0250	5	05/07/2016 14:13	WG870081
Potassium	1.92	J	0.185	1.00	5.00	5	05/06/2016 10:46	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:46	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:13	WG870081
Sodium	560		0.550	1.00	5.00	5	05/06/2016 10:46	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.620		0.0314	0.100	0.100	1	05/03/2016 02:13	WG869048
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/03/2016 02:13	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 09:36	WG868996
Benzene	0.0231		0.000331	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 09:36	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 09:36	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 09:36	WG868996



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 09:36	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 09:36	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 09:36	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 09:36	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 09:36	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 09:36	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 09:36	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Ethylbenzene	0.00494		0.000384	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Isopropylbenzene	0.00111		0.000326	0.00100	0.00100	1	05/05/2016 09:36	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 09:36	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 09:36	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 09:36	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 09:36	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 09:36	WG868996
Methyl tert-butyl ether	0.846		0.00734	0.00100	0.0200	20	05/06/2016 01:46	WG870398
Naphthalene	0.00104	U	0.00100	0.00500	0.00500	1	05/05/2016 09:36	WG868996
n-Propylbenzene	0.00135		0.000349	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 09:36	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,2,4-Trimethylbenzene	0.00209		0.000373	0.00100	0.00100	1	05/05/2016 09:36	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 09:36	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 09:36	WG868996
m&p-Xylene	0.00153		0.000719	0.00100	0.00100	1	05/05/2016 09:36	WG868996
Xylenes, Total	0.00153	U	0.00106	0.00300	0.00300	1	05/05/2016 09:36	WG868996
(S) Toluene-d8	107				90.0-115		05/05/2016 09:36	WG868996
(S) Toluene-d8	98.5				90.0-115		05/06/2016 01:46	WG870398
(S) Dibromofluoromethane	100				79.0-121		05/06/2016 01:46	WG870398
(S) Dibromofluoromethane	107				79.0-121		05/05/2016 09:36	WG868996
(S) 4-Bromofluorobenzene	103				80.1-120		05/05/2016 09:36	WG868996
(S) 4-Bromofluorobenzene	95.7				80.1-120		05/06/2016 01:46	WG870398

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2.45		0.0247	0.100	0.100	1	05/05/2016 19:29	WG869611
(S) o-Terphenyl	106				50.0-150		05/05/2016 19:29	WG869611





## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3040		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.470	J	0.197	0.100	1.00	10	05/10/2016 09:31	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	135		2.60	1.00	50.0	50	05/11/2016 03:10	WG871034
Fluoride	1.42		0.00990	0.100	0.100	1	05/11/2016 02:54	WG871034
Sulfate	672		3.87	5.00	250	50	05/11/2016 03:10	WG871034

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 03:11	WG869397

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 16:59	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 13:03	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0610		0.00125	0.00200	0.0100	5	05/06/2016 10:48	WG869320
Arsenic,Dissolved	0.0116		0.00125	0.00200	0.0100	5	05/07/2016 14:16	WG870081
Barium	0.331		0.00180	0.00500	0.0250	5	05/06/2016 10:48	WG869320
Barium,Dissolved	0.0685		0.00180	0.00500	0.0250	5	05/07/2016 14:16	WG870081
Boron	1.23		0.0150	0.0200	0.200	10	05/07/2016 10:48	WG870589
Boron,Dissolved	1.15		0.0150	0.0200	0.200	10	05/09/2016 12:41	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 10:48	WG869320
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/07/2016 14:16	WG870081
Calcium	1500		0.230	1.00	5.00	5	05/06/2016 10:48	WG869320
Chromium	0.00274	J	0.00270	0.00200	0.0100	5	05/06/2016 10:48	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:16	WG870081
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 10:48	WG869320
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/07/2016 14:16	WG870081
Iron	0.342	J	0.0750	0.100	0.500	5	05/06/2016 10:48	WG869320
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 14:16	WG870081
Lead	0.0520		0.00120	0.00200	0.0100	5	05/06/2016 10:48	WG869320
Lead,Dissolved	0.00812	J	0.00120	0.00200	0.0100	5	05/07/2016 14:16	WG870081
Manganese	0.164		0.00125	0.00500	0.0250	5	05/06/2016 10:48	WG869320
Manganese,Dissolved	0.0342		0.00125	0.00500	0.0250	5	05/07/2016 14:16	WG870081
Nickel	0.0226		0.00175	0.00200	0.0100	5	05/06/2016 10:48	WG869320
Nickel,Dissolved	0.00599	J	0.00175	0.00200	0.0100	5	05/07/2016 14:16	WG870081
Potassium	4.06	J	0.185	1.00	5.00	5	05/06/2016 10:48	WG869320
Selenium	0.00220	J	0.00190	0.00200	0.0100	5	05/06/2016 10:48	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:16	WG870081
Sodium	450		0.550	1.00	5.00	5	05/06/2016 10:48	WG869320



## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/06/2016 10:48	WG869320
Uranium,Dissolved	U		0.00165	0.0100	0.0500	5	05/07/2016 14:16	WG870081
Vanadium	0.0158	U	0.000900	0.00500	0.0250	5	05/06/2016 10:48	WG869320
Vanadium,Dissolved	0.00371	U	0.000900	0.00500	0.0250	5	05/07/2016 14:16	WG870081

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	4.83		0.314	0.100	1.00	10	05/03/2016 02:34	WG869048
(S) a,a,a-Trifluorotoluene(FID)	98.5				62.0-128		05/03/2016 02:34	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.100	0.0500	0.500	10	05/05/2016 09:53	WG868996
Benzene	1.37		0.00331	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Bromoform	U		0.00469	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Bromomethane	U		0.00866	0.00500	0.0500	10	05/05/2016 09:53	WG868996
n-Butylbenzene	U		0.00361	0.00100	0.0100	10	05/05/2016 09:53	WG868996
sec-Butylbenzene	0.00530	U	0.00365	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Carbon disulfide	0.00301	U	0.00275	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Chloroethane	U		0.00453	0.00500	0.0500	10	05/05/2016 09:53	WG868996
Chloroform	U		0.00324	0.00500	0.0500	10	05/05/2016 09:53	WG868996
Chloromethane	U		0.00276	0.00250	0.0250	10	05/05/2016 09:53	WG868996
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/05/2016 09:53	WG868996
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/05/2016 09:53	WG868996
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/05/2016 09:53	WG868996
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 09:53	WG868996
cis-1,2-Dichloroethene	U		0.00260	0.00100	0.0100	10	05/05/2016 09:53	WG868996
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/05/2016 09:53	WG868996
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/05/2016 09:53	WG868996
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/05/2016 09:53	WG868996
trans-1,3-Dichloropropene	U		0.00419	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Ethylbenzene	0.0276		0.00384	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Isopropylbenzene	0.0433		0.00326	0.00100	0.0100	10	05/05/2016 09:53	WG868996
p-Isopropyltoluene	U		0.00350	0.00100	0.0100	10	05/05/2016 09:53	WG868996
2-Butanone (MEK)	U		0.0393	0.0100	0.100	10	05/05/2016 09:53	WG868996
2-Hexanone	U		0.0382	0.0100	0.100	10	05/05/2016 09:53	WG868996
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/05/2016 09:53	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/05/2016 09:53	WG868996
Methyl tert-butyl ether	0.261		0.00367	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Naphthalene	0.0247	U	0.0100	0.00500	0.0500	10	05/05/2016 09:53	WG868996
n-Propylbenzene	0.0577		0.00349	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Styrene	U		0.00307	0.00100	0.0100	10	05/05/2016 09:53	WG868996
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/05/2016 09:53	WG868996
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Toluene	0.0350	U	0.00780	0.00500	0.0500	10	05/05/2016 09:53	WG868996
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/05/2016 09:53	WG868996
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 09:53	WG868996

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/29/16 10:25

L832603

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	0.113		0.00373	0.00100	0.0100	10	05/05/2016 09:53	WG868996
1,3,5-Trimethylbenzene	0.00861	U	0.00387	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/05/2016 09:53	WG868996
o-Xylene	0.00496	U	0.00341	0.00100	0.0100	10	05/05/2016 09:53	WG868996
m&p-Xylene	0.156		0.00719	0.00100	0.0100	10	05/05/2016 09:53	WG868996
Xylenes, Total	0.161		0.0106	0.00300	0.0300	10	05/05/2016 09:53	WG868996
(S) Toluene-d8	107				90.0-115		05/05/2016 09:53	WG868996
(S) Dibromofluoromethane	104				79.0-121		05/05/2016 09:53	WG868996
(S) 4-Bromofluorobenzene	102				80.1-120		05/05/2016 09:53	WG868996

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	17.0		0.124	0.100	0.500	5	05/07/2016 15:02	WG869611
(S) o-Terphenyl	126				50.0-150		05/07/2016 15:02	WG869611

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	942		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.363	J	0.197	0.100	1.00	10	05/10/2016 09:36	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	134		0.519	1.00	10.0	10	05/11/2016 03:42	WG871034
Fluoride	1.36		0.00990	0.100	0.100	1	05/11/2016 03:26	WG871034
Sulfate	0.591	J	0.0774	5.00	5.00	1	05/11/2016 03:26	WG871034

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 03:14	WG869397

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	0.000200	1	05/05/2016 17:02	WG869861
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/04/2016 13:06	WG869207

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0148		0.00125	0.00200	0.0100	5	05/06/2016 10:51	WG869320
Arsenic,Dissolved	0.00279	J	0.00125	0.00200	0.0100	5	05/07/2016 14:18	WG870081
Barium	12.7		0.00180	0.00500	0.0250	5	05/06/2016 10:51	WG869320
Barium,Dissolved	2.37		0.00180	0.00500	0.0250	5	05/07/2016 14:18	WG870081
Boron	0.378		0.0150	0.0200	0.200	10	05/07/2016 10:52	WG870589
Boron,Dissolved	0.321		0.0150	0.0200	0.200	10	05/09/2016 12:45	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 10:51	WG869320
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/07/2016 14:18	WG870081
Calcium	600		0.230	1.00	5.00	5	05/06/2016 10:51	WG869320
Chromium	0.00289	J	0.00270	0.00200	0.0100	5	05/06/2016 10:51	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:18	WG870081
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 10:51	WG869320
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/07/2016 14:18	WG870081
Iron	4.74		0.0750	0.100	0.500	5	05/06/2016 10:51	WG869320
Iron,Dissolved	0.715		0.0750	0.100	0.500	5	05/07/2016 14:18	WG870081
Lead	0.00659	J	0.00120	0.00200	0.0100	5	05/06/2016 10:51	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:18	WG870081
Manganese	1.13		0.00125	0.00500	0.0250	5	05/06/2016 10:51	WG869320
Manganese,Dissolved	0.224		0.00125	0.00500	0.0250	5	05/07/2016 14:18	WG870081
Nickel	0.121		0.00175	0.00200	0.0100	5	05/06/2016 10:51	WG869320
Nickel,Dissolved	0.00421	J	0.00175	0.00200	0.0100	5	05/07/2016 14:18	WG870081
Potassium	4.83	J	0.185	1.00	5.00	5	05/06/2016 10:51	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:51	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:18	WG870081
Sodium	740		0.550	1.00	5.00	5	05/06/2016 10:51	WG869320



Collected date/time: 04/29/16 09:40

L832603

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	U		0.00165	0.0100	0.0500	5	05/06/2016 10:51	WG869320
Uranium,Dissolved	U		0.00165	0.0100	0.0500	5	05/07/2016 14:18	WG870081
Vanadium	0.00670	U	0.000900	0.00500	0.0250	5	05/06/2016 10:51	WG869320
Vanadium,Dissolved	0.00166	U	0.000900	0.00500	0.0250	5	05/07/2016 14:18	WG870081

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	6.09		0.0314	0.100	0.100	1	05/03/2016 02:56	WG869048
(S) a,a,a-Trifluorotoluene(FID)	84.0				62.0-128		05/03/2016 02:56	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.100	0.0500	0.500	10	05/05/2016 10:10	WG868996
Benzene	3.09		0.0331	0.00100	0.100	100	05/06/2016 02:08	WG870398
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Bromoform	U		0.00469	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Bromomethane	U		0.00866	0.00500	0.0500	10	05/05/2016 10:10	WG868996
n-Butylbenzene	0.00609	U	0.00361	0.00100	0.0100	10	05/05/2016 10:10	WG868996
sec-Butylbenzene	0.00771	U	0.00365	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Carbon disulfide	U		0.00275	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Chloroethane	U		0.00453	0.00500	0.0500	10	05/05/2016 10:10	WG868996
Chloroform	U		0.00324	0.00500	0.0500	10	05/05/2016 10:10	WG868996
Chloromethane	U		0.00276	0.00250	0.0250	10	05/05/2016 10:10	WG868996
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/05/2016 10:10	WG868996
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/05/2016 10:10	WG868996
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/05/2016 10:10	WG868996
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 10:10	WG868996
cis-1,2-Dichloroethene	U		0.00260	0.00100	0.0100	10	05/05/2016 10:10	WG868996
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/05/2016 10:10	WG868996
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/05/2016 10:10	WG868996
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/05/2016 10:10	WG868996
trans-1,3-Dichloropropene	U		0.00419	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Ethylbenzene	0.0181		0.00384	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Isopropylbenzene	0.0337		0.00326	0.00100	0.0100	10	05/05/2016 10:10	WG868996
p-Isopropyltoluene	U		0.00350	0.00100	0.0100	10	05/05/2016 10:10	WG868996
2-Butanone (MEK)	U		0.0393	0.0100	0.100	10	05/05/2016 10:10	WG868996
2-Hexanone	U		0.0382	0.0100	0.100	10	05/05/2016 10:10	WG868996
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/05/2016 10:10	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/05/2016 10:10	WG868996
Methyl tert-butyl ether	1.48		0.00367	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Naphthalene	0.0638		0.0100	0.00500	0.0500	10	05/05/2016 10:10	WG868996
n-Propylbenzene	0.0523		0.00349	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Styrene	U		0.00307	0.00100	0.0100	10	05/05/2016 10:10	WG868996
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/05/2016 10:10	WG868996
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Toluene	U		0.00780	0.00500	0.0500	10	05/05/2016 10:10	WG868996
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/05/2016 10:10	WG868996
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 10:10	WG868996

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/29/16 09:40

L832603

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	0.00940	U	0.00373	0.00100	0.0100	10	05/05/2016 10:10	WG868996
1,3,5-Trimethylbenzene	U		0.00387	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/05/2016 10:10	WG868996
o-Xylene	U		0.00341	0.00100	0.0100	10	05/05/2016 10:10	WG868996
m&p-Xylene	0.0285		0.00719	0.00100	0.0100	10	05/05/2016 10:10	WG868996
Xylenes, Total	0.0285	U	0.0106	0.00300	0.0300	10	05/05/2016 10:10	WG868996
(S) Toluene-d8	104				90.0-115		05/05/2016 10:10	WG868996
(S) Toluene-d8	102				90.0-115		05/06/2016 02:08	WG870398
(S) Dibromofluoromethane	102				79.0-121		05/06/2016 02:08	WG870398
(S) Dibromofluoromethane	105				79.0-121		05/05/2016 10:10	WG868996
(S) 4-Bromofluorobenzene	103				80.1-120		05/05/2016 10:10	WG868996
(S) 4-Bromofluorobenzene	95.7				80.1-120		05/06/2016 02:08	WG870398

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4.19		0.0247	0.100	0.100	1	05/05/2016 20:02	WG869611
(S) o-Terphenyl	99.2				50.0-150		05/05/2016 20:02	WG869611

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 mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 05:16	WG868996
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 05:16	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 05:16	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 05:16	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 05:16	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 05:16	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 05:16	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 05:16	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 05:16	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 05:16	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 05:16	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 05:16	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 05:16	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 05:16	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 05:16	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 05:16	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 05:16	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 05:16	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 05:16	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 05:16	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 05:16	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 05:16	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 05:16	WG868996
(S) Toluene-d8	109				90.0-115		05/05/2016 05:16	WG868996
(S) Dibromofluoromethane	108				79.0-121		05/05/2016 05:16	WG868996
(S) 4-Bromofluorobenzene	108				80.1-120		05/05/2016 05:16	WG868996

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	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	1410		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.0330	J J6	0.0197	0.100	0.100	1	05/10/2016 10:05	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	208		0.519	1.00	10.0	10	05/11/2016 04:14	WG871034
Fluoride	0.866		0.00990	0.100	0.100	1	05/11/2016 03:58	WG871034
Sulfate	153		0.774	5.00	50.0	10	05/11/2016 04:14	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0491		0.00125	0.00200	0.0100	5	05/06/2016 10:54	WG869320
Arsenic,Dissolved	0.00883	J	0.00125	0.00200	0.0100	5	05/07/2016 14:25	WG870081
Barium	5.05		0.00180	0.00500	0.0250	5	05/06/2016 10:54	WG869320
Barium,Dissolved	0.981		0.00180	0.00500	0.0250	5	05/07/2016 14:25	WG870081
Calcium	805		0.230	1.00	5.00	5	05/06/2016 10:54	WG869320
Chromium	0.00682	J	0.00270	0.00200	0.0100	5	05/06/2016 10:54	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:25	WG870081
Iron	4.55		0.0750	0.100	0.500	5	05/06/2016 10:54	WG869320
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 14:25	WG870081
Lead	0.0193		0.00120	0.00200	0.0100	5	05/06/2016 10:54	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:25	WG870081
Manganese	1.20		0.00125	0.00500	0.0250	5	05/06/2016 10:54	WG869320
Manganese,Dissolved	0.236		0.00125	0.00500	0.0250	5	05/07/2016 14:25	WG870081
Potassium	6.37		0.185	1.00	5.00	5	05/06/2016 10:54	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 10:54	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:25	WG870081
Sodium	1100		0.550	1.00	5.00	5	05/06/2016 10:54	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	18.1		0.314	0.100	1.00	10	05/03/2016 03:17	WG869048
(S) a,a,a-Trifluorotoluene(FID)	99.6				62.0-128		05/03/2016 03:17	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.100	0.0500	0.500	10	05/05/2016 10:27	WG868996
Benzene	5.59		0.0331	0.00100	0.100	100	05/06/2016 02:30	WG870398
Bromodichloromethane	U		0.00380	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Bromoform	U		0.00469	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Bromomethane	U		0.00866	0.00500	0.0500	10	05/05/2016 10:27	WG868996
n-Butylbenzene	0.00756	J	0.00361	0.00100	0.0100	10	05/05/2016 10:27	WG868996
sec-Butylbenzene	0.00922	J	0.00365	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Carbon disulfide	U		0.00275	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Carbon tetrachloride	U		0.00379	0.00100	0.0100	10	05/05/2016 10:27	WG868996





Collected date/time: 04/29/16 08:45

L832603

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.00348	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Chlorodibromomethane	U		0.00327	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Chloroethane	U		0.00453	0.00500	0.0500	10	05/05/2016 10:27	WG868996
Chloroform	U		0.00324	0.00500	0.0500	10	05/05/2016 10:27	WG868996
Chloromethane	U		0.00276	0.00250	0.0250	10	05/05/2016 10:27	WG868996
1,2-Dibromoethane	U		0.00381	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,1-Dichloroethane	U		0.00259	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,2-Dichloroethane	U		0.00361	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,1-Dichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 10:27	WG868996
cis-1,2-Dichloroethene	U		0.00260	0.00100	0.0100	10	05/05/2016 10:27	WG868996
trans-1,2-Dichloroethene	U		0.00396	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,2-Dichloropropane	U		0.00306	0.00100	0.0100	10	05/05/2016 10:27	WG868996
cis-1,3-Dichloropropene	U		0.00418	0.00100	0.0100	10	05/05/2016 10:27	WG868996
trans-1,3-Dichloropropene	U		0.00419	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Ethylbenzene	0.629		0.00384	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Isopropylbenzene	0.0459		0.00326	0.00100	0.0100	10	05/05/2016 10:27	WG868996
p-Isopropyltoluene	0.00375	U	0.00350	0.00100	0.0100	10	05/05/2016 10:27	WG868996
2-Butanone (MEK)	U		0.0393	0.0100	0.100	10	05/05/2016 10:27	WG868996
2-Hexanone	U		0.0382	0.0100	0.100	10	05/05/2016 10:27	WG868996
Methylene Chloride	U		0.0100	0.00500	0.0500	10	05/05/2016 10:27	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.0214	0.0100	0.100	10	05/05/2016 10:27	WG868996
Methyl tert-butyl ether	1.99		0.0367	0.00100	0.100	100	05/06/2016 02:30	WG870398
Naphthalene	0.0656		0.0100	0.00500	0.0500	10	05/05/2016 10:27	WG868996
n-Propylbenzene	0.0706		0.00349	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Styrene	U		0.00307	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,1,1,2-Tetrachloroethane	U		0.00385	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,1,2,2-Tetrachloroethane	U		0.00130	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Tetrachloroethene	U		0.00372	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Toluene	0.0427	U	0.00780	0.00500	0.0500	10	05/05/2016 10:27	WG868996
1,1,1-Trichloroethane	U		0.00319	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,1,2-Trichloroethane	U		0.00383	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Trichloroethene	U		0.00398	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,2,4-Trimethylbenzene	0.498		0.00373	0.00100	0.0100	10	05/05/2016 10:27	WG868996
1,3,5-Trimethylbenzene	0.0129		0.00387	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Vinyl chloride	U		0.00259	0.00100	0.0100	10	05/05/2016 10:27	WG868996
o-Xylene	0.0843		0.00341	0.00100	0.0100	10	05/05/2016 10:27	WG868996
m&p-Xylene	0.531		0.00719	0.00100	0.0100	10	05/05/2016 10:27	WG868996
Xylenes, Total	0.615		0.0106	0.00300	0.0300	10	05/05/2016 10:27	WG868996
(S) Toluene-d8	105				90.0-115		05/05/2016 10:27	WG868996
(S) Toluene-d8	98.0				90.0-115		05/06/2016 02:30	WG870398
(S) Dibromofluoromethane	99.9				79.0-121		05/06/2016 02:30	WG870398
(S) Dibromofluoromethane	104				79.0-121		05/05/2016 10:27	WG868996
(S) 4-Bromofluorobenzene	101				80.1-120		05/05/2016 10:27	WG868996
(S) 4-Bromofluorobenzene	99.8				80.1-120		05/06/2016 02:30	WG870398

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4.29		0.0247	0.100	0.100	1	05/05/2016 20:19	WG869611
(S) o-Terphenyl	106				50.0-150		05/05/2016 20:19	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5880		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	4.77		0.197	0.100	1.00	10	05/10/2016 09:39	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	377		2.60	1.00	50.0	50	05/11/2016 04:46	WG871034
Fluoride	2.22		0.00990	0.100	0.100	1	05/11/2016 04:30	WG871034
Sulfate	3400		3.87	5.00	250	50	05/11/2016 04:46	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0522		0.00125	0.00200	0.0100	5	05/06/2016 10:56	WG869320
Arsenic,Dissolved	0.00847	J	0.00125	0.00200	0.0100	5	05/07/2016 14:27	WG870081
Barium	0.119		0.00180	0.00500	0.0250	5	05/06/2016 10:56	WG869320
Barium,Dissolved	0.0228	J	0.00180	0.00500	0.0250	5	05/07/2016 14:27	WG870081
Calcium	2840		0.230	1.00	5.00	5	05/06/2016 10:56	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 10:56	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:27	WG870081
Iron	0.197	J	0.0750	0.100	0.500	5	05/06/2016 10:56	WG869320
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 14:27	WG870081
Lead	0.0385		0.00120	0.00200	0.0100	5	05/06/2016 10:56	WG869320
Lead,Dissolved	0.00650	J	0.00120	0.00200	0.0100	5	05/07/2016 14:27	WG870081
Manganese	3.55		0.00125	0.00500	0.0250	5	05/06/2016 10:56	WG869320
Manganese,Dissolved	0.652		0.00125	0.00500	0.0250	5	05/07/2016 14:27	WG870081
Potassium	28.7		0.185	1.00	5.00	5	05/06/2016 10:56	WG869320
Selenium	0.0714		0.00190	0.00200	0.0100	5	05/06/2016 10:56	WG869320
Selenium,Dissolved	0.0133		0.00190	0.00200	0.0100	5	05/07/2016 14:27	WG870081
Sodium	1800		0.550	1.00	5.00	5	05/06/2016 10:56	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 03:55	WG869048
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/03/2016 03:55	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 10:45	WG868996
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 10:45	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 10:45	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 10:45	WG868996



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 10:45	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 10:45	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 10:45	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 10:45	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 10:45	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 10:45	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 10:45	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 10:45	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 10:45	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 10:45	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 10:45	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 10:45	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 10:45	WG868996
Methyl tert-butyl ether	0.195		0.000367	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 10:45	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 10:45	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 10:45	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 10:45	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 10:45	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 10:45	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 10:45	WG868996
(S) Toluene-d8	104				90.0-115		05/05/2016 10:45	WG868996
(S) Dibromofluoromethane	107				79.0-121		05/05/2016 10:45	WG868996
(S) 4-Bromofluorobenzene	103				80.1-120		05/05/2016 10:45	WG868996

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1.75		0.0247	0.100	0.100	1	05/05/2016 20:35	WG869611
(S) o-Terphenyl	103				50.0-150		05/05/2016 20:35	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5320		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	34.7		0.197	0.100	1.00	10	05/10/2016 09:40	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	1010		5.19	1.00	100	100	05/11/2016 05:49	WG871034
Fluoride	0.993		0.00990	0.100	0.100	1	05/11/2016 05:33	WG871034
Sulfate	2470		7.74	5.00	500	100	05/11/2016 05:49	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.0216		0.00125	0.00200	0.0100	5	05/06/2016 10:59	WG869320
Arsenic,Dissolved	0.00339	J	0.00125	0.00200	0.0100	5	05/07/2016 14:30	WG870081
Barium	0.303		0.00180	0.00500	0.0250	5	05/06/2016 10:59	WG869320
Barium,Dissolved	0.0105	J	0.00180	0.00500	0.0250	5	05/07/2016 14:30	WG870081
Calcium	2780		0.230	1.00	5.00	5	05/06/2016 10:59	WG869320
Chromium	0.0130		0.00270	0.00200	0.0100	5	05/06/2016 10:59	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:30	WG870081
Iron	5.54		0.0750	0.100	0.500	5	05/06/2016 10:59	WG869320
Iron,Dissolved	0.149	J	0.0750	0.100	0.500	5	05/07/2016 14:30	WG870081
Lead	0.00566	J	0.00120	0.00200	0.0100	5	05/06/2016 10:59	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:30	WG870081
Manganese	0.225		0.00125	0.00500	0.0250	5	05/06/2016 10:59	WG869320
Manganese,Dissolved	0.00261	J	0.00125	0.00500	0.0250	5	05/07/2016 14:30	WG870081
Potassium	5.74		0.185	1.00	5.00	5	05/06/2016 10:59	WG869320
Selenium	0.128		0.00190	0.00200	0.0100	5	05/06/2016 10:59	WG869320
Selenium,Dissolved	0.0244		0.00190	0.00200	0.0100	5	05/07/2016 14:30	WG870081
Sodium	2640		0.550	1.00	5.00	5	05/06/2016 10:59	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 04:16	WG869048
(S) a,a,q-Trifluorotoluene(FID)	103				62.0-128		05/03/2016 04:16	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 11:02	WG868996
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 11:02	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 11:02	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 11:02	WG868996



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 11:02	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 11:02	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 11:02	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 11:02	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 11:02	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 11:02	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 11:02	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 11:02	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 11:02	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 11:02	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 11:02	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 11:02	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 11:02	WG868996
Methyl tert-butyl ether	0.00197		0.000367	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 11:02	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 11:02	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 11:02	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 11:02	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 11:02	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 11:02	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 11:02	WG868996
(S) Toluene-d8	105				90.0-115		05/05/2016 11:02	WG868996
(S) Dibromofluoromethane	107				79.0-121		05/05/2016 11:02	WG868996
(S) 4-Bromofluorobenzene	102				80.1-120		05/05/2016 11:02	WG868996

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.162		0.0247	0.100	0.100	1	05/05/2016 20:52	WG869611
(S) o-Terphenyl	99.2				50.0-150		05/05/2016 20:52	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5390		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.375	J	0.197	0.100	1.00	10	05/10/2016 09:41	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	153		2.60	1.00	50.0	50	05/11/2016 06:53	WG871034
Fluoride	1.93	J6	0.00990	0.100	0.100	1	05/11/2016 06:37	WG871034
Sulfate	2020		3.87	5.00	250	50	05/11/2016 06:53	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.0230		0.00125	0.00200	0.0100	5	05/06/2016 11:02	WG869320
Arsenic,Dissolved	0.00477	J	0.00125	0.00200	0.0100	5	05/07/2016 14:32	WG870081
Barium	0.0415		0.00180	0.00500	0.0250	5	05/06/2016 11:02	WG869320
Barium,Dissolved	0.00839	J	0.00180	0.00500	0.0250	5	05/07/2016 14:32	WG870081
Calcium	2410		0.230	1.00	5.00	5	05/06/2016 11:02	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 11:02	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:32	WG870081
Iron	0.134	J	0.0750	0.100	0.500	5	05/06/2016 11:02	WG869320
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 14:32	WG870081
Lead	0.00135	J	0.00120	0.00200	0.0100	5	05/06/2016 11:02	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:32	WG870081
Manganese	0.308		0.00125	0.00500	0.0250	5	05/06/2016 11:02	WG869320
Manganese,Dissolved	0.0600		0.00125	0.00500	0.0250	5	05/07/2016 14:32	WG870081
Potassium	2.64	J	0.185	1.00	5.00	5	05/06/2016 11:02	WG869320
Selenium	0.00217	J	0.00190	0.00200	0.0100	5	05/06/2016 11:02	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:32	WG870081
Sodium	1290		0.550	1.00	5.00	5	05/06/2016 11:02	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 04:38	WG869048
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/03/2016 04:38	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 11:19	WG868996
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 11:19	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 11:19	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 11:19	WG868996



## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 11:19	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 11:19	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 11:19	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 11:19	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 11:19	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 11:19	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 11:19	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 11:19	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 11:19	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 11:19	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 11:19	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 11:19	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 11:19	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 11:19	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 11:19	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 11:19	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 11:19	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 11:19	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 11:19	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 11:19	WG868996
(S) Toluene-d8	106				90.0-115		05/05/2016 11:19	WG868996
(S) Dibromofluoromethane	111				79.0-121		05/05/2016 11:19	WG868996
(S) 4-Bromofluorobenzene	103				80.1-120		05/05/2016 11:19	WG868996

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0616	J	0.0247	0.100	0.100	1	05/05/2016 21:08	WG869611
(S) o-Terphenyl	101				50.0-150		05/05/2016 21:08	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3710		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.416	J	0.197	0.100	1.00	10	05/10/2016 09:43	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	88.6		2.60	1.00	50.0	50	05/11/2016 08:29	WG871034
Fluoride	1.87		0.00990	0.100	0.100	1	05/11/2016 07:41	WG871034
Sulfate	1170		3.87	5.00	250	50	05/11/2016 08:29	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00344	J	0.00125	0.00200	0.0100	5	05/06/2016 11:04	WG869320
Arsenic,Dissolved	0.00298	J	0.00125	0.00200	0.0100	5	05/07/2016 14:34	WG870081
Barium	0.0155	J	0.00180	0.00500	0.0250	5	05/06/2016 11:04	WG869320
Barium,Dissolved	0.0148	J	0.00180	0.00500	0.0250	5	05/07/2016 14:34	WG870081
Calcium	681		0.230	1.00	5.00	5	05/06/2016 11:04	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 11:04	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:34	WG870081
Iron	U		0.0750	0.100	0.500	5	05/06/2016 11:04	WG869320
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 14:34	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 11:04	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:34	WG870081
Manganese	1.15		0.00125	0.00500	0.0250	5	05/06/2016 11:04	WG869320
Manganese,Dissolved	1.00		0.00125	0.00500	0.0250	5	05/07/2016 14:34	WG870081
Potassium	2.59	J	0.185	1.00	5.00	5	05/06/2016 11:04	WG869320
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 11:04	WG869320
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/07/2016 14:34	WG870081
Sodium	126		0.550	1.00	5.00	5	05/06/2016 11:04	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 04:59	WG869048
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/03/2016 04:59	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 11:36	WG868996
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 11:36	WG868996
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 11:36	WG868996
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 11:36	WG868996





## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 11:36	WG868996
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 11:36	WG868996
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 11:36	WG868996
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 11:36	WG868996
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 11:36	WG868996
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 11:36	WG868996
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 11:36	WG868996
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 11:36	WG868996
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 11:36	WG868996
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 11:36	WG868996
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 11:36	WG868996
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 11:36	WG868996
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 11:36	WG868996
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 11:36	WG868996
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 11:36	WG868996
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 11:36	WG868996
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 11:36	WG868996
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 11:36	WG868996
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 11:36	WG868996
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 11:36	WG868996
(S) Toluene-d8	105				90.0-115		05/05/2016 11:36	WG868996
(S) Dibromofluoromethane	109				79.0-121		05/05/2016 11:36	WG868996
(S) 4-Bromofluorobenzene	101				80.1-120		05/05/2016 11:36	WG868996

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0317	J	0.0247	0.100	0.100	1	05/05/2016 21:25	WG869611
(S) o-Terphenyl	101				50.0-150		05/05/2016 21:25	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4440		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.537	J	0.197	0.100	1.00	10	05/10/2016 09:44	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	342		2.60	1.00	50.0	50	05/15/2016 21:53	WG872424
Fluoride	1.18		0.00990	0.100	0.100	1	05/11/2016 08:44	WG871034
Sulfate	2900		3.87	5.00	250	50	05/15/2016 21:53	WG872424

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00408	J	0.00125	0.00200	0.0100	5	05/06/2016 11:07	WG869320
Arsenic,Dissolved	0.00391	J	0.00125	0.00200	0.0100	5	05/07/2016 14:37	WG870081
Barium	0.00922	J	0.00180	0.00500	0.0250	5	05/06/2016 11:07	WG869320
Barium,Dissolved	0.0101	J	0.00180	0.00500	0.0250	5	05/07/2016 14:37	WG870081
Calcium	577		0.230	1.00	5.00	5	05/06/2016 11:07	WG869320
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 11:07	WG869320
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 14:37	WG870081
Iron	U		0.0750	0.100	0.500	5	05/06/2016 11:07	WG869320
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 14:37	WG870081
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 11:07	WG869320
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/07/2016 14:37	WG870081
Manganese	0.438		0.00125	0.00500	0.0250	5	05/06/2016 11:07	WG869320
Manganese,Dissolved	0.412		0.00125	0.00500	0.0250	5	05/07/2016 14:37	WG870081
Potassium	1.39	J	0.185	1.00	5.00	5	05/06/2016 11:07	WG869320
Selenium	0.00410	J	0.00190	0.00200	0.0100	5	05/06/2016 11:07	WG869320
Selenium,Dissolved	0.00379	J	0.00190	0.00200	0.0100	5	05/07/2016 14:37	WG870081
Sodium	245		0.550	1.00	5.00	5	05/06/2016 11:07	WG869320

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 05:21	WG869048
(S) a,a,a-Trifluorotoluene(FID)	102				62.0-128		05/03/2016 05:21	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 00:48	WG868993
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 00:48	WG868993
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 00:48	WG868993
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 00:48	WG868993



Collected date/time: 04/29/16 08:55

L832603

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 00:48	WG868993
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 00:48	WG868993
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 00:48	WG868993
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 00:48	WG868993
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 00:48	WG868993
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 00:48	WG868993
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 00:48	WG868993
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 00:48	WG868993
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 00:48	WG868993
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 00:48	WG868993
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 00:48	WG868993
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 00:48	WG868993
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 00:48	WG868993
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 00:48	WG868993
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 00:48	WG868993
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 00:48	WG868993
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 00:48	WG868993
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 00:48	WG868993
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 00:48	WG868993
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 00:48	WG868993
(S) Toluene-d8	102				90.0-115		05/05/2016 00:48	WG868993
(S) Dibromofluoromethane	103				79.0-121		05/05/2016 00:48	WG868993
(S) 4-Bromofluorobenzene	87.6				80.1-120		05/05/2016 00:48	WG868993

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0578	U	0.0247	0.100	0.100	1	05/05/2016 21:42	WG869611
(S) o-Terphenyl	99.3				50.0-150		05/05/2016 21:42	WG869611



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4580		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.473	J	0.197	0.100	1.00	10	05/10/2016 09:49	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	500		2.60	1.00	50.0	50	05/11/2016 09:32	WG871034
Fluoride	1.33		0.00990	0.100	0.100	1	05/11/2016 09:16	WG871034
Sulfate	3300		3.87	5.00	250	50	05/11/2016 09:32	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00422	J	0.00125	0.00200	0.0100	5	05/06/2016 19:15	WG869321
Arsenic,Dissolved	0.00339	J	0.00125	0.00200	0.0100	5	05/07/2016 15:37	WG870083
Barium	0.0231	J	0.00180	0.00500	0.0250	5	05/06/2016 19:15	WG869321
Barium,Dissolved	0.00902	J	0.00180	0.00500	0.0250	5	05/07/2016 15:37	WG870083
Calcium	719		0.230	1.00	5.00	5	05/06/2016 19:15	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 19:15	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:37	WG870083
Iron	0.800		0.0750	0.100	0.500	5	05/06/2016 19:15	WG869321
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 15:37	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 19:15	WG869321
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 15:05	WG870083
Manganese	0.0396		0.00125	0.00500	0.0250	5	05/06/2016 19:15	WG869321
Manganese,Dissolved	0.00791	J	0.00125	0.00500	0.0250	5	05/07/2016 15:37	WG870083
Potassium	1.63	J	0.185	1.00	5.00	5	05/06/2016 19:15	WG869321
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 19:15	WG869321
Selenium,Dissolved	0.00564	J	0.00190	0.00200	0.0100	5	05/07/2016 15:37	WG870083
Sodium	259		0.550	1.00	5.00	5	05/06/2016 19:15	WG869321

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 05:42	WG869048
(S) a,a,q-Trifluorotoluene(FID)	102				62.0-128		05/03/2016 05:42	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 01:08	WG868993
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 01:08	WG868993
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 01:08	WG868993
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 01:08	WG868993



Collected date/time: 04/29/16 09:45

L832603

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 01:08	WG868993
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 01:08	WG868993
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 01:08	WG868993
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 01:08	WG868993
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 01:08	WG868993
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 01:08	WG868993
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 01:08	WG868993
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 01:08	WG868993
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 01:08	WG868993
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 01:08	WG868993
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 01:08	WG868993
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 01:08	WG868993
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 01:08	WG868993
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 01:08	WG868993
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 01:08	WG868993
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 01:08	WG868993
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 01:08	WG868993
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 01:08	WG868993
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 01:08	WG868993
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 01:08	WG868993
(S) Toluene-d8	100				90.0-115		05/05/2016 01:08	WG868993
(S) Dibromofluoromethane	101				79.0-121		05/05/2016 01:08	WG868993
(S) 4-Bromofluorobenzene	86.2				80.1-120		05/05/2016 01:08	WG868993

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.112		0.0247	0.100	0.100	1	05/06/2016 00:46	WG869613
(S) o-Terphenyl	106				50.0-150		05/06/2016 00:46	WG869613

WG869820

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,05,06,07,08,09

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134377-1 05/05/16 04:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L832493-14 Original Sample (OS) • Duplicate (DUP)

(OS) L832493-14 05/05/16 04:07 • (DUP) R3134377-4 05/05/16 04:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1080	1060	1	2.12		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134377-2 05/05/16 04:07 • (LCSD) R3134377-3 05/05/16 04:07

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 %
Dissolved Solids	8800	8220	8380	93.4	95.2	85.0-115			1.93	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG69821

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832603-10,11,12,13,14,15,16,17,18,19

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134729-1 05/05/16 11:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L832603-10 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-10 05/05/16 11:33 • (DUP) R3134729-4 05/05/16 11:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	4010	4090	1	1.98		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134729-2 05/05/16 11:33 • (LCSD) R3134729-3 05/05/16 11:33

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 %
Dissolved Solids	8800	9050	8960	103	102	85.0-115			0.999	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869825

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832603-20,21,22,23



Method Blank (MB)

(MB) R3134730-1 05/05/16 14:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L832603-20 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-20 05/05/16 14:25 • (DUP) R3134730-4 05/05/16 14:25

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3130	3110	1	0.802		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134730-2 05/05/16 14:25 • (LCSD) R3134730-3 05/05/16 14:25

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 %
Dissolved Solids	8800	8860	8880	101	101	85.0-115			0.225	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



WG870203

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832603-24,25,26,27,28,29,30,31,32

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134743-1 05/06/16 23:56

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L832603-24 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-24 05/06/16 23:56 • (DUP) R3134743-4 05/06/16 23:56

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3980	3830	1	3.97		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134743-2 05/06/16 23:56 • (LCSD) R3134743-3 05/06/16 23:56

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 %
Dissolved Solids	8800	8450	8810	96.0	100	85.0-115			4.17	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832603-33,34,36,37,38,39,40,41,42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134744-1 05/06/16 23:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L832603-33 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-33 05/06/16 23:30 • (DUP) R3134744-4 05/06/16 23:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3040	2900	1	4.89		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134744-2 05/06/16 23:30 • (LCSD) R3134744-3 05/06/16 23:30

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 %
Dissolved Solids	8800	8260	8340	93.9	94.8	85.0-115			0.964	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870059

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832603-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134522-1 05/06/16 15:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	0.0230		0.0197	0.100

L832472-35 Original Sample (OS) • Duplicate (DUP)

(OS) L832472-35 05/06/16 15:26 • (DUP) R3134522-4 05/06/16 15:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.222	ND	10	19.0	J	20

L832546-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832546-01 05/06/16 15:51 • (DUP) R3134522-6 05/06/16 15:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.62	1.62	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134522-2 05/06/16 15:22 • (LCSD) R3134522-3 05/06/16 15:23

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 %
Nitrate-Nitrite	5.00	4.95	4.92	99.0	98.0	90.0-110			1.00	20

L832472-36 Original Sample (OS) • Matrix Spike (MS)

(OS) L832472-36 05/06/16 15:28 • (MS) R3134522-5 05/06/16 15:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.715	39.4	77.0	10	90.0-110	J6

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832603-01

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L832603-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-01 05/06/16 15:53 • (MS) R3134522-7 05/06/16 15:58 • (MSD) R3134522-8 05/06/16 15:59

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	0.0490	4.68	4.49	93.0	89.0	1	90.0-110		J6	4.00	20

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832603-02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135141-2 05/09/16 14:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0197	0.100

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

L832603-16 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-16 05/09/16 14:50 • (DUP) R3135141-6 05/09/16 14:51

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.518	ND	10	15.0	J	20

L832603-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-04 05/09/16 15:04 • (DUP) R3135141-9 05/09/16 15:05

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.485	ND	10	35.0	J P1	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135141-3 05/09/16 14:21 • (LCSD) R3135141-4 05/09/16 14:22

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 %
Nitrate-Nitrite	5.00	4.85	4.80	97.0	96.0	90.0-110			1.00	20

L832603-11 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-11 05/09/16 14:39 • (MS) R3135141-5 05/09/16 14:40

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.105	2.94	57.0	1	90.0-110	J6

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832603-02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21

ONE LAB. NATIONWIDE.



L832603-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-18 05/09/16 14:53 • (MS) R3135141-7 05/09/16 14:54 • (MSD) R3135141-8 05/09/16 14:55												
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	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0340	4.20	4.24	83.0	84.0	1	90.0-110	J6	J6	1.00	20

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832603-22,23,24,25,26,27,28

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135143-5 05/09/16 15:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0197	0.100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L832409-26 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-26 05/09/16 15:25 • (DUP) R3135143-8 05/09/16 15:31

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.377	ND	10	2.00	J	20

L832603-23 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-23 05/09/16 16:14 • (DUP) R3135143-10 05/09/16 16:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.0480	ND	1	143	J P1	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135143-6 05/09/16 15:17 • (LCSD) R3135143-7 05/09/16 15:18

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 %
Nitrate-Nitrite	5.00	4.74	4.74	95.0	95.0	90.0-110			0.000	20

L832603-22 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-22 05/09/16 16:11 • (MS) R3135143-9 05/09/16 16:13

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	5.00	0.0770	4.50	88.0	1	90.0-110	J6

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832603-22,23,24,25,26,27,28

ONE LAB. NATIONWIDE.



L832603-26 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-26 05/09/16 16:24 • (MS) R3135143-11 05/09/16 16:25 • (MSD) R3135143-12 05/09/16 16:26

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 %
Nitrate-Nitrite	5.00	0.0650	0.407	0.393	7.00	7.00	1	90.0-110	J6	J6	4.00	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832603-29,30,31,32,33,34,36,37,38,39,40,41,42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135269-2 05/10/16 09:21

Analyte	MB Result mg/l	MB Qualifier mg/l	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0197	0.100

L832603-32 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-32 05/10/16 09:29 • (DUP) R3135269-5 05/10/16 09:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.28	ND	10	94.0	J P1	20

L832616-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832616-02 05/10/16 09:51 • (DUP) R3135269-6 05/10/16 09:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.503	ND	10	0.000	J	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135269-3 05/10/16 09:23 • (LCSD) R3135269-4 05/10/16 09:24

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 %
Nitrate-Nitrite	5.00	4.63	4.72	93.0	94.0	90.0-110			2.00	20

L832616-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832616-03 05/10/16 09:53 • (MS) R3135269-7 05/10/16 09:54 • (MSD) R3135269-8 05/10/16 09:55

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 %
Nitrate-Nitrite	5.00	0.0520	3.74	3.58	74.0	70.0	1	90.0-110	J6	J6	4.00	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832603-29,30,31,32,33,34,36,37,38,39,40,41,42

ONE LAB. NATIONWIDE.



L832603-36 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-36 05/10/16 10:05 • (MS) R3135269-9 05/10/16 10:06

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Nitrate-Nitrite	mg/l	mg/l	mg/l	%		%	
	5.00	0.0330	0.531	10.0	1	90.0-110	J6

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,05,06,07,08

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135310-1 05/09/16 13:45

	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

L832548-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832548-01 05/09/16 15:56 • (DUP) R3135310-4 05/09/16 16:12

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	26.3	26.3	1	0		15
Fluoride	ND	0.0689	1	0		15

L832548-03 Original Sample (OS) • Duplicate (DUP)

(OS) L832548-03 05/10/16 00:21 • (DUP) R3135310-6 05/10/16 00:36

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	3.33	0.564	1	142	P1	15
Fluoride	ND	0.000	1	0		15
Sulfate	5.11	0.752	1	149	P1	15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135310-2 05/09/16 14:01 • (LCSD) R3135310-3 05/09/16 14:16

	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	39.3	39.4	98	98	80-120			0	15
Fluoride	8.00	7.87	7.88	98	99	80-120			0	15
Sulfate	40.0	39.7	39.6	99	99	80-120			0	15

L832548-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L832548-02 05/09/16 16:28 • (MS) R3135310-5 05/09/16 17:16

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	

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1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870883

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



L832603-01,02,03,04,05,06,07,08

Analyte	59.0	19.1	67.9	98	1	80-120
Chloride	5.00	ND	4.70	93	1	80-120
Fluoride	5.00	19.1	67.9	98	1	80-120
Sulfate	50.0	19.1	67.9	98	1	80-120

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

L832548-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832548-04 05/10/16 00:51 • (MS) R3135310-7 05/10/16 01:06 • (MSD) R3135310-8 05/10/16 01:51

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	ND	51.3	51.4	101	101	1	80-120			0	15
Fluoride	5.00	ND	4.81	4.80	95	95	1	80-120			0	15
Sulfate	50.0	8.61	59.3	59.0	101	101	1	80-120			1	15

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832603-11,12,13,14,15,16,17,18,19,20,21,22,23,24,25

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3137141-1 05/16/16 07:45

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

L832409-13 Original Sample (OS) • Duplicate (DUP)

(OS) L832409-13 05/16/16 10:03 • (DUP) R3137141-5 05/16/16 10:43

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	126	134	50	7		15
Fluoride	U	0.000	50	0		15
Sulfate	2520	2340	50	7		15

L832603-21 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-21 05/16/16 15:52 • (DUP) R3137141-6 05/16/16 16:05

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	0.294	0.506	1	53	J3	15

L832603-21 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-21 05/16/16 16:19 • (DUP) R3137141-7 05/16/16 16:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	199	39.2	50	134	J P1	15
Sulfate	1090	190	50	141	J P1	15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3137141-2 05/16/16 07:59 • (LCSD) R3137141-3 05/16/16 08:12

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 %
Chloride	40.0	39.7	39.8	99	100	80-120			0	15
Fluoride	8.00	7.85	7.87	98	98	80-120			0	15

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1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832603-11,12,13,14,15,16,17,18,19,20,21,22,23,24,25

ONE LAB. NATIONWIDE.



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3137141-2 05/16/16 07:59 • (LCSD) R3137141-3 05/16/16 08:12										
	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	%	%	%			%	%
Sulfate	40.0	39.9	40.1	100	100	80-120			0	15

L832435-15 Original Sample (OS) • Matrix Spike (MS)

(OS) L832435-15 05/16/16 09:09 • (MS) R3137141-4 05/16/16 09:23							
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	17.6	66.6	98	1	80-120	
Fluoride	5.00	0.982	5.50	90	1	80-120	

L832603-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-22 05/16/16 17:10 • (MS) R3137141-8 05/16/16 17:23 • (MSD) R3137141-9 05/16/16 17:36												
	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	U	51.9	52.1	104	104	1	80-120			0	15
Fluoride	5.00	U	5.22	5.16	104	103	1	80-120			1	15
Sulfate	50.0	U	50.1	50.2	100	100	1	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG871034

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832603-26,27,28,29,30,31,32,33,34,36,37,38,39,40,41,42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136187-1 05/10/16 20:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	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

L832603-31 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-31 05/10/16 22:55 • (DUP) R3136187-4 05/10/16 23:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	99.0	98.5	1	1		15
Fluoride	1.53	1.52	1	1		15

L832603-38 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-38 05/11/16 05:33 • (DUP) R3136187-6 05/11/16 06:05

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Fluoride	0.993	0.988	1	0		15

L832603-38 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-38 05/11/16 05:49 • (DUP) R3136187-7 05/11/16 06:21

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	1010	1020	100	1		15
Sulfate	2470	2500	100	1		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3136187-2 05/10/16 20:28 • (LCSD) R3136187-3 05/10/16 20:44

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	%	%	%			%	%
Chloride	40.0	39.0	38.6	97	96	80-120			1	15
Fluoride	8.00	7.68	7.60	96	95	80-120			1	15
Sulfate	40.0	39.0	38.6	97	97	80-120			1	15

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832603-26,27,28,29,30,31,32,33,34,36,37,38,39,40,41,42

ONE LAB. NATIONWIDE.



L832603-32 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-32 05/11/16 01:35 • (MS) R3136187-5 05/11/16 02:38							
	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	1.22	5.71	90	1	80-120	

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

L832603-39 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-39 05/11/16 06:37 • (MS) R3136187-8 05/11/16 07:09 • (MSD) R3136187-9 05/11/16 07:25												
	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	%	%		%			%	%
Fluoride	5.00	1.93	5.48	6.13	71	84	1	80-120	<u>J6</u>		11	15



Method Blank (MB)

(MB) R3135448-1 05/10/16 11:38				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

L832435-04 Original Sample (OS) • Duplicate (DUP)

(OS) L832435-04 05/10/16 22:04 • (DUP) R3135448-4 05/10/16 22:28						
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	150	159	10	6		15
Fluoride	0.780	0.847	10	8	J	15
Sulfate	199	215	10	8		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135448-2 05/10/16 11:52 • (LCSD) R3135448-3 05/10/16 12:07										
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	%	%	%			%	%
Chloride	40.0	38.8	38.9	97	97	80-120			0	15
Fluoride	8.00	7.79	7.79	97	97	80-120			0	15
Sulfate	40.0	39.1	39.2	98	98	80-120			0	15

L832654-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832654-01 05/11/16 01:06 • (MS) R3135448-5 05/11/16 01:20 • (MSD) R3135448-6 05/11/16 01:35												
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 %
Chloride	50.0	6.61	56.5	56.3	100	99	1	80-120			0	15
Fluoride	5.00	0.283	5.14	5.29	97	100	1	80-120			3	15
Sulfate	50.0	19.9	68.7	69.0	98	98	1	80-120			0	15

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG872424

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832603-31,32,41

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136920-1 05/15/16 05:48				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00
Sulfate	U		0.0774	5.00

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

L832644-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832644-02 05/15/16 22:08 • (DUP) R3136920-5 05/15/16 22:23						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	6.31	6.26	1	1		15

L832644-09 Original Sample (OS) • Duplicate (DUP)

(OS) L832644-09 05/16/16 00:37 • (DUP) R3136920-6 05/16/16 00:52						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	4.92	4.87	1	1		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3136920-2 05/15/16 06:03 • (LCSD) R3136920-3 05/15/16 06:18									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD
Analyte	mg/l	mg/l	mg/l	%	%	%			
Chloride	40.0	39.2	39.2	98	98	80-120			0
Sulfate	40.0	39.7	39.7	99	99	80-120			0

L832644-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L832644-01 05/15/16 20:38 • (MS) R3136920-4 05/15/16 21:23							
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	50.0	6.62	16.3	19	1	80-120	J6

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832603-31,32,41

ONE LAB. NATIONWIDE.



L832644-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832644-12 05/16/16 01:08 • (MS) R3136920-7 05/16/16 01:22 • (MSD) R3136920-8 05/16/16 01:37												
	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	50.0	6.37	16.2	16.0	20	19	1	80-120	J6	J6	1	15

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

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Wet Chemistry by Method D 7511-09e2

QUALITY CONTROL SUMMARY

L832603-08,16,17,19,24,25,26,29,33,34

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136159-1 05/06/16 01:23

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.0012	0.00500

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

L832419-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832419-02 05/06/16 01:41 • (DUP) R3136159-4 05/06/16 01:44

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	0.000	1	0		20

L832603-26 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-26 05/06/16 02:59 • (DUP) R3136159-7 05/06/16 03:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	U	0.000	1	0		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3136159-2 05/06/16 01:26 • (LCSD) R3136159-3 05/06/16 01:29

	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	0.0980	0.0990	98	99	86-114			1	20

L832791-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832791-03 05/06/16 01:47 • (MS) R3136159-5 05/06/16 01:59 • (MSD) R3136159-6 05/06/16 02:02

	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	%	%		%			%	%
Cyanide	0.100	0.00300	0.110	0.107	107	104	1	64-136			3	20

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832603-08,16,17,19,24,25,26,29,33,34

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133626-1 05/04/16 12:07				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury,Dissolved	U		0.000049	0.000200

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133626-2 05/04/16 12:09 • (LCSD) R3133626-3 05/04/16 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	%	%	%			%	%
Mercury,Dissolved	0.00300	0.00284	0.00263	95	88	80-120			7	20

L832603-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-17 05/04/16 12:13 • (MS) R3133626-4 05/04/16 12:16 • (MSD) R3133626-5 05/04/16 12:18												
	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,Dissolved	0.00300	U	0.00254	0.00254	85	85	1	75-125			0	20

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832603-08,16,17,19,24,25,26,29,33,34

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134185-1 05/05/16 16:13

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134185-2 05/05/16 16:16 • (LCSD) R3134185-3 05/05/16 16:23

	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	0.00296	0.00311	99	104	80-120			5	20

L832603-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-19 05/05/16 16:26 • (MS) R3134185-4 05/05/16 16:28 • (MSD) R3134185-5 05/05/16 16:31

	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	U	0.00280	0.00269	93	90	1	75-125			4	20

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Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L832603-20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3138455-1 05/19/16 21:06

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Selenium	U		0.0074	0.0100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3138455-2 05/19/16 21:08 • (LCSD) R3138455-3 05/19/16 21:11

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 %
Selenium	1.00	1.03	1.03	103	103	80-120			0	20

L832409-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-25 05/19/16 21:14 • (MS) R3138455-5 05/19/16 21:19 • (MSD) R3138455-6 05/19/16 21:22

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 %
Selenium	1.00	U	0.827	0.978	83	98	1	75-125			17	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L832603-20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3138456-1 05/19/16 21:42

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Selenium,Dissolved	U		0.0074	0.0100

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) R3138456-2 05/19/16 21:45 • (LCSD) R3138456-3 05/19/16 21:47

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 %
Selenium,Dissolved	1.00	1.02	1.04	102	104	80-120			2	20

L832409-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832409-25 05/19/16 21:50 • (MS) R3138456-5 05/19/16 21:56 • (MSD) R3138456-6 05/19/16 21:58

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Selenium,Dissolved	1.00	U	0.657	0.922	66	92	1	75-125	J6	J3	34	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134123-1 05/05/16 14:44

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
Cadmium	U		0.00016	0.00100
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	U		0.015	0.100
Lead	0.000458		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
Uranium	U		0.00033	0.0100
Vanadium	0.000218		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134123-2 05/05/16 14:47 • (LCSD) R3134123-3 05/05/16 14:49

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	0.0491	0.0484	98	97	80-120			1	20
Barium	0.0500	0.0486	0.0510	97	102	80-120			5	20
Cadmium	0.0500	0.0510	0.0508	102	102	80-120			1	20
Calcium	5.00	4.93	4.73	99	95	80-120			4	20
Chromium	0.0500	0.0498	0.0511	100	102	80-120			3	20
Cobalt	0.0500	0.0506	0.0522	101	104	80-120			3	20
Iron	5.00	4.89	5.03	98	101	80-120			3	20
Lead	0.0500	0.0505	0.0509	101	102	80-120			1	20
Manganese	0.0500	0.0491	0.0500	98	100	80-120			2	20
Nickel	0.0500	0.0490	0.0505	98	101	80-120			3	20
Potassium	5.00	4.79	4.86	96	97	80-120			1	20
Selenium	0.0500	0.0480	0.0490	96	98	80-120			2	20
Sodium	5.00	5.13	5.14	103	103	80-120			0	20
Uranium	0.0500	0.0490	0.0497	98	99	80-120			1	20
Vanadium	0.0500	0.0495	0.0504	99	101	80-120			2	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



L832603-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-01 05/05/16 14:51 • (MS) R3134123-5 05/05/16 14:56 • (MSD) R3134123-6 05/05/16 14:58

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	%	%		%			%	%
Arsenic	0.0100	0.0142	0.0644	0.0651	100	102	5	75-125			1	20
Barium	0.0100	3.42	3.61	3.65	382	478	5	75-125	✓	✓	1	20
Cadmium	0.0100	U	0.0512	0.0510	102	102	5	75-125			0	20
Calcium	1.00	155	166	170	220	296	5	75-125	✓	✓	2	20
Chromium	0.0100	U	0.0528	0.0536	106	107	5	75-125			1	20
Cobalt	0.0100	U	0.0526	0.0544	105	109	5	75-125			3	20
Potassium	1.00	0.691	6.28	6.18	112	110	5	75-125			2	20
Iron	1.00	2.09	7.32	7.51	105	109	5	75-125			3	20
Lead	0.0100	0.00124	0.0558	0.0540	109	105	5	75-125			3	20
Manganese	0.0100	0.748	0.807	0.835	118	174	5	75-125		✓	3	20
Nickel	0.0100	0.00281	0.0544	0.0530	103	100	5	75-125			3	20
Selenium	0.0100	U	0.0545	0.0543	109	109	5	75-125			0	20
Sodium	1.00	311	325	330	274	381	5	75-125	✓	✓	2	20
Uranium	0.0100	U	0.0533	0.0526	107	105	5	75-125			1	20
Vanadium	0.0100	0.00248	0.0538	0.0559	103	107	5	75-125			4	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-21,22,23,24,25,26,27,28,29,30,31,32,33,34,36,37,38,39,40,41

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134379-1 05/06/16 09:33

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
Cadmium	U		0.00016	0.00100
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	0.0422		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.00119		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
Uranium	U		0.00033	0.0100
Vanadium	0.00022		0.00018	0.00500

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134379-2 05/06/16 09:36 • (LCSD) R3134379-3 05/06/16 09:39

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	0.0517	0.0520	103	104	80-120			1	20
Barium	0.0500	0.0535	0.0510	107	102	80-120			5	20
Cadmium	0.0500	0.0547	0.0547	109	109	80-120			0	20
Calcium	5.00	5.20	5.24	104	105	80-120			1	20
Chromium	0.0500	0.0514	0.0508	103	102	80-120			1	20
Cobalt	0.0500	0.0519	0.0520	104	104	80-120			0	20
Iron	5.00	5.06	5.03	101	101	80-120			1	20
Lead	0.0500	0.0521	0.0527	104	105	80-120			1	20
Manganese	0.0500	0.0520	0.0537	104	107	80-120			3	20
Nickel	0.0500	0.0524	0.0527	105	105	80-120			1	20
Potassium	5.00	4.99	5.10	100	102	80-120			2	20
Selenium	0.0500	0.0539	0.0535	108	107	80-120			1	20
Sodium	5.00	5.09	5.18	102	104	80-120			2	20
Uranium	0.0500	0.0516	0.0520	103	104	80-120			1	20
Vanadium	0.0500	0.0504	0.0507	101	101	80-120			1	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-21,22,23,24,25,26,27,28,29,30,31,32,33,34,36,37,38,39,40,41

ONE LAB. NATIONWIDE.



L832603-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-22 05/06/16 09:41 • (MS) R3134379-5 05/06/16 09:47 • (MSD) R3134379-7 05/06/16 11:18

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	%	%		%			%	%
Arsenic	0.0100	U	0.0562	0.0526	112	105	5	75-125			7	20
Barium	0.0100	U	0.0592	0.0528	118	106	5	75-125			11	20
Cadmium	0.0100	U	0.0567	0.0554	113	111	5	75-125			2	20
Calcium	1.00	U	5.77	5.85	115	117	5	75-125			1	20
Chromium	0.0100	U	0.0571	0.0522	114	104	5	75-125			9	20
Cobalt	0.0100	U	0.0577	0.0547	115	109	5	75-125			5	20
Potassium	1.00	U	5.51	5.08	110	102	5	75-125			8	20
Iron	1.00	U	5.73	5.42	115	108	5	75-125			6	20
Lead	0.0100	U	0.0581	0.0568	116	114	5	75-125			2	20
Manganese	0.0100	0.00146	0.0601	0.0532	117	104	5	75-125			12	20
Nickel	0.0100	U	0.0553	0.0498	111	100	5	75-125			10	20
Selenium	0.0100	U	0.0598	0.0729	120	146	5	75-125	J5		20	20
Sodium	1.00	U	5.73	5.72	115	114	5	75-125			0	20
Uranium	0.0100	U	0.0559	0.0566	112	113	5	75-125			1	20
Vanadium	0.0100	U	0.0560	0.0524	112	105	5	75-125			7	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134603-1 05/06/16 18:35

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	0.032		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.000577		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) R3134603-2 05/06/16 18:38 • (LCSD) R3134603-3 05/06/16 18:40

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	0.0515	0.0506	103	101	80-120			2	20
Barium	0.0500	0.0521	0.0514	104	103	80-120			1	20
Calcium	5.00	5.19	5.18	104	104	80-120			0	20
Chromium	0.0500	0.0517	0.0505	103	101	80-120			2	20
Iron	5.00	5.08	4.98	102	100	80-120			2	20
Lead	0.0500	0.0516	0.0520	103	104	80-120			1	20
Manganese	0.0500	0.0517	0.0507	103	101	80-120			2	20
Potassium	5.00	5.11	4.98	102	100	80-120			3	20
Selenium	0.0500	0.0513	0.0505	103	101	80-120			2	20
Sodium	5.00	5.23	5.12	105	102	80-120			2	20

L832462-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832462-01 05/06/16 18:43 • (MS) R3134603-5 05/06/16 18:48 • (MSD) R3134603-6 05/06/16 18:51

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	0.0100	0.00777	0.0644	0.0628	113	110	5	75-125			3	20
Barium	0.0100	0.0203	0.0773	0.0789	114	117	5	75-125			2	20
Calcium	1.00	559	562	555	62	0	5	75-125	√	√	1	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-42

ONE LAB. NATIONWIDE.



L832462-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832462-01 05/06/16 18:43 • (MS) R3134603-5 05/06/16 18:48 • (MSD) R3134603-6 05/06/16 18:51

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	%	%		%			%	%
Chromium	0.0100	U	0.0569	0.0563	114	113	5	75-125			1	20
Potassium	1.00	2.32	7.76	7.88	109	111	5	75-125			2	20
Iron	1.00	U	5.67	5.68	113	114	5	75-125			0	20
Lead	0.0100	U	0.0575	0.0569	115	114	5	75-125			1	20
Manganese	0.0100	0.373	0.426	0.424	105	103	5	75-125			0	20
Selenium	0.0100	0.00381	0.0590	0.0601	110	112	5	75-125			2	20
Sodium	1.00	379	382	384	65	108	5	75-125	<u>V</u>		1	20

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-21,22,23,24,25,26,27,28,29,30,31,32,33,34,36,37,38,39,40,41

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134751-1 05/07/16 13:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	U		0.00025	0.00500
Nickel,Dissolved	U		0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	0.000208		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134751-2 05/07/16 13:31 • (LCSD) R3134751-3 05/07/16 13:33

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,Dissolved	0.0500	0.0484	0.0469	97	94	80-120			3	20
Barium,Dissolved	0.0500	0.0491	0.0470	98	94	80-120			4	20
Cadmium,Dissolved	0.0500	0.0514	0.0501	103	100	80-120			3	20
Chromium,Dissolved	0.0500	0.0497	0.0490	99	98	80-120			2	20
Cobalt,Dissolved	0.0500	0.0516	0.0509	103	102	80-120			1	20
Iron,Dissolved	5.00	4.80	4.72	96	94	80-120			2	20
Lead,Dissolved	0.0500	0.0490	0.0482	98	96	80-120			1	20
Manganese,Dissolved	0.0500	0.0483	0.0474	97	95	80-120			2	20
Nickel,Dissolved	0.0500	0.0521	0.0507	104	101	80-120			3	20
Selenium,Dissolved	0.0500	0.0467	0.0468	93	94	80-120			0	20
Uranium,Dissolved	0.0500	0.0485	0.0479	97	96	80-120			1	20
Vanadium,Dissolved	0.0500	0.0496	0.0481	99	96	80-120			3	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-21,22,23,24,25,26,27,28,29,30,31,32,33,34,36,37,38,39,40,41

ONE LAB. NATIONWIDE.



L832603-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-21 05/07/16 13:35 • (MS) R3134751-5 05/07/16 13:40 • (MSD) R3134751-6 05/07/16 13:42

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	%	%		%			%	%
Arsenic,Dissolved	0.0100	0.00282	0.0544	0.0509	103	96	5	75-125			7	20
Barium,Dissolved	0.0100	0.0218	0.0743	0.0685	105	93	5	75-125			8	20
Cadmium,Dissolved	0.0100	U	0.0535	0.0495	107	99	5	75-125			8	20
Chromium,Dissolved	0.0100	U	0.0484	0.0452	97	90	5	75-125			7	20
Cobalt,Dissolved	0.0100	0.00162	0.0499	0.0477	97	92	5	75-125			4	20
Iron,Dissolved	1.00	0.178	4.83	4.53	93	87	5	75-125			6	20
Lead,Dissolved	0.0100	U	0.0499	0.0472	100	94	5	75-125			5	20
Manganese,Dissolved	0.0100	0.723	0.751	0.722	58	0	5	75-125	<u>V</u>	<u>V</u>	4	20
Nickel,Dissolved	0.0100	0.00313	0.141	0.0480	276	90	5	75-125	<u>J5</u>	<u>J3</u>	99	20
Selenium,Dissolved	0.0100	U	0.0491	0.0457	98	91	5	75-125			7	20
Uranium,Dissolved	0.0100	0.0134	0.0629	0.0592	99	92	5	75-125			6	20
Vanadium,Dissolved	0.0100	0.000941	0.0475	0.0467	93	91	5	75-125			2	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135821-7 05/11/16 15:04

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	0.000678	J	0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000262	J	0.00025	0.00500
Nickel,Dissolved	0.000892	J	0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	U		0.00018	0.00500

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135821-8 05/11/16 15:06 • (LCSD) R3135821-9 05/11/16 15:11

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,Dissolved	0.0500	0.0445	0.0461	89	92	80-120			4	20
Barium,Dissolved	0.0500	0.0469	0.0465	94	93	80-120			1	20
Cadmium,Dissolved	0.0500	0.0465	0.0481	93	96	80-120			3	20
Chromium,Dissolved	0.0500	0.0477	0.0490	95	98	80-120			3	20
Cobalt,Dissolved	0.0500	0.0500	0.0496	100	99	80-120			1	20
Iron,Dissolved	5.00	4.68	4.79	94	96	80-120			2	20
Lead,Dissolved	0.0500	0.0461	0.0468	92	94	80-120			1	20
Manganese,Dissolved	0.0500	0.0473	0.0481	95	96	80-120			2	20
Nickel,Dissolved	0.0500	0.0487	0.0496	97	99	80-120			2	20
Selenium,Dissolved	0.0500	0.0452	0.0470	90	94	80-120			4	20
Uranium,Dissolved	0.0500	0.0455	0.0462	91	92	80-120			2	20
Vanadium,Dissolved	0.0500	0.0469	0.0483	94	97	80-120			3	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134748-1 05/07/16 14:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000535		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134748-2 05/07/16 14:38 • (LCSD) R3134748-3 05/07/16 14:41

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 %
Arsenic,Dissolved	0.0500	0.0432	0.0440	86	88	80-120			2	20
Barium,Dissolved	0.0500	0.0473	0.0477	95	95	80-120			1	20
Chromium,Dissolved	0.0500	0.0459	0.0473	92	95	80-120			3	20
Iron,Dissolved	5.00	4.48	4.67	90	93	80-120			4	20
Lead,Dissolved	0.0500	0.0457	0.0463	91	93	80-120			1	20
Manganese,Dissolved	0.0500	0.0457	0.0471	91	94	80-120			3	20
Selenium,Dissolved	0.0500	0.0447	0.0464	89	93	80-120			4	20

L832488-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832488-12 05/07/16 14:44 • (MS) R3134748-5 05/07/16 14:49 • (MSD) R3134748-6 05/07/16 14:52

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,Dissolved	0.0100	0.00841	0.0637	0.0631	111	109	5	75-125			1	20
Barium,Dissolved	0.0100	0.0178	0.0675	0.0717	99	108	5	75-125			6	20
Chromium,Dissolved	0.0100	U	0.0537	0.0526	107	105	5	75-125			2	20
Iron,Dissolved	1.00	3.82	9.17	9.28	107	109	5	75-125			1	20
Lead,Dissolved	0.0100	U	0.0539	0.0533	108	107	5	75-125			1	20
Manganese,Dissolved	0.0100	2.39	2.59	2.63	401	479	5	75-125	V	V	1	20
Selenium,Dissolved	0.0100	0.00215	0.0557	0.0575	107	111	5	75-125			3	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-08,16,17,19,24,25,26,29,33,34

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134666-1 05/07/16 08:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.0015	0.0200
Nickel	U		0.00035	0.00200

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) R3134666-2 05/07/16 08:35 • (LCSD) R3134666-3 05/07/16 08:40

	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	%	%	%			%	%
Boron	0.0500	0.0478	0.0491	96	98	80-120			3	20
Nickel	0.0500	0.0517	0.0517	103	103	80-120			0	20

L832450-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-04 05/07/16 08:45 • (MS) R3134666-5 05/07/16 08:54 • (MSD) R3134666-6 05/07/16 08:59

	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	%	%		%			%	%
Boron	0.00500	0.689	0.704	0.712	31	47	10	75-125	✓	✓	1	20
Nickel	0.00500	U	0.0574	0.0516	115	103	10	75-125			11	20

ACCOUNT:  
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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832603-08,16,17,19,24,25,26,29,33,34

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134973-1 05/09/16 10:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0015	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134973-2 05/09/16 10:50 • (LCSD) R3134973-3 05/09/16 10:55

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 %
Boron,Dissolved	0.0500	0.0484	0.0502	97	100	80-120			4	20

L832468-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832468-01 05/09/16 11:00 • (MS) R3134973-5 05/09/16 11:09 • (MSD) R3134973-6 05/09/16 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 %
Boron,Dissolved	0.00500	0.596	0.642	0.644	92	95	10	75-125			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
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WG869047

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

L832603-01,03,06,07,08,09,10,11,12,13,15,17,21,23,25,27,28



Method Blank (MB)

(MB) R3133680-3 05/03/16 07:10				
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)	98.4			62.0-128

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133680-1 05/03/16 06:08 • (LCSD) R3133680-2 05/03/16 06:29										
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	5.82	5.97	106	109	67.0-132			2.64	20
(S) a,a,a-Trifluorotoluene(FID)				98.1	98.8	62.0-128				

L832603-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-11 05/03/16 10:27 • (MS) R3133680-4 05/03/16 09:24 • (MSD) R3133680-5 05/03/16 09:45												
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	U	5.84	5.91	106	108	1	50.0-143			1.32	20
(S) a,a,a-Trifluorotoluene(FID)					98.3	97.9		62.0-128				

WG869048

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

L832603-29,30,31,32,33,34,36,37,38,39,40,41,42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133716-3 05/02/16 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) 103			62.0-128	

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133716-1 05/02/16 21:43 • (LCSD) R3133716-2 05/02/16 22:04										
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	5.44	5.21	98.9	94.8	67.0-132			4.21	20
(S) a,a,a-Trifluorotoluene(FID)				103	103	62.0-128				

L832603-29 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-29 05/03/16 01:09 • (MS) R3133716-4 05/03/16 00:05 • (MSD) R3133716-5 05/03/16 00:26												
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 %
TPH (GC/FID) Low Fraction	5.50	U	4.65	4.65	84.5	84.5	1	50.0-143			0.0100	20
(S) a,a,a-Trifluorotoluene(FID)					102	103		62.0-128				

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Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

L832603-22

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133815-4 05/04/16 09:11				
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)	99.2			62.0-128

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133815-2 05/04/16 08:09 • (LCSD) R3133815-3 05/04/16 08:30										
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	5.64	5.83	103	106	67.0-132			3.35	20
(S) a,a,a-Trifluorotoluene(FID)				98.0	99.7	62.0-128				

L832099-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832099-05 05/04/16 11:29 • (MS) R3133815-8 05/04/16 15:18 • (MSD) R3133815-9 05/04/16 15:39												
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	ND	5.87	7.99	107	145	1	50.0-143		J3 J5	30.6	20
(S) a,a,a-Trifluorotoluene(FID)					100	101		62.0-128				

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WG869995

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

L832603-24,26

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134127-3 05/05/16 03:41				
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)	94.2			62.0-128

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134127-1 05/05/16 02:34 • (LCSD) R3134127-2 05/05/16 02:57										
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	5.10	5.13	92.7	93.2	67.0-132			0.570	20
(S) a,a,a-Trifluorotoluene(FID)				102	102	62.0-128				

L832603-24 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-24 05/05/16 05:32 • (MS) R3134127-4 05/05/16 04:03 • (MSD) R3134127-5 05/05/16 04:25												
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 %
TPH (GC/FID) Low Fraction	5.50	0.575	4.15	3.60	64.9	55.1	1	50.0-143			14.0	20
(S) a,a,a-Trifluorotoluene(FID)					98.1	98.1		62.0-128				

ACCOUNT:  
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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-41,42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134152-3 05/04/16 18:40

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

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Sc

ACCOUNT:  
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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-41,42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134152-3 05/04/16 18:40

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	100			90.0-115
(S) Dibromofluoromethane	99.4			79.0-121
(S) 4-Bromofluorobenzene	88.4			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134152-1 05/04/16 17:18 • (LCSD) R3134152-2 05/04/16 17:39

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 %
Acetone	0.125	0.0995	0.0988	79.6	79.1	28.7-175			0.730	20.9
Benzene	0.0250	0.0267	0.0264	107	106	73.0-122			1.06	20
Bromodichloromethane	0.0250	0.0247	0.0249	98.8	99.8	75.5-121			0.960	20
Bromoform	0.0250	0.0252	0.0258	101	103	71.5-131			2.40	20
Bromomethane	0.0250	0.0353	0.0344	141	138	22.4-187			2.64	20
n-Butylbenzene	0.0250	0.0268	0.0260	107	104	75.9-134			3.08	20
sec-Butylbenzene	0.0250	0.0247	0.0246	98.9	98.4	80.6-126			0.590	20
Carbon disulfide	0.0250	0.0276	0.0270	110	108	53.0-134			2.29	20
Carbon tetrachloride	0.0250	0.0216	0.0212	86.4	84.6	70.9-129			2.11	20
Chlorobenzene	0.0250	0.0260	0.0264	104	106	79.7-122			1.51	20
Chlorodibromomethane	0.0250	0.0249	0.0254	99.8	102	78.2-124			1.81	20
Chloroethane	0.0250	0.0356	0.0345	142	138	41.2-153			3.09	20
Chloroform	0.0250	0.0254	0.0255	102	102	73.2-125			0.410	20
Chloromethane	0.0250	0.0309	0.0308	124	123	55.8-134			0.310	20
1,2-Dibromoethane	0.0250	0.0244	0.0250	97.4	100	79.8-122			2.65	20
1,1-Dichloroethane	0.0250	0.0281	0.0278	112	111	71.7-127			0.900	20

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-41.42

ONE LAB. NATIONWIDE.



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134152-1 05/04/16 17:18 • (LCSD) R3134152-2 05/04/16 17:39

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 %
1,2-Dichloroethane	0.0250	0.0239	0.0238	95.5	95.3	65.3-126			0.140	20
1,1-Dichloroethene	0.0250	0.0290	0.0286	116	114	59.9-137			1.30	20
cis-1,2-Dichloroethene	0.0250	0.0267	0.0267	107	107	77.3-122			0.230	20
trans-1,2-Dichloroethene	0.0250	0.0265	0.0266	106	106	72.6-125			0.160	20
1,2-Dichloropropane	0.0250	0.0290	0.0293	116	117	77.4-125			0.980	20
cis-1,3-Dichloropropene	0.0250	0.0276	0.0276	110	110	77.7-124			0.100	20
trans-1,3-Dichloropropene	0.0250	0.0267	0.0267	107	107	73.5-127			0.140	20
Ethylbenzene	0.0250	0.0263	0.0264	105	105	80.9-121			0.310	20
2-Hexanone	0.125	0.133	0.136	107	109	59.4-151			2.13	20
Isopropylbenzene	0.0250	0.0253	0.0253	101	101	81.6-124			0.0600	20
p-Isopropyltoluene	0.0250	0.0253	0.0255	101	102	77.6-129			0.550	20
2-Butanone (MEK)	0.125	0.127	0.130	102	104	46.4-155			2.27	20
Methylene Chloride	0.0250	0.0259	0.0260	104	104	69.5-120			0.280	20
4-Methyl-2-pentanone (MIBK)	0.125	0.142	0.143	113	115	63.3-138			1.16	20
Methyl tert-butyl ether	0.0250	0.0247	0.0244	98.7	97.6	70.1-125			1.09	20
Naphthalene	0.0250	0.0214	0.0218	85.5	87.3	69.7-134			2.09	20
n-Propylbenzene	0.0250	0.0263	0.0264	105	105	81.9-122			0.280	20
Styrene	0.0250	0.0261	0.0266	104	106	79.9-124			1.86	20
1,1,1,2-Tetrachloroethane	0.0250	0.0257	0.0259	103	104	78.5-125			0.990	20
1,1,2,2-Tetrachloroethane	0.0250	0.0239	0.0239	95.7	95.7	79.3-123			0.0300	20
Tetrachloroethene	0.0250	0.0254	0.0250	101	100	73.5-130			1.22	20
Toluene	0.0250	0.0256	0.0256	102	102	77.9-116			0.000	20
1,1,1-Trichloroethane	0.0250	0.0245	0.0243	98.0	97.0	71.1-129			0.960	20
1,1,2-Trichloroethane	0.0250	0.0245	0.0246	98.0	98.3	81.6-120			0.330	20
Trichloroethene	0.0250	0.0259	0.0256	104	102	79.5-121			1.30	20
1,2,4-Trimethylbenzene	0.0250	0.0244	0.0245	97.6	98.0	79.0-122			0.480	20
1,3,5-Trimethylbenzene	0.0250	0.0243	0.0244	97.4	97.5	81.0-123			0.110	20
Vinyl chloride	0.0250	0.0314	0.0310	126	124	61.5-134			1.21	20
Xylenes, Total	0.0750	0.0768	0.0778	102	104	79.2-122			1.22	20
o-Xylene	0.0250	0.0254	0.0258	102	103	79.1-123			1.54	20
m&p-Xylenes	0.0500	0.0514	0.0520	103	104	78.5-122			1.06	20
(S) Toluene-d8				99.7	99.8	90.0-115				
(S) Dibromofluoromethane				101	101	79.0-121				
(S) 4-Bromofluorobenzene				86.7	87.3	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-41,42

ONE LAB. NATIONWIDE.



L832598-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832598-01 05/04/16 20:23 • (MS) R3134152-4 05/04/16 19:01 • (MSD) R3134152-5 05/04/16 19:21

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	%	%		%			%	%
Acetone	0.125	ND	0.0773	0.0792	61.9	63.3	1	25.0-156			2.31	21.5
Benzene	0.0250	ND	0.0174	0.0182	69.7	72.7	1	58.6-133			4.24	20
Bromodichloromethane	0.0250	ND	0.0186	0.0195	74.5	78.1	1	69.2-127			4.76	20
Bromoform	0.0250	ND	0.0203	0.0211	81.1	84.6	1	66.3-140			4.18	20
Bromomethane	0.0250	ND	0.0158	0.0160	63.2	63.9	1	16.6-183			1.09	20.5
n-Butylbenzene	0.0250	ND	0.0198	0.0204	79.2	81.6	1	64.8-145			3.00	20
sec-Butylbenzene	0.0250	ND	0.0179	0.0183	71.8	73.0	1	66.8-139			1.70	20
Carbon disulfide	0.0250	ND	0.00755	0.00780	30.2	31.2	1	34.9-138	J6	J6	3.27	20
Carbon tetrachloride	0.0250	ND	0.0143	0.0149	57.2	59.6	1	60.6-139	J6	J6	4.02	20
Chlorobenzene	0.0250	ND	0.0185	0.0193	73.9	77.4	1	70.1-130			4.53	20
Chlorodibromomethane	0.0250	ND	0.0194	0.0206	77.5	82.5	1	71.6-132			6.30	20
Chloroethane	0.0250	ND	0.0189	0.0193	75.5	77.1	1	33.3-155			2.16	20
Chloroform	0.0250	ND	0.0186	0.0190	74.3	76.1	1	66.1-133			2.47	20
Chloromethane	0.0250	ND	0.0126	0.0130	50.4	52.1	1	40.7-139			3.28	20
1,2-Dibromoethane	0.0250	ND	0.0188	0.0195	75.0	77.9	1	73.8-131			3.75	20
1,1-Dichloroethane	0.0250	ND	0.0194	0.0202	77.8	80.9	1	64.0-134			3.90	20
1,2-Dichloroethane	0.0250	ND	0.0171	0.0180	68.6	72.0	1	60.7-132			4.86	20
1,1-Dichloroethene	0.0250	ND	0.0164	0.0169	65.7	67.7	1	48.8-144			3.04	20
cis-1,2-Dichloroethene	0.0250	ND	0.0184	0.0191	73.6	76.3	1	60.6-136			3.60	20
trans-1,2-Dichloroethene	0.0250	ND	0.0150	0.0154	59.9	61.7	1	61.0-132	J6		2.92	20
1,2-Dichloropropane	0.0250	ND	0.0212	0.0225	84.9	89.9	1	69.7-130			5.82	20
cis-1,3-Dichloropropene	0.0250	ND	0.0199	0.0209	79.6	83.7	1	71.1-129			4.94	20
trans-1,3-Dichloropropene	0.0250	ND	0.0200	0.0213	80.1	85.1	1	66.3-136			6.05	20
Ethylbenzene	0.0250	ND	0.0179	0.0186	71.6	74.5	1	62.7-136			4.01	20
2-Hexanone	0.125	ND	0.107	0.111	85.9	88.8	1	59.4-154			3.32	20.1
Isopropylbenzene	0.0250	ND	0.0180	0.0184	71.8	73.6	1	67.4-136			2.39	20
p-Isopropyltoluene	0.0250	ND	0.0182	0.0185	72.7	74.1	1	62.8-143			1.90	20
2-Butanone (MEK)	0.125	ND	0.105	0.110	84.3	88.1	1	45.0-156			4.49	20.8
Methylene Chloride	0.0250	ND	0.0169	0.0172	67.4	68.8	1	61.5-125			1.98	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.122	0.126	97.7	101	1	60.7-150			3.43	20
Methyl tert-butyl ether	0.0250	ND	0.0187	0.0196	74.8	78.3	1	61.4-136			4.55	20
Naphthalene	0.0250	ND	0.0177	0.0189	70.7	75.5	1	61.8-143			6.58	20
n-Propylbenzene	0.0250	ND	0.0184	0.0189	73.8	75.5	1	63.2-139			2.33	20
Styrene	0.0250	ND	0.0188	0.0196	75.1	78.5	1	68.2-133			4.37	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0194	0.0201	77.5	80.3	1	70.5-132			3.64	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0202	0.0208	80.6	83.1	1	64.9-145			3.09	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-41,42

ONE LAB. NATIONWIDE.



L832598-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832598-01 05/04/16 20:23 • (MS) R3134152-4 05/04/16 19:01 • (MSD) R3134152-5 05/04/16 19:21

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	%	%		%			%	%
Tetrachloroethene	0.0250	ND	0.0157	0.0166	63.0	66.3	1	57.4-141			5.12	20
Toluene	0.0250	ND	0.0173	0.0182	69.3	72.8	1	67.8-124			4.89	20
1,1,1-Trichloroethane	0.0250	ND	0.0171	0.0177	68.5	70.7	1	58.7-134			3.13	20
1,1,2-Trichloroethane	0.0250	ND	0.0195	0.0208	78.0	83.3	1	74.1-130			6.64	20
Trichloroethene	0.0250	ND	0.0166	0.0171	66.3	68.5	1	48.9-148			3.22	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0174	0.0177	69.5	70.8	1	60.5-137			1.77	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0172	0.0176	68.9	70.5	1	67.9-134			2.21	20
Vinyl chloride	0.0250	ND	0.0146	0.0151	58.4	60.4	1	44.3-143			3.28	20
Xylenes, Total	0.0750	ND	0.0527	0.0551	70.3	73.5	1	65.6-133			4.48	20
o-Xylene	0.0250	ND	0.0179	0.0185	71.6	74.0	1	67.1-133			3.33	20
m&p-Xylenes	0.0500	ND	0.0348	0.0366	69.6	73.3	1	64.1-133			5.06	20
(S) Toluene-d8					99.3	100		90.0-115				
(S) Dibromofluoromethane					99.8	98.8		79.0-121				
(S) 4-Bromofluorobenzene					85.7	85.4		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,08,09,10,13,14,16,17,19

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134288-3 05/05/16 04:33

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

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Sr

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Qc

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ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,08,09,10,13,14,16,17,19

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134288-3 05/05/16 04:33

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	98.8			90.0-115
(S) Dibromofluoromethane	101			79.0-121
(S) 4-Bromofluorobenzene	96.1			80.1-120

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134288-1 05/05/16 02:55 • (LCSD) R3134288-2 05/05/16 03:14

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	0.0989	0.115	79.1	92.3	28.7-175			15.4	20.9
Benzene	0.0250	0.0225	0.0233	89.8	93.0	73.0-122			3.51	20
Bromodichloromethane	0.0250	0.0215	0.0225	85.8	90.0	75.5-121			4.70	20
Bromoform	0.0250	0.0187	0.0205	74.8	81.9	71.5-131			9.03	20
Bromomethane	0.0250	0.0277	0.0284	111	114	22.4-187			2.47	20
n-Butylbenzene	0.0250	0.0228	0.0238	91.2	95.1	75.9-134			4.24	20
sec-Butylbenzene	0.0250	0.0222	0.0231	88.9	92.6	80.6-126			4.12	20
Carbon disulfide	0.0250	0.0204	0.0214	81.7	85.8	53.0-134			4.82	20
Carbon tetrachloride	0.0250	0.0207	0.0215	82.6	86.0	70.9-129			4.05	20
Chlorobenzene	0.0250	0.0221	0.0228	88.4	91.2	79.7-122			3.11	20
Chlorodibromomethane	0.0250	0.0214	0.0225	85.4	90.0	78.2-124			5.25	20
Chloroethane	0.0250	0.0256	0.0260	102	104	41.2-153			1.69	20
Chloroform	0.0250	0.0228	0.0238	91.0	95.2	73.2-125			4.44	20
Chloromethane	0.0250	0.0201	0.0208	80.3	83.4	55.8-134			3.71	20
1,2-Dibromoethane	0.0250	0.0207	0.0225	82.9	89.9	79.8-122			8.10	20
1,1-Dichloroethane	0.0250	0.0229	0.0236	91.7	94.3	71.7-127			2.85	20

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,08,09,10,13,14,16,17,19

ONE LAB. NATIONWIDE.



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134288-1 05/05/16 02:55 • (LCSD) R3134288-2 05/05/16 03:14

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	0.0211	0.0223	84.4	89.2	65.3-126			5.55	20
1,1-Dichloroethene	0.0250	0.0228	0.0236	91.0	94.4	59.9-137			3.68	20
cis-1,2-Dichloroethene	0.0250	0.0233	0.0242	93.2	96.9	77.3-122			3.80	20
trans-1,2-Dichloroethene	0.0250	0.0230	0.0239	92.0	95.7	72.6-125			3.99	20
1,2-Dichloropropane	0.0250	0.0206	0.0214	82.6	85.7	77.4-125			3.68	20
cis-1,3-Dichloropropene	0.0250	0.0223	0.0231	89.3	92.4	77.7-124			3.43	20
trans-1,3-Dichloropropene	0.0250	0.0213	0.0228	85.2	91.1	73.5-127			6.65	20
Ethylbenzene	0.0250	0.0219	0.0227	87.7	90.7	80.9-121			3.44	20
2-Hexanone	0.125	0.105	0.125	83.7	99.9	59.4-151			17.6	20
Isopropylbenzene	0.0250	0.0219	0.0229	87.7	91.5	81.6-124			4.14	20
p-Isopropyltoluene	0.0250	0.0229	0.0240	91.7	96.0	77.6-129			4.62	20
2-Butanone (MEK)	0.125	0.103	0.124	82.0	99.0	46.4-155			18.7	20
Methylene Chloride	0.0250	0.0222	0.0232	88.9	92.8	69.5-120			4.25	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0965	0.117	77.2	93.3	63.3-138			18.8	20
Methyl tert-butyl ether	0.0250	0.0212	0.0237	84.8	94.7	70.1-125			11.0	20
Naphthalene	0.0250	0.0194	0.0223	77.6	89.2	69.7-134			13.9	20
n-Propylbenzene	0.0250	0.0227	0.0233	91.0	93.4	81.9-122			2.58	20
Styrene	0.0250	0.0226	0.0238	90.3	95.1	79.9-124			5.18	20
1,1,1,2-Tetrachloroethane	0.0250	0.0218	0.0224	87.1	89.4	78.5-125			2.66	20
1,1,2,2-Tetrachloroethane	0.0250	0.0204	0.0228	81.7	91.1	79.3-123			10.9	20
Tetrachloroethene	0.0250	0.0212	0.0216	84.8	86.2	73.5-130			1.68	20
Toluene	0.0250	0.0213	0.0220	85.2	88.0	77.9-116			3.21	20
1,1,1-Trichloroethane	0.0250	0.0226	0.0235	90.2	93.9	71.1-129			4.01	20
1,1,2-Trichloroethane	0.0250	0.0212	0.0227	84.6	90.8	81.6-120			7.07	20
Trichloroethene	0.0250	0.0208	0.0219	83.4	87.7	79.5-121			5.08	20
1,2,4-Trimethylbenzene	0.0250	0.0220	0.0225	87.9	90.0	79.0-122			2.32	20
1,3,5-Trimethylbenzene	0.0250	0.0221	0.0229	88.6	91.5	81.0-123			3.22	20
Vinyl chloride	0.0250	0.0232	0.0240	92.8	96.0	61.5-134			3.43	20
Xylenes, Total	0.0750	0.0658	0.0674	87.7	89.9	79.2-122			2.50	20
o-Xylene	0.0250	0.0215	0.0220	85.9	88.0	79.1-123			2.40	20
m&p-Xylenes	0.0500	0.0443	0.0454	88.6	90.8	78.5-122			2.55	20
(S) Toluene-d8				100	102	90.0-115				
(S) Dibromofluoromethane				102	104	79.0-121				
(S) 4-Bromofluorobenzene				96.4	97.1	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

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ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,08,09,10,13,14,16,17,19



L832603-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-09 05/05/16 06:32 • (MS) R3134288-4 05/05/16 05:33 • (MSD) R3134288-5 05/05/16 05:52												
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	%	%		%			%	%
Acetone	0.125	U	0.0513	0.0481	41.0	38.5	1	25.0-156			6.34	21.5
Benzene	0.0250	U	0.0220	0.0209	88.2	83.6	1	58.6-133			5.31	20
Bromodichloromethane	0.0250	U	0.0212	0.0201	84.9	80.5	1	69.2-127			5.31	20
Bromoform	0.0250	U	0.0191	0.0180	76.3	72.2	1	66.3-140			5.53	20
Bromomethane	0.0250	U	0.0289	0.0255	116	102	1	16.6-183			12.7	20.5
n-Butylbenzene	0.0250	U	0.0232	0.0223	92.8	89.0	1	64.8-145			4.19	20
sec-Butylbenzene	0.0250	U	0.0219	0.0208	87.6	83.4	1	66.8-139			4.92	20
Carbon disulfide	0.0250	U	0.0206	0.0199	82.3	79.5	1	34.9-138			3.49	20
Carbon tetrachloride	0.0250	U	0.0207	0.0199	82.9	79.5	1	60.6-139			4.18	20
Chlorobenzene	0.0250	U	0.0214	0.0206	85.8	82.6	1	70.1-130			3.77	20
Chlorodibromomethane	0.0250	U	0.0206	0.0199	82.2	79.7	1	71.6-132			3.11	20
Chloroethane	0.0250	U	0.0262	0.0244	105	97.7	1	33.3-155			6.95	20
Chloroform	0.0250	U	0.0227	0.0217	90.9	86.7	1	66.1-133			4.69	20
Chloromethane	0.0250	U	0.0208	0.0196	83.2	78.6	1	40.7-139			5.73	20
1,2-Dibromoethane	0.0250	U	0.0207	0.0196	82.9	78.6	1	73.8-131			5.40	20
1,1-Dichloroethane	0.0250	U	0.0228	0.0216	91.0	86.4	1	64.0-134			5.22	20
1,2-Dichloroethane	0.0250	U	0.0208	0.0197	83.2	78.8	1	60.7-132			5.46	20
1,1-Dichloroethene	0.0250	U	0.0228	0.0219	91.2	87.7	1	48.8-144			3.89	20
cis-1,2-Dichloroethene	0.0250	U	0.0229	0.0219	91.5	87.6	1	60.6-136			4.42	20
trans-1,2-Dichloroethene	0.0250	U	0.0229	0.0221	91.7	88.5	1	61.0-132			3.52	20
1,2-Dichloropropane	0.0250	U	0.0203	0.0198	81.4	79.2	1	69.7-130			2.75	20
cis-1,3-Dichloropropene	0.0250	U	0.0218	0.0209	87.3	83.6	1	71.1-129			4.38	20
trans-1,3-Dichloropropene	0.0250	U	0.0210	0.0199	84.1	79.8	1	66.3-136			5.23	20
Ethylbenzene	0.0250	U	0.0218	0.0205	87.4	81.9	1	62.7-136			6.46	20
2-Hexanone	0.125	U	0.0864	0.0826	69.1	66.0	1	59.4-154			4.52	20.1
Isopropylbenzene	0.0250	U	0.0216	0.0205	86.2	81.9	1	67.4-136			5.21	20
p-Isopropyltoluene	0.0250	U	0.0226	0.0215	90.4	86.2	1	62.8-143			4.72	20
2-Butanone (MEK)	0.125	U	0.0807	0.0753	64.5	60.2	1	45.0-156			6.91	20.8
Methylene Chloride	0.0250	U	0.0226	0.0213	90.5	85.2	1	61.5-125			6.06	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.102	0.0978	81.3	78.2	1	60.7-150			3.89	20
Methyl tert-butyl ether	0.0250	U	0.0217	0.0206	86.9	82.6	1	61.4-136			5.07	20
Naphthalene	0.0250	U	0.0198	0.0192	79.0	76.9	1	61.8-143			2.68	20
n-Propylbenzene	0.0250	U	0.0224	0.0215	89.6	86.1	1	63.2-139			4.05	20
Styrene	0.0250	U	0.0211	0.0199	84.5	79.7	1	68.2-133			5.90	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0209	0.0198	83.7	79.2	1	70.5-132			5.47	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0206	0.0201	82.4	80.5	1	64.9-145			2.30	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832603

DATE/TIME:  
05/20/16 13:57

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WG868995

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,02,03,04,08,09,10,13,14,16,17,19

ONE LAB. NATIONWIDE.



L832603-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-09 05/05/16 06:32 • (MS) R3134288-4 05/05/16 05:33 • (MSD) R3134288-5 05/05/16 05:52												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0211	0.0197	84.3	78.9	1	57.4-141			6.66	20
Toluene	0.0250	U	0.0211	0.0200	84.6	80.0	1	67.8-124			5.55	20
1,1,1-Trichloroethane	0.0250	U	0.0226	0.0216	90.6	86.3	1	58.7-134			4.79	20
1,1,2-Trichloroethane	0.0250	U	0.0212	0.0200	84.7	80.2	1	74.1-130			5.47	20
Trichloroethene	0.0250	U	0.0207	0.0197	83.0	78.7	1	48.9-148			5.25	20
1,2,4-Trimethylbenzene	0.0250	U	0.0215	0.0202	85.8	80.8	1	60.5-137			6.06	20
1,3,5-Trimethylbenzene	0.0250	U	0.0215	0.0206	86.0	82.5	1	67.9-134			4.22	20
Vinyl chloride	0.0250	U	0.0240	0.0225	96.2	89.8	1	44.3-143			6.83	20
Xylenes, Total	0.0750	U	0.0645	0.0604	86.0	80.5	1	65.6-133			6.57	20
o-Xylene	0.0250	U	0.0208	0.0197	83.1	78.8	1	67.1-133			5.38	20
m&p-Xylenes	0.0500	U	0.0437	0.0407	87.4	81.4	1	64.1-133			7.14	20
(S) Toluene-d8					102	102		90.0-115				
(S) Dibromofluoromethane					103	102		79.0-121				
(S) 4-Bromofluorobenzene					95.7	94.0		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832603

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05/20/16 13:57

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-21,22,23,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134200-3 05/05/16 04:12

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

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Ss

4

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

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

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L832603

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-21,22,23,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134200-3 05/05/16 04:12

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	107			90.0-115
(S) Dibromofluoromethane	110			79.0-121
(S) 4-Bromofluorobenzene	105			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134200-1 05/05/16 03:03 • (LCSD) R3134200-2 05/05/16 03:20

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	0.127	0.123	102	98.2	28.7-175			3.33	20.9
Benzene	0.0250	0.0226	0.0221	90.6	88.4	73.0-122			2.44	20
Bromodichloromethane	0.0250	0.0230	0.0229	92.1	91.5	75.5-121			0.650	20
Bromoform	0.0250	0.0222	0.0218	88.7	87.0	71.5-131			1.92	20
Bromomethane	0.0250	0.0243	0.0232	97.1	92.9	22.4-187			4.47	20
n-Butylbenzene	0.0250	0.0223	0.0228	89.3	91.2	75.9-134			2.11	20
sec-Butylbenzene	0.0250	0.0223	0.0229	89.2	91.7	80.6-126			2.82	20
Carbon disulfide	0.0250	0.0206	0.0202	82.6	80.8	53.0-134			2.15	20
Carbon tetrachloride	0.0250	0.0207	0.0203	82.7	81.2	70.9-129			1.90	20
Chlorobenzene	0.0250	0.0220	0.0226	88.1	90.4	79.7-122			2.52	20
Chlorodibromomethane	0.0250	0.0226	0.0228	90.3	91.1	78.2-124			0.820	20
Chloroethane	0.0250	0.0231	0.0228	92.3	91.2	41.2-153			1.16	20
Chloroform	0.0250	0.0235	0.0228	94.1	91.2	73.2-125			3.14	20
Chloromethane	0.0250	0.0230	0.0224	92.1	89.6	55.8-134			2.74	20
1,2-Dibromoethane	0.0250	0.0222	0.0223	88.8	89.3	79.8-122			0.540	20
1,1-Dichloroethane	0.0250	0.0237	0.0229	94.7	91.8	71.7-127			3.14	20

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-21,22,23,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134200-1 05/05/16 03:03 • (LCSD) R3134200-2 05/05/16 03:20

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	0.0239	0.0227	95.7	90.7	65.3-126			5.40	20
1,1-Dichloroethene	0.0250	0.0235	0.0231	94.0	92.4	59.9-137			1.71	20
cis-1,2-Dichloroethene	0.0250	0.0235	0.0229	94.1	91.7	77.3-122			2.52	20
trans-1,2-Dichloroethene	0.0250	0.0233	0.0229	93.1	91.4	72.6-125			1.75	20
1,2-Dichloropropane	0.0250	0.0228	0.0224	91.2	89.4	77.4-125			1.99	20
cis-1,3-Dichloropropene	0.0250	0.0236	0.0233	94.6	93.0	77.7-124			1.67	20
trans-1,3-Dichloropropene	0.0250	0.0234	0.0228	93.7	91.1	73.5-127			2.81	20
Ethylbenzene	0.0250	0.0213	0.0219	85.4	87.7	80.9-121			2.66	20
2-Hexanone	0.125	0.116	0.111	92.9	88.8	59.4-151			4.60	20
Isopropylbenzene	0.0250	0.0224	0.0230	89.7	92.1	81.6-124			2.62	20
p-Isopropyltoluene	0.0250	0.0225	0.0233	90.2	93.3	77.6-129			3.40	20
2-Butanone (MEK)	0.125	0.103	0.0934	82.1	74.7	46.4-155			9.40	20
Methylene Chloride	0.0250	0.0226	0.0219	90.2	87.8	69.5-120			2.71	20
4-Methyl-2-pentanone (MIBK)	0.125	0.117	0.108	94.0	86.4	63.3-138			8.36	20
Methyl tert-butyl ether	0.0250	0.0225	0.0213	90.0	85.4	70.1-125			5.23	20
Naphthalene	0.0250	0.0238	0.0231	95.1	92.4	69.7-134			2.96	20
n-Propylbenzene	0.0250	0.0229	0.0235	91.4	94.0	81.9-122			2.84	20
Styrene	0.0250	0.0227	0.0233	90.7	93.1	79.9-124			2.64	20
1,1,1,2-Tetrachloroethane	0.0250	0.0212	0.0215	84.7	86.1	78.5-125			1.73	20
1,1,2,2-Tetrachloroethane	0.0250	0.0220	0.0221	87.9	88.4	79.3-123			0.520	20
Tetrachloroethene	0.0250	0.0220	0.0224	88.2	89.4	73.5-130			1.41	20
Toluene	0.0250	0.0224	0.0223	89.5	89.2	77.9-116			0.310	20
1,1,1-Trichloroethane	0.0250	0.0240	0.0235	96.0	94.0	71.1-129			2.16	20
1,1,2-Trichloroethane	0.0250	0.0221	0.0220	88.4	88.0	81.6-120			0.430	20
Trichloroethene	0.0250	0.0226	0.0224	90.3	89.6	79.5-121			0.860	20
1,2,4-Trimethylbenzene	0.0250	0.0223	0.0229	89.1	91.6	79.0-122			2.84	20
1,3,5-Trimethylbenzene	0.0250	0.0221	0.0228	88.4	91.1	81.0-123			2.98	20
Vinyl chloride	0.0250	0.0242	0.0237	96.8	94.7	61.5-134			2.18	20
Xylenes, Total	0.0750	0.0660	0.0678	88.0	90.4	79.2-122			2.74	20
o-Xylene	0.0250	0.0217	0.0225	86.7	90.1	79.1-123			3.85	20
m&p-Xylenes	0.0500	0.0443	0.0453	88.6	90.5	78.5-122			2.19	20
(S) Toluene-d8				106	105	90.0-115				
(S) Dibromofluoromethane				107	104	79.0-121				
(S) 4-Bromofluorobenzene				99.1	100	80.1-120				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG868996

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-21,22,23,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40

ONE LAB. NATIONWIDE.



L832603-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-21 05/05/16 05:34 • (MS) R3134200-4 05/05/16 05:51 • (MSD) R3134200-5 05/05/16 06:08

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	%	%		%			%	%
Acetone	0.125	U	0.101	0.103	80.9	82.4	1	25.0-156			1.93	21.5
Benzene	0.0250	0.0136	0.0371	0.0362	93.9	90.6	1	58.6-133			2.28	20
Bromodichloromethane	0.0250	U	0.0240	0.0246	96.1	98.3	1	69.2-127			2.26	20
Bromoform	0.0250	U	0.0230	0.0239	92.0	95.8	1	66.3-140			4.06	20
Bromomethane	0.0250	U	0.0266	0.0258	106	103	1	16.6-183			2.88	20.5
n-Butylbenzene	0.0250	U	0.0227	0.0224	90.6	89.5	1	64.8-145			1.27	20
sec-Butylbenzene	0.0250	U	0.0239	0.0240	95.5	95.9	1	66.8-139			0.350	20
Carbon disulfide	0.0250	U	0.0227	0.0223	90.6	89.0	1	34.9-138			1.78	20
Carbon tetrachloride	0.0250	U	0.0226	0.0222	90.6	88.7	1	60.6-139			2.14	20
Chlorobenzene	0.0250	U	0.0227	0.0230	91.0	92.1	1	70.1-130			1.20	20
Chlorodibromomethane	0.0250	U	0.0229	0.0238	91.5	95.3	1	71.6-132			4.04	20
Chloroethane	0.0250	U	0.0257	0.0256	103	102	1	33.3-155			0.620	20
Chloroform	0.0250	U	0.0275	0.0272	110	109	1	66.1-133			1.32	20
Chloromethane	0.0250	U	0.0254	0.0247	102	98.7	1	40.7-139			2.92	20
1,2-Dibromoethane	0.0250	U	0.0217	0.0228	86.8	91.1	1	73.8-131			4.76	20
1,1-Dichloroethane	0.0250	U	0.0249	0.0244	99.7	97.6	1	64.0-134			2.07	20
1,2-Dichloroethane	0.0250	U	0.0241	0.0244	96.4	97.4	1	60.7-132			1.09	20
1,1-Dichloroethene	0.0250	U	0.0252	0.0250	101	99.8	1	48.8-144			0.970	20
cis-1,2-Dichloroethene	0.0250	U	0.0248	0.0244	99.3	97.6	1	60.6-136			1.77	20
trans-1,2-Dichloroethene	0.0250	U	0.0247	0.0243	98.8	97.1	1	61.0-132			1.68	20
1,2-Dichloropropane	0.0250	U	0.0241	0.0238	96.3	95.4	1	69.7-130			0.950	20
cis-1,3-Dichloropropene	0.0250	U	0.0236	0.0240	94.5	95.8	1	71.1-129			1.45	20
trans-1,3-Dichloropropene	0.0250	U	0.0233	0.0237	93.2	94.9	1	66.3-136			1.82	20
Ethylbenzene	0.0250	0.00354	0.0257	0.0260	88.6	89.8	1	62.7-136			1.24	20
2-Hexanone	0.125	U	0.0897	0.0984	71.7	78.7	1	59.4-154			9.27	20.1
Isopropylbenzene	0.0250	U	0.0239	0.0240	95.4	96.0	1	67.4-136			0.530	20
p-Isopropyltoluene	0.0250	U	0.0242	0.0243	96.9	97.0	1	62.8-143			0.120	20
2-Butanone (MEK)	0.125	U	0.0804	0.0853	64.3	68.3	1	45.0-156			5.96	20.8
Methylene Chloride	0.0250	U	0.0250	0.0247	100	98.6	1	61.5-125			1.39	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.121	0.131	96.9	105	1	60.7-150			7.60	20
Methyl tert-butyl ether	0.0250	0.0143	0.0394	0.0396	100	101	1	61.4-136			0.470	20
Naphthalene	0.0250	U	0.0244	0.0254	97.8	102	1	61.8-143			3.92	20
n-Propylbenzene	0.0250	U	0.0241	0.0243	96.3	97.2	1	63.2-139			0.950	20
Styrene	0.0250	U	0.0240	0.0245	95.9	97.9	1	68.2-133			2.05	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0223	0.0228	89.0	91.3	1	70.5-132			2.53	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0239	0.0255	95.8	102	1	64.9-145			6.11	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

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832603

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-21,22,23,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40

ONE LAB. NATIONWIDE.



L832603-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-21 05/05/16 05:34 • (MS) R3134200-4 05/05/16 05:51 • (MSD) R3134200-5 05/05/16 06:08

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	U	0.0219	0.0220	87.5	88.0	1	57.4-141			0.580	20
Toluene	0.0250	U	0.0238	0.0237	95.1	94.6	1	67.8-124			0.530	20
1,1,1-Trichloroethane	0.0250	U	0.0262	0.0259	105	103	1	58.7-134			1.51	20
1,1,2-Trichloroethane	0.0250	U	0.0226	0.0237	90.6	94.6	1	74.1-130			4.38	20
Trichloroethene	0.0250	U	0.0226	0.0227	90.3	90.7	1	48.9-148			0.510	20
1,2,4-Trimethylbenzene	0.0250	0.000753	0.0246	0.0249	95.5	96.8	1	60.5-137			1.32	20
1,3,5-Trimethylbenzene	0.0250	U	0.0236	0.0237	94.4	94.9	1	67.9-134			0.480	20
Vinyl chloride	0.0250	U	0.0267	0.0263	107	105	1	44.3-143			1.36	20
Xylenes, Total	0.0750	0.00518	0.0741	0.0742	91.9	92.1	1	65.6-133			0.160	20
o-Xylene	0.0250	U	0.0233	0.0233	93.4	93.4	1	67.1-133			0.0100	20
m&p-Xylenes	0.0500	0.00518	0.0508	0.0509	91.2	91.4	1	64.1-133			0.220	20
(S) Toluene-d8					110	110		90.0-115				
(S) Dibromofluoromethane					108	108		79.0-121				
(S) 4-Bromofluorobenzene					102	104		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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L832603

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-24,27,28,32,34,36

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134389-3 05/05/16 18:28

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

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

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Qc

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Gl

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Al

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Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-24,27,28,32,34,36

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134389-3 05/05/16 18:28

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	96.7			90.0-115
(S) Dibromofluoromethane	102			79.0-121
(S) 4-Bromofluorobenzene	90.2			80.1-120

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134389-1 05/05/16 17:00 • (LCSD) R3134389-2 05/05/16 17:22

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 %
Acetone	0.125	0.197	0.202	158	161	28.7-175			2.28	20.9
Benzene	0.0250	0.0276	0.0277	110	111	73.0-122			0.390	20
Bromodichloromethane	0.0250	0.0254	0.0255	102	102	75.5-121			0.320	20
Bromoform	0.0250	0.0245	0.0263	98.1	105	71.5-131			6.88	20
Bromomethane	0.0250	0.0387	0.0380	155	152	22.4-187			1.84	20
n-Butylbenzene	0.0250	0.0291	0.0285	116	114	75.9-134			2.03	20
sec-Butylbenzene	0.0250	0.0288	0.0289	115	115	80.6-126			0.350	20
Carbon disulfide	0.0250	0.0262	0.0262	105	105	53.0-134			0.130	20
Carbon tetrachloride	0.0250	0.0257	0.0262	103	105	70.9-129			1.91	20
Chlorobenzene	0.0250	0.0289	0.0295	116	118	79.7-122			1.74	20
Chlorodibromomethane	0.0250	0.0255	0.0272	102	109	78.2-124			6.13	20
Chloroethane	0.0250	0.0331	0.0343	133	137	41.2-153			3.50	20
Chloroform	0.0250	0.0271	0.0266	108	106	73.2-125			1.72	20
Chloromethane	0.0250	0.0256	0.0260	102	104	55.8-134			1.62	20
1,2-Dibromoethane	0.0250	0.0269	0.0280	108	112	79.8-122			3.98	20
1,1-Dichloroethane	0.0250	0.0263	0.0259	105	104	71.7-127			1.40	20

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-24,27,28,32,34,36

ONE LAB. NATIONWIDE.



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134389-1 05/05/16 17:00 • (LCSD) R3134389-2 05/05/16 17:22

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 %
1,2-Dichloroethane	0.0250	0.0238	0.0242	95.0	97.0	65.3-126			2.04	20
1,1-Dichloroethene	0.0250	0.0255	0.0249	102	99.6	59.9-137			2.21	20
cis-1,2-Dichloroethene	0.0250	0.0280	0.0284	112	114	77.3-122			1.57	20
trans-1,2-Dichloroethene	0.0250	0.0286	0.0288	114	115	72.6-125			0.540	20
1,2-Dichloropropane	0.0250	0.0260	0.0260	104	104	77.4-125			0.0900	20
cis-1,3-Dichloropropene	0.0250	0.0249	0.0254	99.7	101	77.7-124			1.80	20
trans-1,3-Dichloropropene	0.0250	0.0245	0.0253	97.9	101	73.5-127			3.43	20
Ethylbenzene	0.0250	0.0297	0.0293	119	117	80.9-121			1.31	20
2-Hexanone	0.125	0.158	0.163	127	131	59.4-151			3.30	20
Isopropylbenzene	0.0250	0.0289	0.0284	116	114	81.6-124			1.82	20
p-Isopropyltoluene	0.0250	0.0284	0.0284	114	113	77.6-129			0.110	20
2-Butanone (MEK)	0.125	0.149	0.159	119	127	46.4-155			6.62	20
Methylene Chloride	0.0250	0.0277	0.0279	111	111	69.5-120			0.420	20
4-Methyl-2-pentanone (MIBK)	0.125	0.120	0.126	96.4	101	63.3-138			4.44	20
Methyl tert-butyl ether	0.0250	0.0251	0.0270	100	108	70.1-125			7.25	20
Naphthalene	0.0250	0.0235	0.0245	93.9	97.9	69.7-134			4.14	20
n-Propylbenzene	0.0250	0.0290	0.0291	116	117	81.9-122			0.370	20
Styrene	0.0250	0.0282	0.0284	113	113	79.9-124			0.600	20
1,1,1,2-Tetrachloroethane	0.0250	0.0269	0.0270	108	108	78.5-125			0.0600	20
1,1,2,2-Tetrachloroethane	0.0250	0.0272	0.0283	109	113	79.3-123			3.97	20
Tetrachloroethene	0.0250	0.0281	0.0283	112	113	73.5-130			0.580	20
Toluene	0.0250	0.0269	0.0272	108	109	77.9-116			1.01	20
1,1,1-Trichloroethane	0.0250	0.0270	0.0271	108	109	71.1-129			0.510	20
1,1,2-Trichloroethane	0.0250	0.0277	0.0286	111	115	81.6-120			3.21	20
Trichloroethene	0.0250	0.0277	0.0271	111	109	79.5-121			2.01	20
1,2,4-Trimethylbenzene	0.0250	0.0283	0.0286	113	115	79.0-122			1.03	20
1,3,5-Trimethylbenzene	0.0250	0.0286	0.0285	114	114	81.0-123			0.300	20
Vinyl chloride	0.0250	0.0260	0.0261	104	104	61.5-134			0.140	20
Xylenes, Total	0.0750	0.0874	0.0878	117	117	79.2-122			0.430	20
o-Xylene	0.0250	0.0290	0.0289	116	116	79.1-123			0.240	20
m&p-Xylenes	0.0500	0.0584	0.0588	117	118	78.5-122			0.770	20
(S) Toluene-d8				100	101	90.0-115				
(S) Dibromofluoromethane				97.9	100	79.0-121				
(S) 4-Bromofluorobenzene				95.2	98.2	80.1-120				

Cp

Tc

Ss

Cn

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Qc

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ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-24,27,28,32,34,36

ONE LAB. NATIONWIDE.



L832660-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832660-07 05/06/16 00:17 • (MS) R3134389-4 05/05/16 19:05 • (MSD) R3134389-5 05/05/16 19:26

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	%	%		%			%	%
Acetone	0.125	U	0.0824	0.0893	65.9	71.4	1	25.0-156			8.03	21.5
Benzene	0.0250	U	0.0219	0.0228	87.6	91.3	1	58.6-133			4.14	20
Bromodichloromethane	0.0250	U	0.0217	0.0227	86.6	90.8	1	69.2-127			4.63	20
Bromoform	0.0250	U	0.0221	0.0232	88.4	92.6	1	66.3-140			4.71	20
Bromomethane	0.0250	U	0.0248	0.0264	99.0	106	1	16.6-183			6.56	20.5
n-Butylbenzene	0.0250	U	0.0242	0.0261	96.7	104	1	64.8-145			7.65	20
sec-Butylbenzene	0.0250	U	0.0247	0.0260	99.0	104	1	66.8-139			4.86	20
Carbon disulfide	0.0250	U	0.0144	0.0146	57.6	58.4	1	34.9-138			1.48	20
Carbon tetrachloride	0.0250	U	0.0207	0.0222	82.8	88.7	1	60.6-139			6.80	20
Chlorobenzene	0.0250	U	0.0243	0.0250	97.4	100	1	70.1-130			2.66	20
Chlorodibromomethane	0.0250	U	0.0227	0.0235	90.8	94.1	1	71.6-132			3.61	20
Chloroethane	0.0250	U	0.0238	0.0251	95.3	100	1	33.3-155			5.01	20
Chloroform	0.0250	U	0.0224	0.0234	89.7	93.5	1	66.1-133			4.25	20
Chloromethane	0.0250	U	0.0166	0.0176	66.5	70.3	1	40.7-139			5.57	20
1,2-Dibromoethane	0.0250	U	0.0227	0.0236	90.7	94.3	1	73.8-131			3.91	20
1,1-Dichloroethane	0.0250	U	0.0212	0.0222	84.7	88.6	1	64.0-134			4.53	20
1,2-Dichloroethane	0.0250	U	0.0200	0.0210	80.2	84.0	1	60.7-132			4.69	20
1,1-Dichloroethene	0.0250	U	0.0184	0.0190	73.7	76.2	1	48.8-144			3.31	20
cis-1,2-Dichloroethene	0.0250	U	0.0226	0.0237	90.3	94.7	1	60.6-136			4.67	20
trans-1,2-Dichloroethene	0.0250	U	0.0209	0.0219	83.6	87.7	1	61.0-132			4.83	20
1,2-Dichloropropane	0.0250	0.00129	0.0217	0.0224	81.7	84.5	1	69.7-130			3.16	20
cis-1,3-Dichloropropene	0.0250	U	0.0198	0.0211	79.0	84.5	1	71.1-129			6.67	20
trans-1,3-Dichloropropene	0.0250	0.000717	0.0202	0.0222	77.9	86.1	1	66.3-136			9.59	20
Ethylbenzene	0.0250	U	0.0244	0.0255	97.6	102	1	62.7-136			4.58	20
2-Hexanone	0.125	U	0.110	0.118	87.8	94.5	1	59.4-154			7.31	20.1
Isopropylbenzene	0.0250	U	0.0241	0.0255	96.4	102	1	67.4-136			5.52	20
p-Isopropyltoluene	0.0250	U	0.0242	0.0256	96.9	102	1	62.8-143			5.50	20
2-Butanone (MEK)	0.125	U	0.0942	0.0982	75.4	78.5	1	45.0-156			4.14	20.8
Methylene Chloride	0.0250	U	0.0224	0.0232	89.5	92.6	1	61.5-125			3.44	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.104	0.112	83.2	89.6	1	60.7-150			7.50	20
Methyl tert-butyl ether	0.0250	U	0.0218	0.0236	87.3	94.6	1	61.4-136			8.00	20
Naphthalene	0.0250	U	0.0207	0.0234	83.0	93.5	1	61.8-143			11.9	20
n-Propylbenzene	0.0250	U	0.0241	0.0251	96.5	100	1	63.2-139			3.89	20
Styrene	0.0250	U	0.0231	0.0240	92.3	95.9	1	68.2-133			3.81	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0237	0.0244	94.8	97.7	1	70.5-132			3.06	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0256	0.0266	102	107	1	64.9-145			4.01	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-24,27,28,32,34,36

ONE LAB. NATIONWIDE. 

L832660-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832660-07 05/06/16 00:17 • (MS) R3134389-4 05/05/16 19:05 • (MSD) R3134389-5 05/05/16 19:26												
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	%	%		%			%	%
Tetrachloroethene	0.0250	U	0.0225	0.0235	90.0	93.9	1	57.4-141			4.23	20
Toluene	0.0250	U	0.0230	0.0231	92.2	92.5	1	67.8-124			0.340	20
1,1,1-Trichloroethane	0.0250	U	0.0221	0.0230	88.5	92.0	1	58.7-134			3.91	20
1,1,2-Trichloroethane	0.0250	U	0.0248	0.0257	99.1	103	1	74.1-130			3.54	20
Trichloroethene	0.0250	U	0.0214	0.0227	85.5	90.7	1	48.9-148			5.88	20
1,2,4-Trimethylbenzene	0.0250	U	0.0241	0.0251	96.3	100	1	60.5-137			4.00	20
1,3,5-Trimethylbenzene	0.0250	U	0.0242	0.0251	96.7	100	1	67.9-134			3.73	20
Vinyl chloride	0.0250	U	0.0174	0.0184	69.6	73.5	1	44.3-143			5.45	20
Xylenes, Total	0.0750	U	0.0730	0.0750	97.4	100	1	65.6-133			2.69	20
o-Xylene	0.0250	U	0.0245	0.0250	98.0	100	1	67.1-133			2.08	20
m&p-Xylenes	0.0500	U	0.0485	0.0500	97.1	100	1	64.1-133			3.00	20
(S) Toluene-d8					98.7	99.6		90.0-115				
(S) Dibromofluoromethane					99.2	101		79.0-121				
(S) 4-Bromofluorobenzene					96.0	95.7		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,04,05,06,07,11,12,15,16,18,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134420-3 05/06/16 10:21

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

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Cp

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ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832603

DATE/TIME:  
05/20/16 13:57

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WG870521

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,04,05,06,07,11,12,15,16,18,20

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134420-3 05/06/16 10:21

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	114			79.0-121
(S) 4-Bromofluorobenzene	100			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134420-1 05/06/16 08:21 • (LCSD) R3134420-2 05/06/16 08:45

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	0.146	0.149	117	119	28.7-175			1.53	20.9
Benzene	0.0250	0.0265	0.0257	106	103	73.0-122			3.11	20
Bromodichloromethane	0.0250	0.0246	0.0242	98.5	96.7	75.5-121			1.87	20
Bromoform	0.0250	0.0241	0.0243	96.5	97.1	71.5-131			0.710	20
Bromomethane	0.0250	0.0375	0.0376	150	150	22.4-187			0.200	20
n-Butylbenzene	0.0250	0.0260	0.0256	104	102	75.9-134			1.79	20
sec-Butylbenzene	0.0250	0.0224	0.0224	89.5	89.6	80.6-126			0.0600	20
Carbon disulfide	0.0250	0.0236	0.0233	94.4	93.0	53.0-134			1.41	20
Carbon tetrachloride	0.0250	0.0238	0.0228	95.2	91.3	70.9-129			4.22	20
Chlorobenzene	0.0250	0.0228	0.0228	91.2	91.1	79.7-122			0.100	20
Chlorodibromomethane	0.0250	0.0232	0.0236	92.7	94.2	78.2-124			1.65	20
Chloroethane	0.0250	0.0313	0.0302	125	121	41.2-153			3.70	20
Chloroform	0.0250	0.0258	0.0256	103	102	73.2-125			0.910	20
Chloromethane	0.0250	0.0266	0.0269	106	107	55.8-134			0.880	20
1,2-Dibromoethane	0.0250	0.0249	0.0250	99.6	100	79.8-122			0.460	20
1,1-Dichloroethane	0.0250	0.0269	0.0258	108	103	71.7-127			4.33	20

ACCOUNT:  
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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,04,05,06,07,11,12,15,16,18,20

ONE LAB. NATIONWIDE.



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134420-1 05/06/16 08:21 • (LCSD) R3134420-2 05/06/16 08:45

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	0.0264	0.0256	106	103	65.3-126			3.12	20
1,1-Dichloroethene	0.0250	0.0243	0.0243	97.0	97.2	59.9-137			0.150	20
cis-1,2-Dichloroethene	0.0250	0.0258	0.0259	103	104	77.3-122			0.340	20
trans-1,2-Dichloroethene	0.0250	0.0252	0.0245	101	97.9	72.6-125			3.08	20
1,2-Dichloropropane	0.0250	0.0265	0.0256	106	102	77.4-125			3.68	20
cis-1,3-Dichloropropene	0.0250	0.0277	0.0271	111	109	77.7-124			1.96	20
trans-1,3-Dichloropropene	0.0250	0.0273	0.0268	109	107	73.5-127			1.97	20
Ethylbenzene	0.0250	0.0221	0.0223	88.3	89.4	80.9-121			1.19	20
2-Hexanone	0.125	0.147	0.149	118	119	59.4-151			1.08	20
Isopropylbenzene	0.0250	0.0219	0.0217	87.4	86.8	81.6-124			0.800	20
p-Isopropyltoluene	0.0250	0.0221	0.0224	88.4	89.7	77.6-129			1.42	20
2-Butanone (MEK)	0.125	0.171	0.170	137	136	46.4-155			0.230	20
Methylene Chloride	0.0250	0.0262	0.0254	105	101	69.5-120			3.14	20
4-Methyl-2-pentanone (MIBK)	0.125	0.149	0.148	119	119	63.3-138			0.450	20
Methyl tert-butyl ether	0.0250	0.0293	0.0287	117	115	70.1-125			2.00	20
Naphthalene	0.0250	0.0260	0.0255	104	102	69.7-134			1.85	20
n-Propylbenzene	0.0250	0.0232	0.0231	92.7	92.5	81.9-122			0.190	20
Styrene	0.0250	0.0246	0.0247	98.3	98.9	79.9-124			0.670	20
1,1,1,2-Tetrachloroethane	0.0250	0.0219	0.0218	87.7	87.3	78.5-125			0.460	20
1,1,2,2-Tetrachloroethane	0.0250	0.0258	0.0261	103	104	79.3-123			1.33	20
Tetrachloroethene	0.0250	0.0199	0.0201	79.8	80.3	73.5-130			0.600	20
Toluene	0.0250	0.0236	0.0234	94.5	93.6	77.9-116			0.940	20
1,1,1-Trichloroethane	0.0250	0.0240	0.0239	96.1	95.8	71.1-129			0.340	20
1,1,2-Trichloroethane	0.0250	0.0249	0.0245	99.5	98.0	81.6-120			1.54	20
Trichloroethene	0.0250	0.0220	0.0222	87.9	88.6	79.5-121			0.780	20
1,2,4-Trimethylbenzene	0.0250	0.0228	0.0230	91.3	91.9	79.0-122			0.670	20
1,3,5-Trimethylbenzene	0.0250	0.0228	0.0232	91.0	92.7	81.0-123			1.78	20
Vinyl chloride	0.0250	0.0283	0.0274	113	110	61.5-134			2.94	20
Xylenes, Total	0.0750	0.0680	0.0675	90.7	90.0	79.2-122			0.740	20
o-Xylene	0.0250	0.0230	0.0229	91.9	91.4	79.1-123			0.590	20
m&p-Xylenes	0.0500	0.0450	0.0447	90.1	89.3	78.5-122			0.820	20
(S) Toluene-d8				109	109	90.0-115				
(S) Dibromofluoromethane				113	113	79.0-121				
(S) 4-Bromofluorobenzene				99.4	102	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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249545.0000.0000 000

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L832603

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,04,05,06,07,11,12,15,16,18,20

ONE LAB. NATIONWIDE.



L832603-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-11 05/06/16 12:53 • (MS) R3134420-4 05/06/16 13:17 • (MSD) R3134420-5 05/06/16 13:41

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	U	0.0867	0.0851	69.3	68.0	1	25.0-156			1.86	21.5
Benzene	0.0250	U	0.0271	0.0269	108	108	1	58.6-133			0.530	20
Bromodichloromethane	0.0250	U	0.0250	0.0260	99.9	104	1	69.2-127			3.81	20
Bromoform	0.0250	U	0.0247	0.0252	98.7	101	1	66.3-140			2.05	20
Bromomethane	0.0250	U	0.0166	0.0167	66.3	66.9	1	16.6-183			0.870	20.5
n-Butylbenzene	0.0250	U	0.0258	0.0263	103	105	1	64.8-145			1.92	20
sec-Butylbenzene	0.0250	U	0.0223	0.0229	89.4	91.6	1	66.8-139			2.52	20
Carbon disulfide	0.0250	0.000551	0.0257	0.0255	101	99.8	1	34.9-138			0.720	20
Carbon tetrachloride	0.0250	U	0.0235	0.0241	94.0	96.6	1	60.6-139			2.70	20
Chlorobenzene	0.0250	U	0.0229	0.0232	91.7	92.9	1	70.1-130			1.34	20
Chlorodibromomethane	0.0250	U	0.0239	0.0245	95.7	98.0	1	71.6-132			2.43	20
Chloroethane	0.0250	U	0.0316	0.0321	126	128	1	33.3-155			1.54	20
Chloroform	0.0250	U	0.0269	0.0268	107	107	1	66.1-133			0.370	20
Chloromethane	0.0250	U	0.0285	0.0283	114	113	1	40.7-139			0.510	20
1,2-Dibromoethane	0.0250	U	0.0260	0.0263	104	105	1	73.8-131			1.10	20
1,1-Dichloroethane	0.0250	U	0.0269	0.0272	108	109	1	64.0-134			1.16	20
1,2-Dichloroethane	0.0250	U	0.0275	0.0278	110	111	1	60.7-132			1.17	20
1,1-Dichloroethene	0.0250	U	0.0255	0.0252	102	101	1	48.8-144			1.01	20
cis-1,2-Dichloroethene	0.0250	U	0.0269	0.0264	107	106	1	60.6-136			1.62	20
trans-1,2-Dichloroethene	0.0250	U	0.0256	0.0260	102	104	1	61.0-132			1.76	20
1,2-Dichloropropane	0.0250	U	0.0270	0.0273	108	109	1	69.7-130			1.17	20
cis-1,3-Dichloropropene	0.0250	U	0.0274	0.0282	110	113	1	71.1-129			2.81	20
trans-1,3-Dichloropropene	0.0250	U	0.0272	0.0287	109	115	1	66.3-136			5.39	20
Ethylbenzene	0.0250	U	0.0223	0.0230	89.1	92.0	1	62.7-136			3.22	20
2-Hexanone	0.125	U	0.131	0.132	105	105	1	59.4-154			0.660	20.1
Isopropylbenzene	0.0250	U	0.0221	0.0225	88.3	90.0	1	67.4-136			1.87	20
p-Isopropyltoluene	0.0250	U	0.0222	0.0229	88.9	91.6	1	62.8-143			2.99	20
2-Butanone (MEK)	0.125	U	0.140	0.139	112	111	1	45.0-156			0.670	20.8
Methylene Chloride	0.0250	U	0.0271	0.0266	108	106	1	61.5-125			1.99	20
4-Methyl-2-pentanone (MIBK)	0.125	U	0.158	0.159	126	127	1	60.7-150			0.780	20
Methyl tert-butyl ether	0.0250	U	0.0310	0.0311	124	124	1	61.4-136			0.240	20
Naphthalene	0.0250	U	0.0270	0.0278	108	111	1	61.8-143			3.00	20
n-Propylbenzene	0.0250	U	0.0229	0.0237	91.6	94.9	1	63.2-139			3.54	20
Styrene	0.0250	U	0.0244	0.0252	97.6	101	1	68.2-133			3.16	20
1,1,1,2-Tetrachloroethane	0.0250	U	0.0223	0.0228	89.2	91.3	1	70.5-132			2.29	20
1,1,2,2-Tetrachloroethane	0.0250	U	0.0274	0.0275	109	110	1	64.9-145			0.400	20

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Cp

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Tc

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Ss

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ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832603-01,04,05,06,07,11,12,15,16,18,20

ONE LAB. NATIONWIDE.



L832603-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-11 05/06/16 12:53 • (MS) R3134420-4 05/06/16 13:17 • (MSD) R3134420-5 05/06/16 13:41

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	U	0.0199	0.0201	79.6	80.5	1	57.4-141			1.05	20
Toluene	0.0250	U	0.0242	0.0246	96.7	98.3	1	67.8-124			1.62	20
1,1,1-Trichloroethane	0.0250	U	0.0242	0.0248	96.9	99.4	1	58.7-134			2.47	20
1,1,2-Trichloroethane	0.0250	U	0.0254	0.0256	102	102	1	74.1-130			0.870	20
Trichloroethene	0.0250	U	0.0225	0.0229	90.0	91.7	1	48.9-148			1.87	20
1,2,4-Trimethylbenzene	0.0250	U	0.0229	0.0236	91.7	94.4	1	60.5-137			2.98	20
1,3,5-Trimethylbenzene	0.0250	U	0.0225	0.0232	90.0	92.9	1	67.9-134			3.08	20
Vinyl chloride	0.0250	U	0.0288	0.0288	115	115	1	44.3-143			0.0300	20
Xylenes, Total	0.0750	U	0.0684	0.0701	91.3	93.5	1	65.6-133			2.44	20
o-Xylene	0.0250	U	0.0231	0.0237	92.5	95.0	1	67.1-133			2.63	20
m&p-Xylenes	0.0500	U	0.0453	0.0464	90.6	92.8	1	64.1-133			2.34	20
(S) Toluene-d8					108	109		90.0-115				
(S) Dibromofluoromethane					114	113		79.0-121				
(S) 4-Bromofluorobenzene					99.9	99.1		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

WG869610

Semi-Volatile Organic Compounds (GC) by Method 3511/8015 L832603-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3133988-1 05/04/16 13:48				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	90.0			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133988-2 05/04/16 14:06 • (LCSD) R3133988-3 05/04/16 14:24										
	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	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.56	1.58	104	105	50.0-150			0.930	20
(S) o-Terphenyl				105	101	50.0-150				

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Cp

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Tc

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WG869611

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method 3511/8015 L832603-21,22,23,24,25,26,27,28,29,30,31,32,33,34,36,37,38,39,40,41

Method Blank (MB)

(MB) R3133910-1 05/04/16 11:48				
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	102			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133910-2 05/04/16 12:04 • (LCSD) R3133910-3 05/04/16 12:21										
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	1.55	1.54	103	103	50.0-150			0.280	20
(S) o-Terphenyl				100	101	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869613

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832603-42

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133989-1 05/04/16 12:53

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	93.7			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133989-2 05/04/16 13:11 • (LCSD) R3133989-3 05/04/16 13:30

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	1.57	1.57	104	105	50.0-150			0.280	20
(S) o-Terphenyl				103	102	50.0-150				

1Cp

2Tc

3Ss

4Cn

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9Sc

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## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Sample Detection Limit.
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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gi<sup>8</sup> Al<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		Billing Information: <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		Analysis / Container / Preservative										Chain of Custody Page <u>1</u> of <u>5</u>							
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Project Description: <b>REST Spring 2016 - Team G &amp; JH</b>		City/State Collected: <b>Artesia, NM</b>																			
Phone: 512-684-3170		Client Project #		Lab Project #		<div style="display: flex; justify-content: space-between;"> <div> L# <b>6832663</b> A187 Acctnum: TRCATX Template: T111394 Prelogin: P549622 TSR: Chris McCord Cooler: Shipped Via: </div> <div> 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 </div> </div>															
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Collected by (print): <b>Scott Ude + HWI Team</b>		Site/Facility ID #		P.O. #		<div style="display: flex; justify-content: space-between;"> <div> Rush? (Lab MUST Be Notified)  Same Day .....200%  Next Day .....100%  Two Day .....50%  Three Day .....25% </div> <div> Date Results Needed  Email? <input type="checkbox"/> No <input type="checkbox"/> Yes  FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes </div> </div>															
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Packed on Ice <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> V		Next Day .....100%		FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes																	
Sample ID		Comp/Grab		Matrix *		Depth		Date		Time		Cntrs									
MW-65				GW				4/28/16		1515		12									
RW-5R								4/28/16		1600		10									
MW-102								4/28/16		1645		12									
RW-6								4/28/16		1740		10									
RW-4								4/28/16		1830		10									
RW-2								4/28/16		1740		12									
MW-62								4/28/16		1650		12									
MW-43								4/28/16		1555		13									
RW-10								4/28/16		1510		12									
MW-39		✓		✓				4/28/16		1425		12									
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____														pH _____ Temp _____		Flow _____ Other _____		Hold # _____			
Remarks: Log all metals by 6020. Dissolved metals are field filtered.														Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____		Condition: (lab use only) <b>SW7</b>					
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: _____ °C		Bottles Received:		COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA									
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		3.1		487		pH Checked: 6.2, 7.2									
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		4/30/16		9:00		NCF:									

671103356149

<b>Company Name/Address:</b> <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752			<b>Billing Information:</b> <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095			<b>Analysis / Container / Preservative</b> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <b>DRO - 40ml Amb-HCl-BT</b>  <b>GRO - 40ml Amb-HCl</b>  <b>V8260 - 40ml Amb-HCl</b> </div> <div style="width: 50%;"> <b>Tot./Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500ml HDPE-HNO3</b>  <b>Cyanide (CN) - 250ml HDPE-Amb-NaOH</b>  <b>Cations-Total Ca, K, Na - 500ml HDPE-HNO3</b>  <b>Anions- Chloride, Fluoride, Sulfate- 125ml HDPE-NoPres</b>  <b>Nitrate/Nitrite (NO2NO3) - 250ml HDPE-H2SO4</b>  <b>TDS - 250ml HDPE-NoPres</b>  <b>Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V</b> </div> </div>										<b>Chain of Custody</b> Page <u>2</u> of <u>5</u>  <b>ESC</b> L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-759-5858 Phone: 800-767-5859 Fax: 615-759-5859  <b>L#</b> <u>L832603</u> <b>Table #</b> <b>Acctnum:</b> TRCATX <b>Template:</b> T111394 <b>Prelogin:</b> P549622 <b>TSR:</b> Chris McCord <b>Cooler:</b> <b>Shipped Via:</b>																																																																																																																																																																																																											
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Phone: 512-684-3170 Fax:		Client Project #		Lab Project # <b>TRCATX-REST SPRING</b>																													
Collected by (print): <b>Scott Ude + HM Team</b>		Site/Facility ID # <b>REST - Navajo- Artesia</b>		P.O. #																													
Collected by (signature):  Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day .....200% <input type="checkbox"/> Next Day .....100% <input type="checkbox"/> Two Day .....50% <input type="checkbox"/> Three Day .....25%		Date Results Needed Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes		No. of Cntrs																											
Sample ID		Comp/Grab		Matrix *		Depth		Date		Time		No. of Cntrs																					
<b>MW-113</b>		↓		<b>GW</b>		↓		<b>4/28/16</b>		<b>1640</b>		<b>12</b>																					
<b>EB-REST-01</b>		↓		↓		↓		<b>4/28/16</b>		<b>1655</b>		<b>12</b>																					
<b>DUP-REST-01</b>		↓		↓		↓		<b>4/28/16</b>		<b>1500</b>		<b>12</b>																					
<b>MW-60</b>		↓		↓		↓		<b>4/29/16</b>		<b>825</b>		<b>13</b>																					
<b>EB-REST-04</b>		↓		↓		↓		<b>4/29/16</b>		<b>910</b>		<b>13</b>																					
<b>DUP-REST-04</b>		↓		↓		↓		<b>4/29/16</b>		<b>1000</b>		<b>13</b>																					
<b>MW-107</b>		↓		↓		↓		<b>4/29/16</b>		<b>1105</b>		<b>12</b>																					
<b>MW-59</b>		↓		↓		↓		<b>4/29/16</b>		<b>1015</b>		<b>12</b>																					
<b>MW-52</b>		↓		↓		↓		<b>4/29/16</b>		<b>1050</b>		<b>13</b>																					
<b>MW-109</b>		↓		↓		↓		<b>4/29/16</b>		<b>1005</b>		<b>12</b>																					
														21		22		23		24		25		26		27		28		29		30	

\* Matrix: SS - Soil GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other



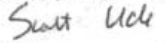
Remarks: **Log all metals by 6020. Dissolved metals are field filtered.**

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

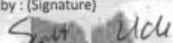
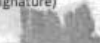
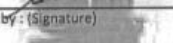
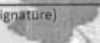
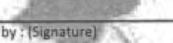
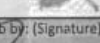
Hold # \_\_\_\_\_

Relinquished by: (Signature) 		Date: <b>4/29/16</b>		Time: <b>1500</b>		Received by: (Signature) 		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____		Condition: (lab use only) <b>SW7</b>	
Relinquished by: (Signature) 		Date:		Time:		Received by: (Signature) 		Temp: <b>3.1</b> °C Bottles Received: <b>487</b>		COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
Relinquished by: (Signature) 		Date:		Time:		Received for lab by: (Signature) 		Date: <b>4/30/16</b> Time: <b>900</b>		pH Checked: <b>12.72</b> NCF:	

<b>Company Name/Address:</b> <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752		<b>Billing Information:</b> <b>Accounts Payable</b> 21 Griffin Road North Windsor, CT 06095		<b>Analysis / Container / Preservative</b> DRO - 40mlAmb-HCl-BT GRO - 40mlAmb-HCl V8260 - 40mlAmb-HCl Tot/Diss. As, Ba, Cr, Fe, Pb, Mn, Se - 500mlHDPE-HNO3 Cyanide (CN) - 250mlHDPEAmb-NaOH Cations-Total Ca, K, Na - 500mlHDPE-HNO3 Anions- Chloride, Fluoride, Sulfate- 125mlHDPE-NoPres Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4 TDS - 250mlHDPE-NoPres Tot/Diss. As, B, Ba, Cd, Co, Cr, Fe, Hg, Mn, Ni, Pb, Se, U, V										<b>Chain of Custody</b> Page <u>4</u> of <u>5</u>  YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859  L# <u>L032603</u> Table # Acctnum: TRCATX Template: T111394 Prelogin: P549622 TSR: <b>Chris McCord</b> Cooler: Shipped Via:											
<b>Report to:</b> jspeer@trcsolutions.com		<b>Email To:</b> jspeer@trcsolutions.com		<b>Project Description:</b> <b>REST Spring 2016 - Team G. CJH</b>		<b>City/State Collected:</b> Artesia, NM		<b>Lab Project #</b> TRCATX-REST SPRING		<b>P.O. #</b>		<b>Phone:</b> 512-684-3170 <b>Fax:</b>		<b>Client Project #</b>		<b>Site/Facility ID #</b> <b>REST - Navajo- Artesia</b>		<b>Rush? (Lab MUST Be Notified)</b> Same Day ..... 200% Next Day ..... 100% Two Day ..... 50% Three Day ..... 25%		<b>Date Results Needed</b> Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes		<b>No. of Cntrs</b>			
<b>Collected by (print):</b> Scott Ude + HMA Team		<b>Collected by (signature):</b> 		<b>Immediately Packed on Ice</b> N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		<b>Sample ID</b>		<b>Comp/Grab</b>		<b>Matrix *</b>		<b>Depth</b>		<b>Date</b>		<b>Time</b>		<b>No. of Cntrs</b>		<b>Analysis / Container / Preservative</b>		<b>Rem./Contaminant</b>		<b>Sample # (lab only)</b>	
MW-110				GW				4/29/16		920		12		✓		✓		✓		✓		✓		31	
MW-128								4/29/16		1725		12		✓		✓		✓		✓		✓		32	
MW-28								4/29/16		1025		13		✓		✓		✓		✓		✓		33	
MW-66								4/29/16		940		13		✓		✓		✓		✓		✓		34	
Trip Blank-REST-04								4/29/16		—		1		✓		✓		✓		✓		✓		35	
MW-99								4/29/16		845		12		✓		✓		✓		✓		✓		36	
RW- #17A								4/29/16		940		12		✓		✓		✓		✓		✓		37	
MW-135								4/29/16		1125		12		✓		✓		✓		✓		✓		38	
MW-115								4/29/16		850		12		✓		✓		✓		✓		✓		39	
MW-114		✓		✓				4/29/16		945		12		✓		✓		✓		✓		✓		40	

\* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other \_\_\_\_\_

Remarks: **Log all metals by 6020. Dissolved metals are field filtered.**

<b>Relinquished by: (Signature)</b> 	<b>Date:</b> 4/29/16	<b>Time:</b> 1500	<b>Received by: (Signature)</b> 	<b>Samples returned via:</b> <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	<b>Condition:</b> (lab use only) 5w7
<b>Relinquished by: (Signature)</b> 	<b>Date:</b>	<b>Time:</b>	<b>Received by: (Signature)</b> 	<b>Temp:</b> 3.1 °C <b>Bottles Returned:</b> 487	<b>COC Seal Intact:</b> Y <input type="checkbox"/> N <input type="checkbox"/> NA
<b>Relinquished by: (Signature)</b> 	<b>Date:</b>	<b>Time:</b>	<b>Received by: (Signature)</b> 	<b>Date:</b> 4/30/16 <b>Time:</b> 9:00	<b>pH Checked:</b> 22, >12 <b>NCF:</b>

Company Name/Address: <b>TRC Solutions - Austin, TX</b> 505 E. Huntland Dr, Ste 250 Austin, TX 78752			Billing Information: <b>Accounts Payable</b> <b>21 Griffin Road North</b> <b>Windsor, CT 06095</b>			Analysis / Container / Preservative <div style="display: flex; justify-content: space-between;"> <div>DRO - 40ml/Amb-HCl-BT</div> <div>GRO - 40ml/Amb-HCl</div> <div>V8260 - 40ml/Amb-HCl</div> <div>Tot./Diss. As,Ba,Cr,Fe,Pb,Mn,Se - 500mlHDPE-HNO3</div> <div>Cyanide (CN) - 250mlHDPEAmb-NaOH</div> <div>Cations-Total Ca, K, Na - 500mlHDPE-HNO3</div> <div>Anions- Chloride, Fluoride, Sulfate-1125mlHDPE-NoPres</div> <div>Nitrate/Nitrite (NO2NO3) - 250mlHDPE-H2SO4</div> <div>TDS - 250mlHDPE-NoPres</div> <div>Tot/Diss. As,Ba,Cd,Co,Cr,Fe,Hg,Mn,Ni,Pb,Se,U,V</div> </div>										Chain of Custody  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# <b>1832603</b>	
Report to: <b>jspeer@trcsolutions.com</b>			Email To: <b>jspeer@trcsolutions.com</b>														
Project Description: <b>REST Spring 2016 - Team-E CJH</b>			City/State Collected: <b>Artesia, NM</b>														
Phone: 512-684-3170 Fax:		Client Project #		Lab Project # <b>TRCATX-REST SPRING</b>													
Collected by (print): <b>Scott Ude + HMI Team</b>		Site/Facility ID # <b>REST - Navajo- Artesia</b>		P.O. #													
Collected by (signature): 		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day ..... 200% <input type="checkbox"/> Next Day ..... 100% <input type="checkbox"/> Two Day ..... 50% <input type="checkbox"/> Three Day ..... 25%		Date Results Needed Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes		No. of Cntrs											
Immediately Packed on ice N <input checked="" type="checkbox"/> Y <input type="checkbox"/>																	
Sample ID <b>MW-125</b> <b>MW-116</b>		Comp. Grab <input checked="" type="checkbox"/> <input type="checkbox"/>		Matrix * <b>GW</b> <input checked="" type="checkbox"/> <input type="checkbox"/>		Depth 											
Date <b>4/29/16</b>		Time <b>855</b>		No. of Cntrs <b>12</b>		pH _____ Temp _____ Flow _____ Other _____											
Date <b>4/29/16</b>		Time <b>945</b>		No. of Cntrs <b>12</b>		Condition: (lab use only) <b>SWT</b>											
Date 		Time 		No. of Cntrs 		COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA											
Date 		Time 		No. of Cntrs 		pH Checked: <b>12.712</b> NCF:											
Date 		Time 		No. of Cntrs 													
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Date 		Time 		No. of Cntrs 													
Date 																	

## TRC Solutions - Austin, TX

Sample Delivery Group: L832616  
Samples Received: 04/30/2016  
Project Number: 249545.0000.0000 000  
Description: TMD Spring 2016  
Site: TMD NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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-21 L832616-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 15:45

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869825	1	05/05/16 13:36	05/05/16 14:25	MMF
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 04:17	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 16:42	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 21:10	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 06:03	05/03/16 06:03	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868993	1	05/05/16 01:28	05/05/16 01:28	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:50	05/10/16 09:50	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 09:48	05/11/16 09:48	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 10:04	05/11/16 10:04	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-8 L832616-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/28/16 13:05

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG869825	1	05/05/16 13:36	05/05/16 14:25	MMF
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 04:32	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 16:44	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 21:27	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869048	1	05/03/16 06:25	05/03/16 06:25	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868993	1	05/05/16 01:49	05/05/16 01:49	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 09:51	05/10/16 09:51	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 10:20	05/11/16 10:20	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 10:36	05/11/16 10:36	CM

MW-46R L832616-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 10:35

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870358	1	05/06/16 22:37	05/06/16 23:30	JM
Metals (ICPMS) by Method 6020	WG869316	5	05/03/16 19:00	05/06/16 04:34	JDG
Metals (ICPMS) by Method 6020	WG870080	5	05/05/16 17:40	05/09/16 16:47	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869259	1	05/02/16 21:06	05/04/16 21:43	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868993	1	05/05/16 02:09	05/05/16 02:09	BMB
Wet Chemistry by Method 353.2	WG870500	1	05/10/16 09:53	05/10/16 09:53	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 11:39	05/11/16 11:39	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 11:55	05/11/16 11:55	CM



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

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	5720		2.82	10.0	10.0	1	05/05/2016 14:25	WG869825

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	15.0		0.197	0.100	1.00	10	05/10/2016 09:50	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	516		2.60	1.00	50.0	50	05/11/2016 10:04	WG871034
Fluoride	1.69		0.00990	0.100	0.100	1	05/11/2016 09:48	WG871034
Sulfate	3150		3.87	5.00	250	50	05/11/2016 10:04	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00607	J	0.00125	0.00200	0.0100	5	05/06/2016 04:17	WG869316
Arsenic,Dissolved	0.00583	J	0.00125	0.00200	0.0100	5	05/09/2016 16:42	WG870080
Barium	0.0100	J	0.00180	0.00500	0.0250	5	05/06/2016 04:17	WG869316
Barium,Dissolved	0.0104	J	0.00180	0.00500	0.0250	5	05/09/2016 16:42	WG870080
Calcium	590		0.230	1.00	5.00	5	05/06/2016 04:17	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 04:17	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 16:42	WG870080
Iron	U		0.0750	0.100	0.500	5	05/06/2016 04:17	WG869316
Iron,Dissolved	0.283	B J	0.0750	0.100	0.500	5	05/09/2016 16:42	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 04:17	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 16:42	WG870080
Manganese	0.354		0.00125	0.00500	0.0250	5	05/06/2016 04:17	WG869316
Manganese,Dissolved	0.323		0.00125	0.00500	0.0250	5	05/09/2016 16:42	WG870080
Potassium	2.31	J	0.185	1.00	5.00	5	05/06/2016 04:17	WG869316
Selenium	0.0327		0.00190	0.00200	0.0100	5	05/06/2016 04:17	WG869316
Selenium,Dissolved	0.0327		0.00190	0.00200	0.0100	5	05/09/2016 16:42	WG870080
Sodium	440		0.550	1.00	5.00	5	05/06/2016 04:17	WG869316

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 06:03	WG869048
(S) a,a,q-Trifluorotoluene(FID)	103				62.0-128		05/03/2016 06:03	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 01:28	WG868993
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 01:28	WG868993
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 01:28	WG868993
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 01:28	WG868993





Collected date/time: 04/28/16 15:45

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## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 01:28	WG868993
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 01:28	WG868993
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 01:28	WG868993
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 01:28	WG868993
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 01:28	WG868993
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 01:28	WG868993
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 01:28	WG868993
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 01:28	WG868993
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 01:28	WG868993
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 01:28	WG868993
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 01:28	WG868993
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 01:28	WG868993
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 01:28	WG868993
Methyl tert-butyl ether	0.0101		0.000367	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 01:28	WG868993
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 01:28	WG868993
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 01:28	WG868993
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 01:28	WG868993
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 01:28	WG868993
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 01:28	WG868993
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 01:28	WG868993
(S) Toluene-d8	101				90.0-115		05/05/2016 01:28	WG868993
(S) Dibromofluoromethane	100				79.0-121		05/05/2016 01:28	WG868993
(S) 4-Bromofluorobenzene	86.3				80.1-120		05/05/2016 01:28	WG868993

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.190		0.0247	0.100	0.100	1	05/04/2016 21:10	WG869259
(S) o-Terphenyl	101				50.0-150		05/04/2016 21:10	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	3690		2.82	10.0	10.0	1	05/05/2016 14:25	WG869825

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	0.503	J	0.197	0.100	1.00	10	05/10/2016 09:51	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	275		2.60	1.00	50.0	50	05/11/2016 10:36	WG871034
Fluoride	2.02		0.00990	0.100	0.100	1	05/11/2016 10:20	WG871034
Sulfate	2380		3.87	5.00	250	50	05/11/2016 10:36	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00885	J	0.00125	0.00200	0.0100	5	05/06/2016 04:32	WG869316
Arsenic,Dissolved	0.00676	J	0.00125	0.00200	0.0100	5	05/09/2016 16:44	WG870080
Barium	0.0117	J	0.00180	0.00500	0.0250	5	05/06/2016 04:32	WG869316
Barium,Dissolved	0.0113	J	0.00180	0.00500	0.0250	5	05/09/2016 16:44	WG870080
Calcium	377		0.230	1.00	5.00	5	05/06/2016 04:32	WG869316
Chromium	0.107		0.00270	0.00200	0.0100	5	05/06/2016 04:32	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 16:44	WG870080
Iron	0.397	J	0.0750	0.100	0.500	5	05/06/2016 04:32	WG869316
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 16:44	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 04:32	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 16:44	WG870080
Manganese	0.538		0.00125	0.00500	0.0250	5	05/06/2016 04:32	WG869316
Manganese,Dissolved	0.504		0.00125	0.00500	0.0250	5	05/09/2016 16:44	WG870080
Potassium	1.69	J	0.185	1.00	5.00	5	05/06/2016 04:32	WG869316
Selenium	0.00622	J	0.00190	0.00200	0.0100	5	05/06/2016 04:32	WG869316
Selenium,Dissolved	0.00716	J	0.00190	0.00200	0.0100	5	05/09/2016 16:44	WG870080
Sodium	295		0.550	1.00	5.00	5	05/06/2016 04:32	WG869316

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/03/2016 06:25	WG869048
(S) a,a,q-Trifluorotoluene(FID)	103				62.0-128		05/03/2016 06:25	WG869048

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 01:49	WG868993
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 01:49	WG868993
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 01:49	WG868993
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 01:49	WG868993



Collected date/time: 04/28/16 13:05

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## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 01:49	WG868993
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 01:49	WG868993
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 01:49	WG868993
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 01:49	WG868993
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 01:49	WG868993
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 01:49	WG868993
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 01:49	WG868993
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 01:49	WG868993
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 01:49	WG868993
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 01:49	WG868993
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 01:49	WG868993
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 01:49	WG868993
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 01:49	WG868993
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 01:49	WG868993
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 01:49	WG868993
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 01:49	WG868993
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 01:49	WG868993
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 01:49	WG868993
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 01:49	WG868993
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 01:49	WG868993
(S) Toluene-d8	101				90.0-115		05/05/2016 01:49	WG868993
(S) Dibromofluoromethane	101				79.0-121		05/05/2016 01:49	WG868993
(S) 4-Bromofluorobenzene	87.7				80.1-120		05/05/2016 01:49	WG868993

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.230		0.0247	0.100	0.100	1	05/04/2016 21:27	WG869259
(S) o-Terphenyl	100				50.0-150		05/04/2016 21:27	WG869259



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3980		2.82	10.0	10.0	1	05/06/2016 23:30	WG870358

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.0520	J J6	0.0197	0.100	0.100	1	05/10/2016 09:53	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	290		2.60	1.00	50.0	50	05/11/2016 11:55	WG871034
Fluoride	1.47		0.00990	0.100	0.100	1	05/11/2016 11:39	WG871034
Sulfate	2470		3.87	5.00	250	50	05/11/2016 11:55	WG871034

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00317	J	0.00125	0.00200	0.0100	5	05/06/2016 04:34	WG869316
Arsenic,Dissolved	0.00276	J	0.00125	0.00200	0.0100	5	05/09/2016 16:47	WG870080
Barium	0.0140	J	0.00180	0.00500	0.0250	5	05/06/2016 04:34	WG869316
Barium,Dissolved	0.0134	J	0.00180	0.00500	0.0250	5	05/09/2016 16:47	WG870080
Calcium	645		0.230	1.00	5.00	5	05/06/2016 04:34	WG869316
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 04:34	WG869316
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/09/2016 16:47	WG870080
Iron	0.159	J	0.0750	0.100	0.500	5	05/06/2016 04:34	WG869316
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/09/2016 16:47	WG870080
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 04:34	WG869316
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 16:47	WG870080
Manganese	0.125		0.00125	0.00500	0.0250	5	05/06/2016 04:34	WG869316
Manganese,Dissolved	0.105		0.00125	0.00500	0.0250	5	05/09/2016 16:47	WG870080
Potassium	1.26	J	0.185	1.00	5.00	5	05/06/2016 04:34	WG869316
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 04:34	WG869316
Selenium,Dissolved	U		0.00190	0.00200	0.0100	5	05/09/2016 16:47	WG870080
Sodium	168		0.550	1.00	5.00	5	05/06/2016 04:34	WG869316

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 02:09	WG868993
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 02:09	WG868993
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 02:09	WG868993
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 02:09	WG868993
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 02:09	WG868993
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 02:09	WG868993
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 02:09	WG868993
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 02:09	WG868993



Collected date/time: 04/29/16 10:35

L832616

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 02:09	WG868993
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 02:09	WG868993
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 02:09	WG868993
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 02:09	WG868993
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 02:09	WG868993
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 02:09	WG868993
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 02:09	WG868993
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 02:09	WG868993
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 02:09	WG868993
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 02:09	WG868993
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 02:09	WG868993
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 02:09	WG868993
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 02:09	WG868993
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 02:09	WG868993
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 02:09	WG868993
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 02:09	WG868993
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 02:09	WG868993
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 02:09	WG868993
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 02:09	WG868993
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 02:09	WG868993
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 02:09	WG868993
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 02:09	WG868993
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 02:09	WG868993
(S) Toluene-d8	101				90.0-115		05/05/2016 02:09	WG868993
(S) Dibromofluoromethane	103				79.0-121		05/05/2016 02:09	WG868993
(S) 4-Bromofluorobenzene	88.7				80.1-120		05/05/2016 02:09	WG868993

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.0622	U	0.0247	0.100	0.100	1	05/04/2016 21:43	WG869259
(S) o-Terphenyl	101				50.0-150		05/04/2016 21:43	WG869259

WG69825

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832616-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134730-1 05/05/16 14:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L832603-20 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-20 05/05/16 14:25 • (DUP) R3134730-4 05/05/16 14:25

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3130	3110	1	0.802		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134730-2 05/05/16 14:25 • (LCSD) R3134730-3 05/05/16 14:25

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 %
Dissolved Solids	8800	8860	8880	101	101	85.0-115			0.225	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832616-03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134744-1 05/06/16 23:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L832603-33 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-33 05/06/16 23:30 • (DUP) R3134744-4 05/06/16 23:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3040	2900	1	4.89		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134744-2 05/06/16 23:30 • (LCSD) R3134744-3 05/06/16 23:30

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 %
Dissolved Solids	8800	8260	8340	93.9	94.8	85.0-115			0.964	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG870500

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135269-2 05/10/16 09:21

Analyte	MB Result mg/l	MB Qualifier mg/l	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0197	0.100

L832603-32 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-32 05/10/16 09:29 • (DUP) R3135269-5 05/10/16 09:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.28	ND	10	94.0	J P1	20

L832616-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832616-02 05/10/16 09:51 • (DUP) R3135269-6 05/10/16 09:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.503	ND	10	0.000	J	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135269-3 05/10/16 09:23 • (LCSD) R3135269-4 05/10/16 09:24

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 %
Nitrate-Nitrite	5.00	4.63	4.72	93.0	94.0	90.0-110			2.00	20

L832616-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832616-03 05/10/16 09:53 • (MS) R3135269-7 05/10/16 09:54 • (MSD) R3135269-8 05/10/16 09:55

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 %
Nitrate-Nitrite	5.00	0.0520	3.74	3.58	74.0	70.0	1	90.0-110	J6	J6	4.00	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



L832603-36 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-36 05/10/16 10:05 • (MS) R3135269-9 05/10/16 10:06

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Nitrate-Nitrite	mg/l	mg/l	mg/l	%		%	
	5.00	0.0330	0.531	10.0	1	90.0-110	J6

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136187-1 05/10/16 20:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

L832603-31 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-31 05/10/16 22:55 • (DUP) R3136187-4 05/10/16 23:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	99.0	98.5	1	1		15
Fluoride	1.53	1.52	1	1		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3136187-2 05/10/16 20:28 • (LCSD) R3136187-3 05/10/16 20:44

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	%	%	%			%	%
Chloride	40.0	39.0	38.6	97	96	80-120			1	15
Fluoride	8.00	7.68	7.60	96	95	80-120			1	15
Sulfate	40.0	39.0	38.6	97	97	80-120			1	15

L832603-32 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-32 05/11/16 01:35 • (MS) R3136187-5 05/11/16 02:38

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/l	mg/l	mg/l	%		%	
Fluoride	5.00	1.22	5.71	90	1	80-120	

L832603-39 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-39 05/11/16 06:37 • (MS) R3136187-8 05/11/16 07:09 • (MSD) R3136187-9 05/11/16 07:25

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	%	%		%			%	%
Fluoride	5.00	1.93	5.48	6.13	71	84	1	80-120	J6		11	15

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Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG869316

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134375-7 05/06/16 03:15

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

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134375-8 05/06/16 03:17 • (LCSD) R3134375-9 05/06/16 03:19

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	0.0480	100	96	80-120			4	20
Barium	0.0500	0.0489	0.0484	98	97	80-120			1	20
Calcium	5.00	5.12	4.94	102	99	80-120			4	20
Chromium	0.0500	0.0529	0.0518	106	104	80-120			2	20
Iron	5.00	5.20	5.07	104	101	80-120			3	20
Lead	0.0500	0.0506	0.0499	101	100	80-120			1	20
Manganese	0.0500	0.0524	0.0508	105	102	80-120			3	20
Potassium	5.00	4.92	4.74	98	95	80-120			4	20
Selenium	0.0500	0.0500	0.0480	100	96	80-120			4	20
Sodium	5.00	4.88	4.69	98	94	80-120			4	20

L832472-36 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-36 05/06/16 03:22 • (MS) R3134375-11 05/06/16 03:27 • (MSD) R3134375-12 05/06/16 03:29

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	0.0100	U	0.0613	0.0596	123	119	5	75-125			3	20
Barium	0.0100	0.0301	0.0845	0.0823	109	104	5	75-125			3	20
Calcium	1.00	1280	1340	1300	1190	387	5	75-125	✓	✓	3	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



L832472-36 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-36 05/06/16 03:22 • (MS) R3134375-11 05/06/16 03:27 • (MSD) R3134375-12 05/06/16 03:29

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	%	%		%			%	%
Chromium	0.0100	0.00353	0.0576	0.0567	108	106	5	75-125			2	20
Potassium	1.00	19.0	24.5	24.1	110	103	5	75-125			1	20
Iron	1.00	0.416	5.67	5.62	105	104	5	75-125			1	20
Lead	0.0100	U	0.0547	0.0533	109	107	5	75-125			3	20
Manganese	0.0100	0.876	0.942	0.931	133	111	5	75-125	V		1	20
Selenium	0.0100	U	0.0549	0.0556	110	111	5	75-125			1	20
Sodium	1.00	5150	5350	5210	3990	1170	5	75-125	E V	E V	3	20

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134964-1 05/09/16 11:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	0.0559		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000728		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134964-2 05/09/16 12:01 • (LCSD) R3134964-3 05/09/16 12:03

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 %
Arsenic,Dissolved	0.0500	0.0499	0.0509	100	102	80-120			2	20
Barium,Dissolved	0.0500	0.0489	0.0488	98	98	80-120			0	20
Chromium,Dissolved	0.0500	0.0509	0.0515	102	103	80-120			1	20
Iron,Dissolved	5.00	5.03	5.05	101	101	80-120			0	20
Lead,Dissolved	0.0500	0.0499	0.0509	100	102	80-120			2	20
Manganese,Dissolved	0.0500	0.0499	0.0498	100	100	80-120			0	20
Selenium,Dissolved	0.0500	0.0499	0.0502	100	100	80-120			1	20

L832472-28 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-28 05/09/16 12:06 • (MS) R3134964-5 05/09/16 12:10 • (MSD) R3134964-6 05/09/16 12:13

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 %
Arsenic,Dissolved	0.0500	0.000615	0.0503	0.0500	99	99	1	75-125			1	20
Barium,Dissolved	0.0500	U	0.0496	0.0490	99	98	1	75-125			1	20
Chromium,Dissolved	0.0500	U	0.0504	0.0518	101	104	1	75-125			3	20
Iron,Dissolved	5.00	U	5.01	5.05	100	101	1	75-125			1	20
Lead,Dissolved	0.0500	U	0.0504	0.0500	101	100	1	75-125			1	20
Manganese,Dissolved	0.0500	0.000556	0.0500	0.0493	99	97	1	75-125			1	20
Selenium,Dissolved	0.0500	U	0.0505	0.0492	101	98	1	75-125			2	20

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1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869048

Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

L832616-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133716-3 05/02/16 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) 103			62.0-128	

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133716-1 05/02/16 21:43 • (LCSD) R3133716-2 05/02/16 22:04										
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	5.44	5.21	98.9	94.8	67.0-132			4.21	20
(S) a,a,a-Trifluorotoluene(FID)				103	103	62.0-128				

L832603-29 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-29 05/03/16 01:09 • (MS) R3133716-4 05/03/16 00:05 • (MSD) R3133716-5 05/03/16 00:26												
	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	%	%		%			%	
TPH (GC/FID) Low Fraction	5.50	U	4.65	4.65	84.5	84.5	1	50.0-143			0.0100	20
(S) a,a,a-Trifluorotoluene(FID)					102	103		62.0-128				

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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SDG:  
L832616

DATE/TIME:  
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WG868993

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134152-3 05/04/16 18:40

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

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Ss

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Cn

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Sr

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ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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05/13/16 16:06

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WG868993

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134152-3 05/04/16 18:40

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	100			90.0-115
(S) Dibromofluoromethane	99.4			79.0-121
(S) 4-Bromofluorobenzene	88.4			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134152-1 05/04/16 17:18 • (LCSD) R3134152-2 05/04/16 17:39

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 %
Acetone	0.125	0.0995	0.0988	79.6	79.1	28.7-175			0.730	20.9
Benzene	0.0250	0.0267	0.0264	107	106	73.0-122			1.06	20
Bromodichloromethane	0.0250	0.0247	0.0249	98.8	99.8	75.5-121			0.960	20
Bromoform	0.0250	0.0252	0.0258	101	103	71.5-131			2.40	20
Bromomethane	0.0250	0.0353	0.0344	141	138	22.4-187			2.64	20
n-Butylbenzene	0.0250	0.0268	0.0260	107	104	75.9-134			3.08	20
sec-Butylbenzene	0.0250	0.0247	0.0246	98.9	98.4	80.6-126			0.590	20
Carbon disulfide	0.0250	0.0276	0.0270	110	108	53.0-134			2.29	20
Carbon tetrachloride	0.0250	0.0216	0.0212	86.4	84.6	70.9-129			2.11	20
Chlorobenzene	0.0250	0.0260	0.0264	104	106	79.7-122			1.51	20
Chlorodibromomethane	0.0250	0.0249	0.0254	99.8	102	78.2-124			1.81	20
Chloroethane	0.0250	0.0356	0.0345	142	138	41.2-153			3.09	20
Chloroform	0.0250	0.0254	0.0255	102	102	73.2-125			0.410	20
Chloromethane	0.0250	0.0309	0.0308	124	123	55.8-134			0.310	20
1,2-Dibromoethane	0.0250	0.0244	0.0250	97.4	100	79.8-122			2.65	20
1,1-Dichloroethane	0.0250	0.0281	0.0278	112	111	71.7-127			0.900	20

ACCOUNT:  
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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134152-1 05/04/16 17:18 • (LCSD) R3134152-2 05/04/16 17:39										
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	%	%	%			%	%
1,2-Dichloroethane	0.0250	0.0239	0.0238	95.5	95.3	65.3-126			0.140	20
1,1-Dichloroethene	0.0250	0.0290	0.0286	116	114	59.9-137			1.30	20
cis-1,2-Dichloroethene	0.0250	0.0267	0.0267	107	107	77.3-122			0.230	20
trans-1,2-Dichloroethene	0.0250	0.0265	0.0266	106	106	72.6-125			0.160	20
1,2-Dichloropropane	0.0250	0.0290	0.0293	116	117	77.4-125			0.980	20
cis-1,3-Dichloropropene	0.0250	0.0276	0.0276	110	110	77.7-124			0.100	20
trans-1,3-Dichloropropene	0.0250	0.0267	0.0267	107	107	73.5-127			0.140	20
Ethylbenzene	0.0250	0.0263	0.0264	105	105	80.9-121			0.310	20
2-Hexanone	0.125	0.133	0.136	107	109	59.4-151			2.13	20
Isopropylbenzene	0.0250	0.0253	0.0253	101	101	81.6-124			0.0600	20
p-Isopropyltoluene	0.0250	0.0253	0.0255	101	102	77.6-129			0.550	20
2-Butanone (MEK)	0.125	0.127	0.130	102	104	46.4-155			2.27	20
Methylene Chloride	0.0250	0.0259	0.0260	104	104	69.5-120			0.280	20
4-Methyl-2-pentanone (MIBK)	0.125	0.142	0.143	113	115	63.3-138			1.16	20
Methyl tert-butyl ether	0.0250	0.0247	0.0244	98.7	97.6	70.1-125			1.09	20
Naphthalene	0.0250	0.0214	0.0218	85.5	87.3	69.7-134			2.09	20
n-Propylbenzene	0.0250	0.0263	0.0264	105	105	81.9-122			0.280	20
Styrene	0.0250	0.0261	0.0266	104	106	79.9-124			1.86	20
1,1,1,2-Tetrachloroethane	0.0250	0.0257	0.0259	103	104	78.5-125			0.990	20
1,1,2,2-Tetrachloroethane	0.0250	0.0239	0.0239	95.7	95.7	79.3-123			0.0300	20
Tetrachloroethene	0.0250	0.0254	0.0250	101	100	73.5-130			1.22	20
Toluene	0.0250	0.0256	0.0256	102	102	77.9-116			0.000	20
1,1,1-Trichloroethane	0.0250	0.0245	0.0243	98.0	97.0	71.1-129			0.960	20
1,1,2-Trichloroethane	0.0250	0.0245	0.0246	98.0	98.3	81.6-120			0.330	20
Trichloroethene	0.0250	0.0259	0.0256	104	102	79.5-121			1.30	20
1,2,4-Trimethylbenzene	0.0250	0.0244	0.0245	97.6	98.0	79.0-122			0.480	20
1,3,5-Trimethylbenzene	0.0250	0.0243	0.0244	97.4	97.5	81.0-123			0.110	20
Vinyl chloride	0.0250	0.0314	0.0310	126	124	61.5-134			1.21	20
Xylenes, Total	0.0750	0.0768	0.0778	102	104	79.2-122			1.22	20
o-Xylene	0.0250	0.0254	0.0258	102	103	79.1-123			1.54	20
m&p-Xylenes	0.0500	0.0514	0.0520	103	104	78.5-122			1.06	20
(S) Toluene-d8				99.7	99.8	90.0-115				
(S) Dibromofluoromethane				101	101	79.0-121				
(S) 4-Bromofluorobenzene				86.7	87.3	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



L832598-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832598-01 05/04/16 20:23 • (MS) R3134152-4 05/04/16 19:01 • (MSD) R3134152-5 05/04/16 19:21

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	%	%		%			%	%
Acetone	0.125	ND	0.0773	0.0792	61.9	63.3	1	25.0-156			2.31	21.5
Benzene	0.0250	ND	0.0174	0.0182	69.7	72.7	1	58.6-133			4.24	20
Bromodichloromethane	0.0250	ND	0.0186	0.0195	74.5	78.1	1	69.2-127			4.76	20
Bromoform	0.0250	ND	0.0203	0.0211	81.1	84.6	1	66.3-140			4.18	20
Bromomethane	0.0250	ND	0.0158	0.0160	63.2	63.9	1	16.6-183			1.09	20.5
n-Butylbenzene	0.0250	ND	0.0198	0.0204	79.2	81.6	1	64.8-145			3.00	20
sec-Butylbenzene	0.0250	ND	0.0179	0.0183	71.8	73.0	1	66.8-139			1.70	20
Carbon disulfide	0.0250	ND	0.00755	0.00780	30.2	31.2	1	34.9-138	J6	J6	3.27	20
Carbon tetrachloride	0.0250	ND	0.0143	0.0149	57.2	59.6	1	60.6-139	J6	J6	4.02	20
Chlorobenzene	0.0250	ND	0.0185	0.0193	73.9	77.4	1	70.1-130			4.53	20
Chlorodibromomethane	0.0250	ND	0.0194	0.0206	77.5	82.5	1	71.6-132			6.30	20
Chloroethane	0.0250	ND	0.0189	0.0193	75.5	77.1	1	33.3-155			2.16	20
Chloroform	0.0250	ND	0.0186	0.0190	74.3	76.1	1	66.1-133			2.47	20
Chloromethane	0.0250	ND	0.0126	0.0130	50.4	52.1	1	40.7-139			3.28	20
1,2-Dibromoethane	0.0250	ND	0.0188	0.0195	75.0	77.9	1	73.8-131			3.75	20
1,1-Dichloroethane	0.0250	ND	0.0194	0.0202	77.8	80.9	1	64.0-134			3.90	20
1,2-Dichloroethane	0.0250	ND	0.0171	0.0180	68.6	72.0	1	60.7-132			4.86	20
1,1-Dichloroethene	0.0250	ND	0.0164	0.0169	65.7	67.7	1	48.8-144			3.04	20
cis-1,2-Dichloroethene	0.0250	ND	0.0184	0.0191	73.6	76.3	1	60.6-136			3.60	20
trans-1,2-Dichloroethene	0.0250	ND	0.0150	0.0154	59.9	61.7	1	61.0-132	J6		2.92	20
1,2-Dichloropropane	0.0250	ND	0.0212	0.0225	84.9	89.9	1	69.7-130			5.82	20
cis-1,3-Dichloropropene	0.0250	ND	0.0199	0.0209	79.6	83.7	1	71.1-129			4.94	20
trans-1,3-Dichloropropene	0.0250	ND	0.0200	0.0213	80.1	85.1	1	66.3-136			6.05	20
Ethylbenzene	0.0250	ND	0.0179	0.0186	71.6	74.5	1	62.7-136			4.01	20
2-Hexanone	0.125	ND	0.107	0.111	85.9	88.8	1	59.4-154			3.32	20.1
Isopropylbenzene	0.0250	ND	0.0180	0.0184	71.8	73.6	1	67.4-136			2.39	20
p-Isopropyltoluene	0.0250	ND	0.0182	0.0185	72.7	74.1	1	62.8-143			1.90	20
2-Butanone (MEK)	0.125	ND	0.105	0.110	84.3	88.1	1	45.0-156			4.49	20.8
Methylene Chloride	0.0250	ND	0.0169	0.0172	67.4	68.8	1	61.5-125			1.98	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.122	0.126	97.7	101	1	60.7-150			3.43	20
Methyl tert-butyl ether	0.0250	ND	0.0187	0.0196	74.8	78.3	1	61.4-136			4.55	20
Naphthalene	0.0250	ND	0.0177	0.0189	70.7	75.5	1	61.8-143			6.58	20
n-Propylbenzene	0.0250	ND	0.0184	0.0189	73.8	75.5	1	63.2-139			2.33	20
Styrene	0.0250	ND	0.0188	0.0196	75.1	78.5	1	68.2-133			4.37	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0194	0.0201	77.5	80.3	1	70.5-132			3.64	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0202	0.0208	80.6	83.1	1	64.9-145			3.09	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

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Gl

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Al

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Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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L832616

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



L832598-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832598-01 05/04/16 20:23 • (MS) R3134152-4 05/04/16 19:01 • (MSD) R3134152-5 05/04/16 19:21

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	%	%		%			%	%
Tetrachloroethene	0.0250	ND	0.0157	0.0166	63.0	66.3	1	57.4-141			5.12	20
Toluene	0.0250	ND	0.0173	0.0182	69.3	72.8	1	67.8-124			4.89	20
1,1,1-Trichloroethane	0.0250	ND	0.0171	0.0177	68.5	70.7	1	58.7-134			3.13	20
1,1,2-Trichloroethane	0.0250	ND	0.0195	0.0208	78.0	83.3	1	74.1-130			6.64	20
Trichloroethene	0.0250	ND	0.0166	0.0171	66.3	68.5	1	48.9-148			3.22	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0174	0.0177	69.5	70.8	1	60.5-137			1.77	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0172	0.0176	68.9	70.5	1	67.9-134			2.21	20
Vinyl chloride	0.0250	ND	0.0146	0.0151	58.4	60.4	1	44.3-143			3.28	20
Xylenes, Total	0.0750	ND	0.0527	0.0551	70.3	73.5	1	65.6-133			4.48	20
o-Xylene	0.0250	ND	0.0179	0.0185	71.6	74.0	1	67.1-133			3.33	20
m&p-Xylenes	0.0500	ND	0.0348	0.0366	69.6	73.3	1	64.1-133			5.06	20
(S) Toluene-d8					99.3	100		90.0-115				
(S) Dibromofluoromethane					99.8	98.8		79.0-121				
(S) 4-Bromofluorobenzene					85.7	85.4		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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WG869259

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832616-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133525-1 05/03/16 13:09				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	108			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133525-2 05/03/16 13:25 • (LCSD) R3133525-3 05/03/16 13:42									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD
Analyte	mg/l	mg/l	mg/l	%	%	%			RPD Limits
TPH (GC/FID) High Fraction	1.50	1.75	1.71	117	114	50.0-150			2.53 20
(S) o-Terphenyl				108	104	50.0-150			

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832616

DATE/TIME:  
05/13/16 16:06

PAGE:  
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## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Sample Detection Limit.
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
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> GI

<sup>8</sup> Al

<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



[illegible]

## TRC Solutions - Austin, TX

Sample Delivery Group: L832621  
Samples Received: 04/30/2016  
Project Number: 249545.0000.0000 000  
Description: NCL Spring 2016  
Site: NCL NAVAJO-ARTESIA  
Report To: Julie Speer  
505 E. Huntland Dr, Ste 250  
Austin, TX 78752

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-55 L832621-01 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 10:40

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870365	1	05/06/16 11:00	05/06/16 11:20	JM
Mercury by Method 7470A	WG869159	1	05/02/16 11:44	05/03/16 11:30	NJB
Mercury by Method 7470A	WG869862	1	05/04/16 18:29	05/05/16 17:38	TRB
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 19:18	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:40	LAT
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/09/16 15:08	LAT
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 10:57	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:50	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869931	1	05/05/16 08:23	05/06/16 00:44	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG869046	1	05/04/16 07:48	05/04/16 07:48	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868993	1	05/05/16 02:30	05/05/16 02:30	BMB
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 10:02	05/10/16 10:02	DR
Wet Chemistry by Method 9056A	WG871034	1	05/11/16 12:11	05/11/16 12:11	CM
Wet Chemistry by Method 9056A	WG871034	50	05/11/16 12:27	05/11/16 12:27	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:11	05/06/16 02:11	ASK

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

MW-18 L832621-02 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 11:30

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870365	1	05/06/16 11:00	05/06/16 11:20	JM
Mercury by Method 7470A	WG869159	1	05/02/16 11:44	05/03/16 11:33	NJB
Mercury by Method 7470A	WG869862	1	05/04/16 18:29	05/05/16 17:46	TRB
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 19:21	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:43	LAT
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/09/16 15:10	LAT
Metals (ICPMS) by Method 6020	WG870589	10	05/06/16 14:41	05/07/16 11:02	LAT
Metals (ICPMS) by Method 6020	WG870591	10	05/06/16 16:27	05/09/16 12:55	JDG
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG869931	1	05/05/16 08:23	05/06/16 01:01	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868998	1	05/05/16 07:24	05/05/16 07:24	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870333	1	05/05/16 23:49	05/05/16 23:49	ACG
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 10:03	05/10/16 10:03	DR
Wet Chemistry by Method 9056A	WG871035	1	05/11/16 04:10	05/11/16 04:10	CM
Wet Chemistry by Method 9056A	WG871035	50	05/11/16 04:25	05/11/16 04:25	CM
Wet Chemistry by Method D 7511-09e2	WG869397	1	05/06/16 02:14	05/06/16 02:14	ASK

NCL-33 L832621-03 GW

Collected by  
SU / HM1 Team

Collected date/time  
04/29/16 08:40

Received date/time  
04/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG870365	1	05/06/16 11:00	05/06/16 11:20	JM
Metals (ICPMS) by Method 6020	WG869321	5	05/02/16 21:41	05/06/16 19:23	ST
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/07/16 15:45	LAT
Metals (ICPMS) by Method 6020	WG870083	5	05/05/16 20:28	05/09/16 15:13	LAT
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG870603	1	05/06/16 23:19	05/07/16 13:24	AAT
Volatile Organic Compounds (GC/MS) by Method 8260B	WG868998	1	05/05/16 07:48	05/05/16 07:48	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG870333	1	05/06/16 00:10	05/06/16 00:10	ACG
Wet Chemistry by Method 353.2	WG870500	10	05/10/16 10:04	05/10/16 10:04	DR
Wet Chemistry by Method 9056A	WG871035	1	05/11/16 04:40	05/11/16 04:40	CM
Wet Chemistry by Method 9056A	WG871035	50	05/11/16 04:55	05/11/16 04:55	CM

ACCOUNT:

TRC Solutions - Austin, TX

PROJECT:

249545.0000.0000 000

SDG:

L832621

DATE/TIME:

05/13/16 19:30

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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

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Dissolved Solids	4200		2.82	10.0	10.0	1	05/06/2016 11:20	WG870365

## Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Nitrate-Nitrite	2.26		0.197	0.100	1.00	10	05/10/2016 10:02	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Chloride	442		2.60	1.00	50.0	50	05/11/2016 12:27	WG871034
Fluoride	1.04		0.00990	0.100	0.100	1	05/11/2016 12:11	WG871034
Sulfate	2080		3.87	5.00	250	50	05/11/2016 12:27	WG871034

## Wet Chemistry by Method D 7511-09e2

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Cyanide	U		0.00120	0.00500	0.00500	1	05/06/2016 02:11	WG869397

## Mercury by Method 7470A

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Mercury	0.0000514	J	0.0000490	0.000200	0.000200	1	05/03/2016 11:30	WG869159
Mercury,Dissolved	U	J6 O1	0.0000490	0.000200	0.000200	1	05/05/2016 17:38	WG869862

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	SDL	Unadj. MQL	MQL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l	mg/l		date / time	
Arsenic	0.00933	J	0.00125	0.00200	0.0100	5	05/06/2016 19:18	WG869321
Arsenic,Dissolved	0.00504	J	0.00125	0.00200	0.0100	5	05/07/2016 15:40	WG870083
Barium	0.0157	J	0.00180	0.00500	0.0250	5	05/06/2016 19:18	WG869321
Barium,Dissolved	0.0110	J	0.00180	0.00500	0.0250	5	05/07/2016 15:40	WG870083
Boron	1.31		0.0150	0.0200	0.200	10	05/07/2016 10:57	WG870589
Boron,Dissolved	1.26		0.0150	0.0200	0.200	10	05/09/2016 12:50	WG870591
Cadmium	0.000891	J	0.000800	0.00100	0.00500	5	05/06/2016 19:18	WG869321
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/09/2016 15:08	WG870083
Calcium	472		0.230	1.00	5.00	5	05/06/2016 19:18	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 19:18	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:40	WG870083
Cobalt	0.00141	J	0.00130	0.00200	0.0100	5	05/06/2016 19:18	WG869321
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/07/2016 15:40	WG870083
Iron	0.128	J	0.0750	0.100	0.500	5	05/06/2016 19:18	WG869321
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 15:40	WG870083
Lead	0.00168	J	0.00120	0.00200	0.0100	5	05/06/2016 19:18	WG869321
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 15:08	WG870083
Manganese	0.151		0.00125	0.00500	0.0250	5	05/06/2016 19:18	WG869321
Manganese,Dissolved	0.0251		0.00125	0.00500	0.0250	5	05/07/2016 15:40	WG870083
Nickel	U		0.00350	0.00200	0.0200	10	05/07/2016 10:57	WG870589
Nickel,Dissolved	0.00242	J	0.00175	0.00200	0.0100	5	05/07/2016 15:40	WG870083
Potassium	0.829	J	0.185	1.00	5.00	5	05/06/2016 19:18	WG869321
Selenium	0.00896	J	0.00190	0.00200	0.0100	5	05/06/2016 19:18	WG869321
Selenium,Dissolved	0.0134		0.00190	0.00200	0.0100	5	05/07/2016 15:40	WG870083
Sodium	253		0.550	1.00	5.00	5	05/06/2016 19:18	WG869321



## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.0460	U	0.00165	0.0100	0.0500	5	05/06/2016 19:18	WG869321
Uranium,Dissolved	0.0445	U	0.00165	0.0100	0.0500	5	05/09/2016 15:08	WG870083
Vanadium	0.0244	U	0.000900	0.00500	0.0250	5	05/06/2016 19:18	WG869321
Vanadium,Dissolved	0.0187	U	0.000900	0.00500	0.0250	5	05/07/2016 15:40	WG870083

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0314	0.100	0.100	1	05/04/2016 07:48	WG869046
(S) a,a,a-Trifluorotoluene(FID)	93.0				62.0-128		05/04/2016 07:48	WG869046

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 02:30	WG868993
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 02:30	WG868993
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 02:30	WG868993
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 02:30	WG868993
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 02:30	WG868993
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 02:30	WG868993
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 02:30	WG868993
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 02:30	WG868993
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 02:30	WG868993
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 02:30	WG868993
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 02:30	WG868993
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 02:30	WG868993
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 02:30	WG868993
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 02:30	WG868993
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 02:30	WG868993
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 02:30	WG868993
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 02:30	WG868993
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 02:30	WG868993
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 02:30	WG868993
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 02:30	WG868993
Methyl tert-butyl ether	0.0163		0.000367	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 02:30	WG868993
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 02:30	WG868993
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 02:30	WG868993
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 02:30	WG868993
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 02:30	WG868993
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 02:30	WG868993

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/29/16 10:40

L832621

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 02:30	WG868993
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 02:30	WG868993
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 02:30	WG868993
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 02:30	WG868993
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 02:30	WG868993
(S) Toluene-d8	101				90.0-115		05/05/2016 02:30	WG868993
(S) Dibromofluoromethane	102				79.0-121		05/05/2016 02:30	WG868993
(S) 4-Bromofluorobenzene	88.8				80.1-120		05/05/2016 02:30	WG868993

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	0.691		0.0247	0.100	0.100	1	05/06/2016 00:44	WG869931
(S) o-Terphenyl	104				50.0-150		05/06/2016 00:44	WG869931

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2920		2.82	10.0	10.0	1	05/06/2016 11:20	WG870365

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	42.6		0.197	0.100	1.00	10	05/10/2016 10:03	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	178		2.60	1.00	50.0	50	05/11/2016 04:25	WG871035
Fluoride	1.39		0.00990	0.100	0.100	1	05/11/2016 04:10	WG871035
Sulfate	1600		3.87	5.00	250	50	05/11/2016 04:25	WG871035

## Wet Chemistry by Method D 7511-09e2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Cyanide	0.00200	J	0.00120	0.00500	0.00500	1	05/06/2016 02:14	WG869397

## Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/03/2016 11:33	WG869159
Mercury,Dissolved	U		0.0000490	0.000200	0.000200	1	05/05/2016 17:46	WG869862

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00395	J	0.00125	0.00200	0.0100	5	05/06/2016 19:21	WG869321
Arsenic,Dissolved	0.00307	J	0.00125	0.00200	0.0100	5	05/07/2016 15:43	WG870083
Barium	0.0207	J	0.00180	0.00500	0.0250	5	05/06/2016 19:21	WG869321
Barium,Dissolved	0.0146	J	0.00180	0.00500	0.0250	5	05/07/2016 15:43	WG870083
Boron	1.36		0.0150	0.0200	0.200	10	05/07/2016 11:02	WG870589
Boron,Dissolved	1.35		0.0150	0.0200	0.200	10	05/09/2016 12:55	WG870591
Cadmium	U		0.000800	0.00100	0.00500	5	05/06/2016 19:21	WG869321
Cadmium,Dissolved	U		0.000800	0.00100	0.00500	5	05/07/2016 15:43	WG870083
Calcium	504		0.230	1.00	5.00	5	05/06/2016 19:21	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 19:21	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:43	WG870083
Cobalt	U		0.00130	0.00200	0.0100	5	05/06/2016 19:21	WG869321
Cobalt,Dissolved	U		0.00130	0.00200	0.0100	5	05/07/2016 15:43	WG870083
Iron	U		0.0750	0.100	0.500	5	05/06/2016 19:21	WG869321
Iron,Dissolved	U		0.0750	0.100	0.500	5	05/07/2016 15:43	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 19:21	WG869321
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 15:10	WG870083
Manganese	0.0157	J	0.00125	0.00500	0.0250	5	05/06/2016 19:21	WG869321
Manganese,Dissolved	0.00725	J	0.00125	0.00500	0.0250	5	05/07/2016 15:43	WG870083
Nickel	U		0.00350	0.00200	0.0200	10	05/07/2016 11:02	WG870589
Nickel,Dissolved	U		0.00175	0.00200	0.0100	5	05/07/2016 15:43	WG870083
Potassium	3.69	J	0.185	1.00	5.00	5	05/06/2016 19:21	WG869321
Selenium	0.0153		0.00190	0.00200	0.0100	5	05/06/2016 19:21	WG869321
Selenium,Dissolved	0.0200		0.00190	0.00200	0.0100	5	05/07/2016 15:43	WG870083
Sodium	107		0.550	1.00	5.00	5	05/06/2016 19:21	WG869321



## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Uranium	0.0480	U	0.00165	0.0100	0.0500	5	05/06/2016 19:21	WG869321
Uranium,Dissolved	0.0405	U	0.00165	0.0100	0.0500	5	05/09/2016 15:10	WG870083
Vanadium	0.0200	U	0.000900	0.00500	0.0250	5	05/06/2016 19:21	WG869321
Vanadium,Dissolved	0.0177	U	0.000900	0.00500	0.0250	5	05/07/2016 15:43	WG870083

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 07:24	WG868998
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 07:24	WG868998
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 07:24	WG868998
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 07:24	WG868998
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 07:24	WG868998
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 07:24	WG868998
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 07:24	WG868998
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 07:24	WG868998
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 07:24	WG868998
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:24	WG868998
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/05/2016 23:49	WG870333
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 07:24	WG868998
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 07:24	WG868998
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 07:24	WG868998
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 07:24	WG868998
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 07:24	WG868998
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 07:24	WG868998
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 07:24	WG868998
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 07:24	WG868998
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 07:24	WG868998
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 07:24	WG868998
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 07:24	WG868998
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 07:24	WG868998
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 07:24	WG868998
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 07:24	WG868998
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 23:49	WG870333
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 07:24	WG868998
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 07:24	WG868998
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 07:24	WG868998
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 07:24	WG868998
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 07:24	WG868998
(S) Toluene-d8	106				90.0-115		05/05/2016 07:24	WG868998

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc





Collected date/time: 04/29/16 11:30

L832621

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
(S) Toluene-d8	105				90.0-115		05/05/2016 23:49	WG870333
(S) Dibromofluoromethane	104				79.0-121		05/05/2016 23:49	WG870333
(S) Dibromofluoromethane	111				79.0-121		05/05/2016 07:24	WG868998
(S) 4-Bromofluorobenzene	99.9				80.1-120		05/05/2016 07:24	WG868998
(S) 4-Bromofluorobenzene	103				80.1-120		05/05/2016 23:49	WG870333

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	<u>Qualifier</u>	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) High Fraction	2.02		0.0247	0.100	0.100	1	05/06/2016 01:01	WG869931
(S) o-Terphenyl	103				50.0-150		05/06/2016 01:01	WG869931

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3200		2.82	10.0	10.0	1	05/06/2016 11:20	WG870365

## Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.367	J	0.197	0.100	1.00	10	05/10/2016 10:04	WG870500

## Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	280		2.60	1.00	50.0	50	05/11/2016 04:55	WG871035
Fluoride	2.82		0.00990	0.100	0.100	1	05/11/2016 04:40	WG871035
Sulfate	1370		3.87	5.00	250	50	05/11/2016 04:55	WG871035

## Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.00444	J	0.00125	0.00200	0.0100	5	05/06/2016 19:23	WG869321
Arsenic,Dissolved	0.00228	J	0.00125	0.00200	0.0100	5	05/09/2016 15:13	WG870083
Barium	0.0246	J	0.00180	0.00500	0.0250	5	05/06/2016 19:23	WG869321
Barium,Dissolved	0.0202	J	0.00180	0.00500	0.0250	5	05/07/2016 15:45	WG870083
Calcium	622		0.230	1.00	5.00	5	05/06/2016 19:23	WG869321
Chromium	U		0.00270	0.00200	0.0100	5	05/06/2016 19:23	WG869321
Chromium,Dissolved	U		0.00270	0.00200	0.0100	5	05/07/2016 15:45	WG870083
Iron	0.770		0.0750	0.100	0.500	5	05/06/2016 19:23	WG869321
Iron,Dissolved	0.134	J	0.0750	0.100	0.500	5	05/07/2016 15:45	WG870083
Lead	U		0.00120	0.00200	0.0100	5	05/06/2016 19:23	WG869321
Lead,Dissolved	U		0.00120	0.00200	0.0100	5	05/09/2016 15:13	WG870083
Manganese	0.188		0.00125	0.00500	0.0250	5	05/06/2016 19:23	WG869321
Manganese,Dissolved	0.146		0.00125	0.00500	0.0250	5	05/07/2016 15:45	WG870083
Potassium	7.58		0.185	1.00	5.00	5	05/06/2016 19:23	WG869321
Selenium	U		0.00190	0.00200	0.0100	5	05/06/2016 19:23	WG869321
Selenium,Dissolved	0.0156		0.00190	0.00200	0.0100	5	05/07/2016 15:45	WG870083
Sodium	113		0.550	1.00	5.00	5	05/06/2016 19:23	WG869321

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/05/2016 07:48	WG868998
Benzene	U		0.000331	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Bromoform	U		0.000469	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Bromomethane	U		0.000866	0.00500	0.00500	1	05/05/2016 07:48	WG868998
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/05/2016 07:48	WG868998
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Chlorodibromomethane	U		0.000327	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Chloroethane	U		0.000453	0.00500	0.00500	1	05/05/2016 07:48	WG868998
Chloroform	U		0.000324	0.00500	0.00500	1	05/05/2016 07:48	WG868998
Chloromethane	U		0.000276	0.00250	0.00250	1	05/05/2016 07:48	WG868998
1,2-Dibromoethane	U		0.000381	0.00100	0.00100	1	05/05/2016 07:48	WG868998
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/05/2016 07:48	WG868998



Collected date/time: 04/29/16 08:40

L832621

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/05/2016 07:48	WG868998
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/05/2016 07:48	WG868998
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/06/2016 00:10	WG870333
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/05/2016 07:48	WG868998
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/05/2016 07:48	WG868998
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/05/2016 07:48	WG868998
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/05/2016 07:48	WG868998
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/05/2016 07:48	WG868998
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/05/2016 07:48	WG868998
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/05/2016 07:48	WG868998
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/05/2016 07:48	WG868998
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/05/2016 07:48	WG868998
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Naphthalene	U		0.00100	0.00500	0.00500	1	05/05/2016 07:48	WG868998
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Styrene	U		0.000307	0.00100	0.00100	1	05/05/2016 07:48	WG868998
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/05/2016 07:48	WG868998
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Toluene	U		0.000780	0.00500	0.00500	1	05/05/2016 07:48	WG868998
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/05/2016 07:48	WG868998
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/06/2016 00:10	WG870333
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/05/2016 07:48	WG868998
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/05/2016 07:48	WG868998
o-Xylene	U		0.000341	0.00100	0.00100	1	05/05/2016 07:48	WG868998
m&p-Xylene	U		0.000719	0.00100	0.00100	1	05/05/2016 07:48	WG868998
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/05/2016 07:48	WG868998
(S) Toluene-d8	106				90.0-115		05/05/2016 07:48	WG868998
(S) Toluene-d8	106				90.0-115		05/06/2016 00:10	WG870333
(S) Dibromofluoromethane	106				79.0-121		05/06/2016 00:10	WG870333
(S) Dibromofluoromethane	111				79.0-121		05/05/2016 07:48	WG868998
(S) 4-Bromofluorobenzene	103				80.1-120		05/05/2016 07:48	WG868998
(S) 4-Bromofluorobenzene	106				80.1-120		05/06/2016 00:10	WG870333

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 3511/8015

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4.53		0.0247	0.100	0.100	1	05/07/2016 13:24	WG870603
(S) o-Terphenyl	113				50.0-150		05/07/2016 13:24	WG870603

WG870365

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L832621-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134745-1 05/06/16 11:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L832621-01 Original Sample (OS) • Duplicate (DUP)

(OS) L832621-01 05/06/16 11:20 • (DUP) R3134745-4 05/06/16 11:20

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	4200	4230	1	0.831		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134745-2 05/06/16 11:20 • (LCSD) R3134745-3 05/06/16 11:20

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 %
Dissolved Solids	8800	8370	8640	95.1	98.2	85.0-115			3.17	5

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

WG870500

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832621-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135269-2 05/10/16 09:21

Analyte	MB Result mg/l	MB Qualifier mg/l	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0197	0.100

L832603-32 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-32 05/10/16 09:29 • (DUP) R3135269-5 05/10/16 09:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	1.28	ND	10	94.0	J P1	20

L832616-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832616-02 05/10/16 09:51 • (DUP) R3135269-6 05/10/16 09:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate-Nitrite	0.503	ND	10	0.000	J	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135269-3 05/10/16 09:23 • (LCSD) R3135269-4 05/10/16 09:24

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 %
Nitrate-Nitrite	5.00	4.63	4.72	93.0	94.0	90.0-110			2.00	20

L832616-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832616-03 05/10/16 09:53 • (MS) R3135269-7 05/10/16 09:54 • (MSD) R3135269-8 05/10/16 09:55

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 %
Nitrate-Nitrite	5.00	0.0520	3.74	3.58	74.0	70.0	1	90.0-110	J6	J6	4.00	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L832621-01,02,03

ONE LAB. NATIONWIDE.



L832603-36 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-36 05/10/16 10:05 • (MS) R3135269-9 05/10/16 10:06

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Nitrate-Nitrite	mg/l	mg/l	mg/l	%		%	
	5.00	0.0330	0.531	10.0	1	90.0-110	J6

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832621-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136187-1 05/10/16 20:12

	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

L832603-31 Original Sample (OS) • Duplicate (DUP)

(OS) L832603-31 05/10/16 22:55 • (DUP) R3136187-4 05/10/16 23:43

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	99.0	98.5	1	1		15
Fluoride	1.53	1.52	1	1		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3136187-2 05/10/16 20:28 • (LCSD) R3136187-3 05/10/16 20:44

	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	39.0	38.6	97	96	80-120			1	15
Fluoride	8.00	7.68	7.60	96	95	80-120			1	15
Sulfate	40.0	39.0	38.6	97	97	80-120			1	15

L832603-32 Original Sample (OS) • Matrix Spike (MS)

(OS) L832603-32 05/11/16 01:35 • (MS) R3136187-5 05/11/16 02:38

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	5.00	1.22	5.71	90	1	80-120	

L832603-39 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832603-39 05/11/16 06:37 • (MS) R3136187-8 05/11/16 07:09 • (MSD) R3136187-9 05/11/16 07:25

	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	1.93	5.48	6.13	71	84	1	80-120	J6		11	15

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG871035

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L832621-02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3135955-1 05/11/16 02:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

L832625-42 Original Sample (OS) • Duplicate (DUP)

(OS) L832625-42 05/11/16 05:10 • (DUP) R3135955-4 05/11/16 05:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Fluoride	U	0.000	1	0		15
Sulfate	2.39	2.32	1	3	J	15

L832644-10 Original Sample (OS) • Duplicate (DUP)

(OS) L832644-10 05/11/16 12:16 • (DUP) R3135955-6 05/11/16 12:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	1.31	1.38	1	5		15
Fluoride	0.102	0.100	1	2		15
Sulfate	6.35	6.28	1	1		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3135955-2 05/11/16 03:10 • (LCSD) R3135955-3 05/11/16 03:25

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	%	%	%			%	%
Chloride	40.0	39.1	39.1	98	98	80-120			0	15
Fluoride	8.00	7.76	7.80	97	98	80-120			0	15
Sulfate	40.0	39.5	39.6	99	99	80-120			0	15

L832644-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L832644-03 05/11/16 06:09 • (MS) R3135955-5 05/11/16 06:24

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/l	mg/l	mg/l	%		%	

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Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc



WG871035

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



L832621-02.03

Analyte	5.00	0.975	5.07	98	1	80-120	
Fluoride	50.0	62.1	111	98	1	80-120	E

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

L832644-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832644-11 05/11/16 12:45 • (MS) R3135955-7 05/11/16 13:00 • (MSD) R3135955-8 05/11/16 13:15

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	%	%		%			%	%
Chloride	50.0	1.73	52.3	52.5	101	101	1	80-120			0	15
Fluoride	5.00	0.119	4.95	4.90	97	96	1	80-120			1	15
Sulfate	50.0	26.6	76.5	76.3	100	99	1	80-120			0	15

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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Wet Chemistry by Method D 7511-09e2

QUALITY CONTROL SUMMARY

L832621-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3136159-1 05/06/16 01:23

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.0012	0.00500

L832419-02 Original Sample (OS) • Duplicate (DUP)

(OS) L832419-02 05/06/16 01:41 • (DUP) R3136159-4 05/06/16 01:44

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	0.000	1	0		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3136159-2 05/06/16 01:26 • (LCSD) R3136159-3 05/06/16 01:29

	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	0.0980	0.0990	98	99	86-114			1	20

L832791-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832791-03 05/06/16 01:47 • (MS) R3136159-5 05/06/16 01:59 • (MSD) R3136159-6 05/06/16 02:02

	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	%	%		%			%	%
Cyanide	0.100	0.00300	0.110	0.107	107	104	1	64-136			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869159

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832621-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133255-1 05/03/16 10:26				
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000049	0.000200

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133255-2 05/03/16 10:28 • (LCSD) R3133255-3 05/03/16 10:31										
	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	0.00298	0.00292	99	97	80-120			2	20

L832391-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832391-01 05/03/16 10:40 • (MS) R3133255-4 05/03/16 10:43 • (MSD) R3133255-5 05/03/16 10:46												
	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	0.00307	0.00291	102	97	1	75-125			5	20

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Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L832621-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134183-1 05/05/16 17:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury,Dissolved	U		0.000049	0.000200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134183-2 05/05/16 17:33 • (LCSD) R3134183-3 05/05/16 17:35

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 %
Mercury,Dissolved	0.00300	0.00291	0.00317	97	106	80-120			9	20

L832621-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832621-01 05/05/16 17:38 • (MS) R3134183-4 05/05/16 17:41 • (MSD) R3134183-5 05/05/16 17:43

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 %
Mercury,Dissolved	0.00300	U	0.000825	0.000785	27	26	1	75-125	J6	J6	5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

WG869321

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832621-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134603-1 05/06/16 18:35

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
Cadmium	U		0.00016	0.00100
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Cobalt	U		0.00026	0.00200
Iron	0.032		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.000577		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Uranium	U		0.00033	0.0100
Vanadium	0.000203		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134603-2 05/06/16 18:38 • (LCSD) R3134603-3 05/06/16 18:40

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	0.0515	0.0506	103	101	80-120			2	20
Barium	0.0500	0.0521	0.0514	104	103	80-120			1	20
Cadmium	0.0500	0.0542	0.0528	108	106	80-120			3	20
Calcium	5.00	5.19	5.18	104	104	80-120			0	20
Chromium	0.0500	0.0517	0.0505	103	101	80-120			2	20
Cobalt	0.0500	0.0526	0.0518	105	104	80-120			2	20
Iron	5.00	5.08	4.98	102	100	80-120			2	20
Lead	0.0500	0.0516	0.0520	103	104	80-120			1	20
Manganese	0.0500	0.0517	0.0507	103	101	80-120			2	20
Potassium	5.00	5.11	4.98	102	100	80-120			3	20
Selenium	0.0500	0.0513	0.0505	103	101	80-120			2	20
Sodium	5.00	5.23	5.12	105	102	80-120			2	20
Uranium	0.0500	0.0525	0.0528	105	106	80-120			1	20
Vanadium	0.0500	0.0510	0.0504	102	101	80-120			1	20

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WG869321

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832621-01,02,03

ONE LAB. NATIONWIDE.



L832462-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832462-01 05/06/16 18:43 • (MS) R3134603-5 05/06/16 18:48 • (MSD) R3134603-6 05/06/16 18:51

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	%	%		%			%	%
Arsenic	0.0100	0.00777	0.0644	0.0628	113	110	5	75-125			3	20
Barium	0.0100	0.0203	0.0773	0.0789	114	117	5	75-125			2	20
Cadmium	0.0100	U	0.0594	0.0561	119	112	5	75-125			6	20
Calcium	1.00	559	562	555	62	0	5	75-125	V	V	1	20
Chromium	0.0100	U	0.0569	0.0563	114	113	5	75-125			1	20
Cobalt	0.0100	0.00673	0.0638	0.0627	114	112	5	75-125			2	20
Potassium	1.00	2.32	7.76	7.88	109	111	5	75-125			2	20
Iron	1.00	U	5.67	5.68	113	114	5	75-125			0	20
Lead	0.0100	U	0.0575	0.0569	115	114	5	75-125			1	20
Manganese	0.0100	0.373	0.426	0.424	105	103	5	75-125			0	20
Selenium	0.0100	0.00381	0.0590	0.0601	110	112	5	75-125			2	20
Sodium	1.00	379	382	384	65	108	5	75-125	V		1	20
Uranium	0.0100	0.0249	0.0815	0.0820	113	114	5	75-125			1	20
Vanadium	0.0100	0.0280	0.0850	0.0842	114	112	5	75-125			1	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

WG870083

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832621-01,02,03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134748-1 05/07/16 14:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Cadmium,Dissolved	U		0.00016	0.00100
Chromium,Dissolved	U		0.00054	0.00200
Cobalt,Dissolved	U		0.00026	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000535		0.00025	0.00500
Nickel,Dissolved	U		0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Uranium,Dissolved	U		0.00033	0.0100
Vanadium,Dissolved	0.000251		0.00018	0.00500

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134748-2 05/07/16 14:38 • (LCSD) R3134748-3 05/07/16 14:41

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 %
Arsenic,Dissolved	0.0500	0.0432	0.0440	86	88	80-120			2	20
Barium,Dissolved	0.0500	0.0473	0.0477	95	95	80-120			1	20
Cadmium,Dissolved	0.0500	0.0463	0.0468	93	94	80-120			1	20
Chromium,Dissolved	0.0500	0.0459	0.0473	92	95	80-120			3	20
Cobalt,Dissolved	0.0500	0.0469	0.0487	94	97	80-120			4	20
Iron,Dissolved	5.00	4.48	4.67	90	93	80-120			4	20
Lead,Dissolved	0.0500	0.0457	0.0463	91	93	80-120			1	20
Manganese,Dissolved	0.0500	0.0457	0.0471	91	94	80-120			3	20
Nickel,Dissolved	0.0500	0.0472	0.0489	94	98	80-120			4	20
Selenium,Dissolved	0.0500	0.0447	0.0464	89	93	80-120			4	20
Uranium,Dissolved	0.0500	0.0465	0.0469	93	94	80-120			1	20
Vanadium,Dissolved	0.0500	0.0452	0.0474	90	95	80-120			5	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832621-01,02,03

ONE LAB. NATIONWIDE.



L832488-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832488-12 05/07/16 14:44 • (MS) R3134748-5 05/07/16 14:49 • (MSD) R3134748-6 05/07/16 14:52

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	%	%		%			%	%
Arsenic,Dissolved	0.0100	0.00841	0.0637	0.0631	111	109	5	75-125			1	20
Barium,Dissolved	0.0100	0.0178	0.0675	0.0717	99	108	5	75-125			6	20
Cadmium,Dissolved	0.0100	U	0.0514	0.0524	103	105	5	75-125			2	20
Chromium,Dissolved	0.0100	U	0.0537	0.0526	107	105	5	75-125			2	20
Cobalt,Dissolved	0.0100	0.00244	0.0550	0.0557	105	106	5	75-125			1	20
Iron,Dissolved	1.00	3.82	9.17	9.28	107	109	5	75-125			1	20
Lead,Dissolved	0.0100	U	0.0539	0.0533	108	107	5	75-125			1	20
Manganese,Dissolved	0.0100	2.39	2.59	2.63	401	479	5	75-125	<u>V</u>	<u>V</u>	1	20
Nickel,Dissolved	0.0100	0.0132	0.0634	0.0644	101	102	5	75-125			1	20
Selenium,Dissolved	0.0100	0.00215	0.0557	0.0575	107	111	5	75-125			3	20
Uranium,Dissolved	0.0100	0.0140	0.0702	0.0704	112	113	5	75-125			0	20
Vanadium,Dissolved	0.0100	0.00256	0.0551	0.0581	105	111	5	75-125			5	20

1

Cp

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Tc

3

Ss

4

Cn

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Sr

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Qc

7

Gl

8

Al

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Sc



WG870589

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832621-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134666-1 05/07/16 08:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.0015	0.0200
Nickel	U		0.00035	0.00200

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134666-2 05/07/16 08:35 • (LCSD) R3134666-3 05/07/16 08:40

	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	%	%	%			%	%
Boron	0.0500	0.0478	0.0491	96	98	80-120			3	20
Nickel	0.0500	0.0517	0.0517	103	103	80-120			0	20

L832450-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832450-04 05/07/16 08:45 • (MS) R3134666-5 05/07/16 08:54 • (MSD) R3134666-6 05/07/16 08:59

	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	%	%		%			%	%
Boron	0.00500	0.689	0.704	0.712	31	47	10	75-125	✓	✓	1	20
Nickel	0.00500	U	0.0574	0.0516	115	103	10	75-125			11	20

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L832621-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134973-1 05/09/16 10:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron,Dissolved	U		0.0015	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134973-2 05/09/16 10:50 • (LCSD) R3134973-3 05/09/16 10:55

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 %
Boron,Dissolved	0.0500	0.0484	0.0502	97	100	80-120			4	20

L832468-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832468-01 05/09/16 11:00 • (MS) R3134973-5 05/09/16 11:09 • (MSD) R3134973-6 05/09/16 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 %
Boron,Dissolved	0.00500	0.596	0.642	0.644	92	95	10	75-125			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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Volatile Organic Compounds (GC) by Method 8015D/GRO

QUALITY CONTROL SUMMARY

L832621-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3133660-3 05/03/16 19:07				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	0.0316		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	93.4			62.0-128

- 1Cp
- 2Tc
- 3Ss
- 4Cn
- 5Sr
- 6Qc
- 7Gl
- 8Al
- 9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3133660-1 05/03/16 18:01 • (LCSD) R3133660-2 05/03/16 18:23										
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	5.37	5.38	97.6	97.8	67.0-132			0.180	20
(S) a,a,a-Trifluorotoluene(FID)				101	101	62.0-128				

L832472-37 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832472-37 05/03/16 22:39 • (MS) R3133660-4 05/03/16 23:45 • (MSD) R3133660-5 05/04/16 00:07												
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	0.203	4.04	4.23	69.7	73.3	1	50.0-143			4.78	20
(S) a,a,a-Trifluorotoluene(FID)					98.4	98.7		62.0-128				

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134152-3 05/04/16 18:40

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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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134152-3 05/04/16 18:40

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	100			90.0-115
(S) Dibromofluoromethane	99.4			79.0-121
(S) 4-Bromofluorobenzene	88.4			80.1-120

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134152-1 05/04/16 17:18 • (LCSD) R3134152-2 05/04/16 17:39

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 %
Acetone	0.125	0.0995	0.0988	79.6	79.1	28.7-175			0.730	20.9
Benzene	0.0250	0.0267	0.0264	107	106	73.0-122			1.06	20
Bromodichloromethane	0.0250	0.0247	0.0249	98.8	99.8	75.5-121			0.960	20
Bromoform	0.0250	0.0252	0.0258	101	103	71.5-131			2.40	20
Bromomethane	0.0250	0.0353	0.0344	141	138	22.4-187			2.64	20
n-Butylbenzene	0.0250	0.0268	0.0260	107	104	75.9-134			3.08	20
sec-Butylbenzene	0.0250	0.0247	0.0246	98.9	98.4	80.6-126			0.590	20
Carbon disulfide	0.0250	0.0276	0.0270	110	108	53.0-134			2.29	20
Carbon tetrachloride	0.0250	0.0216	0.0212	86.4	84.6	70.9-129			2.11	20
Chlorobenzene	0.0250	0.0260	0.0264	104	106	79.7-122			1.51	20
Chlorodibromomethane	0.0250	0.0249	0.0254	99.8	102	78.2-124			1.81	20
Chloroethane	0.0250	0.0356	0.0345	142	138	41.2-153			3.09	20
Chloroform	0.0250	0.0254	0.0255	102	102	73.2-125			0.410	20
Chloromethane	0.0250	0.0309	0.0308	124	123	55.8-134			0.310	20
1,2-Dibromoethane	0.0250	0.0244	0.0250	97.4	100	79.8-122			2.65	20
1,1-Dichloroethane	0.0250	0.0281	0.0278	112	111	71.7-127			0.900	20

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-01

ONE LAB. NATIONWIDE. 

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134152-1 05/04/16 17:18 • (LCSD) R3134152-2 05/04/16 17:39										
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	%	%	%			%	%
1,2-Dichloroethane	0.0250	0.0239	0.0238	95.5	95.3	65.3-126			0.140	20
1,1-Dichloroethene	0.0250	0.0290	0.0286	116	114	59.9-137			1.30	20
cis-1,2-Dichloroethene	0.0250	0.0267	0.0267	107	107	77.3-122			0.230	20
trans-1,2-Dichloroethene	0.0250	0.0265	0.0266	106	106	72.6-125			0.160	20
1,2-Dichloropropane	0.0250	0.0290	0.0293	116	117	77.4-125			0.980	20
cis-1,3-Dichloropropene	0.0250	0.0276	0.0276	110	110	77.7-124			0.100	20
trans-1,3-Dichloropropene	0.0250	0.0267	0.0267	107	107	73.5-127			0.140	20
Ethylbenzene	0.0250	0.0263	0.0264	105	105	80.9-121			0.310	20
2-Hexanone	0.125	0.133	0.136	107	109	59.4-151			2.13	20
Isopropylbenzene	0.0250	0.0253	0.0253	101	101	81.6-124			0.0600	20
p-Isopropyltoluene	0.0250	0.0253	0.0255	101	102	77.6-129			0.550	20
2-Butanone (MEK)	0.125	0.127	0.130	102	104	46.4-155			2.27	20
Methylene Chloride	0.0250	0.0259	0.0260	104	104	69.5-120			0.280	20
4-Methyl-2-pentanone (MIBK)	0.125	0.142	0.143	113	115	63.3-138			1.16	20
Methyl tert-butyl ether	0.0250	0.0247	0.0244	98.7	97.6	70.1-125			1.09	20
Naphthalene	0.0250	0.0214	0.0218	85.5	87.3	69.7-134			2.09	20
n-Propylbenzene	0.0250	0.0263	0.0264	105	105	81.9-122			0.280	20
Styrene	0.0250	0.0261	0.0266	104	106	79.9-124			1.86	20
1,1,1,2-Tetrachloroethane	0.0250	0.0257	0.0259	103	104	78.5-125			0.990	20
1,1,2,2-Tetrachloroethane	0.0250	0.0239	0.0239	95.7	95.7	79.3-123			0.0300	20
Tetrachloroethene	0.0250	0.0254	0.0250	101	100	73.5-130			1.22	20
Toluene	0.0250	0.0256	0.0256	102	102	77.9-116			0.000	20
1,1,1-Trichloroethane	0.0250	0.0245	0.0243	98.0	97.0	71.1-129			0.960	20
1,1,2-Trichloroethane	0.0250	0.0245	0.0246	98.0	98.3	81.6-120			0.330	20
Trichloroethene	0.0250	0.0259	0.0256	104	102	79.5-121			1.30	20
1,2,4-Trimethylbenzene	0.0250	0.0244	0.0245	97.6	98.0	79.0-122			0.480	20
1,3,5-Trimethylbenzene	0.0250	0.0243	0.0244	97.4	97.5	81.0-123			0.110	20
Vinyl chloride	0.0250	0.0314	0.0310	126	124	61.5-134			1.21	20
Xylenes, Total	0.0750	0.0768	0.0778	102	104	79.2-122			1.22	20
o-Xylene	0.0250	0.0254	0.0258	102	103	79.1-123			1.54	20
m&p-Xylenes	0.0500	0.0514	0.0520	103	104	78.5-122			1.06	20
(S) Toluene-d8				99.7	99.8	90.0-115				
(S) Dibromofluoromethane				101	101	79.0-121				
(S) 4-Bromofluorobenzene				86.7	87.3	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832621

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WG68993

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-01

ONE LAB. NATIONWIDE.



L832598-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832598-01 05/04/16 20:23 • (MS) R3134152-4 05/04/16 19:01 • (MSD) R3134152-5 05/04/16 19:21

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	%	%		%			%	%
Acetone	0.125	ND	0.0773	0.0792	61.9	63.3	1	25.0-156			2.31	21.5
Benzene	0.0250	ND	0.0174	0.0182	69.7	72.7	1	58.6-133			4.24	20
Bromodichloromethane	0.0250	ND	0.0186	0.0195	74.5	78.1	1	69.2-127			4.76	20
Bromoform	0.0250	ND	0.0203	0.0211	81.1	84.6	1	66.3-140			4.18	20
Bromomethane	0.0250	ND	0.0158	0.0160	63.2	63.9	1	16.6-183			1.09	20.5
n-Butylbenzene	0.0250	ND	0.0198	0.0204	79.2	81.6	1	64.8-145			3.00	20
sec-Butylbenzene	0.0250	ND	0.0179	0.0183	71.8	73.0	1	66.8-139			1.70	20
Carbon disulfide	0.0250	ND	0.00755	0.00780	30.2	31.2	1	34.9-138	J6	J6	3.27	20
Carbon tetrachloride	0.0250	ND	0.0143	0.0149	57.2	59.6	1	60.6-139	J6	J6	4.02	20
Chlorobenzene	0.0250	ND	0.0185	0.0193	73.9	77.4	1	70.1-130			4.53	20
Chlorodibromomethane	0.0250	ND	0.0194	0.0206	77.5	82.5	1	71.6-132			6.30	20
Chloroethane	0.0250	ND	0.0189	0.0193	75.5	77.1	1	33.3-155			2.16	20
Chloroform	0.0250	ND	0.0186	0.0190	74.3	76.1	1	66.1-133			2.47	20
Chloromethane	0.0250	ND	0.0126	0.0130	50.4	52.1	1	40.7-139			3.28	20
1,2-Dibromoethane	0.0250	ND	0.0188	0.0195	75.0	77.9	1	73.8-131			3.75	20
1,1-Dichloroethane	0.0250	ND	0.0194	0.0202	77.8	80.9	1	64.0-134			3.90	20
1,2-Dichloroethane	0.0250	ND	0.0171	0.0180	68.6	72.0	1	60.7-132			4.86	20
1,1-Dichloroethene	0.0250	ND	0.0164	0.0169	65.7	67.7	1	48.8-144			3.04	20
cis-1,2-Dichloroethene	0.0250	ND	0.0184	0.0191	73.6	76.3	1	60.6-136			3.60	20
trans-1,2-Dichloroethene	0.0250	ND	0.0150	0.0154	59.9	61.7	1	61.0-132	J6		2.92	20
1,2-Dichloropropane	0.0250	ND	0.0212	0.0225	84.9	89.9	1	69.7-130			5.82	20
cis-1,3-Dichloropropene	0.0250	ND	0.0199	0.0209	79.6	83.7	1	71.1-129			4.94	20
trans-1,3-Dichloropropene	0.0250	ND	0.0200	0.0213	80.1	85.1	1	66.3-136			6.05	20
Ethylbenzene	0.0250	ND	0.0179	0.0186	71.6	74.5	1	62.7-136			4.01	20
2-Hexanone	0.125	ND	0.107	0.111	85.9	88.8	1	59.4-154			3.32	20.1
Isopropylbenzene	0.0250	ND	0.0180	0.0184	71.8	73.6	1	67.4-136			2.39	20
p-Isopropyltoluene	0.0250	ND	0.0182	0.0185	72.7	74.1	1	62.8-143			1.90	20
2-Butanone (MEK)	0.125	ND	0.105	0.110	84.3	88.1	1	45.0-156			4.49	20.8
Methylene Chloride	0.0250	ND	0.0169	0.0172	67.4	68.8	1	61.5-125			1.98	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.122	0.126	97.7	101	1	60.7-150			3.43	20
Methyl tert-butyl ether	0.0250	ND	0.0187	0.0196	74.8	78.3	1	61.4-136			4.55	20
Naphthalene	0.0250	ND	0.0177	0.0189	70.7	75.5	1	61.8-143			6.58	20
n-Propylbenzene	0.0250	ND	0.0184	0.0189	73.8	75.5	1	63.2-139			2.33	20
Styrene	0.0250	ND	0.0188	0.0196	75.1	78.5	1	68.2-133			4.37	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0194	0.0201	77.5	80.3	1	70.5-132			3.64	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0202	0.0208	80.6	83.1	1	64.9-145			3.09	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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L832621

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-01

ONE LAB. NATIONWIDE. 

L832598-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832598-01 05/04/16 20:23 • (MS) R3134152-4 05/04/16 19:01 • (MSD) R3134152-5 05/04/16 19:21

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	%	%		%			%	%
Tetrachloroethene	0.0250	ND	0.0157	0.0166	63.0	66.3	1	57.4-141			5.12	20
Toluene	0.0250	ND	0.0173	0.0182	69.3	72.8	1	67.8-124			4.89	20
1,1,1-Trichloroethane	0.0250	ND	0.0171	0.0177	68.5	70.7	1	58.7-134			3.13	20
1,1,2-Trichloroethane	0.0250	ND	0.0195	0.0208	78.0	83.3	1	74.1-130			6.64	20
Trichloroethene	0.0250	ND	0.0166	0.0171	66.3	68.5	1	48.9-148			3.22	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0174	0.0177	69.5	70.8	1	60.5-137			1.77	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0172	0.0176	68.9	70.5	1	67.9-134			2.21	20
Vinyl chloride	0.0250	ND	0.0146	0.0151	58.4	60.4	1	44.3-143			3.28	20
Xylenes, Total	0.0750	ND	0.0527	0.0551	70.3	73.5	1	65.6-133			4.48	20
o-Xylene	0.0250	ND	0.0179	0.0185	71.6	74.0	1	67.1-133			3.33	20
m&p-Xylenes	0.0500	ND	0.0348	0.0366	69.6	73.3	1	64.1-133			5.06	20
(S) Toluene-d8					99.3	100		90.0-115				
(S) Dibromofluoromethane					99.8	98.8		79.0-121				
(S) 4-Bromofluorobenzene					85.7	85.4		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-02.03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134040-3 05/05/16 02:10

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
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
Tetrachloroethene	U		0.000372	0.00100

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-02.03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134040-3 05/05/16 02:10				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Toluene	U		0.000780	0.00500
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	107			90.0-115
(S) Dibromofluoromethane	112			79.0-121
(S) 4-Bromofluorobenzene	101			80.1-120

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134040-1 05/05/16 00:09 • (LCSD) R3134040-2 05/05/16 00:33										
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	0.151	0.146	121	116	28.7-175			3.79	20.9
Benzene	0.0250	0.0253	0.0253	101	101	73.0-122			0.110	20
Bromodichloromethane	0.0250	0.0238	0.0241	95.1	96.6	75.5-121			1.55	20
Bromoform	0.0250	0.0247	0.0238	98.6	95.2	71.5-131			3.53	20
Bromomethane	0.0250	0.0357	0.0377	143	151	22.4-187			5.49	20
n-Butylbenzene	0.0250	0.0255	0.0253	102	101	75.9-134			0.740	20
sec-Butylbenzene	0.0250	0.0224	0.0225	89.6	89.9	80.6-126			0.340	20
Carbon disulfide	0.0250	0.0220	0.0213	88.1	85.2	53.0-134			3.38	20
Carbon tetrachloride	0.0250	0.0231	0.0234	92.3	93.6	70.9-129			1.43	20
Chlorobenzene	0.0250	0.0228	0.0226	91.0	90.5	79.7-122			0.640	20
Chlorodibromomethane	0.0250	0.0239	0.0240	95.5	95.9	78.2-124			0.410	20
Chloroethane	0.0250	0.0289	0.0285	115	114	41.2-153			1.42	20
Chloroform	0.0250	0.0257	0.0255	103	102	73.2-125			0.930	20
Chloromethane	0.0250	0.0246	0.0234	98.5	93.7	55.8-134			4.90	20
1,2-Dibromoethane	0.0250	0.0251	0.0248	101	99.4	79.8-122			1.20	20
1,1-Dichloroethane	0.0250	0.0257	0.0251	103	100	71.7-127			2.53	20
1,2-Dichloroethane	0.0250	0.0262	0.0261	105	104	65.3-126			0.240	20
1,1-Dichloroethene	0.0250	0.0233	0.0229	93.3	91.6	59.9-137			1.86	20

ACCOUNT:  
TRC Solutions - Austin, TX

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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-02.03

ONE LAB. NATIONWIDE.



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134040-1 05/05/16 00:09 • (LCSD) R3134040-2 05/05/16 00:33										
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	%	%	%			%	%
trans-1,2-Dichloroethene	0.0250	0.0246	0.0234	98.2	93.5	72.6-125			4.94	20
1,2-Dichloropropane	0.0250	0.0251	0.0249	100	99.7	77.4-125			0.780	20
cis-1,3-Dichloropropene	0.0250	0.0265	0.0270	106	108	77.7-124			1.66	20
trans-1,3-Dichloropropene	0.0250	0.0266	0.0267	106	107	73.5-127			0.430	20
Ethylbenzene	0.0250	0.0219	0.0221	87.7	88.6	80.9-121			0.970	20
2-Hexanone	0.125	0.148	0.147	118	118	59.4-151			0.420	20
Isopropylbenzene	0.0250	0.0221	0.0218	88.2	87.1	81.6-124			1.30	20
p-Isopropyltoluene	0.0250	0.0229	0.0227	91.5	90.8	77.6-129			0.760	20
2-Butanone (MEK)	0.125	0.171	0.171	137	137	46.4-155			0.140	20
Methylene Chloride	0.0250	0.0255	0.0246	102	98.4	69.5-120			3.78	20
4-Methyl-2-pentanone (MIBK)	0.125	0.148	0.149	118	119	63.3-138			0.940	20
Methyl tert-butyl ether	0.0250	0.0288	0.0281	115	113	70.1-125			2.36	20
Naphthalene	0.0250	0.0258	0.0262	103	105	69.7-134			1.35	20
n-Propylbenzene	0.0250	0.0230	0.0231	91.8	92.3	81.9-122			0.560	20
Styrene	0.0250	0.0247	0.0248	98.6	99.2	79.9-124			0.580	20
1,1,1,2-Tetrachloroethane	0.0250	0.0224	0.0223	89.6	89.1	78.5-125			0.590	20
1,1,2,2-Tetrachloroethane	0.0250	0.0261	0.0258	104	103	79.3-123			0.890	20
Tetrachloroethene	0.0250	0.0198	0.0195	79.1	78.1	73.5-130			1.29	20
Toluene	0.0250	0.0230	0.0231	92.0	92.2	77.9-116			0.280	20
1,1,1-Trichloroethane	0.0250	0.0240	0.0242	96.0	96.7	71.1-129			0.720	20
1,1,2-Trichloroethane	0.0250	0.0241	0.0243	96.3	97.0	81.6-120			0.720	20
1,2,4-Trimethylbenzene	0.0250	0.0230	0.0230	91.8	92.1	79.0-122			0.340	20
1,3,5-Trimethylbenzene	0.0250	0.0228	0.0228	91.2	91.4	81.0-123			0.150	20
Vinyl chloride	0.0250	0.0265	0.0253	106	101	61.5-134			4.60	20
Xylenes, Total	0.0750	0.0681	0.0675	90.7	90.0	79.2-122			0.810	20
o-Xylene	0.0250	0.0231	0.0232	92.6	92.7	79.1-123			0.140	20
m&p-Xylenes	0.0500	0.0449	0.0443	89.8	88.7	78.5-122			1.30	20
(S) Toluene-d8				107	107	90.0-115				
(S) Dibromofluoromethane				113	112	79.0-121				
(S) 4-Bromofluorobenzene				102	102	80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L832636-29 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832636-29 05/05/16 04:10 • (MS) R3134040-4 05/05/16 02:34 • (MSD) R3134040-5 05/05/16 02:58												
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	%	%		%			%	%

ACCOUNT:  
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Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-02.03

ONE LAB. NATIONWIDE.



L832636-29 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832636-29 05/05/16 04:10 • (MS) R3134040-4 05/05/16 02:34 • (MSD) R3134040-5 05/05/16 02:58

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	%	%		%			%	%
Acetone	0.125	ND	0.0729	0.0713	58.3	57.1	1	25.0-156			2.16	21.5
Benzene	0.0250	ND	0.0190	0.0190	76.1	76.1	1	58.6-133			0.0400	20
Bromodichloromethane	0.0250	ND	0.0206	0.0215	82.3	85.9	1	69.2-127			4.22	20
Bromoform	0.0250	ND	0.0214	0.0226	85.6	90.3	1	66.3-140			5.35	20
Bromomethane	0.0250	ND	0.0181	0.0184	72.3	73.4	1	16.6-183			1.53	20.5
n-Butylbenzene	0.0250	ND	0.0221	0.0225	88.4	90.0	1	64.8-145			1.90	20
sec-Butylbenzene	0.0250	ND	0.0200	0.0205	80.0	81.9	1	66.8-139			2.35	20
Carbon disulfide	0.0250	ND	0.00583	0.00618	23.3	24.7	1	34.9-138	J6	J6	5.87	20
Carbon tetrachloride	0.0250	0.00214	0.0161	0.0164	55.7	56.9	1	60.6-139	J6	J6	1.78	20
Chlorobenzene	0.0250	ND	0.0191	0.0196	76.5	78.3	1	70.1-130			2.32	20
Chlorodibromomethane	0.0250	ND	0.0214	0.0215	85.7	86.1	1	71.6-132			0.470	20
Chloroethane	0.0250	ND	0.0164	0.0179	65.5	71.6	1	33.3-155			9.01	20
Chloroform	0.0250	ND	0.0218	0.0218	87.2	87.2	1	66.1-133			0.0800	20
Chloromethane	0.0250	ND	0.00969	0.0106	38.8	42.5	1	40.7-139	J6		9.28	20
1,2-Dibromoethane	0.0250	ND	0.0204	0.0211	81.5	84.3	1	73.8-131			3.29	20
1,1-Dichloroethane	0.0250	0.00102	0.0214	0.0217	81.4	82.9	1	64.0-134			1.64	20
1,2-Dichloroethane	0.0250	ND	0.0206	0.0205	82.5	81.9	1	60.7-132			0.760	20
1,1-Dichloroethene	0.0250	0.00175	0.0154	0.0162	54.5	57.8	1	48.8-144			5.29	20
trans-1,2-Dichloroethene	0.0250	ND	0.0149	0.0155	59.5	61.8	1	61.0-132	J6		3.74	20
1,2-Dichloropropane	0.0250	0.00217	0.0210	0.0218	75.4	78.3	1	69.7-130			3.42	20
cis-1,3-Dichloropropene	0.0250	ND	0.0207	0.0217	82.9	86.7	1	71.1-129			4.50	20
trans-1,3-Dichloropropene	0.0250	0.00101	0.0213	0.0233	81.0	89.0	1	66.3-136			9.02	20
Ethylbenzene	0.0250	ND	0.0179	0.0182	71.7	72.9	1	62.7-136			1.66	20
2-Hexanone	0.125	ND	0.114	0.119	91.1	94.8	1	59.4-154			3.98	20.1
Isopropylbenzene	0.0250	ND	0.0187	0.0192	74.9	76.8	1	67.4-136			2.45	20
p-Isopropyltoluene	0.0250	ND	0.0194	0.0200	77.6	79.9	1	62.8-143			3.03	20
2-Butanone (MEK)	0.125	ND	0.116	0.117	92.5	93.3	1	45.0-156			0.880	20.8
Methylene Chloride	0.0250	ND	0.0183	0.0187	73.3	74.7	1	61.5-125			1.94	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.131	0.137	104	109	1	60.7-150			4.50	20
Methyl tert-butyl ether	0.0250	ND	0.0241	0.0244	96.2	97.6	1	61.4-136			1.35	20
Naphthalene	0.0250	ND	0.0231	0.0240	92.6	96.0	1	61.8-143			3.67	20
n-Propylbenzene	0.0250	ND	0.0197	0.0200	78.6	80.0	1	63.2-139			1.81	20
Styrene	0.0250	ND	0.0208	0.0211	83.0	84.4	1	68.2-133			1.66	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0206	0.0205	82.4	81.8	1	70.5-132			0.760	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0245	0.0251	98.1	101	1	64.9-145			2.51	20
Tetrachloroethene	0.0250	ND	0.0144	0.0147	57.7	58.9	1	57.4-141			1.91	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
249545.0000.0000 000

SDG:  
L832621

DATE/TIME:  
05/13/16 19:30


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WG868998

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-02.03

ONE LAB. NATIONWIDE. 

L832636-29 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832636-29 05/05/16 04:10 • (MS) R3134040-4 05/05/16 02:34 • (MSD) R3134040-5 05/05/16 02:58												
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	%	%		%			%	%
Toluene	0.0250	ND	0.0174	0.0183	69.8	73.1	1	67.8-124			4.64	20
1,1,1-Trichloroethane	0.0250	0.0156	0.0339	0.0323	73.0	66.8	1	58.7-134			4.70	20
1,1,2-Trichloroethane	0.0250	ND	0.0217	0.0221	86.7	88.4	1	74.1-130			1.90	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0195	0.0198	77.9	79.4	1	60.5-137			1.90	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0195	0.0199	78.0	79.4	1	67.9-134			1.73	20
Vinyl chloride	0.0250	ND	0.0119	0.0133	47.7	53.0	1	44.3-143			10.6	20
Xylenes, Total	0.0750	ND	0.0546	0.0562	72.8	74.9	1	65.6-133			2.78	20
o-Xylene	0.0250	ND	0.0189	0.0195	75.4	77.9	1	67.1-133			3.19	20
m&p-Xylenes	0.0500	ND	0.0358	0.0367	71.5	73.4	1	64.1-133			2.56	20
(S) Toluene-d8					107	108		90.0-115				
(S) Dibromofluoromethane					111	110		79.0-121				
(S) 4-Bromofluorobenzene					101	101		80.1-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

ACCOUNT:  
TRC Solutions - Austin, TX

PROJECT:  
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WG870333

Volatile Organic Compounds (GC/MS) by Method 8260B

QUALITY CONTROL SUMMARY

L832621-02.03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134283-3 05/05/16 17:41				
Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
cis-1,2-Dichloroethene	U		0.000260	0.00100
Trichloroethene	U		0.000398	0.00100
(S) Toluene-d8	104			90.0-115
(S) Dibromofluoromethane	107			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) R3134283-1 05/05/16 16:17 • (LCSD) R3134283-2 05/05/16 16:38										
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 %
cis-1,2-Dichloroethene	0.0250	0.0271	0.0239	109	95.4	77.3-122			12.9	20
Trichloroethene	0.0250	0.0259	0.0227	104	90.9	79.5-121			13.1	20
(S) Toluene-d8				105	105	90.0-115				
(S) Dibromofluoromethane				106	106	79.0-121				
(S) 4-Bromofluorobenzene				98.9	102	80.1-120				

L832445-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L832445-17 05/05/16 19:58 • (MS) R3134283-4 05/05/16 18:56 • (MSD) R3134283-5 05/05/16 19:17												
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 %
cis-1,2-Dichloroethene	0.0250	U	0.0223	0.0223	89.1	89.1	1	60.6-136			0.0800	20
Trichloroethene	0.0250	0.00799	0.0280	0.0273	79.9	77.3	1	48.9-148			2.35	20
(S) Toluene-d8					105	104		90.0-115				
(S) Dibromofluoromethane					107	108		79.0-121				
(S) 4-Bromofluorobenzene					102	102		80.1-120				

ACCOUNT:  
TRC Solutions - Austin, TX

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WG869931

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832621-01,02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134267-1 05/05/16 23:54

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	106			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134267-2 05/06/16 00:11 • (LCSD) R3134267-3 05/06/16 00:28

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	1.66	1.68	111	112	50.0-150			0.780	20
(S) o-Terphenyl				103	101	50.0-150				

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

WG870603

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

QUALITY CONTROL SUMMARY

L832621-03

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3134780-1 05/07/16 12:29				
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	88.5			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3134780-2 05/07/16 12:47 • (LCSD) R3134780-3 05/07/16 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 %
TPH (GC/FID) High Fraction	1.50	1.50	1.50	99.7	100	50.0-150			0.600	20
(S) o-Terphenyl				107	104	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 Sample Detection Limit.
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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> GI

<sup>8</sup> Al

<sup>9</sup> 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**.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## 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 <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**



[illegible]

Appendix B, Table B.1 - Summary of Groundwater Analytical Data - Total Petroleum Hydrocarbons

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				TPH			Analyte Group:				TPH						
				Analyte:		GRO					DRO	DRO - EP	Analyte:		GRO	DRO	DRO - EP
Units:		mg/L	mg/L	mg/L	Units:		mg/L	mg/L	mg/L								
CGWSL:		---	0.200	0.400	CGWSL:		---	0.200	0.400								
CGWSL Source:			NMED TPH	NMED TPH	CGWSL Source:			NMED TPH	NMED TPH								
Area	Well ID	Date	Dup				Area	Well ID	Date	Dup							
Cross-Gradient	KWB-13	Apr-13				<0.052		MW-18B	Apr-13			0.100		<0.052			
		Apr-14				<0.020			Apr-15			<0.0310		0.280			
		Apr-15				0.0630 J			Apr-14			3.46		5.80			
		Apr-16				0.0505 J			Nov-14			3.30		5.60			
	MW-17	Apr-14				0.038 J		MW-22A	Nov-14	FD		4.30		5.30			
		Apr-13				<0.053			Apr-15			2.57		5.80			
	NP-5	Apr-15				0.0387 J			Apr-15	FD		3.80		6.39			
		Apr-13							Oct-15			3.63		4.56			
		Nov-13							Oct-15	FD		3.31		4.46			
	RA-3156	Apr-14							Apr-16			3.53		7.43			
		Apr-16							Apr-16	FD		4.02		7.66			
		Oct-15			<0.0314	0.0721 J			Oct-16			3.48		5.73			
	MW-136	Apr-16			<0.0314	0.162			Oct-16	FD		3.25		6.18			
		Oct-16			<0.0314	0.118		MW-22B	Apr-13			1.99		3.00			
		Apr-13					<0.052		Apr-15			2.34		5.60			
	MW-1R	Apr-13	FD			<0.052			MW-70	Apr-14			1.42		0.530		
		Apr-14				<0.020				Nov-14			1.20		0.720		
		Apr-15				0.124		Apr-15				1.27 J		0.790			
		Apr-16				0.163		Oct-15				1.37		0.599			
MW-2A		Apr-14			0.13		<0.020	Apr-16				1.46		0.896			
	Nov-14			<0.031	0.250		Oct-16				1.32		0.772				
	Apr-15			<0.0310	0.295		MW-72	Nov-13			0.093		<0.051				
	Oct-15			0.0363 J	0.260			Apr-14			0.092		0.760				
	Apr-16			<0.0314	0.212			Apr-15			<0.0310		1.30				
Oct-16			0.0435 JB	0.195		Apr-16				<0.0314		0.950					
MW-3	Apr-14			0.0493 J	1.00		MW-73	Oct-13			1.22		3.10				
	Nov-14			0.540	9.10			Apr-14			0.985		4.80				
	Nov-14	FD		0.520	9.20			Apr-15			0.378		4.00				
	Apr-15			0.134	8.50			Apr-16			0.925		5.17				
	Apr-15	FD		0.151 J	8.60			MW-74	Apr-14			1.09		28.0			
	Oct-15			3.59	11.2				Nov-14			0.680		30.0			
	Oct-15	FD		0.839	10.2		Apr-15				0.0910 J		38.0				
	Apr-16			0.499	10.2		Oct-15				3.23		18.9				
	Apr-16	FD		0.490	9.97		Apr-16				1.20		18.4				
	Oct-16			0.611	11.0		Oct-16				0.135		64.3				
	Oct-16	FD		0.571	10.5		MW-75	Apr-14			1.66		9.00				
	MW-4A	Apr-14			0.342 H	3.40			Nov-14			2.50		13.0			
Nov-14				0.350	3.80			Apr-15			2.31		22.0				
Apr-15				0.130	5.60			Oct-15			10.9		19.6				
Oct-15				3.44	9.81			Apr-16			1.39		18.2				
Apr-16				0.402	8.76			Oct-16			2.46		16.6				
MW-4B	Oct-16			0.396	5.84		MW-76	Apr-14			0.856		4.60				
	Apr-13			0.102	0.360			Nov-14			1.10		23.0				
	Apr-15			0.119	1.31			Apr-15			0.356 J		21.0				
MW-5A	Apr-14			4.48 H	6.10			Oct-15			0.773		25.2				
	Nov-14			0.900	2.00			Apr-16			0.759		24.1				
	Apr-15			1.19	4.30			Oct-16			2.19		43.7				
	Oct-15			1.72	2.31		MW-77	Apr-14			1.13		39.0				
	Apr-16			2.09	8.92			Nov-14			1.30		91.0				
Oct-16			1.17	3.08		Apr-15				0.893		140					
MW-5B	Apr-13			1.78	7.10			Oct-15			2.68		173				
	Apr-15			1.14	11.00			Apr-16			0.968		101				
	Oct-16			0.065	0.220			Oct-16			1.53 J		86.1				
MW-5C	Apr-15			<0.0310	0.580		MW-78	Mar-13			0.373		6.40				
	Mar-13			0.190	3.00			Apr-14			0.333 J		29.0				
MW-6A	Apr-14			0.238	1.50			Apr-15			0.279		67.0				
	Apr-15			<0.0310	4.50			Apr-16			0.269		63.2				
	Apr-16			<0.0314	4.81			MW-79	Apr-14			0.076		1.30			
	Mar-13			<0.0500	<0.053		Nov-14				0.055 J		0.590				
MW-6B	Mar-13	FD		<0.0500	<0.054		Apr-15				<0.0310		0.560				
	Apr-15			<0.0310	0.386		Oct-15				0.0383 J		0.575				
	Apr-14			0.463 H	0.930		Apr-16				<0.0314		0.516				
MW-7A	Nov-14			0.360	1.10		Oct-16			0.0513 J		0.413					
	Nov-14	FD		0.370	1.10		MW-80	Mar-13			<0.0500		0.054				
	Apr-15			0.201	1.20			Apr-14			0.0489 J		0.200				
	Apr-15	FD		0.19 J	1.20			Apr-15			<0.0310		0.750				
	Oct-15			0.347	1.06			Apr-16			<0.0314		0.317				
	Oct-15	FD		0.417	1.13			MW-81	Mar-13			<0.0500		0.140			
	Apr-16			0.251	1.22				Mar-13	FD		<0.0500		0.150			
	Apr-16	FD		0.269	1.32		Apr-14				0.0318 J		3.60				
	Oct-16			0.235	1.21		Apr-15				<0.0310		8.00				
	Oct-16	FD		0.212	1.25		Apr-16				0.0339 J		8.64				
MW-7B	Apr-13			<0.0500	<0.053		MW-82		Mar-13			1.30		2.70			
	Apr-15			<0.0310	0.120			Apr-14			0.611		4.20				
	Apr-14			1.08	2.00			Apr-14	FD		0.649		4.20				
MW-10	Nov-14			0.910	2.20			Apr-15			0.361		14.0				
	Apr-15			0.41 J	2.60			Apr-16			0.334		8.41				
	Oct-15			0.730	1.79		MW-83	Apr-14			0.489 J		20.0				
	Apr-16			1.06	3.19			Nov-14			0.430		22.0				
	Oct-16			1.05	2.65			Apr-15			0.278		31.0				
	MW-11A	Apr-14			<0.0100	<0.021			Oct-15			6.26		40.3			
Nov-14								Apr-16			0.310		26.0				
Apr-15				<0.0310	0.0558 J			Oct-16			0.234		28.9				
Oct-15							Apr-14			0.607		27.0					
Apr-16			<0.0314	<0.0247		MW-84	Nov-14			0.610		75.0					
Oct-16							Apr-15			0.613		62.0					
MW-11B	Mar-13			<0.0500	<0.052			Oct-15			1.96		82.1				
	Apr-15			<0.0310	<0.0250			Apr-16			0.519		83.8				
MW-12	Apr-14				<0.020			Oct-16			1.58 J		95.3				
MW-13	Apr-14				<0.020		MW-87	Apr-14			<0.0100		0.230				
	Mar-13			<0.0500	0.200			Nov-14			<0.031		0.120				
	Apr-14			0.149	0.570			Apr-15			<0.0310		0.390				
	Apr-15			<0.16	1.01			Oct-15			0.0451 J		0.251				
	Apr-16			0.203	0.549			Apr-16			0.0421 J		0.449				
	MW-18A	Apr-14				<0.020			Oct-16			<0.0314		0.405			
Nov-14					0.074 J		MW-88	Apr-14			0.0497 J		0.370				
Apr-15					0.0770 J			Nov-14			0.048 J		0.570				
Oct-15					0.215			Apr-15			<0.0310		0.610				
Apr-16					0.460			Oct-15			<0.0314		0.455				
Oct-16					0.424			Apr-16			<0.0314		0.636				
						Oct-16				0.0848 J		0.635					

Appendix B, Table B.1 - Summary of Groundwater Analytical Data - Total Petroleum Hydrocarbons

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				TPH			Analyte Group:				TPH			
				GRO	DRO	DRO - EP					GRO	DRO	DRO - EP	
Units:				mg/L	mg/L	mg/L	Units:				mg/L	mg/L	mg/L	
CGWSL:				---	0.200	0.400	CGWSL:				---	0.200	0.400	
CGWSL Source:				NMED TPH	NMED TPH		CGWSL Source:				NMED TPH	NMED TPH		
Area	Well ID	Date	Dup				Area	Well ID	Date	Dup				
Evaporation Ponds	MW-120	Apr-14		0.073		0.230	Field East of Refinery	KWB-10R	Nov-14			12.0		
		Nov-14		0.057 J		2.40			Apr-15			9.16		
		Apr-15		<0.0310		3.09			Oct-15			4.65		
		Oct-15		0.181		1.30			Apr-16			5.24		
		Apr-16		0.0845 J		1.82			Oct-16			7.50		
	MW-121	Oct-16		<0.0314		0.920		KWB-11A	Nov-14		<0.031	0.710		
		Apr-14		<0.0100		0.092			Nov-14	FD	0.290	0.860		
		Nov-14		<0.031		0.510			Apr-15		0.339	1.87		
		Apr-15		<0.0310		0.565			Oct-15		0.217	0.646		
		Oct-15		<0.0314		0.460			Apr-16		0.267	3.74		
	MW-122	Apr-16		<0.0314		0.456		KWB-11B	Oct-16		0.223 B	1.36		
		Oct-16		0.0514 JB		0.593			Apr-14		2.74	3.20		
		Apr-14		0.0289 J		<0.021			Nov-14		<0.031	<0.022		
		Nov-14		<0.031		5.50			Apr-15		<0.0310	0.0365 J		
		Apr-15		<0.0310		4.79			Oct-15		<0.0314	<0.0247		
	MW-123	Oct-15		0.0340 J		6.06		KWB-12A	Apr-16		<0.0314	<0.0247		
		Apr-16		<0.0314		0.824			Oct-16		0.0565 JB	0.0388 J		
		Oct-16		0.0443 JB		0.412			Nov-14		<0.031	<0.022		
		Apr-14		<0.0100		2.80			Nov-14	FD	<0.031	0.074 J		
		Nov-14		1.60		2.70			Apr-15		<0.0310	0.0310 J		
	MW-124	Apr-15		1.90		3.60		KWB-12B	Apr-15	FD	<0.0310	0.305		
		Oct-15		1.24		2.13			Oct-15		<0.0314	<0.0247		
		Apr-16		1.83		3.82			Apr-16		<0.0314	0.0377 J		
		Oct-16		1.50		3.53			Oct-16		0.0348 JB	0.0329 J		
		Apr-14		<0.0100		<0.021			Apr-14		<0.0100	<0.021		
	OCD-1R	Nov-14		<0.031		<0.022		MW-57	Apr-14	FD	<0.0100	<0.021		
		Apr-15		<0.0310 J		0.0550 J			Nov-14		<0.031	<0.022		
		Oct-15		<0.0314		0.0298 J			Apr-15		<0.0310	0.0740 J		
		Apr-16		<0.0314		<0.0247			Oct-15		<0.0314	<0.0247		
		Oct-16		<0.0314		<0.0247			Oct-15	FD	<0.0314	0.0372 J		
	OCD-2A	Apr-16		<0.0100		<0.021		KWB-P4	Apr-16		<0.0314	<0.0247		
		Nov-14		<0.031		0.230			Apr-16	FD	<0.0314	<0.0247		
		Apr-15		<0.0310		0.242			Oct-16		0.0581 JB	0.0351 J		
		Oct-15		<0.0314		0.266			Oct-16	FD	0.0416 JB	0.0806 J		
		Apr-16		<0.0314		0.241			Apr-13			<0.052		
	OCD-3	Oct-16		0.0450 J		0.267		MW-58	Apr-15			0.0820 J		
		Apr-14		<0.0100		<0.020			Apr-14		0.350	0.780		
		Nov-14		<0.031		0.093 J			Nov-14		0.047 J	0.26 J		
		Apr-15		<0.0310		0.104			Apr-15		<0.0310	0.200		
		Oct-15		<0.0314		0.0455 J			Oct-15		<0.0314	0.242		
	OCD-4	Apr-16		<0.0314		0.0682 J		MW-111	Apr-16		<0.0314	0.198		
		Oct-16		0.0333 J		0.0722 J			Oct-16		0.0467 JB	0.103		
		Apr-14		<0.0100		<0.021			Nov-14			7.80		
		Nov-14		<0.031		0.07 J			Apr-15			9.00		
		Apr-15		<0.0310		0.0484 J			Oct-15			5.11		
	OCD-5	Oct-15		<0.0314		0.0251 J		MW-112	Apr-16			6.27		
		Apr-16		<0.0314		<0.0247			Oct-16			7.78		
		Oct-16		<0.0314		<0.0247			Apr-14		2.36	1.30		
		Apr-14		<0.0100		<0.021			Nov-14		1.70	2.00		
		Nov-14		<0.031		0.065 J			Apr-15		1.37	1.90		
	OCD-6	Apr-15		<0.0310		0.0464 J		MW-113	Oct-15		0.674	2.10		
		Oct-15		<0.0314		<0.0247			Apr-16		1.31	2.04		
		Apr-16		<0.0314		<0.0247			Oct-16		1.13	2.04		
		Oct-16		<0.0314		<0.0247			Nov-14		28.00	2.20		
		Apr-14		0.127		<0.021			Apr-14		17.30	0.230		
	OCD-7A	Apr-14	FD	0.140		<0.021		MW-125	Nov-14		2.40	0.640		
		Nov-14		0.260		0.540			Nov-14	FD	2.70	0.820		
		Apr-15		<0.0310		0.218			Apr-15		<0.0310	0.330		
		Oct-15		0.0402 J		0.0951 J			Apr-15	FD	<0.0310	0.241		
		Apr-16		<0.0314		0.0576 J			Oct-15		<0.0314	0.115		
	OCD-8A	Oct-16		0.0391 J		0.0423 J		MW-126A	Oct-15	FD	<0.0314	0.0917 J		
		Apr-14		0.297		0.820			Apr-16		0.581	0.156		
		Nov-14		<0.031		0.540			Apr-16	FD	0.627	0.180		
		Apr-15		0.0819 J		1.00			Oct-16		0.215 B	0.236		
		Oct-15		1.88		1.09			Oct-16	FD	0.218 B	0.188		
	OCD-8B	Apr-16		0.0939		1.11		MW-127	Apr-14		0.0383 J	<0.021		
		Oct-16		0.242		1.11			Nov-14		<0.031	0.047 J		
		Apr-14		0.889		4.00			Apr-15		<0.0310 J	<0.0250 B		
		Apr-14	FD	0.883		4.10			Oct-15		<0.0314	0.0523 J		
		Nov-14		0.760		3.50			Apr-16		<0.0314	0.0578 J		
	OCD-9A	Apr-15		0.715		4.29		MW-128	Oct-16		<0.0314	0.0756 J		
		Oct-15		1.20		4.12			Apr-14		0.142	0.710		
		Apr-16		0.443		5.24			Nov-14		0.410	0.880		
		Oct-16		1.08		5.28			Apr-15		<0.0310	0.757		
		Mar-13		<0.0500		<0.052			Oct-15		0.640	0.569		
	OCD-9B	Apr-15		<0.0310		0.120		MW-129	Apr-16		0.202	0.751		
		Apr-14		0.728		2.90			Oct-16		0.702	0.924		
		Apr-14	FD	0.764		2.80			Apr-14		0.079	0.340		
		Nov-14		0.660		1.80			Nov-14		<0.031	0.280		
		Apr-15		0.491		2.60			Apr-15		<0.0310	0.392		
	OCD-10A	Oct-15		0.648		2.74		MW-129	Oct-15		<0.0314	0.140		
		Apr-16		0.726		3.26			Apr-16		<0.0314	0.361		
		Oct-16		0.714		3.23			Oct-16		0.0546 JB	0.346		
		Apr-13		0.298		0.890			Apr-14		37.70	3.50		
		Apr-15		<0.0310		0.840			Nov-14		6.10	1.30		
	Field East of Refinery	KWB-1A	Apr-14			<0.021			MW-128	Apr-15		9.73	1.68	
			Nov-14		0.15 J					Oct-15		6.54	0.585	
			Apr-15		0.0932 J					Apr-16		6.40	1.43	
			Oct-15		0.114					Oct-16		3.81 B	1.22	
			Apr-16		0.127					Apr-14		3.19	2.10	
		KWB-1C	Oct-16		0.166				MW-129	Nov-14		1.20	2.40	
			Apr-13		<0.044					Apr-15		1.23 J	3.00	
			Apr-15		0.113					Oct-15		0.644	1.78	
			Nov-14		1.00					Apr-16		0.620	2.45	
			Apr-15		1.43					Oct-16		0.907	2.75	
		KWB-7	Oct-15		0.721				MW-129	Nov-14		4.60	2.70	
			Apr-16		1.22					Apr-15		3.29	2.45	
			Oct-16		1.06					Oct-15		4.11 J	1.31	
			Oct-16		3.02					Apr-16		2.70	1.68	
			Oct-16							Oct-16		2.17	1.68	

**Appendix B, Table B.1 - Summary of Groundwater Analytical Data - Total Petroleum Hydrocarbons**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				TPH			
				Analyte:			
				GRO	DRO	DRO - EP	
				mg/L	mg/L	mg/L	
				CGWSL: ---	0.200	0.400	
CGWSL Source:				NMED TPH	NMED TPH		
Area	Well ID	Date	Dup				
Field East of Refinery	KWB-10R	Nov-14			12.0		
		Apr-15			9.16		
		Oct-15			4.65		
		Apr-16			5.24		
		Oct-16			7.50		
	KWB-11A	Nov-14		<0.031	0.710		
		Nov-14	FD	0.290	0.860		
		Apr-15		0.339	1.87		
		Oct-15		0.217	0.646		
		Apr-16		0.267	3.74		
	KWB-11B	Oct-16		0.223 B	1.36		
		Apr-14		2.74	3.20		
		Nov-14		<0.031	<0.022		
		Apr-15		<0.0310	0.0365 J		
		Oct-15		<0.0314	<0.0247		
	KWB-12A	Apr-16		<0.0314	<0.0247		
		Oct-16		0.0565 JB	0.0388 J		
		Nov-14		<0.031	<0.022		
		Nov-14	FD	<0.031	0.074 J		
		Apr-15		<0.0310	0.0310 J		
	KWB-12B	Apr-15	FD	<0.0310	0.305		
		Oct-15		<0.0314	<0.0247		
		Apr-16		<0.0314	0.0377 J		
		Oct-16		0.0348 JB	0.0329 J		
		Apr-14		<0.0100	<0.021		
	KWB-P4	Apr-14	FD	<0.0100	<0.021		
		Nov-14		<0.031	<0.022		
		Apr-15		<0.0310	0.0740 J		
		Oct-15		<0.0314	<0.0247		
		Oct-15	FD	<0.0314	0.0372 J		
	MW-57	Apr-16		<0.0314	<0.0247		
		Apr-16	FD	<0.0314	<0.0247		
		Oct-16		0.0581 JB	0.0351 J		
		Oct-16	FD	0.0416 JB	0.0806 J		
		Apr-13			<0.052		
	MW-58	Apr-15			0.0820 J		
		Apr-14		0.350	0.780		
		Nov-14		0.047 J	0.26 J		
		Apr-15		<0.0310	0.200		
		Oct-15		<0.0314	0.242		
	MW-111	Apr-16		<0.0314	0.198		
		Oct-16		0.0467 JB	0.103		
		Nov-14			7.80		
		Apr-15			9.00		
		Oct-15			5.11		
	MW-112	Apr-16			6.27		
		Oct-16			7.78		
		Apr-14		2.36	1.30		
		Nov-14		1.70	2.00		
		Apr-15		1.37	1.90		
	MW-113	Oct-15		0.674	2.10		
		Apr-16		1.31	2.04		
		Oct-16		1.13	2.04		
		Nov-14		28.00	2.20		
		Apr-14		17.30	0.230		
	MW-125	Nov-14		2.40	0.640		
		Nov-14	FD	2.70	0.820		
		Apr-15		<0.0310	0.330		
		Apr-15	FD	<0.0310	0.241		
		Oct-15		<0.0314	0.115		
	MW-126A	Oct-15	FD	<0.0314	0.0917 J		
		Apr-16		0.581	0.156		
		Apr-16	FD	0.627	0.180		
		Oct-16		0.215 B	0.236		
		Oct-16	FD	0.218 B	0.188		
	MW-126B	Apr-14		0.0383 J	<0.021		
		Nov-14		<0.031	0.047 J		
		Apr-15		<0.0310 J	<0.0250 B		
		Oct-15		<0.0314	0.0523 J		
		Apr-16		<0.0314	0.0578 J		
	MW-127	Oct-16		<0.0314	0.0756 J		
		Apr-14		0.142	0.710		
		Nov-14		0.410	0.880		
		Apr-15		<0.0310	0.757		
		Oct-15		0.640	0.569		
	MW-128	Apr-16		0.202	0.751		
		Oct-16		0.702	0.924		
		Apr-14		0.079	0.340		
		Nov-14		<0.031	0.280		
		Apr-15		<0.0310	0.392		
	MW-129	Oct-15		<0.0314	0.140		
		Apr-16		<0.0314	0.361		
		Oct-16		0.0546 JB	0.346		
		Apr-14		37.70	3.50		
		Nov-14		6.10	1.30		
	MW-130	Apr-15		9.73	1.68		
		Oct-15		6.54	0.585		
		Apr-16		6.40	1.43		
		Oct-16		3.81 B	1.22		
		Apr-14		3.19	2.10		
	MW-131	Nov-14		1.20	2.40		
		Apr-15		1.23 J	3.00		
		Oct-15		0.644	1.78		
		Apr-16		0.620	2.45		
		Oct-16		0.907	2.75		
	MW-133	Nov-14		4.60	2.70		
		Apr-15		3.29	2.45		
		Oct-15		4.11 J	1.31		
		Apr-16		2.70	1.68		
		Oct-16		2.17	1.68		
	North Refinery	MW-130	Nov-14			<0.0100	0.330
			Apr-15			<0.031	0.700
			Oct-15			<0.0310 J	0.960
			Apr-16			<0.0314	0.508
Oct-16					<0.0314	1.08	
MW-131		Oct-16		0.200	1.09		
		Apr-14		26.20	3.40		
		Nov-14		9.10	3.70		
		Apr-15		7.68	2.80		
		Oct-15		6.76	4.00		
MW-133		Apr-16		9.16	2.12		
		Oct-16		6.31	1.86		
		Nov-14		9.40	2.80		
		Apr-15		11.3	3.10		
		Apr-14		<0.0100	<0.021		
MW-134		Nov-14		<0.031	0.064 J		
		Apr-15		<0.0310	0.100		
		Apr-15	FD	<0.0310	0.0886 J		
		Oct-15		<0.0314	0.0503 J		
		Oct-15	FD	<0.0314	0.0457 J		
MW-135		Apr-16		0.0420 J	0.0971 J		
		Apr-16	FD	<0.0314	0.0774 J		
		Oct-16		<0.0314	0.184		
		Oct-16	FD	<0.0314	0.135		
		Apr-14		<0.0100	<0.021		
RA-4196		Nov-14		<0.031	0.310		
		Apr-15		<0.0310	0.0823 J		
		Oct-15		<0.0314	0.0571 J		
		Apr-16		<0.0314	0.162		
		Oct-16		0.0638 JB	0.147		
RA-4798		Apr-14					
		Apr-15					
		Oct-15					
		Apr-16					
		Oct-16					
RW-12R		Apr-14					
		Nov-14	FD				
		Apr-15					
		Oct-15					
		Apr-16					
RW-13R		Oct-16					
		Apr-14					
		Apr-15					
		Oct-15					
		Apr-16					
RW-18		Oct-16					
		Apr-14					
		Apr-15					
		Oct-15					
		Apr-16					
RW-20		Oct-16					
		Apr-14					
		Apr-15					
		Oct-15					
		Apr-16					
MW-23		Oct-16					
		Apr-14					
		Apr-15					
		Oct-15					
		Apr-16					
MW-29		Oct-16					
		Apr-14					
		Nov-14					
		Apr-15					
		Oct-15					
MW-39		Apr-16					
		Oct-16					
		Oct-13					
		Apr-15					
		Oct-15					
MW-40		Apr-16					
		Oct-16					
		Apr-13					
		Apr-14					
		Apr-15					
MW-41		Oct-16					
		Oct-13					
		Apr-14					
		Apr-15					
		Apr-16					
MW-42		Oct-13					
		Apr-14					
		Apr-15					
		Apr-16					
		Oct-13					
MW-43		Apr-14					
		Nov-14					
		Apr-15					
		Oct-15					
		Apr-16					
MW-59		Oct-15					
		Apr-13					
		Apr-14					
		Apr-15					
		Apr-16					
MW-60		Oct-16					
		Apr-14					
		Nov-14					
		Apr-15					
		Oct-15					

**Appendix B, Table B.1 - Summary of Groundwater Analytical Data - Total Petroleum Hydrocarbons**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				TPH				
Analyte:				GRO	DRO	DRO - EP		
Units:				mg/L	mg/L	mg/L		
CGWSL:				---	0.200	0.400		
CGWSL Source:				NMED TPH	NMED TPH			
Area	Well ID	Date	Dup					
North Refinery	MW-61	Apr-14		10.9 J	3.40			
		Nov-14		11.00	6.40			
		Apr-15		6.77	9.40			
		Oct-15		5.13	3.32			
		Apr-16		2.60	3.59			
		Oct-16		4.21	3.55			
	MW-62	Apr-14		7.37	2.00			
		Nov-14		42.00	29.0			
		Apr-15		21.10	36.9			
		Oct-15		18.50	7.62			
		Apr-16		7.81	7.54			
		Oct-16		11.3	4.72			
	MW-67	Nov-14		0.81	4.20			
		Apr-15		0.78	8.40			
		Oct-15		2.16	5.18			
		Apr-16		1.29	11.1			
		Oct-16		1.03	9.36			
		Apr-14		0.317	1.40			
	MW-90	Nov-14		0.210	2.30			
		Apr-15		0.242	7.68			
		Oct-15		0.166	0.992			
		Apr-16		0.119	4.03			
		Oct-16		<0.0314	1.11			
		Apr-14		11.90	2.90			
	MW-91	Nov-14		7.90	11.0			
		Apr-15		14.70	15.9			
		Oct-15		12.20	20.3			
		Apr-16		22.10	22.2			
		Oct-16		20.6	16.3			
		Apr-16		5.50	20.4			
	MW-92	Oct-16		6.05	22.8			
		Apr-14		9.90	14.0			
		Nov-14		6.50	11.0			
		Apr-15		3.67	15.3			
		Oct-15		5.14	16.5			
		Apr-16		1.06	7.83			
	MW-94	Oct-16		2.57	8.66			
		Nov-14		5.50	9.40			
		Oct-15		6.12	25.6			
		Apr-16		7.91	8.69			
		Oct-16		6.83	9.76			
		Apr-13		0.053	3.40			
	MW-95	Apr-14		0.093	1.10			
		Apr-15		<0.0310	7.58			
		Apr-16		0.129	8.06			
		Apr-14		25.8	2.20			
		Nov-14		26.0	10.0			
		Apr-15		45.1	12.0			
	MW-96	Oct-15		24.3	9.23			
		Apr-16		25.3	10.8			
		Oct-16		20.0	7.74			
		Apr-14		32.1	2.20			
		Apr-14	FD	32.5	2.70			
		Nov-14		26.0	5.40			
	MW-98	Apr-15		19.3	7.06			
		Oct-15		18.6	6.38			
		Apr-16		14.7	6.88			
		Oct-16		20.0	4.97			
		Oct-15		30.0	20.1			
		Apr-16		33.8	11.8			
	MW-137	Oct-16		30.9	9.65			
		Oct-15		5.08	6.73			
		Apr-16		4.86	15.5			
		Oct-16		2.28	10.3			
		RW-1	Apr-15		2.95 J	12.0		
		RW-1R	Apr-16		2.13	8.54		
	RW-2	Apr-15		18.30	19.7			
		RW-2R	Apr-16		20.8	17.3		
		RW-7	Apr-15		1.05	9.70		
		RW-7R	Apr-16		0.0588 J	1.97		
		RW-8	Apr-15			7.30		
		RW-9	Apr-13		4.14	2.30		
	Apr-14			3.26	0.480			
	Apr-15			2.55	3.20			
	Apr-16			0.492 J	3.44			
	RW-10		Apr-13		<0.0500	0.650		
	Apr-14			<0.0100	0.150			
	RW-15	Apr-15		<0.0310	4.80			
		Apr-16		<0.157	3.66			
		RW-16	Apr-13		0.580			
		Apr-14			0.110			
		Apr-14	FD		0.230			
		Apr-15			1.90			
	RW-17	Apr-16		2.29				
		Apr-13		<0.0500	0.290			
		Apr-14		<0.0100	0.110			
		Apr-15		<0.0310	1.20			
		Apr-16		<0.0314	1.75			
		Apr-14		<0.0100	<0.022			
	North RO Reject Field	MW-117	Nov-14		<0.031	0.029 J		
			Nov-14	FD		<0.031	0.12 J	
			Apr-15		<0.0310	0.0323 J		
			Oct-15		<0.0314	<0.0247		
			Apr-16		<0.0314	<0.0247		
			Oct-16		<0.0314	0.0265 J		
		MW-118	Apr-14		<0.0100	<0.021		
			Nov-14		<0.031	0.032 J		
			Apr-15		<0.0310	0.0307 J		
			Oct-15		<0.0314	<0.0247		
			Apr-16		<0.0314	0.0248 J		
Oct-16				<0.0314	<0.0247			
South Refinery			KWB-2R	Nov-14			5.50	
				Apr-15			5.20	
				Oct-15			3.95	
				Apr-16			1.49	
		Oct-16				1.84		
		Nov-14				1.80		
		KWB-5	Apr-15			2.30		
			Oct-15			1.39		
			Apr-16			2.36		
			Oct-16			1.89		

**Appendix B, Table B.1 - Summary of Groundwater Analytical Data - Total Petroleum Hydrocarbons**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				TPH		
				Analyte:		
				GRO	DRO	DRO - EP
				mg/L	mg/L	mg/L
Units:				---	0.200	0.400
CGWSL:				---		
CGWSL Source:				NMED TPH	NMED TPH	
Area	Well ID	Date	Dup			
South Refinery	KWB-6	Nov-14			1.80	
		Apr-15			4.50	
		Oct-15			1.41	
		Apr-16			3.75	
		Oct-16			1.78	
	MW-28	Apr-14		6.32	3.00	
		Nov-14		16.00	3.70	
		Apr-15		7.85 J	13.0	
		Oct-15		9.88	16.2	
		Apr-16		4.83	17.0	
		Oct-16		6.13	22.2	
	MW-48	Nov-14		4.5 J	4.00	
		Apr-15		3.65 J	3.90	
		Oct-15		2.99	2.97	
		Apr-16		23.3	15.3	
		Oct-16		15.8	7.81	
	MW-50	Apr-14		0.0223 J	0.120	
		Nov-14		0.0263 J	0.36 J	
		Apr-15		0.032 J	0.902	
		Oct-15		<0.0310 J	0.642	
		Apr-16		<0.0314	1.10	
		Oct-16		<0.0314	1.02	
	MW-52	Apr-14		0.0386 J	0.170	
		Apr-14	FD	136	0.330	
		Nov-14		90.7	0.28 J	
		Apr-15		27.00	0.370	
		Oct-15		33.10	0.158	
		Apr-16		19.6	0.324	
	MW-64	Oct-16		19.2	0.367	
		Apr-16			12.3	
		Oct-16			12.0	
	MW-65	Nov-14			15.00	
		Apr-15			12.40	
		Apr-16			10.6	
	MW-66	Oct-16			7.99	
		Apr-14		6.64	2.10	
		Nov-14		23.00	3.30	
		Apr-15		8.18	4.51	
		Oct-15		8.74	1.40	
		Apr-16		6.09	4.19	
	MW-99	Oct-16		7.32	4.24	
		Nov-14		14.0	2.50	
		Apr-15		6.76	1.94	
		Oct-15		19.4	1.87	
		Apr-16		18.1	4.29	
		Oct-16		17.8 B	2.26	
	MW-101	Apr-14		4.56	4.30	
		Nov-14		1.40	5.30	
		Apr-15		0.18	6.00	
		Oct-15		0.0803 J	5.08	
		Apr-16		0.614	5.84	
		Oct-16		0.208	2.95	
	MW-102	Nov-14		36.00	9.50	
		Apr-15		24.50	9.96	
		Oct-15		31.40	11.4	
		Apr-16		26.2	9.69	
		Oct-16		31.5	14.8	
		Apr-13		3.31	5.40	
	MW-103	Apr-14		1.43 J	5.90	
		Apr-15		4.15	8.66	
		Apr-16		3.55	7.35	
		Apr-14		1.42	0.72	
		Apr-14	FD	1.42	0.69	
		Nov-14		1.3 J	0.70	
	MW-104	Nov-14	FD	1.40	0.62	
		Apr-15		0.78	0.81	
		Apr-15	FD	0.88	0.79	
		Oct-15		1.05	1.06	
		Oct-15	FD	1.18	3.00	
		Apr-16		0.797	2.23	
	MW-105	Apr-16	FD	0.775	2.19	
		Oct-16		1.35	2.55	
		Oct-16	FD	1.26	2.68	
		Nov-14		14.00	7.80	
		Apr-15		6.50	3.74	
		Oct-15		4.37	2.31	
	MW-106	Apr-16		33.6	21.2	
		Oct-16		43.7	8.66	
		Apr-14		27.90	2.10	
		Apr-15		1.52	3.40	
		Oct-15		23.80	19.6	
		Apr-16		23.9	19.5	
	MW-107	Oct-16		27.1	21.8	
		Apr-14		7.32	4.90	
		Nov-14		17.00	4.90	
		Apr-15		9.85	7.20	
		Oct-15		14.9 J	4.72	
		Apr-16		4.89	6.80	
	MW-109	Oct-16		17.7	7.24	
		Apr-14		2.02	2.70	
		Nov-14		1.00	3.70	
		Apr-15		2.36	8.10	
		Oct-15		1.46	0.842	
		Apr-16		1.93	5.92	
	MW-110	Oct-16		2.12	3.19	
		Apr-14		2.05	1.20	
		Nov-14		0.47	0.820	
		Apr-15		1.12	2.20	
		Oct-15		1.48	<0.0247	
		Apr-16		0.735	1.55	
South Refinery	RA-313	Apr-13				
		Apr-14				
		Apr-15				
		Apr-16				
		Oct-16				
	RW-4	Apr-15			3.72	
		RW-4R	Apr-16		5.03	
		RW-5R	Apr-15		6.42	
			Apr-16		7.39	
		RW-6R	Apr-15		11.40	
	MW-114	Apr-16		4.20		
		Apr-14		<0.0100	<0.020	
		Nov-14		<0.031	0.032 J	
		Apr-15		<0.0310 J	<0.0250 B	
		Oct-15		<0.0314	<0.0247	
	MW-115	Apr-16		<0.0314	0.0317 J	
		Oct-16		<0.0314	0.0410 J	
		Apr-14		<0.0100	<0.021	
		Nov-14		<0.031	0.110	
		Apr-15		<0.0310 J	<0.0250 B	
	MW-116	Oct-15		0.0324 J	0.103	
		Apr-16		<0.0314	0.0616 J	
		Oct-16		<0.0314	0.0582 J	
		Apr-14		<0.0100	<0.021	
		Nov-14		<0.031	0.026 J	
	MW-49	Apr-15		<0.0310 J	<0.0250 B	
		Oct-15		0.0314	0.0607 J	
		Apr-16		<0.0314	0.112	
		Oct-16		<0.0314	0.0868 J	
		Apr-14		1.99	5.60	
	TEL-1	Nov-14		1.00	7.00	
		Apr-15		0.65	8.60	
		Oct-15		1.58	7.66	
		Apr-16		1.75	8.63	
		Oct-16		2.82	9.26	
	TEL-2	Apr-14		0.384 J	8.70	
		Apr-14	FD	0.35	7.70	
		Nov-14		0.20	6.00	
		Apr-15		0.18	9.80	
		Oct-15		0.15	7.46	
	TEL-3	Apr-16		0.153	8.51	
		Oct-16		0.193	3.58	
		Apr-14		6.08 J	17.0	
		Nov-14		1.7 J	18.0	
		Apr-15		5.12	20.0	
	TEL-4	Oct-15		2.86	18.7 J	
		Apr-16		3.12	18.1	
		Oct-16		3.08	17.0	
		Apr-14		0.971 J	8.30	
		Nov-14		0.45	6.30	
	MW-8	Apr-15		0.67	9.40	
		Oct-15		0.63	5.86	
		Apr-16		1.05	14.1	
		Oct-16		0.589	4.22	
		Apr-14		3.11 J	8.60	
	MW-16	Nov-14	FD	3.30	7.40	
		Nov-14		2.80	5.70	
		Apr-15		2.09	8.40	
		Apr-15	FD	2.26	8.50	
		Oct-15		2.77	4.98	
	MW-20	Oct-15	FD	2.70	5.73	
		Apr-16		2.36	9.13	
		Apr-16	FD	2.65	8.65	
		Oct-16		2.52	6.36	
		Oct-16	FD	2.72	6.66	
	MW-21	Oct-13		<0.0500	<0.052	
		Apr-14		<0.0100	<0.021	
		Apr-15		<0.0310	0.380	
		Apr-16		<0.0314	0.230	
		Apr-13			<0.052	
	MW-25	Apr-14			0.058	
		Apr-15			0.340	
		Apr-13			<0.053	
		Apr-14			<0.020	
		Apr-15			0.690	
	MW-26	Apr-16			0.348	
		Apr-13			<0.053	
		Apr-14			<0.020	
		Apr-15			0.0530 J	
		Apr-16			0.103	
	MW-27	Apr-13			<0.052	
		Apr-14			<0.021	
		Apr-15			0.110	
		Apr-16			0.134	
		Apr-14			<0.021	
	MW-46R	Nov-14			0.042 J	
		Apr-15			0.0540 J	
		Apr-16			0.0622 J	
		Oct-16			0.0459 J	



**Appendix B, Table B.1 - Summary of Groundwater Analytical Data - Total Petroleum Hydrocarbons**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				TPH		
Analyte:				GRO	DRO	DRO - EP
Units:				mg/L	mg/L	mg/L
CGWSL:				---	0.200	0.400
CGWSL Source:					NMED TPH	NMED TPH
Area	Well ID	Date	Dup			
TMD	MW-68	Apr-13			<0.052	
		Apr-14			<0.020	
		Apr-15			0.130	
		Apr-16			0.162	
	MW-71	Oct-13			0.096	
		Apr-14			<0.021	
		Apr-15			0.0930 J	
		Apr-16			0.0252 J	
	MW-89	Apr-13			0.058	
		Apr-14			0.210	
		Apr-15			2.40	
		Apr-16			3.38	
	NP-1	Apr-14				
		Nov-14				
		Apr-15				
		Oct-15				
		Apr-16				
		Oct-16				
	NP-2	Apr-13			<0.0500	<0.052
	NP-6	Apr-13				
Apr-15						
Up-Gradient	UG-1	Apr-13			<0.0500	<0.053
		Apr-14			<0.0100	<0.021
		Apr-15			<0.0310	<0.0250 B
		Apr-16			<0.0314	0.0302 J
	UG-2	Apr-13			<0.0500	<0.052
		Apr-13	FD		<0.0500	<0.053
		Apr-14			<0.0100	<0.020
		Apr-15			<0.0310	<0.0250 B
		Apr-16			<0.0314	0.0692 J
	UG-3R	Apr-13			<0.0500	<0.053
		Apr-14			<0.0100	<0.020
		Apr-14	FD		<0.0100	<0.020
		Apr-15			<0.0310	<0.0250 B
		Apr-16			<0.0314	<0.0247
UG-4	Apr-16			<0.0314	0.0349 J	

Analyte Group:				TPH		
Analyte:				GRO	DRO	DRO - EP
Units:				mg/L	mg/L	mg/L
CGWSL:				---	0.200	0.400
CGWSL Source:					NMED TPH	NMED TPH
Area	Well ID	Date	Dup			

Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals													
Analyte:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
Units:				mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050	0.030	0.0631
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	WQCC HH	NMED TW
Area	Well ID	Date	Dup														
Crossgradient	KWB-13	Apr-13		<0.0100	0.0232				<0.00500	0.932	<0.00500	0.0208	<2.0E-04	<0.0100	0.0165		0.0206
		Apr-14		0.00259 J	0.0145				0.00121 J	<0.00500	<0.000700	<0.00250	<4.0E-05	<0.00100	0.0126		0.0172
		Apr-15		0.0118	0.122				0.0182	12.3	0.019	0.399	<4.9E-05	0.0144	0.011		0.0426
		Apr-16		0.00484 J	0.0459	0.384	<0.005	0.00161 J	0.00621 J	4.00	0.00403 J	0.0747	<4.9E-05	<0.00175	0.0188	0.0261 J	0.0304
	MW-17	Apr-14		<0.00200	0.0152				<0.00200	<0.100	0.00724 J	<0.00500			0.0104		
		Apr-13		<0.0100	<0.0100				<0.0100	<0.400	<0.0100	<0.0100			0.0135		
	NP-5	Apr-15		0.00288	0.0159				0.00109 J	0.437	0.000415 J	0.00318 J			0.0125		
		Apr-13															
	RA-3156	Nov-13															
		Apr-14															
		Apr-16															
	MW-136	Oct-15		0.00381	0.103				0.00365	1.18	0.00218	0.204	<4.9E-05	0.00425	0.00463		0.0212
		Apr-16		0.00280 J	0.0270	0.695	<0.005	0.00132 J	<0.00270	0.599	<0.00120	0.0591	<4.9E-05	<0.00350	0.0112	0.0702	0.0197 J
		Oct-16		0.00284	0.0134	0.512	<0.00016	0.000279 J	0.00118 JB	0.0892 JB	0.00094 JB	0.0112 B	<4.9E-05	0.00184 JB	0.00562	0.0720	0.0176
	MW-1R	Apr-14		<0.0250	<0.0250				<0.0250	1.77	<0.0250	1.64			<0.0250		
		Apr-13	FD	<0.0250	<0.0250				<0.0250	1.64	<0.0250	1.59			<0.0250		
		Apr-14		0.00335 J	0.0214				<0.00200	2.39	<0.00140	1.38			<0.00200		
		Apr-15		0.00366 J	0.0240 J				<0.00270	3.49	<0.00120	2.14 J			<0.00190		
	MW-2A	Apr-16		0.00917 J	0.0301				0.0188	9.67	<0.00120	2.94			<0.00190		
		Apr-14		0.0194 J	0.0222 J				<0.00500	0.737 J	<0.00350	1.21			<0.00500		
		Nov-14		0.048	0.026				0.0078	3.10	<0.0012	1.50			0.0051 J		
		Apr-15		0.0155 J	0.0255 J				<0.00540	0.571 J	<0.00240	1.98			<0.00380		
	MW-3	Oct-15		0.00962	0.0241				<0.00108	0.588	<0.000480	2.88			0.00153 J		
		Apr-16		0.0154	0.0228 J				<0.00270	3.37	<0.00120	2.50			0.00432 J		
		Oct-16		0.00798	0.0208				0.00105 J	0.146	<0.000240	1.43			0.00056 J		
		Apr-14		0.0298	0.0185				<0.00200	<0.100	<0.00140	0.254			0.0458		
	MW-4A	Nov-14		0.035	0.022 J				0.0081	0.570	<0.0012	2.20			0.019		
		Nov-14	FD	0.029	0.022 J				0.006	0.340 J	<0.0012	2.50			0.023		
		Apr-15		0.0288	0.0186 J				<0.00270	<0.0750	<0.00120	1.55			0.108		
		Apr-15	FD	0.0346	0.0215				0.00198 J	0.0806 J	0.000346 J	1.85			0.112		
	MW-4B	Oct-15		0.0248	0.0157				<0.000540	0.366	0.000298 J	1.29			0.00892		
		Oct-15	FD	0.0281	0.0158				0.00107 J	0.559	0.000371 J	1.33			0.00804		
		Apr-16		0.0388	0.0175 J				<0.00270	0.677	<0.00120	2.61			0.00580 J		
		Apr-16	FD	0.0348	0.0168 J				<0.00270	0.612	<0.00120	2.62			0.00575 J		
	MW-5A	Oct-16		0.055	0.0152				0.000868 J	1.82	0.000241 JB	1.60			0.00258		
		Oct-16	FD	0.0553	0.0152				0.000869 J	1.75	0.000692 JB	1.60			0.00263		
		Apr-14		0.147	0.0121				<0.00200	2.31	<0.00140	2.24			<0.00200		
		Nov-14		0.057	0.014 J				<0.0027	0.820	<0.0012	2.70			<0.0019		
	MW-5B	Apr-15		0.108 J	0.0139 J				0.00570 J	3.15	<0.00120	2.96			<0.00190		
		Oct-15		0.112	0.014				0.00126 J	2.09	<0.000240	1.75			0.000589 J		
		Apr-16		0.188	0.0125 J				<0.00270	3.21	<0.00120	2.39			<0.00190		
		Oct-16		0.172	0.0121				0.000815 J	1.08	0.000566 JB	1.69			0.000608 J		
	MW-6A	Apr-13		0.0371	<0.0250				<0.0250	<1.00	<0.0250	1.30			<0.0250		
		Apr-15		0.101	0.0349				<0.00110	3.60	0.00189 J	8.68			<0.000760		
		Apr-14		0.106	0.0142 J				<0.00500	7.10	<0.00350	1.74			<0.00500		
		Nov-14		0.064	0.014 J				<0.0027	4.40	<0.0012	2.00			0.0040 J		
	MW-6B	Apr-15		0.0938	0.0128 J				<0.00540	5.62	<0.00240	1.84			<0.00380		
		Oct-15		0.0705	0.0143				0.000685 J	5.34	<0.000240	1.82			0.000954 J		
		Apr-16		0.213	0.0149 J				<0.00270	8.10	<0.00120	1.34			<0.00190		
		Oct-16		0.0638	0.0117				<0.000540	4.19	0.000445 JB	1.73			0.000606 J		
	MW-7A	Apr-13		0.122	<0.0250				<0.0250	<1.00	<0.0250	2.44			<0.0250		
		Apr-15		0.201	0.0112 J				0.00277 J	6.11	<0.00120	3.87			0.00197 J		
		Apr-13		0.0139	0.0166				<0.0100	1.04	<0.0100	0.943			<0.0100		
		Apr-15		0.0145	0.0200 J				<0.00270	1.15	<0.00120	0.975			<0.00190		
	MW-7B	Mar-13		0.00788	0.0143				<0.00500	0.660	<0.00500	0.277			<0.00500		
		Apr-14		0.0113	0.0287				0.00234 J	<0.100	<0.00140	1.37			0.0192		
		Apr-15		0.0129	0.0308				<0.00270	0.155 J	<0.00120	1.40			0.0308		
		Apr-16		0.00953 J	0.0158 J				<0.00270	0.0787 J	<0.00120	0.505			<0.00190		
	MW-7C	Mar-13		0.0493	0.0139				<0.00500	1.54	<0.00500	2.39			<0.00500		
		Mar-13	FD	0.0537	0.0163				<0.00500	1.69	<0.00500	2.43			<0.00500		
		Apr-15		0.0333	0.0164				<0.00110	1.37	<0.000480	3.45			<0.000760		
		Apr-14		0.0256	0.0152				<0.00200	2.99	<0.00140	0.509			<0.00200		
	MW-7D	Nov-14		0.021	0.018 J				0.0027 J	1.30	<0.0012	1.50			<0.0019		
		Nov-14	FD	0.02	0.017 J				<0.0027	1.50	<0.0012	1.60			<0.0019		
		Apr-15		0.019	0.0149				0.000895 J	0.984	<0.000240	1.11			0.000620 J		
		Apr-15	FD	0.0194	0.0156				0.00131 J	0.996	0.000288 J	1.06			0.000570 J		
	MW-7E	Oct-15		0.0255	0.0155				0.00116 J	2.86	0.000494 J	0.632			0.000638 J		
		Oct-15	FD	0.0253	0.0159				0.00114 J	2.86	0.000524 J	0.629			0.000647 J		
		Apr-16		0.0382	0.0170 J				0.00370 J	6.35	<0.00120	0.682			<0.00190		
		Apr-16	FD	0.0305	0.0158 J				<0.00270	4.43	<0.00120	0.588			<0.00190		
	MW-7F	Oct-16		0.0181	0.0173				0.00184 J	1.66	0.000527 JB	0.563			0.000402 J		
		Oct-16	FD	0.0186	0.0159				0.00184 J	1.66	0.000618 JB	0.563			0.000507 J		
		Apr-13		<0.0250	<0.0250				<0.0250	<1.00	<0.0250	0.397			<0.0250		
		Apr-15		0.00588	0.0111				0.000702 J	0.188	<0.000240	0.58			<0.000380		
	MW-10	Apr-14		0.0211	0.0134				<0.00200	<0.100	<0.00140	2.70			<0.00200		
		Nov-14		0.019	0.021				0.00092 JB								

Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals											
Analyte:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium
Units:				mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH
Area	Well ID	Date	Dup	Uranium	Vanadium										NMED TW
Evaporation Ponds	MW-18B	Apr-13		<0.0100	0.0126				<0.0100	<0.400	<0.0100	0.572			<0.0100
		Apr-15		0.012	0.0125				0.000942 J	0.139	0.000814 J	0.789			<0.000380
	MW-22A	Apr-14		0.0568	0.0153				<0.00200	2.19	<0.00140	3.61			<0.00200
		Nov-14		0.060	0.019				0.00081 JB	6.90	<0.00024	6.00			0.0016 J
		Nov-14	FD	0.064	0.018 J				0.0030 J	8.10	<0.0012	6.30			<0.0019
		Apr-15		0.0545	0.0179 J				<0.00270	2.34	<0.00120	5.18			<0.00190
		Apr-15	FD	0.0362	0.0147 J				<0.00270	2.89	<0.00120	4.36			<0.00190
		Oct-15		0.0482	0.0166				<0.000540	4.62	<0.000240	5.86			0.000966 J
		Oct-15	FD	0.0479	0.0165				<0.000540	4.54	<0.000240	5.81			0.000979 J
		Apr-16		0.0449	0.0174 J				<0.00270	4.42	<0.00120	6.06			<0.00190
		Apr-16	FD	0.0455	0.0167				<0.00270	4.46	<0.00120	6.20			<0.00190
		Oct-16		0.0452	0.0179				0.000678 J	5.41	<0.000240	7.28			0.000938 J
		Oct-16	FD	0.0447	0.0183				0.000633 J	5.26	<0.000240	7.15			0.000874 J
	MW-22B	Apr-13		0.0343	<0.0250				<0.0250	1.78	<0.0250	3.37			<0.0250
		Apr-15		0.0389	0.0160 J				<0.00270	2.32	0.00134 J	4.32			<0.00190
	MW-70	Apr-14		0.0286	0.0157				<0.00200	3.36	<0.00140	0.262			<0.00200
		Nov-14		0.021	0.020				0.00055 J	2.50	<0.00024	0.730			0.00044 J
		Apr-15		0.0252	0.0151				0.000653 J	3.29	<0.000240	0.222			<0.000380
		Oct-15		0.0163	0.0166				<0.000540	2.99	<0.000240	0.227			<0.000380
		Apr-16		0.0238	0.0147 J				<0.00270	6.19	<0.00120	0.543			<0.00190
		Oct-16		0.0189	0.0162				<0.000540	4.69	<0.000240	0.381			<0.000380
	MW-72	Nov-13		0.0929	0.0186				<0.0100	20.9	<0.00500	5.26			<0.0100
		Apr-14		0.048	0.0154				<0.00100	7.13	<0.000700	5.69			<0.00100
		Apr-15		0.149	0.0321				<0.00270	32.3	<0.00120	3.05			0.0155
		Apr-16		0.0318	0.0195 J				<0.00270	7.20	<0.00120	4.86			<0.00190
	MW-73	Oct-13		0.108	0.012				<0.00500	9.29	<0.00500	3.09			<0.00500
		Apr-14		0.0982	0.0132 J				<0.00500	5.71	<0.00350	2.77			<0.00500
		Apr-15		0.0757	0.00999 J				<0.00270	2.40	<0.00120	2.61			0.00233 J
		Apr-16		0.0990	0.0114 J				<0.00270	8.28	<0.00120	3.17			0.00201 J
	MW-74	Apr-14		0.0599	0.0137 J				<0.00500	<0.250	<0.00350	1.18			0.193
		Nov-14		0.062	0.014				0.00074 JB	0.110	<0.00024	0.88			0.250
		Apr-15		0.0549	0.00894 J				<0.00270	0.175 J	<0.00120	0.406			0.480
		Oct-15		0.0733	0.0127				<0.00108	<0.030	<0.000480	1.17			0.0608
		Apr-16		0.136	0.0151 J				<0.00270	0.756	<0.00120	2.19			0.0150
		Oct-16		0.0699	0.0147				0.00120 J	0.203 B	<0.000240	0.0907			0.585
	MW-75	Apr-14		0.299	0.0166				0.00221 J	4.01	<0.00140	1.10			0.00288 J
		Nov-14		0.350	0.016				0.0019	4.20	0.00029 J	0.960			0.0025
		Apr-15		0.400	0.0183 J				0.00396 J	10.7	<0.00120	0.901			0.00311 J
		Oct-15		0.328	0.0149				0.00155 J	3.75	<0.000240	0.821			0.00248
		Apr-16		0.183	0.0218 J				<0.00270	2.52	<0.00120	1.01			0.00310 J
		Oct-16		0.275	0.0150				0.00156 J	3.29	<0.000240	0.916			0.00245
	MW-76	Apr-14		0.0712	0.0151				0.00181 J	4.00	<0.000700	1.06			0.00301 J
		Nov-14		0.100	0.018				0.0027	5.10	0.00046 J	1.80			0.0049
		Apr-15		0.0777	0.0127 J				<0.00270	4.04	<0.00120	1.10			0.00258 J
		Oct-15		0.0582	0.0143				0.00126 J	3.75	0.000242 J	0.753			0.0025
		Apr-16		0.0610	0.0140 J				<0.00270	4.68	<0.00120	1.07			0.00298 J
		Oct-16		0.0818	0.0163				0.00266	6.79	<0.000240	1.25			0.00582
	MW-77	Apr-14		0.0765	0.0138				0.00084 J	9.80	<0.000700	1.06			0.0113
		Nov-14		0.054	0.013 J				0.0097	9.80	0.0013 J	0.770			0.021
		Apr-15		0.0928	0.0158 J				0.0144	14.9	<0.00120	0.666			0.0135
		Oct-15		0.0500	0.0132 J				0.00980 J	8.54	<0.00120	0.703			0.0119
		Apr-16		0.0749	0.0136 J				0.0132	12.2	<0.00120	0.687			0.0137
		Oct-16		0.0505	0.0120 JB				0.00899 J	7.87	<0.00120	0.706			0.00996 J
	MW-78	Mar-13		<0.0250	0.0284				0.0843	<1.00	<0.00500	0.491			<0.0250
		Apr-14		0.0217	0.0388				0.0476	7.58	0.00107 J	1.46			0.0105
		Apr-15		0.0211	0.0318				0.133	12.3	<0.00120	1.29			0.0156
		Apr-16		0.0210	0.0445				0.0761	14.8	<0.00120	0.946			0.0141
	MW-79	Apr-14		0.0188	0.0138				<0.00200	0.108 J	<0.00140	1.34			0.00675 J
		Nov-14		0.0073	0.020				0.00065 JB	0.230	<0.00024	4.00			0.0017 J
		Apr-15		0.00807 J	0.0154 J				<0.00270	0.276 J	<0.00120	1.46			<0.00190
		Oct-15		0.0126	0.0165				<0.00108	3.03	<0.000480	3.76			0.00144 J
		Apr-16		0.0113	0.0181 J				<0.00270	0.882	<0.00120	3.00			<0.00190
		Oct-16		0.0208	0.0184				<0.000540	5.37	<0.000240	3.68 V			<0.000380
	MW-80	Mar-13		<0.0250	<0.0250				<0.0250	1.31	<0.0100	0.583			<0.0250
		Apr-14		0.0143	0.016				<0.00200	2.10	<0.00140	0.703			<0.00200
		Apr-15		0.0187	0.0151 J				<0.00270	1.73	<0.00120	0.555			<0.00190
		Apr-16		0.00788 J	0.0185 J				0.0465	1.34	<0.00120	0.234			<0.00190
	MW-81	Mar-13		<0.0250	<0.0250				<0.0250	<1.00	<0.0100	2.14			<0.0250
		Mar-13	FD	<0.0250	<0.0250				<0.0250	<1.00	<0.0100	2.08			<0.0250
		Apr-14		0.0188	0.0162				<0.00200	<0.100	<0.00140	0.137			0.00757 J
		Apr-15		0.022	0.0131 J				<0.00270	0.183 J	<0.00120	0.132			0.0235
		Apr-16		0.030	0.0212 J				<0.00270	0.136 J	<0.00120	0.106			0.0467
	MW-82	Mar-13		0.105	<0.0250				<0.0250	1.80	<0.0250	1.55			<0.0250
		Apr-14		0.133	0.021				<0.00200	3.06	0.000773 J	1.33			<0.00200
		Apr-14	FD	0.126	0.021				<0.00200	2.73	<0.00140	1.36			<0.00200
		Apr-15		0.0929	0.0302				0.00570 J	1.68	<0.00120	1.38			0.00302 J
		Apr-16		0.0510	0.0387				<0.00270	0.414 J	<0.00120	1.76			0.00199 J
	MW-83	Apr-14		0.0388	0.0197				0.00430 J	4.65	0.000914 J	0.986			0.00977
		Nov-14		0.03	0.046				0.0089	12.0	0.00037 J	0.700			0.0075
		Apr-15		0.0304	0.0116 J				0.0115	8.98	<0.00120	0.863			0.00376 J
		Oct-15		0.0215	0.0403				0.00791	1.87	0.000860 J	0.170			0.00806
		Apr-16		0.0313	0.0248 J				0.0153	5.63	<0.00120	0.573			0.00364 J
		Oct-16		0.0131	0.121				0.00973	1.85	0.00141 JB	0.434			0.00925
	MW-84	Apr-14		0.114	0.0144				0.00416 J	3.21	<0.000700	3.58			0.00577 J
		Nov-14		0.083	0.029				0.019 B	1.60	<0.00024	3.60			0.014
		Apr-15		0.116	0.0135 J				0.00500 J	2.54	<0.0				

Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals											
Units:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium
CGWSL:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL Source:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050
				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH
Area	Well ID	Date	Dup												
Evaporation Ponds	MW-120	Apr-14		0.0307	0.0335				0.00217 J	8.09	0.00213 J	1.19			<0.00200
		Nov-14		0.026	0.018				0.001	12.0	0.00064 J	1.50			0.038
		Apr-15		0.00974 J	0.0108 J				<0.00270	2.63	<0.00120	1.33			0.0335
		Oct-15		0.0101	0.0149				<0.000540	4.74	<0.000240	1.79			0.00113 J
		Apr-16		0.0138	0.0176 J				<0.00270	7.32	<0.00120	2.14			0.00511 J
		Oct-16		0.0135	0.0194				<0.000540	5.90	<0.000240	1.96			<0.000380
	MW-121	Apr-14		0.0465	0.016				<0.00100	0.963	<0.000700	4.22			0.00446 J
		Nov-14		0.071	0.019				0.0014	2.00	0.00070 J	3.80			0.012
		Apr-15		0.0366	0.0142				<0.00110	0.700	<0.000480	3.85			0.00792
		Oct-15		0.0413	0.0138				<0.000540	0.287	<0.000240	2.70			0.0109
		Apr-16		0.0443	0.0179 J				<0.00270	0.530	<0.00120	3.56			0.00777 J
		Oct-16		0.0377	0.0130				<0.000540	0.262	<0.000240	2.33			0.00746
	MW-122	Apr-14		0.00917 J	0.0406				<0.00200	5.37	0.00144 J	2.09			<0.00200
		Nov-14		0.018	0.034				0.0015	2.60	0.00036 J	1.10			0.040
		Apr-15		0.0116 J	0.0273 J				<0.00540	0.606 J	<0.00240	1.92			0.00988 J
		Oct-15		0.00629	0.0251				<0.00108	1.59	<0.000480	1.27			0.00120 J
		Apr-16		0.00444 J	0.0291				<0.00270	0.610	<0.00120	1.50			<0.00190
		Oct-16		0.00559	0.0272				<0.000540	5.20	<0.000240	1.61			<0.000380
	MW-123	Apr-14		0.0226	0.0175				<0.00200	0.102 J	<0.00140	2.66			<0.00200
		Nov-14		0.023	0.027				0.00093 JB	0.300	0.00075 J	2.70			0.0013 J
		Apr-15		0.0258	0.0200 J				<0.00270	<0.0750	<0.00120	2.59			<0.00190
		Oct-15		0.025	0.0228				<0.000540	0.0657 J	0.000254 J	2.72			<0.000380
		Apr-16		0.0275	0.0242 J				<0.00270	<0.0750	<0.00120	2.92			<0.00190
		Oct-16		0.0226	0.0236				<0.000540	0.0599 J	0.000364 JB	2.59			<0.000380
	MW-124	Apr-14		0.00952 J	0.0216				<0.00200	2.48	<0.00140	0.479			<0.00200
		Nov-14		0.0052	0.027				0.00086 JB	2.70	0.00051 J	1.10			0.00093 J
		Apr-15		0.00276	0.0192				0.00126 J	1.22	0.000379 J	0.816			<0.000380
		Oct-15		0.00443	0.0247				<0.00108	2.93	<0.000480	0.562			<0.000760
		Apr-16		0.00477 J	0.0288				<0.00270	4.08	<0.00120	0.749			<0.00190
		Oct-16		0.00303	0.0323				0.00124 J	4.99	0.000546 JB	0.469			<0.000380
	OCD-1R	Apr-14		0.00833 J	0.0144 J				0.00407 J	0.650	<0.00140	1.52			0.00892 J
		Nov-14		0.0071	0.020				0.00081 JB	0.340	<0.00024	0.410			0.019
		Apr-15		0.00662 J	0.0176 J				<0.00540	0.238 J	<0.00240	0.773			0.0217
		Oct-15		0.00447	0.0184				<0.00108	0.593	<0.000480	1.59			0.00229 J
		Apr-16		0.00729 J	0.0141 J				0.105	1.54	<0.00120	0.462			0.00420 J
		Oct-16		0.00524	0.0286				0.00312	3.04	<0.000240	3.92			0.000543 J
	OCD-2A	Apr-14		0.00332 J	0.0185				<0.00200	0.425	<0.00140	0.563			0.00245 J
		Nov-14		0.0021	0.023				0.00089 JB	0.710	<0.00024	0.590			0.0075
		Apr-15		0.00197 J	0.0193 J				<0.00270	0.965	<0.00120	0.313			<0.00190
		Oct-15		0.00361 J	0.0234				0.00385 J	2.64	<0.000480	1.34			<0.000760
		Apr-16		0.00640 J	0.0209 J				0.00304 J	5.47	<0.00120	1.66			<0.00190
		Oct-16		0.00234	0.0264				0.000783 J	1.50	0.00026 J	0.535			<0.000380
	OCD-3	Apr-14		0.00631 J	0.0198				<0.00200	1.69	<0.00140	0.134			0.00206 J
		Nov-14		0.0055 J	0.019 J				<0.0027	2.2 V	<0.0012	0.160 J			0.0040 J
		Apr-15		0.00421 J	0.0198 J				<0.00270	1.69	<0.00120	0.165			<0.00190
		Oct-15		0.00184 J	0.0224				<0.000540	0.352	<0.000240	0.412			0.00113 J
		Apr-16		0.00389 J	0.0214 J				<0.00270	1.23	<0.00120	0.0524			<0.00190
		Oct-16		0.00422	0.0228				<0.000540	2.31	<0.000240	0.527			<0.000380
	OCD-4	Apr-14		<0.00500	0.0213				<0.00500	3.13	<0.00140	0.276			<0.00500
		Nov-14		0.0036 J	0.025				<0.0027	3.80	<0.0012	0.310			<0.0019
		Apr-15		0.00351 J	0.0263 J				<0.00540	4.06	<0.00240	0.311			<0.00380
		Oct-15		0.00701	0.0226				<0.000540	6.61	<0.000240	0.233			<0.000380
		Apr-16		0.00209 J	0.0226 J				<0.00270	0.855	<0.00120	0.119			<0.00190
		Oct-16		0.00374	0.0255				<0.000540	3.46	<0.000240	0.285			<0.000380
	OCD-5	Apr-14		0.00738 J	0.0206				<0.00200	2.47	<0.00140	0.411			<0.00200
		Nov-14	FD	0.00491 J	0.0211				<0.00200	1.28	<0.00140	0.364			<0.00200
		Apr-15		0.0099 J	0.028				<0.0027	4.80	<0.0012	0.360			<0.0019
		Oct-15		0.00805 J	0.0284 J				<0.00540	5.34	<0.00240	0.328			<0.00380
		Apr-16		0.0166	0.0272				0.00108 J	11.3	<0.000480	0.306			<0.000760
		Oct-16		0.0126	0.0279				<0.00270	15.4	0.00177 J	0.267			<0.00190
	OCD-6	Apr-14		0.00863	0.0288				0.000559 J	9.09	<0.000240	0.295			<0.000380
		Nov-14		0.0160 J	0.0191 J				<0.00500	2.56	<0.00350	2.15			<0.00500
		Apr-15		0.014	0.024 J				0.0027 J	7.60	<0.0012	1.20			<0.0019
		Oct-15		0.0141	0.0240 J				<0.00270	3.91	<0.00120	2.07			<0.00190
		Apr-16		0.0235	0.0254				<0.00108	9.38	<0.000480	2.32			0.00110 J
		Oct-16		0.0139	0.0214 J				<0.00270	2.39	<0.00120	2.22			<0.00190
	OCD-7AR	Apr-14		0.0120	0.0253				0.000759 JB	1.82	0.000501 JB	2.61			0.00090 J
		Nov-14	FD	0.158	0.0147				<0.00200	7.59	<0.00140	2.87			0.00425 J
		Apr-15		0.165	0.0152				<0.00200	8.08	<0.00140	2.92			0.00356 J
		Oct-15		0.110	0.015 J				<0.0027	4.30	<0.0012	2.40			0.0020 J
		Apr-16		0.084	0.0111 J				<0.00270	1.66	<0.00120	2.56			<0.00190
		Oct-16		0.201	0.0162				<0.00108	9.36	<0.00048	2.88			0.0023 J
Field East of Refinery	OCD-7B	Apr-16		0.150	0.0145 J				<0.00270	2.89	<0.00120	2.25			0.00195 J
		Oct-16		0.169	0.0151				0.000837 J	10.3	<0.000240	2.92			0.00178 J
		Mar-13		<0.00500	0.016				<0.00500	<0.200	<0.00500	0.0246			<0.00500
		Apr-15		0.00294 J	0.0196 J				<0.00270	3.52	<0.00120	0.710			<0.00190
		Oct-15		0.0676	0.023				<0.00200	7.72	<0.00140	3.14	<4.0E-05	0.0279	<0.00200
		Nov-14	FD	0.0683	0.0218				<0.00200	7.73	<0.00140	3.12	<4.0E-05	0.0279	<0.00200
	OCD-8A	Apr-14		0.050	0.080				0.0072	13.0	<0.0012	4.70	<4.9E-05	0.062	<0.0019
		Oct-15		0.0541	0.0336				0.000836 J	12.3	<0.000240	6.38	<4.9E-05	0.0598	0.000802 J
		Apr-16		0.0622	0.0287				0.000787 J	9.70	0.000380 J	4.11	<4.9E-05 J	0.0471	0.000

Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals													
Area	Well ID	Date	Dup	Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050	0.030	0.0631
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	WQCC HH	NMED TW
Field East of Refinery	KWB-10R	Nov-14		0.036	3.40				0.001	8.20	0.0042	0.190			0.00052 J		
		Apr-15		0.0259	3.50				<0.000540	7.48	0.00172 J	0.149			<0.000380		
		Oct-15		0.0217	3.72				<0.000540	5.84	0.00109 J	0.157			<0.000380		
		Apr-16		0.0226	4.31				<0.00270	7.43	0.00131 J	0.199			<0.00190		
		Oct-16		0.0301	0.816				0.000798 JB	6.11	0.00102 J	0.161			<0.000380		
	KWB-11A	Nov-14		0.002	0.028				0.00076 JB	<0.05	0.0061 B	0.160	<4.9E-05	0.0039	0.0079		0.013
		Nov-14	FD	0.002	0.028				<0.00054	<0.05	0.0055	0.160	<4.9E-05	0.0042	0.0082		0.012
		Apr-15		0.00251 J	0.0240 J				<0.00270	<0.0750	0.00825 J	0.294	<4.9E-05	0.00675 J	0.00262 J		0.0122 J
		Oct-15		0.00266	0.0267				<0.000540	<0.0150	0.00515	0.191	<4.9E-05	0.00461	0.00776		0.0112
		Apr-16		0.00231 J	0.00508	0.502	<0.005	0.00175 J	<0.00270	<0.0750	0.00851 J	0.222	<4.9E-05	0.00476 J	0.00852 J	0.0326 J	0.0118 J
	KWB-11B	Oct-16		0.0022	0.0227	0.449	<0.00016	0.00194 J	<0.000540	<0.0150	0.00525	0.212	<4.9E-05 J3J60	0.00476 B	0.00529	0.0217	0.0102
		Apr-14		0.00157 J	0.0117				<0.00100	<0.0500	0.000903 J	<0.00250	<4.0E-05	<0.00100	0.00848		0.00741
		Nov-14		0.0011 J	0.013				<0.0027	<0.05	0.00090 JB	0.0030 J	<4.9E-05	<0.00035	0.0073		0.0081
		Apr-15		0.00147 J	0.0127				0.00116 J	<0.0150	<0.000240	0.00271 J	<4.9E-05	<0.000350	0.00783		0.00806
		Oct-15		0.00185 J	0.0134				0.000703 J	<0.0150	<0.000240	0.000257 J	<4.9E-05	<0.000350	0.00769		0.00812
	KWB-12A	Apr-16		<0.00125	0.0135 J	0.173 JJ60J	<0.005	<0.00130	<0.00270	0.121 J	<0.00120	0.00188 J	<4.9E-05	<0.00175	0.00949 J	0.00987 J	0.00814 J
		Oct-16		0.00109 J	0.0116	0.105	<0.00016	<0.000260	<0.000540	<0.0150	<0.000240	0.00080 J	<4.9E-05 J3	0.000559 JB	0.00701	0.0101	0.00727
		Nov-14		0.0014 J	0.017				0.00086 JB	<0.0500	<0.00024	0.0011 J	<4.9E-05	0.00074 J	0.0052		0.013
		Nov-14	FD	0.0016 J	0.010				0.00060 J	<0.0500	<0.00024	0.0016 J	<4.9E-05	0.00065 J	0.0046		0.012
		Apr-15		0.00160 J	0.0168				0.00164 J	0.269	0.000780 J	0.00353 J	<4.9E-05	0.000930 J	0.00435		0.0108
	KWB-12B	Apr-15	FD	0.00145 J	0.0138				<0.000540	<0.0150	<0.000240	0.000251 J	<4.9E-05	0.000503 J	0.00375		0.01
		Oct-15		0.00242	0.017				0.000659 J	0.0285 J	<0.000240	0.000862 J	<4.9E-05	0.000959 J	0.00368		0.0139
		Apr-16		0.00162 J	0.0164 J	0.695	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	<0.00125	<4.9E-05	<0.00175	0.00370 J	0.0331 J	0.0132 J
		Oct-16		0.00159 J	0.0156	0.481	<0.00016	<0.000260	0.000599 JB	<0.0150	0.000256 J	<0.000250	<4.9E-05 J3	0.000739 J	0.00360	0.0288	0.0110
		Apr-14		0.00286 J	0.00926				<0.00100	<0.0500	<0.000700	<0.00250	<4.0E-05	<0.00100	0.00318 J		0.013
	KWB-P4	Apr-14	FD	0.00240 J	0.0108				<0.00100	<0.0500	<0.000700	<0.00250	<4.0E-05	<0.00100	0.00363 J		0.0136
		Nov-14		0.0015 J	0.013				0.00086 JB	<0.05	<0.00024	0.0027 J	<4.9E-05	0.00071 J	0.0042		0.013
		Apr-15		0.00151 J	0.00823				0.000588 J	<0.0150	<0.000240	0.000826 J	<4.9E-05	0.000469 J	0.00348		0.0108
		Oct-15		0.00182 J	0.0118				<0.000540	0.0175 J	<0.000240	0.00117 J	<4.9E-05	0.00120 J	0.0037		0.0129
		Oct-15	FD	0.00237	0.0118				0.000599 J	0.0312 J	<0.000240	<0.000250 B	<4.9E-05	0.000565 J	0.00361		0.0129
	MW-57	Apr-16		0.00178 J	0.0130 J	0.712	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	0.00441 J	<4.9E-05	<0.00175	0.00307 J	0.0302 J	0.0125 J
		Apr-16	FD	0.00165 J	0.0116 J	0.651	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	0.00434 J	<4.9E-05	<0.00175	0.00301 J	0.0282 J	0.0117 J
		Oct-16		0.00159 J	0.0101	0.464	<0.00016	<0.000260	0.00136 JB	0.0358 J	<0.000240	0.000955	<4.9E-05 J3	0.000824 J	0.00248	0.0263	0.0112
		Oct-16	FD	0.00161 J	0.0108	0.533	<0.00016	<0.000260	0.00147 JB	0.0369 J	0.000299 J	0.0104	<4.9E-05 J3	0.000703 J	0.00295	0.0265	0.0114
		Apr-13															
	MW-58	Apr-15															
		Nov-14		0.0889	2.17				0.0456	38.8	0.0269	2.73			0.00342 J		
		Nov-14		0.0055	0.052				0.0015	1.00	0.0019 J	1.30			0.0088		
		Apr-15		0.00495	0.0267				0.00104 J	0.658	0.000946 J	0.192			0.03		
		Oct-15		0.0066	0.0339				<0.000540	0.301	0.000729 J	0.852			0.0159		
	MW-111	Apr-16		0.00654 J	0.0344				0.00322 J	0.881	0.00266 J	0.378			0.0131		
		Oct-16		0.00564	0.0253				0.000798 JB	0.559	0.000516 J	0.104			0.0169		
		Nov-14		0.0078	0.670				0.00083 J	0.66	0.0058	0.094	<4.9E-05	0.0015 J	0.00040 J		0.0043 J
		Apr-15		0.0121	0.819				<0.000540	1.76	0.00339	0.0946	<4.9E-05	0.00140 J	<0.000380		0.00229 J
		Oct-15		0.0081	1.03				<0.000540	1.29	0.00190 J	0.117	<4.9E-05	0.00108 J	<0.000380		<0.000180 B
	MW-112	Apr-16		0.0135	0.744	0.518	<0.005	<0.00130	<0.00270	1.06	0.00297 J	0.391	<4.9E-05	<0.00175	0.00524 J	<0.00165	0.00259 J
		Oct-16		0.00683	0.915	0.455	<0.00016	0.000318 J	0.00108 JB	1.01	0.00234	0.114	<4.9E-05 J3	0.00133 J	<0.000380	<0.000330	0.00451 J
		Apr-14		0.0114	0.254				0.00252 J	7.64	0.000856 J	1.57			<0.00100		
		Nov-14		0.014	0.22				0.0024	8.00	0.0013 J	1.60			0.00046 J		
		Apr-15		0.0201	0.147				0.00167 J	5.03	0.00141 J	1.72			<0.000380		
	MW-113	Oct-15		0.0144	0.127				0.00239	7.14	0.00205	1.52			<0.000380		
		Apr-16		0.0131	0.0926				<0.00270	6.67	<0.00120	1.66			<0.00190		
		Oct-16		0.0108	0.0757				0.000976 JB	6.14	0.00031 J	1.41			<0.000380		
		Nov-14		0.005	7.60				0.0021	5.80	0.0013 J	0.31			0.0018 J		
		Apr-14		0.00326 J	0.0882				0.00423 J	1.87	0.00211 J	0.408			<0.00200		
	MW-125	Nov-14		0.0088	0.047				0.00059 J	0.680	0.00025 J	1.90			0.00044 J		
		Nov-14	FD	0.0093	0.048				<0.00054	0.700	<0.00024	1.90			0.00070 J		
		Apr-15		0.00294	0.033				0.00171 J	0.559	0.000733 J	0.918			0.0025		
		Apr-15	FD	0.00418	0.0518				0.00221	1.01	0.000872 J	0.857			<0.000380		
		Oct-15		0.00366	0.0242				<0.000540	0.196	<0.000240	0.765			<0.000380		
	MW-126A	Oct-15	FD	0.00379	0.0233				<0.000540	0.203	<0.000240	0.767			<0.000380		
		Apr-16		0.00282 J	0.0251				<0.00270	0.270 J	<0.00120	0.734			<0.00190		
		Apr-16	FD	0.00306 J	0.0289				<0.00270	0.347 J	<0.00120	0.823			<0.00190		
		Oct-16		0.00138 J	0.0249				<0.000540	1.17 O1	<0.000240	1.36 O1V			<0.000380		
		Oct-16	FD	0.00125 J	0.0245				<0.000540	1.13	<0.000240	1.37			<0.000380		
	MW-126B	Apr-14		0.00471 J	0.011				<0.00100	0.0544 J	<0.000700	0.470			<0.00100 B		
		Nov-14		0.0036	0.0092				0.00056 J	<0.05	<0.00024	0.420			0.0033		
		Apr-15		0.00369	0.00961				<0.000540	<0.0150	<0.000240	0.405			0.00581 J		

Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals													
Area	Well ID	Date	Dup	Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
Units:				mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050	0.030	0.0631
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	WQCC HH	NMED TW
Field East of Refinery	MW-130	Apr-14		0.00474 J	0.037				0.00626	2.84	0.00398 J	0.202			0.00569		
		Nov-14		0.0046	0.026				0.0025	1.20	0.0012 J	0.120			0.0037		
		Apr-15		0.00718	0.677				0.00205	0.143 J	0.00929	0.242			<0.00190 B		
		Oct-15		0.00477	0.0195				0.000567 J	0.162	0.000362 J	0.0921			0.00224		
		Apr-16		0.00449 J	0.0228 J				<0.00270	0.451 J	<0.00120	0.105			0.00575 J		
		Oct-16		0.00403	0.0188				0.000869 JB	0.104	<0.000240	0.0891			0.00675		
	MW-131	Apr-14		0.0196	2.37				0.00159 J	2.25	0.00106 J	0.378			<0.00100		
		Nov-14		0.023	2.60				0.0028	3.80	0.0014 J	0.36			0.00050 J		
		Apr-15		0.022	2.67				0.000747 J	2.34	0.000919 J	0.316			<0.000380		
		Oct-15		0.0261	2.88				0.00371	4.71	0.00294	0.337			<0.000380		
		Apr-16		0.0222	2.67				<0.00270	1.46	<0.00120	0.305			<0.00190		
		Oct-16		0.0207	2.69				<0.000540	1.34	<0.000240	0.285			<0.000380		
	MW-133	Nov-14		0.019	0.130				0.00060 J	3.50	0.00080 J	0.380			<0.00038		
		Apr-15		0.00897	0.157				<0.000540	5.53	0.00145 J	0.312			0.00124 J		
	MW-134	Apr-14		0.00701 J	0.0168				<0.00200	0.581	<0.00140	0.031			0.00570 J		
		Nov-14		0.0059	0.015				0.0024	0.360	0.00024 J	0.031			0.0120		
		Apr-15		0.00881 J	0.0143 J				0.00285 J	0.234 J	<0.00120	0.00773 J			0.0197		
		Apr-15	FD	0.00575	0.0107				0.00148 J	0.131	<0.000240	0.00795			0.0129		
		Oct-15		0.00621	0.0101				0.000869 J	<0.0150	<0.000240	0.0065			0.00756		
		Oct-15	FD	0.0063	0.00964				0.000709 J	<0.0150	<0.000240	0.00594			0.00807		
		Apr-16		0.00566 J	0.0112 J				<0.00270	<0.0750	0.00131 J	0.0102 J			0.00812 J		
		Apr-16	FD	0.00555 J	0.00895 J				<0.00270	0.0767 J	<0.00120	0.0110 J			0.00711 J		
		Oct-16		0.00511	0.00827				0.00158 JB	0.0181 JB	<0.000240	0.00886			0.00647		
		Oct-16	FD	0.00475	0.00833				0.00148 JB	0.0293 JB	0.000513 J	0.00817			0.00416		
	MW-135	Apr-14		0.00454 J	0.0856				0.00467 J	1.68	0.00227 J	0.0799			0.0344		
		Nov-14		0.0088	0.410				0.018	9.60	0.0100	0.420			0.038		
		Apr-15		0.00871 J	0.413				0.0168	5.33	0.0119	0.500			0.0337		
		Oct-15		0.00442	0.058				0.00319	1.52	0.00144 J	0.0438			0.0399		
		Apr-16		0.0216	0.303				0.0130	5.54	0.00566 J	0.225			0.128		
		Oct-16		0.00394	0.0397				0.00149 JB	0.598	0.000686 J	0.0324			0.0368		
	RA-4196	Apr-14												<0.000500			
		Apr-15															
		Oct-15															
		Apr-16															
		Oct-16															
	RA-4798	Apr-14												0.000731 J			
		Apr-14	FD											0.00136 J			
		Nov-14															
		Apr-15															
		Oct-15															
North Refinery	RW-12R	Apr-16		<0.00125	0.0512				0.0453	0.213 J	0.00204 J	0.547			<0.00740		
		Apr-16		0.00922 J	0.0165				<0.00270	0.572	<0.00120	1.26					
	RW-13R	Apr-13		<0.0100	0.015				<0.00500	0.496	<0.00500	<0.00500			0.0124		
		Apr-14		0.00496 J	0.0137				<0.00200	0.295 J	<0.00140	0.00572 J			0.011		
		Apr-15		0.00379	0.0105				0.000703 J	<0.0150	<0.000240	<0.000250			0.00988		
		Apr-16		0.00400 J	0.0124 J				<0.00270	<0.0750	<0.00120	<0.00125			0.00436 J		
	RW-20	Apr-15		0.00375 J	0.527				<0.00270	1.75	0.00354 J	0.872			<0.00190		
		Apr-15		0.00248	0.816				0.0032	0.140	0.00397	0.845			0.00234		
	RW-22	Apr-14		0.00898	9.23				<0.00100	<0.0500	0.00224 J	0.0877			0.00280 J		
		Nov-14		0.022	0.100				0.0014 B	0.059 J	0.00075 J	0.210			0.0020 J		
		Apr-15		0.0164	0.319				<0.00270	0.560	0.00336 J	0.212			0.125		
		Oct-15		0.0104	11.0				0.00113 J	0.0742 J	0.00578	0.089			0.00109 J		
		Apr-16		0.0113	12.8				<0.00270	0.456 J	0.0186	0.105			<0.00190		
		Oct-16		0.00776	12.0				0.00711	1.89	0.0334	0.184			0.0019 J		
	MW-29	Apr-14		0.00836	<0.000900 B				<0.00100	0.228	<0.000700 B	0.558 J			0.00119 J		
		Nov-14		0.00093 J	0.020				0.00062 JB	<0.0500	0.00037 J	0.47			0.00063 J		
		Apr-15		0.000896 J	0.017				<0.000540	0.0678 J	<0.000240	0.382			<0.000380		
		Oct-15		0.00100 J	0.0161				<0.000540	<0.0150	<0.00120	0.369			0.00165 J		
		Apr-16		<0.00125	0.0182 J				<0.00270	<0.0750	<0.00120	0.485			0.0141		
		Oct-16		0.00165 J	0.0156				0.000619 JB	0.0168 J	0.000465 J	0.374			0.000713 J		
	MW-39	Oct-13		0.0147	0.022				<0.00500	<0.200	<0.00500	0.0383			<0.00500		
		Apr-15		0.00256 J	0.0228 J				<0.00270	<0.0750	<0.00120	0.208			<0.00190		
		Oct-15		0.00156 J	0.0222				<0.000540	0.0199 J	<0.00240	0.186			0.00266		
		Apr-16		0.0195	0.0209 J				0.00407 J	0.0932 J	0.00124 J	0.0161 J			0.0192		
		Oct-16		0.0274	0.0145				0.00128 JB	0.016 J	0.000867 J	0.0211			0.00146 J		
		Apr-13		<0.0100	0.0284				<0.0100	<0.400	<0.00500	0.0479			<0.0100		
	MW-40	Apr-14		0.00157 J	0.0278				<0.00100	<0.0500	<0.000700	0.0451			0.00202 J		
		Apr-15		0.00122 J	0.0336				<0.00270	0.345 J	0.00213 J	0.0398			<0.00190		
		Apr-16		0.00154 J	0.0392				<0.00270	0.512	0.00311 J	0.0321			<0.00190		
		Oct-13		0.00849	0.016				<0.00500	<0.200	<0.00500	0.832			<0.00500		
	MW-41	Apr-14		0.00475 J	0.014				<0.00100	0.0729 J	<0.000700	0.854			0.00163 J		
		Apr-15		0.00591 J	0.0203 J				<0.00270	0.136 J	<0.00120	1.01			<0.00190		
		Apr-16		0.00578 J	0.0210 J				<0.00270	<0.0750	<0.00120	0.888			<0.00190		
		Oct-13		0.00973	0.0252				<0.00500	0.213	<0.00500	0.152			<0.00500		
	MW-42	Apr-14		0.012	0.0284				<0.00100	0.527	0.000766 J	0.189			0.00168 J		
		Apr-15		0.00935 J	0.0242 J				<0.00270	0.136 J	<0.00120	0.171			0.00393 J		
		Apr-16		0.00814 J	0.0274				<0.00270	0.182 J	<0.00120	0.197			<0.00190		
		Apr-14		0.0106	0.103				<0.00100	<0.0500	<0.000700	0.470			0.00617	0.00128 J	<0.000900
	MW-43	Nov-14		0.009	0.420				0.0013	<0.0500	0.0018 J	0.370	<4.9E-05	0.0059	0.022 C1J6	0.00062 J	
		Apr-15		0.0134	0.239				<0.00270	<0.0750	<0.00120	0.402	<4				

Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals											
Analyte:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH
Area	Well ID	Date	Dup	Vanadium	Uranium	Vanadium	Uranium	Vanadium	Uranium	Vanadium	Uranium	Vanadium	Uranium	Vanadium	Uranium
North Refinery	MW-61	Apr-14		0.00127 J	0.0305					<0.00100	0.0734 J	<0.000700 B	0.0226		<0.00100
		Nov-14		0.002	0.053					0.00081 J	<0.05	0.0012 J	0.0044 J		0.0087
		Apr-15		0.00463 J	0.0499 J					<0.00270	<0.15	<0.00240	0.00444 J		0.168
		Oct-15		0.00107 J	0.0246					0.00119 J	0.0828 J	0.00122 J	0.0416		0.00688
		Apr-16		<0.00125	0.0192 J					<0.00270	<0.0750	<0.00120	0.0664		0.0101
		Oct-16		0.000831 J	0.0223					0.00145 JB	0.0204 J	0.000914 J	0.0746		<0.000380
	MW-62	Apr-14		0.00288 J	0.0679					<0.00100	0.0711 J	<0.000700	0.00786		0.00279 J
		Nov-14		0.010	9.30					0.0021	0.260	0.0098	0.100		0.0019 J
		Apr-15		0.0136	9.30					0.00149 J	0.0542 J	0.00419	0.0677		0.0187
		Oct-15		0.00293	0.0235					<0.000540	0.0154 J	0.000278 J	0.00266 J		0.00587
		Apr-16		0.00321 J	0.0390					<0.00270	<0.0750	<0.00120	<0.00125		0.00935 J
		Oct-16		0.0115	0.0252					0.000596 JB	0.0385 J	0.000715 J	0.00213 J		<0.000380
	MW-67	Nov-14		0.0018 J	0.120					0.00074 J	<0.0500	0.00094 J	0.130	<4.9E-05	0.0033
		Apr-15		0.00371	0.140					<0.000540	0.0384 J	0.00113 J	0.080	<4.9E-05	0.00198 J
		Oct-15		0.0063	0.129					0.000623 J	<0.0150	0.00100 J	0.0785	<4.9E-05	0.000885 J
		Apr-16		0.0101	0.229	0.471	<0.005	<0.00130	<0.00270	<0.0750	0.00135 J	0.117	<4.9E-05	<0.00175	<0.00190
		Oct-16		0.0103	0.161	0.451	<0.00016	<0.000260	0.000671 JB	0.0242 J	0.00127 J	0.104	<4.9E-05	0.000689 J	0.000479 J
														<0.000330	0.000595 J
	MW-90	Apr-14		0.00439 J	0.0183					<0.00100	0.0589 J	0.000780 J	0.0745		<0.00100
		Nov-14		0.011	0.014					0.00067 J	0.410	<0.00024	0.052		0.021
		Apr-15		0.00709	0.0233					<0.000540	0.473	0.000242 J	0.345		0.00172 J
		Oct-15		0.00883	0.0126					<0.000540	1.56	<0.000240	0.0504		0.0334
		Apr-16		0.0111	0.0140 J					<0.00270	1.34	<0.00120	0.166		0.00262 J
		Oct-16		0.0103	0.00945					<0.000540	0.201	0.000244 J	0.0186		0.0663
	MW-91	Apr-14		0.00394 J	0.130					<0.00100	0.117 J	0.00191 J	0.00450 J		<0.00100
		Nov-14		0.0047	0.094					0.00099 J	<0.0500	0.0013 J	0.026		0.0098
		Apr-15		0.00509	0.094					<0.000540	0.0957 J	0.00236	0.00502		0.0138
		Oct-15		0.00552	0.0824					<0.000540	0.0165 J	0.0027	0.00246 J		0.0248
		Apr-16		0.00660 J	0.0716					<0.00270	<0.0750	0.00376 J	0.00267 J		<0.00740
		Oct-16		0.0088	0.0554					<0.000540	<0.0150	0.0034	0.00304 JB		0.00063 J
	MW-92	Apr-16		0.00316 J	3.44 O1V					<0.00270	0.328 J	<0.00120	0.0363		0.00207 J
		Oct-16		0.00732	2.81					0.00101 JB	0.0744 J	0.00183 J	0.0274		0.00172 J
	MW-93	Apr-14		0.00671	0.0823					0.00329 J	0.163 J	0.00288 J	0.0471		0.00282 J
		Nov-14		0.003	0.052					0.0065	3.20	0.0054	1.30		0.013
		Apr-15		0.00687 J	0.0346					0.00442 J	1.83	0.00126 J	0.227		0.0646
		Oct-15		0.00502	0.0486					0.00365	1.29	0.00327	0.120		0.0709
		Apr-16		0.0137	0.0231 J					0.00907 J	0.858	<0.00120	0.0663		0.0242
		Oct-16		0.00195 J3J36	0.0263					0.00337 B	1.19	0.00112 J	0.335		0.0119 J3J36
	MW-94	Nov-14		0.017	0.780					0.0014	0.081 J	<0.00024	0.0065		0.0012 J
		Oct-15		0.0215	1.57					0.00144 J	<0.0150	<0.000240	0.00194 J		0.000935 J
		Apr-16		0.0286	0.353					<0.00270	<0.0750	<0.00120	0.00666 J		<0.00190
		Oct-16		0.0115	0.635					0.00119 JB	0.0159 J	0.000255 J	0.00631		0.000962 J
	MW-95	Apr-13		<0.00500	0.130					<0.00500	1.02	<0.00500	0.0567		<0.00500
		Apr-14		<0.00100	0.126					<0.00100	0.0549 J	<0.000700	0.0419		<0.00100
		Apr-15		0.00133 J	0.0762					<0.000540	0.0357 J	0.000477 J	0.0247		0.000381 J
		Apr-16		0.00175 J	0.0736					<0.00270	<0.0750	<0.00120	0.0214 J		<0.00190
	MW-96	Apr-14		0.00469 J	0.109					<0.00100	<0.0500	<0.000700	0.00250 J		<0.00100
		Nov-14		0.0049	0.073					0.0021	0.370	0.00089 J	0.110		0.0019 J
		Apr-15		0.00421	0.126					0.000816 J	0.0338 J	0.000576 J	0.00352 J		0.000731 J
		Oct-15		0.00397	0.158					0.000655 J	0.132	0.000953 J	0.00236 J		0.000640 J
		Apr-16		0.00463 J	0.155					<0.00270	<0.0750	<0.00120	0.00174 J		0.00330 J
		Oct-16		0.00238	0.106					<0.000540	0.0573 J	<0.000240	0.0070		0.000695 J
	MW-98	Apr-14		0.00167 J	0.0156					<0.00100	<0.00500	0.00919	0.0259		0.00335 J
		Apr-14	FD	0.00177 J	0.0145					<0.00100	<0.00500	0.00934	0.0267		0.00464 J
		Nov-14		0.00068 J	0.017					0.0011	0.064 J	0.0079	0.027		0.020
		Apr-15		<0.00250	0.0177 J					<0.00270	<0.0750	0.00894 J	0.0192 J		0.108
		Oct-15		0.00109 J	0.0149					0.000932 J	0.0339 J	0.00659	0.0213		0.00514
		Apr-16		0.00199 J	0.0204 J					<0.00270	<0.0750	0.00934 J	0.0312		<0.00190
	MW-137	Oct-16		0.00110 J	0.015					0.000797 JB	0.016 J	0.00734	0.0233		0.000906 J
		Apr-16		0.0525	0.127					0.00326	1.63	0.00596	0.120	<4.9E-05	0.00874
		Apr-16		0.0893	0.0567	0.982	<0.005	<0.00130	<0.00270	0.0953 J	0.00601 J	0.144	<4.9E-05	0.0101	0.00327 J
		Oct-16		0.0345	0.0453	0.799	<0.00016	<0.000260	0.000628 JB	0.0169 J	0.00436	0.120	<4.9E-05	0.00652	0.00368
														<0.000330	0.00529
															0.00705
	MW-138	Oct-15		0.00728	0.131					0.00218	2.54	0.00195 J	0.249	<4.9E-05	0.0042
		Apr-16		0.00777 J	0.220	1.56	<0.005	<0.00130	<0.00270	0.221 J	<0.00120	0.164	<4.9E-05	0.00598 J	<0.00190
		Oct-16		0.00609	0.0947	1.01	<0.00016	<0.000260	0.000775 JB	0.0178 J	0.000407 J	0.143	<4.9E-05	0.00523	0.00284
														<0.000330	0.00306 J
	RW-1	Apr-15		0.00607	0.0305					0.0029	0.216	0.000495 J	0.126		0.00302 J
		Apr-16		0.00695 J	0.0414					<0.00270	17.1	0.00149 J	0.317		0.00246 J
	RW-2	Apr-15		0.0264	0.0245 J					0.00553 J	0.381 J	0.00233 J	0.313		0.0705
		Apr-16		0.00552 J	0.171					0.00750 J	2.25	0.0153	0.0705		0.422
	RW-7	Apr-15		0.00239 J	0.508					<0.00270	0.0976 J	<0.00120	0.028		<0.00190
		Apr-16		0.0154	0.0293					<0.00270	1.09	<0.00120	1.22		<0.00190
	RW-8	Apr-15		0.00556 J	0.0889					<0.00270	0.427 J	<0.00120	0.0556		0.00200 J
		Apr-13		<0.0100	0.0703					<0.0100	<0.400	<0.00500	0.288		<0.0100
	RW-9	Apr-14		0.00434 J	0.047					<0.00100	0.942	<0.000700	0.417		0.00250 J
		Apr-15		0.00392	0.0397					0.00102 J	0.257	0.000449 J	0.460		0.0144
		Apr-16		0.00476 J	0.0550					<0.00270	0.169 J	<0.00120	0.441		0.00735 J

Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals											
Analyte:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium
Units:				mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH
Area	Well ID	Date	Dup	Vanadium	Uranium	Uranium	Uranium	Uranium	Uranium	Uranium	Uranium	Uranium	Uranium	Uranium	Uranium
North RO Reject Field	MW-119	Apr-14		0.00470 J	0.0126				0.00119 J	0.350	<0.000700	0.0148			<0.00100 B
		Apr-14	FD	0.00446 J	0.0126				0.00114 J	0.341	<0.000700	0.0136			<0.00100 B
		Nov-14		0.0062	0.06				0.0042	2.30	0.0016 J	0.062			0.0013 J
		Apr-15		0.00398 J	0.0156 J				<0.00270	0.309 J	<0.00120	0.0151 J			<0.00190
		Oct-15		0.00417	0.0105				0.000744 J	0.0886 J	<0.000240	0.00485 J			0.00189 J
		Apr-16		0.00315 J	0.00645 J				<0.00270	<0.0750	<0.00120	<0.00125			0.00259 J
		Oct-16		0.00404	0.00979				<0.000540	0.0660 J	<0.000240	0.0019 J			0.00334
		Oct-13		<0.00500	0.025				<0.00500	<0.200	<0.00500	0.017	<2.0E-04	<0.00500	0.00853
		Apr-14		0.00313 J	0.0168				<0.00100	0.146 J	<0.000700	0.0203	<4.0E-05	0.00151 J	0.0112
		Apr-15		0.00321	0.0167				0.00108 J	0.0150	<0.000240	0.00671	<4.9E-05	0.00120 J	0.00947
NCL	MW-18	Apr-16		0.00395 J	0.0207 J	1.36	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	0.0157 J	<4.9E-05	<0.00350	0.0153
		Apr-14		0.00268 J	0.0159				<0.00100	0.786	0.00443 J	0.535	<4.0E-05	0.00736	0.00191 J
		Nov-14		0.0028	0.018				<0.00054 B	0.820	<0.00024 B	0.6	<4.9E-05	0.0083	0.00071 J
		Apr-15		0.00395	0.0185				<0.000540	1.66	0.00527	0.534	<4.9E-05	0.00666	<0.000380
		Oct-15		0.00373	0.0216				0.000591 J	0.600	0.00667	0.551	<4.9E-05	0.00472	<0.000380
		Apr-16		0.00752 J	0.0191 J	0.671	<0.005	<0.00130	<0.00270	4.14	0.00443 J	0.633	<4.9E-05	0.00631 J	<0.00190
		Oct-16		0.00346	0.0182	0.636	<0.00016	<0.000260	<0.000540	0.942	0.000647 J	0.576	<4.9E-05	0.00513 B	<0.000380
		Apr-13		<0.00500	0.0267				<0.00500	<0.200	<0.0100	1.00		<0.00500	0.000909 J
		Apr-14		0.00217 J	0.0232				<0.00100	<0.00500	<0.000700	0.778			0.00141 J
		Apr-15		0.00179 J	0.0256				<0.000540	0.0338 J	0.000252 J	1.20			0.00566
NCL	MW-53	Apr-16		0.00193 J	0.0308				<0.00270	<0.0750	<0.00120	1.07			0.00617 J
		Apr-14		0.00532	0.0181				<0.00100	0.0714 J	0.000847 J	0.495			0.00134 J
		Nov-14		0.0045	0.019				<0.00054 B	0.079 J	<0.00024 B	0.450			<0.00038
		Apr-15		0.00312	0.0173				<0.000540	0.0537 J	<0.000240	0.450			0.000509 J
		Oct-15		0.00312	0.0192				0.000898 J	<0.0150	0.00110 J	0.488			0.00126 J
		Apr-16		0.00343 J	0.0189 J				<0.00270	<0.0750	<0.00120	0.512			<0.00190
		Oct-16		0.00236	0.0158				<0.000540	<0.0150	<0.000240	0.437			0.000709 J
		Apr-13		<0.00500	0.0183				<0.00500	<0.200	<0.00500	0.145			<0.00500
		Apr-15		0.0022	0.0165				<0.000540	0.0520 J	<0.000240	0.165			0.000400 J
		Apr-14		0.00506	0.0106				<0.00100	0.0618 J	<0.000700	0.195	<4.0E-05	0.00498 J	0.0245
NCL	MW-55	Nov-14		0.00484 J	0.00952				<0.00100	<0.0500	<0.000700	0.185	<4.0E-05	0.00409 J	0.0238
		Apr-15		0.0045	0.013				<0.00054 B	0.056 J	<0.00024 B	0.093	<4.9E-05	0.0025	0.013
		Apr-15		0.00457	0.011				0.00108 J	0.0483 J	<0.000240	0.139	<4.9E-05	0.00268	0.019
		Oct-15		0.00582	0.0128				0.00104 J	<0.0150	<0.000240	0.0468	<4.9E-05	0.00168 J	0.00934
		Apr-16		0.00933 J	0.0157 J	1.31	0.000891 J	0.00141 J	<0.00270	0.128 J	0.00168 J	0.151	5.14E-05 J	<0.00350	0.00896 J
		Oct-16		0.00543	0.0140	1.21	<0.00016	0.00068 J	0.00168 J	0.0587 JB	0.000582 J	0.113	5.31E-05 J	0.00314 B	0.00746
		Apr-14		0.00689	0.0137				<0.00100	<0.0500	0.000927 J	0.36			0.00495 J
		Nov-14		0.0067	0.014				<0.00054 B	0.061 J	<0.00024 B	0.35			0.0031
		Apr-15		0.00727	0.0143				<0.000540	0.0230 J	0.000739 J	0.293			0.00372
		Oct-15		0.00731	0.0166				<0.000540	<0.0150	0.000392 J	0.321			0.00491
NCL	MW-56	Apr-16		0.00777 J	0.0203 J				<0.00270	<0.0750	<0.00120	0.373			0.00381 J
		Oct-16		0.00721	0.0138				<0.000540	<0.0150	0.000540 J	0.282			0.00125 J
		Apr-14		0.00320 J	0.046				0.00333 J	0.310	0.00196 J	0.0338			0.00115 J
		Nov-14		0.0061	0.049				<0.00054 B	<0.0500	<0.00024 B	0.045			0.0012 J
		Apr-15		0.00462	0.0387				0.00259	0.0411 J	0.00155 J	0.0256			<0.000380
		Oct-15		0.00399	0.0482				0.00226	0.0288 J	0.00157 J	0.0239			0.00234
		Apr-16		0.00454 J	0.481				<0.00270	0.206 J	0.00209 J	0.0501			<0.00190
		Oct-16		0.0102	0.0462				0.00732	3.13	0.0101	0.182			0.00126 J
		Apr-14		0.011	0.0229				<0.00100	1.02	0.00104 J	1.83			0.00110 J
		Nov-14		0.026	0.021				<0.00054 B	0.950	<0.00024 B	2.00			0.00059 J
NCL	NCL-31	Apr-15		0.00847	0.0224				0.000989 J	0.834	0.000803 J	1.70			<0.000380
		Oct-15		0.00655	0.0334				0.00175 J	1.49	0.00140 J	2.28			<0.000380
		Apr-16		0.00495 J	0.0241 J				<0.00270	0.838	<0.00120	1.85			<0.00190
		Oct-16		0.0428	0.022				0.000711 JB	1.04	0.000493 J	2.48			<0.000380
		Nov-14		0.013	0.200				0.0084	1.40	<0.00024 B	0.470			0.00044 J
		Apr-15		0.00446 J	0.0556				0.00960 J	1.39	0.0167	0.968			<0.00190
		Oct-15		0.00653	0.129				0.028	4.57	0.0289	1.34			0.000884 J
		Apr-16		0.0108	0.227				0.0660	9.75	0.0681	1.77			<0.00190
		Oct-16		0.00428	0.0254				0.00312	0.407 B	0.00296	1.06			0.00138 J
		Apr-14		0.00230 J	0.0246				<0.00100	2.98	<0.000700	0.0896			0.00142 J
NCL	NCL-33	Nov-14		0.0019 J	0.032				<0.00054 B	3.60	<0.00024 B	0.110			0.00067 J
		Apr-15		0.00407 J	0.0247 J				<0.00270	2.26	0.00569 J	0.108			<0.00190
		Oct-15		0.00385	0.0274				<0.000540	2.49	0.000259 J	0.117			0.000519 J
		Apr-16		0.00444 J	0.0246 J				<0.00270	0.770	<0.00120	0.188			<0.00190
		Oct-16		0.00593	0.0224				0.00187 J	1.93	0.000459 J	0.128			0.00217
		Nov-14		0.00042 J	0.260				0.00078 J	<0.05	0.00066 J	0.053			<0.00038
		Apr-15		<0.00120	0.547				<0.00270	<0.0750	0.00183 J	0.0369			<0.00190
		Oct-15		0.00218 J	0.382				<0.00270	<0.0750	0.00136 J	0.042			0.00641 J
		Apr-16		0.00184 J	0.854				<0.00270	<0.0750	<0.00120	0.0185 J			<0.00190
		Oct-16		0.000745 J	0.370				<0.000540	<0.0150	<0.000240	0.0279			0.0142
South Refinery	KWB-2R	Apr-14		0.0383	0.0276				<0.00100	1.25	<0.000700	0.656			0.00122 J
		Nov-14		0.042	0.031				<0.00054 B	1.20	0.00064 J	0.680			0.00065 J
		Apr-15		0.0617	0.0311				<0.00270	1.47	0.00123 J	0.703			<0.00190
		Oct-15		0.070	0.0306				0.00105 J	2.09	0.000414 J	0.723			<0.000380
		Apr-16		0.0459	0.0371				<0.00270	1.82	<0.00120	1.11			<0.00190
		Oct-16		0.049	0.0276				0.00165 JB	1.78	0.000521 J	0.896			0.000394 J
		Apr-14		0.00187 J	0.0115				<0.00100	<0.0500	<0.000700	<0.			



Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals													
Units:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
CGWSL Source:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL Source:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050	0.030	0.0631
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Lrr	USEPA MCL	WQCC Lrr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Lrr	WQCC HH	WQCC HH	NMED TW
Area	Well ID	Date	Dup														
South Refinery	KWB-6	Nov-14		0.0095	0.160				0.00073 J	0.770	0.0010 J	2.20			0.0013 J		
		Apr-15		0.00621	0.294				<0.000540	0.870	0.00182 J	2.16			<0.000380		
		Oct-15		0.0124	0.136				<0.000540	0.558	0.00137 J	2.04	<4.9E-05	0.00186 J	<0.000380		0.00239 J
		Apr-16		0.00703 J	0.327				<0.00270	0.546	0.00143 J	2.55			<0.00190		
	MW-28	Oct-16		0.00915	0.0891				0.00095 JB	0.303	0.00103 J	1.87			<0.000380		
		Apr-14		0.00429 J	0.142				<0.00100	<0.00500	<0.000700 B	0.0397	<2.0E-04	0.00817	<0.00100		<0.000900 B
		Nov-14		0.0067	0.100				0.0017 B	0.073 J	0.0045	0.100	<4.9E-05	0.0056	0.0020 J		0.0099
		Apr-15		0.00912 J	0.0772				0.000931 J	0.0712 J	0.011	0.0685	<4.9E-05	0.00489	0.0204 J		0.00634
	MW-48	Oct-15		0.00936	0.0484				0.000931 J	0.0744 J	0.0136	0.0261	<4.9E-05	0.0036	0.0205		0.00557
		Apr-16		0.0610	0.331	1.23	<0.005	<0.00130	0.00274 J	0.342 J	0.0520	0.164	<4.9E-05	0.0226	0.00220 J	<0.00165	0.0158 J
		Oct-16		0.0154	0.0424	1.27	<0.00016	0.000289 J	0.00213 B	0.0951 JB	0.0168	0.0375	<4.9E-05	0.00387 B	0.000605 J	<0.000330	0.00701
		Nov-14		0.033	0.350				0.0031	1.40	0.012	2.00			0.0014 J		
	MW-50	Apr-15		0.004	0.0204 J				<0.000540	0.562	0.000320 J	0.0948 J			<0.000380 B		
		Oct-15		0.0108	0.367				0.000690 J	0.131	0.00215	1.24			0.00487		
		Apr-16		0.0125	2.77				<0.00270	0.177 J	0.00371 J	0.390			<0.00190		
		Oct-16		0.0107	1.18				0.00119 JB	0.166	0.00173 J	0.565			0.00052 J		
	MW-52	Apr-14		<0.00100	0.0199				<0.00100	0.123 J	0.00124 J	1.32			<0.00100		
		Nov-14		0.0042	0.024				0.00060 J	3.70	0.0010 J	1.50			0.00040 J		
		Apr-15		0.00138 J	0.0228				<0.000540	0.471	0.00102 J	1.53			<0.000380		
		Oct-15		0.00166 J	0.0219				<0.000540	0.0271 J	0.000889 J	1.37			0.000495 J		
	MW-64	Apr-16		0.00234 J	0.0141 JB				<0.00270	0.0916 J	<0.00120	0.214			0.0994		
		Oct-16		0.00434	0.0207				<0.000540	0.160	0.000413 J	0.295			0.0704		
		Apr-14		0.00373 J	0.00923				<0.00100	<0.00500	<0.000700	0.036	<4.0E-05	0.00268 J	0.00103 J		0.0236
		Apr-14	FD	0.00349 J	0.00988				0.00143 J	0.0709 J	<0.000700	0.0324	<4.0E-05	0.00206 J	0.00124 J		0.0238
	MW-65	Nov-14		0.0033	0.0097				0.00057 J	<0.05	0.00076 J	0.060	<4.9E-05	0.0067	0.002		0.025
		Apr-15		0.00318	0.0098				<0.000540	0.0256 J	<0.000240	0.0478	<4.9E-05	0.00625	<0.000380 B		0.0253
		Oct-15		0.00429	0.0129				0.000582 J	0.0180 J	<0.000240	0.0446	<4.9E-05	0.00684	0.00187 J		0.0262
		Apr-16		0.0193	0.0436	0.736	<0.005	0.00155 J	<0.00270	0.158 J	<0.00120	0.230	<4.9E-05	0.0263	0.00045 J	0.0438 J	0.123
	MW-66	Oct-16		0.00343	0.0104	0.718	<0.00016	0.000423 J	0.000547 JB	<0.0150	<0.000240	0.0484	<4.9E-05 J3	0.0081	0.00179 J	0.0105	0.0243
		Nov-14		0.0333	2.26				<0.00270	<0.0750	0.00187 J	0.0599			<0.00190		
		Oct-16		0.0302	2.41				0.000897 JB	0.0566 JB	0.00105 J	0.048			0.000493 J		
		Nov-14		0.058	0.370				0.00074 J	8.60	0.0019 J	2.20			0.00042 J		
	MW-99	Apr-15		0.0186	3.08				<0.000540	2.88	0.00153 J	0.790			<0.000380		
		Apr-16		0.0142	3.42 V				<0.00270	2.09	0.00124 J	0.748 V			<0.00190		
		Oct-16		0.0120	2.97				0.00121 JB	1.66	0.00103 J	0.605			<0.000380		
		Apr-14		0.00300 J	1.90				<0.00100	0.397 J	<0.000700	0.335	<4.0E-05	0.00857	<0.00100		<0.000900
	MW-101	Nov-14		0.0029	2.20				0.00076 J	1.40	0.0026	0.280	<4.9E-05	0.0068	0.0015 J		0.00084 J
		Apr-15		0.00298	2.35				<0.000540	0.635	0.000902 J	0.189	<4.9E-05	0.00613	<0.000380		0.000941 J
		Oct-15		0.0037	2.00				<0.000540	0.782	0.000430 J	0.220	<4.9E-05	0.00743	<0.000380		0.00175 J
		Apr-16		0.0148	12.7	0.378	<0.005	<0.00130	0.00289 J	4.74	0.00659 J	1.13	<4.9E-05	0.121	<0.00190	<0.00165	0.00670 J
	MW-102	Oct-16		0.00269	1.88	0.283	<0.00016	<0.000260	0.000733 JB	0.717	0.000342 J	0.216	<4.9E-05 J3	0.00497	<0.000380	<0.000330	0.000342 J
		Nov-14		0.012	0.430				0.0019	1.20	0.0038	0.29			<0.00038		
		Apr-15		0.00289	0.159				0.000639 J	0.457	0.00571	0.0802			0.000808 J		
		Oct-15		0.00812	0.279				0.000832 J	0.382	0.00153 J	0.191			<0.000380		
	MW-103	Apr-16		0.0491	5.05				0.00682 J	4.55	0.0193	1.20			<0.00190		
		Oct-16		0.00635	1.14				0.00128 JB	0.208	0.0015 J	0.354			<0.000380		
		Apr-14		0.0320 J	<0.000900 B				<0.00100	1.42 J	<0.000700	1.12			<0.00100		
		Nov-14		0.049	0.089				0.00061 J	1.80	0.00065 J	0.98			0.0012 J		
	MW-104	Apr-15		0.0939	0.0501				0.000581 J	3.58	<0.000240	1.08			<0.000380		
		Oct-15		0.056	0.0382				<0.000540	2.59	<0.000240	1.13			0.00344 J		
		Apr-16		0.0293	0.0898				<0.00270	1.38	<0.00120	1.34			<0.00190		
		Oct-16		0.0783	0.0366				0.00145 JB	2.56	0.000266 J	1.06			<0.000380		
	MW-105	Nov-14		0.012	0.250				0.0016	0.100 J	0.0026	0.049			0.0013 J		
		Apr-15		0.010	6.21				<0.000540	0.138	0.00344	0.0431			<0.000380		
		Oct-15		0.0123	0.423				0.00106 J	0.0723 J	0.00263	0.0273			0.000393 J		
		Apr-16		0.0117	7.71				<0.00270	0.222 J	0.00339 J	0.0308			<0.00190		
	MW-106	Oct-16		0.0132	0.427				0.002 B	0.094 JB	0.00223	0.0214			<0.000380		
		Apr-13		<0.00500	0.823				<0.00500	<0.200	<0.0100	<0.00500			<0.00500		
		Apr-14		0.00270 J	1.47				<0.00100 B	<0.0500	<0.000700 B	0.00278 J			<0.00100		
		Apr-15		0.00617 J	9.36				<0.0110	<0.300	<0.00480	0.0125 J			0.0607 J		
	MW-107	Apr-16		0.00594 J	26.8				<0.00270	<0.0750	0.00148 J	0.0262			<0.00190		
		Apr-14		<0.00100	<0.000900 B				<0.00100	<0.0500	<0.000700	0.038			<0.00100		
		Apr-14	FD	<0.00100	0.0188				<0.00100	<0.0500	<0.000700	0.0216			<0.00100 B		
		Nov-14		0.0018 J	0.030				<0.00054	<0.0500	<0.000240	0.031			<0.00038		
	MW-108	Nov-14	FD	0.0017 J	0.029				0.00075 J	<0.0500	<0.000240	0.032			0.00095 J		
		Apr-15		0.000408 J	0.0195				<0.000540	0.0945 J	0.000364 J	0.0228			<0.000380		
		Apr-15	FD	0.000400 J	0.0196				<0.000540	0.0490 J	<0.000240	0.0217			<0.000380		
		Oct-15		0.00150 J	0.0229				0.000591 J	0.0385 J	<0.000240	0.0148			<0.000380		
	MW-109	Oct-15	FD	0.00149 J	0.0218				<0.000540	<0.0150	<0.000240	0.0142			<0.000380		
		Apr-16		0.00165 J	0.0343 O1				<0.00270	<0.0750	<0.00120	0.0113 J			<0.00190 J3J6		

Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals											
Analyte:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium
Units:				mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH
Area	Well ID	Date	Dup	Vanadium	Uranium	Uranium	Vanadium	Vanadium	Vanadium	Vanadium	Vanadium	Vanadium	Vanadium	Vanadium	Vanadium
South Refinery	RA-313	Apr-13													
		Apr-14													
		Apr-15													
		Apr-16													
	RW-4	Apr-15		0.00183 J	0.0521				<0.000540	0.0744 J	0.000665 J	0.104			<0.000380
	RW-4R	Apr-16		0.00440 J	0.0623				<0.00270	0.181 J	<0.00120	0.0728			<0.00190
	RW-5R	Apr-15		0.00136 J	0.0259				<0.000540	0.0952 J	0.000336 J	0.0177			<0.000380
		Apr-16		0.00183 J	0.0282				<0.00270	<0.0750	<0.00120	0.0191 J			<0.00190
	RW-6	Apr-15		0.0332	1.66				<0.000540	13.8	0.000574 J	0.280			<0.000380
	RW-6R	Apr-16		0.0712	0.480				<0.00270	3.70	<0.00120	0.553			<0.00190
South RO Reject Field	MW-114	Apr-14		0.00292 J	0.0153				<0.00100	0.0777 J	<0.000700	1.20			<0.00100 B
		Nov-14		0.0031	0.026				0.0023	0.810	0.00055 J	1.20			0.0019 J
		Apr-15		0.00279	0.0165				0.000896 J	0.361	0.000317 J	0.927			<0.000380 B
		Oct-15		0.00355	0.0134				<0.000540	0.0486 J	<0.000240	0.905			0.000757 J
		Apr-16		0.00344 J	0.0155 J				<0.00270	<0.0750	<0.00120	1.15			<0.00190
		Oct-16		0.00327	0.0119				0.00115 JB	<0.0150	0.000617 J	0.899			0.00839
	MW-115	Apr-14		0.00444 J	0.0102				<0.00100	0.0685 J	<0.000700	0.0262			<0.00100 B
		Nov-14		0.0034	0.015				0.00086 J	0.130	0.00024 J	0.030			0.0028
		Apr-15		0.00697 J	0.0118				<0.000540	0.0684 J	<0.000240	0.120			<0.000380 B
		Oct-15		0.00761	0.0119				0.000763 J	0.0367 J	<0.000240	0.124			0.000590 J
		Apr-16		0.0230	0.0415				<0.00270	0.134 J	0.00135 J	0.308			0.00217 J
		Oct-16		0.00838	0.00908				0.000944 JB	0.116 B	0.000381 J	0.146			<0.000380
	MW-116	Apr-14		0.00442 J	0.0102				<0.00100	0.108 J	<0.000700	0.00627			<0.00100 B
		Nov-14		0.0038	0.0098				0.0010 J	0.11	<0.00024	0.0042 J			0.0055
		Apr-15		0.00521	0.00931				<0.000540	<0.0150	<0.000240	0.00454 J			<0.000380 B
		Oct-15		0.00825	0.0434				0.00542	2.45	0.00183 J	0.0815			0.000668 J
		Apr-16		0.00422 J	0.0231 J				<0.00270	0.800	<0.00120	0.0396			<0.00190
		Oct-16		0.00720	0.0118				0.000922 JB	0.119	0.000397 J	0.0506			0.000738 J
	MW-49	Apr-14		0.00457 J	0.0409				<0.00100	<0.0500	<0.000700	0.302	<4.0E-05	0.00856	0.00113 J
		Nov-14		0.0055	0.100				0.0082	3.40	0.012	0.330	<4.9E-05	0.02	0.019 J
		Apr-15		0.00433	0.0514				0.00147 J	0.530	0.00133 J	0.269	<4.9E-05	0.00842	<0.000380
		Oct-15		<0.000250 B	0.0429				<0.000250 B	0.0195 J	0.000453 J	0.209	<4.9E-05	0.0074	0.0117
		Apr-16		0.00489 J	0.0439	0.695	<0.005	<0.00130	<0.00270	0.0770 J	<0.00120	0.269	<4.9E-05	0.00686 J	<0.00190
		Oct-16		0.00505	0.0449	0.642	<0.00016	<0.000260	0.000766 JB	0.127	0.000423 J	0.223	<4.9E-05 JB	0.00867	<0.000380
TEL	TEL-1	Apr-14		0.00402 J	0.0117				<0.00100	<0.0500	0.00109 J	0.0827			<0.00100 B
		Apr-14	FD	0.00372 J	0.0108 J				<0.00100	<0.0500	<0.000700	0.0751 J			<0.00100 B
		Nov-14		0.0026	0.011				0.00090 J	<0.0500	<0.00024	0.140			<0.00038
		Apr-15		0.00537	0.0119				0.00501	0.0741 J	<0.000240	0.0523			<0.000380
		Oct-15		<0.000250 B	<0.000360 B				0.00318	0.0506 J	<0.000240	0.103			0.00798 J
		Apr-16		0.00407 J	0.0126 J				0.0269	0.104 J	<0.00120	0.199			<0.00190
	TEL-2	Oct-16		0.00256	0.00987				0.00911 B	0.0829 J	0.0003 J	0.216			<0.000380
		Apr-14		0.0115	0.0729				0.00127 J	<0.0500	0.00248 J	0.00988			0.00593
		Nov-14		0.012	0.110				0.0017	<0.05	0.0024	0.013			0.0011 J
		Apr-15		0.0132	0.185				0.00134 J	0.0326 J	0.00276	0.0101			0.000383 J
		Oct-15		0.0118	0.153				0.00178 J	0.0291 J	0.00242	0.00753			0.00679
		Apr-16		0.0101	0.127				0.00303 J	<0.0750	0.00131 J	0.0212 J			<0.00190
	TEL-3	Oct-16		0.0147	0.0773				0.00209 B	0.0279 J	0.00145 J	0.0144			0.000618 J
		Apr-14		0.00330 J	0.0147				0.00723	0.0610 J	<0.000700	0.0122			<0.00100 B
		Nov-14		0.0013 J	0.012				0.0053	0.076 J	<0.00024	0.015			<0.00038
		Apr-15		0.00354	0.0145				0.00466	0.0738 J	0.000599 J	0.00827			<0.000380
		Oct-15		<0.000250 B	<0.000360 B				0.00613	0.0417 J	0.000435 J	0.0139			0.00966
		Apr-16		0.00876 J	0.0208 J				0.0269	0.171 J	<0.00120	0.00661 J			<0.00190
	TEL-4	Oct-16		0.00126 J	0.0156				0.138	0.456	0.000368 J	0.0133			<0.000380
		Apr-14		0.0128	0.0376				0.223	0.0921 J	<0.000700 B	0.408			0.00103 J
		Nov-14		0.010	0.043				0.38	0.093 J	<0.00024 B	0.290			<0.00038
		Nov-14	FD	0.010	0.042				0.51	0.130	<0.00024 B	0.280			<0.00038
		Apr-15		0.00613	0.0244				0.419	1.57	0.00227	0.872			<0.000380
		Apr-15	FD	0.00598	0.0233				0.599	2.41	0.00262	0.860			0.000420 J
TMD	MW-8	Oct-15		0.0106	0.0338				0.315	0.107	0.00255	0.406			0.0201
		Oct-15	FD	0.00829	0.0326				0.281	0.107	0.00206	0.412			0.0135
		Apr-16		0.00710 J	0.0247 J				0.282	0.331 J	0.00330 J	0.751			<0.00190
		Apr-16	FD	0.00738 J	0.0245 J				0.306	0.628	0.00316 J	0.750			<0.00190
		Oct-16		0.00784	0.0190				0.688	1.93	0.00263	0.508			0.000883 J
		Oct-16	FD	0.00700	0.0199				0.389	1.07	0.00241	0.501			<0.000380
	MW-16	Oct-13		0.00929	0.0123				0.0986	0.307	<0.000500	0.584			0.0158
		Apr-14		0.00884 J	0.0114				0.0212	<0.100	<0.00140	0.557			0.0237
		Apr-15		0.0108	0.0107				0.234	0.779	0.000470 J	0.507			0.0188
		Apr-16		0.00885 J	0.0117 J				0.107	0.397 J	<0.00120	0.538			0.00622 J
		Apr-13		<0.0100	0.0162				<0.0100	<0.400	<0.0100	0.052			<0.0100
		Apr-14		0.00470 J	0.0151				<0.00200	<0.100	<0.00140	0.244			0.00322 J
	MW-20	Apr-15		0.00500 J	0.0174 J				<0.00270	<0.0750	<0.00120	0.0950 J			0.00213 J
		Apr-13		<0.0100	0.0101				<0.0100	<0.400	<0.0100	0.251			0.016
		Apr-14		0.00750 J	0.00905 J				<0.00200	<0.100	<0.00140	0.0906			0.0179
		Apr-14	FD	0.00865 J	0.0103				<0.00200	<0.100	<0.00140	0.080			0.017
		Apr-15		0.00621	0.0104				<0.000540	0.0746 J	<0.000240	0.00743			0.0289
		Apr-16		0.00628 J	0.0113 J				<0.00270	<0.0750	<0.00120	0.00814 J			0.0305
	MW-21	Apr-14		0.00724 J	0.00373 J				<0.00200	<0.100	<0.00140	0.432			0.0259
		Nov-14		0.0054	0.008				0.00078 J	<0.05	<0.00024	0.820			0.018
		Apr-15		0.00656 J	0.0100 J				<0.00270	<0.0750	<0.00120	0.323 J			0.0258
		Oct-15		0.00635	0.00939				<0.000540	<0.0150	<0.000240	0.658			0.029
		Apr-16		0.00607 J	0.0100 J										

**Appendix B, Table B.2 - Summary of Groundwater Analytical Data - Total Metals**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Total Metals														
Analyte:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium	
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.010	1.00	0.75	0.005	0.050	0.050	1.00	0.015	0.200	0.002	0.200	0.050	0.030	0.0631	
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	WQCC HH	NMED TW	
Area	Well ID	Date	Dup															
TMD	MW-68	Apr-13		<0.00500	0.0147				<0.00500	0.279	<0.00500	<0.00500				0.0314		
		Apr-14		0.00325 J	0.0142				<0.00200	<0.100	<0.00140	<0.00500				0.0248		
		Apr-15		0.00292	0.0159				<0.000540	0.0594 J	0.000524 J	0.00131 J				0.0123		
		Apr-16		0.00314 J	0.0133 J				<0.00270	<0.0750	<0.00120	0.0393				0.00339 J		
	MW-71	Oct-13		0.00536	0.00969				<0.00500	<0.200	<0.00500	<0.00500	<2.0E-04	<0.00500	0.0417		0.0251	
		Apr-14		0.00458 J	0.0086				<0.00100	<0.0500	<0.000700	<0.00250	<4.0E-05	0.00123 J	0.0452		0.0252	
		Apr-15		0.00411	0.00897				0.000581 J	0.0373 J	<0.000240	0.000898 J	<4.9E-05	0.00134 J	0.0349		0.0229	
		Apr-16		0.00436 J	0.0103 J	0.689 V	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	<0.00125	<4.9E-05	<0.00175	0.0370	0.0605	0.0257	
	MW-89	Apr-13		0.0132	0.0134				<0.00500	<0.200	<0.00500	0.670			<0.00500			
		Apr-14		0.0128	0.014				<0.00100	0.195 J	<0.000700	0.537			0.0188			
		Apr-15		0.00900 J	0.0144 J				<0.00270	0.12 J	<0.00120	0.0710 J			0.0275			
		Apr-16		0.00839 J	0.0155 J				<0.00270	0.228 J	<0.00120	0.0788			0.0311	<0.00100		
	NP-1	Apr-14																
		Nov-14																
		Apr-15																
		Oct-15																
	NP-2	Apr-16																
		Oct-16																
		Apr-13																
		Apr-13																
Upgradient	UG-1	Apr-13		<0.00500	0.0137				<0.00500	<0.200	<0.00500	<0.00500	<2.0E-04	<0.00500	<0.00500		0.0111	
		Apr-14		0.00158 J	0.0128				0.00159 J	0.0832 J	<0.000700	0.00575	<4.0E-05	0.00121 J	0.00728		0.0135	
		Apr-15		0.00113 J	0.0137				0.00242	0.0262 J	<0.000240	0.000764 J	<4.9E-05	<0.000350 B	0.0103		0.0105	
		Apr-16		<0.00125	0.0136 J	0.574	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	<0.00125	<4.9E-05	<0.00175	0.0140	0.0252 J	0.0107 J	
	UG-2	Apr-13		<0.00500	0.0172				<0.00500	<0.200	<0.00500	0.0801	<2.0E-04	0.0125	<0.00500		0.0148	
		Apr-13	FD	<0.00500	0.0182				<0.00500	<0.200	<0.00500	0.0711	<2.0E-04	0.0121	0.00581		0.0166	
		Apr-14		0.00385 J	0.0167				<0.00100	0.673	<0.000700	0.488	<4.0E-05	0.0256	0.00209 J		0.0082	
		Apr-15		0.00205	0.0153				<0.000540	<0.0150	<0.000240	0.011	<4.9E-05	0.00527	<0.000380 B		0.0115	
	UG-3R	Apr-16		0.00202 J	0.0150 J	0.343	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	0.0147	<4.9E-05	0.00905	0.00321 J	0.0156 J	0.0123 J	
		Apr-13		<0.00500	0.0149				<0.00500	<0.200	<0.00500	<0.00500	<2.0E-04	<0.00500	<0.00500		0.00815	
		Apr-14		0.00184 J	0.017				<0.00100	<0.0500	<0.000700	<0.00250	<4.0E-05	<0.00100	0.00534		0.0109	
		Apr-14	FD	0.00167 J	0.0163				<0.00100	<0.0500	<0.000700	<0.00250	<4.0E-05	<0.00100	0.0064		0.0101	
	UG-4	Apr-15		0.00258	0.0595				0.00368	2.05	0.000626 J	0.0725	<4.9E-05	<0.000350 B	<0.000380 B		0.0135	
		Apr-16		0.00182 J	0.0198 J	0.295	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	0.00141 J	<4.9E-05	0.00188 J	0.00386 J	0.0122 J	0.0104 J	
		Apr-16		<0.00125	0.0184 J	1.19	<0.005	<0.00130	<0.00270	<0.0750	<0.00120	0.00752 J	<4.9E-05	0.00203 J	0.00634 J	0.0364 J	0.00749 J	

**Definitions**

X	Reported concentration, X, exceeds the CGWSL.
X	Analyte detected above the detection limit at a concentration equal to X
< x	Analyte not detected at detection limit equal to x.
< x	Analyte not detected at detection limit equal to x, but x exceeds the CGWSL.
	Blank cell indicates a sample was collected from the well during the indicated sampling event, but the analyte was not analyzed.

**Abbreviations**

CGWSL	Critical Groundwater Screening Level (see Table 3)
CGWSL Source	Source for CGWSL value (see Table 3)
FD	field duplicate sample
mg/L	milligrams per liter
NMED TW	NMED Risk Assessment Guidance for Site Investigations and Remediation, July 2015, Table A-1, Tap Water Screening Level
USEPA MCL	United States Environmental Protection Agency Maximum Contaminant Level, "Regional Screening Levels for Chemical Contaminants at Superfund Sites", November 2015
WQCC Dom	NMED Groundwater standard for domestic exposure taken from 20.6.2.3103.B
WQCC HH	NMED Groundwater standard for human health exposure, NMAC 20.6.2.3103.A
WQCC Irr	NMED Groundwater standard for irrigation exposure

**Lab Footnote**

B	Analyte was also detected in the associated method blank.
J	Indicates an estimated value.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

**Appendix B.3 - Groundwater Analytical Data: Dissolved Metals**  
**2016 Annual Groundwater Report**  
**Navajo Refinery, Artesia, New Mexico**

Analyte Group:		Dissolved Metals													
Analyte:		Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
Units:		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:		0.01	1.00	0.75	0.005	0.05	0.05	1.00	0.015	0.2	0.002	0.2	0.05	0.03	0.0631
CGWSL Source:		USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	WQCC HH	NMED TW
Area	Well ID	Date	Dup												
Cross-Gradient	KWB-13	Apr-13		<0.00500	0.0161			<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.0145	0.0206
		Apr-14		0.00276 J	0.0156			0.00107 J	<0.0780	<0.000700	<0.00250	<4.2E-05	<0.00100	0.0136	0.0188
		Apr-15		0.00376	0.0439			0.00125 J	0.34	0.00143 J	0.0462	0.00136 J	0.0117	0.0173	0.0173
		Apr-16		0.0029 J	0.0210 J	0.416	<0.000800	<0.0013	<0.00270	0.483 J	<0.00120	0.00842 JB	<4.90E-05	0.0140	0.0245 J
	MW-17	Apr-14		0.00217 J	0.0139			0.00184 J	<0.0780	<0.000700	<0.00250			0.00918	
		Apr-13		<0.0100	<0.0100			<0.0100	<0.400	<0.0100	<0.0100			0.0148	
	NP-5	Apr-15		0.00306	0.0076			<0.000540	<0.0150	<0.000240	0.000511 J			0.0128	
		Apr-15		0.00283	0.0107		<0.000160	<0.000540	0.0239 J	<0.000240	0.00574	0.00110 J	0.00362	0.0158	0.0158
	MW-136	Apr-16		0.00242 J	0.0113 J	0.661	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	0.00291 JB	<4.90E-05	0.00664 J	0.0698
		Apr-16		0.00242 J	0.0113 J	0.661	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	0.00291 JB	<4.90E-05	0.00664 J	0.0698
Evaporation Ponds	MW-1R	Apr-13	FD	<0.00500	0.0195			<0.00500	1.53	<0.00500	1.37		<0.00500		
		Apr-13		<0.00500	0.02			<0.00500	1.55	<0.00500	1.38		<0.00500		
		Apr-14		<0.00200	0.0194			<0.00200	1.31	<0.00140	1.22		<0.00200		
		Apr-15		0.00264 J	0.0229 J			<0.00270	2.58	<0.00120	2.14		<0.00190		
	MW-2A	Apr-16		0.00311 J	0.0252			<0.00270	3.72	<0.00120	2.64		0.00216 J		
		Mar-13		0.0437	0.0236			<0.0100	5.95	<0.0100	2.87		<0.0100		
		Apr-14		0.0148 J	0.0210 J			<0.00500	<0.390	0.00423 J	1.27		0.00624 J		
		Apr-15		0.0116	0.0216			<0.000540	0.201	<0.000240	1.83		0.00186 J		
	MW-3	Apr-16		0.014	0.0223 J			<0.00270	2.64	<0.00120	2.31		0.00347 J		
		Apr-14		0.0285	0.0178			<0.00200	<0.156	<0.00140	0.325		0.0429		
		Apr-15	FD	0.0253	0.0171			<0.000540	<0.0150	<0.000240	1.30		0.0955		
		Apr-15	FD	0.0269	0.018			<0.000540	<0.0150	<0.000240	1.37		0.095		
	MW-4A	Apr-16		0.0246	0.0141 J			<0.00270	0.401 J	<0.00120	2.13		0.00615 J		
		Apr-16		0.0299	0.0146			0.00103 J	0.388	0.0003 J	2.49		0.00429		
		Apr-13		0.0618	0.0123			<0.00500	1.46	<0.00500	1.59		<0.00500		
		Apr-14		0.0786	0.0121			<0.00200	0.614	<0.00140	2.36		<0.00200		
	MW-5A	Apr-15		0.104	0.0113			0.000987 J	1.89	<0.000240	2.73		0.000614 J		
		Apr-16		0.174	0.0128 J			<0.00270	2.99	<0.00120	2.29		0.00269 J		
		Apr-13		0.14	<0.0250			<0.0250	8.10	<0.0250	1.63		<0.0250		
		Apr-14		0.0796	0.0106 J			<0.00500	5.40	<0.00350	1.62		<0.00500		
	MW-5B	Apr-15		0.0848	0.0107			0.000957 J	4.500	<0.000240	1.58		0.000860 J		
		Apr-16		0.179	0.0128 J			<0.00270	6.87	<0.00120	1.33		0.00262 J		
		Apr-13		0.109	<0.0100			<0.0100	0.618	<0.0100	2.17		<0.0100		
		Apr-15		0.198	0.0104			0.000978 J	4.71	<0.000240	3.49		0.00197 J		
	MW-5C	Apr-13		0.0137	0.014			<0.00500	1.08	<0.00500	0.9		<0.00500		
		Apr-15		0.0124	0.0172			0.00115 J	0.77	0.000449 J	0.687		<0.000380		
	MW-6A	Mar-13		0.00642	0.0136			<0.00500	0.571	<0.00500	0.297		<0.00500		
		Apr-14		0.0102	0.0252			<0.00200	<0.156	<0.00140	1.2		0.0157		
		Apr-15		0.0114	0.0331			<0.000540	0.0527 J	0.000400 J	1.4		0.0318		
		Apr-16		0.00932 J	0.0156 J			<0.00270	<0.075	<0.00120	0.491		<0.00190		
	MW-6B	Mar-13	FD	0.0336	0.0173			<0.00500	1.23	<0.00500	3.03		<0.00500		
		Mar-13		0.032	0.0145			<0.00500	1.24	<0.00500	2.84		<0.00500		
		Apr-15		0.0319	0.0186			<0.000540	1.21	<0.000240	3.52		<0.000380		
		Apr-13		0.0264	<0.0250			<0.0250	5.61	<0.0250	0.392		<0.0250		
	MW-7A	Apr-14		0.0239	0.0167			<0.00200	2.34	<0.00140	0.541		<0.00200		
		Apr-15	FD	0.0141	0.0149			0.000544 J	<0.0150	<0.000240	0.997		0.000601 J		
		Apr-15		0.0172	0.0148			0.000890 J	0.676	<0.000240	0.994		0.000532 J		
		Apr-16	FD	0.0226	0.0174 J			<0.00270	2.56	<0.00120	0.642		0.00207 J		
	MW-7B	Apr-16		0.0224	0.0170 J			<0.00270	2.63	<0.00120	0.634		<0.00190		
		Apr-13		<0.0100	0.0114			<0.0100	<0.400	<0.0100	0.358		<0.0100		
		Apr-15		0.00529	0.011			<0.000540	0.0879 J	<0.000240	0.541 J		<0.000380		
		Apr-13		<0.0250	<0.0250			<0.0250	<1.00	<0.0250	2.27		<0.0250		
	MW-10	Apr-14		0.0195	0.0114			<0.00200	<0.156	<0.00140	2.75		<0.00200		
		Apr-15		0.0191	0.0130 J			<0.00270	<0.0750	<0.00120	2.53		<0.00190		
		Apr-16		0.0247	0.0174 J			<0.00270	<0.075	<0.00120	2.60		0.00211 J		
		Mar-13		<0.0250	0.0251			<0.0250	3.95	<0.0250	1.83		<0.0250		
	MW-11A	Apr-14		<0.00500	0.037			<0.00500	0.924 J	<0.00350	1.84		<0.00500		
		Apr-15		<0.00250	0.0338 J			<0.00540	<0.150	<0.00240	0.846		<0.00380		
		Apr-16		0.00133 J	0.0321			<0.00270	0.887	<0.00120	0.903		<0.00190		
		Mar-13		<0.0250	<0.0250			<0.0250	3.62	<0.0250	0.365		<0.0250		
	MW-11B	Apr-15		0.00458 J	0.0187 J			<0.00270	3.59	<0.00120	0.376		<0.00190		
		Apr-14		<0.00200	0.0204			<0.00200	<0.156	<0.00140	0.183		0.0208		
		Apr-14		<0.00200	0.0334			<0.00200	<0.156	<0.00140	0.173		<0.00200		
		Mar-13		0.0242	0.0157			<0.0100	<0.400	<0.0100	1.60		<0.0100		
	MW-15	Apr-14		0.0589	0.0186			0.0144	<0.156	<0.00140	0.33		0.00547 J		
		Apr-15		0.0268	0.0219 J			<0.00270	0.0762 J	<0.00120	0.814		0.0211		
		Apr-16		0.0204	0.0217 J			<0.00270	<0.075	<0.00120	0.874		<0.00190		
		Apr-13		<0.0250	<0.0250			<0.0250	9.20	<0.0250	2.58	<0.000200	<0.0250		<0.0250
	MW-18A	Apr-14		<0.0100	0.0166 J			<0.0100	<0.780	<0.00700	0.176	<4.2E-05	<0.0100	0.0323 J	<0.00900
		Apr-15		0.00341	0.0116			<0.000540	<0.0150	<0.000240	0.009		0.00194 J	0.0464	0.00420 J
		Apr-16		0.00629 J	0.0157 J	2.87	<0.000800	<0.0013	<0.00270	0.333 JB	<0.00120	0.335	<4.90E-05	0.00835 J	0.00190
		Apr-13		0.00781	0.0119			<0.00500	<0.200	<0.00500	0.657		<0.00500		
	MW-18B	Apr-15		0.0104	0.0116			<0.000540	0.0398 J	<0.000240	0.72		<0.000380		
		Apr-13		0.0397	<0.0250			<0.0250	2.55	<0.0250	5.34		<0.0250		
		Apr-14		0.0418	0.0154			<0.00200	0.271 J	<0.00140	3.58		0.00322 J		
		Apr-15	FD	0.0369	0.0171			<0.000540	0.901	<0.000240	5.08		0.00105 J		
	MW-22A	Apr-15		0.0376	0.0162 J			<0.00270	0.537	<0.00120	5.37		<0.00190		
		Apr-16	FD	0.037	0.0171 J			<0.00270							

**Appendix B.3 - Groundwater Analytical Data: Dissolved Metals**  
**2016 Annual Groundwater Report**  
**Navajo Refinery, Artesia, New Mexico**

Analyte Group:			Dissolved Metals													
Analyte:			Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
Units:			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:			0.01	1.00	0.75	0.005	0.05	0.05	1.00	0.015	0.2	0.002	0.2	0.05	0.03	0.0631
CGWSL Source:			USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	WQCC HH	NMED TW
Area	Well ID	Date	Dup													
Evaporation Ponds	MW-77	Mar-13		0.0641	0.0117			0.0057	3.48	<0.00500	0.824	<0.000200	0.0129	0.00744		0.00656
		Apr-14		0.067	0.011			0.00747 J	7.09	0.00176 J	0.909			0.0123		
		Apr-15		0.0921	0.0144 J			0.0116	13.6	<0.00120	0.644			0.0127		
		Apr-16		0.0594	0.00881 J			0.0122 J	10.7	<0.00240	0.599			0.011		
	MW-78	Mar-13		0.0126	0.030			0.0815	0.798	<0.00500	0.489			0.00963		
		Apr-14		0.0145	0.0278			0.0363	4.70	<0.000700	1.60			0.00708		
		Apr-15		0.0117	0.032			0.0342	10.7	<0.00120	1.26			0.0122		
		Apr-16		0.0116	0.0382			0.049	11.2	<0.00120	0.773			0.0124		
	MW-79	Mar-13		0.00818	0.0147			<0.00500	0.587	<0.00500	3.78			<0.00500		
		Apr-14		0.0183	0.0134			<0.00200	<0.156	<0.00140	1.30			0.00861 J		
		Apr-15		0.0063	0.0161			<0.000540	<0.0150	<0.000240	1.34			0.00120 J		
		Apr-16		0.00557 J	0.0166 J			<0.00270	0.130 J	<0.00120	2.91			<0.00190		
	MW-80	Mar-13		0.0051	0.0136			<0.00500	0.544	<0.00500	0.642			<0.00500		
		Apr-14		0.00720 J	0.0155			<0.00200	<0.156	0.00170 J	0.403			0.00238 J		
		Apr-15		0.0109	0.0153			<0.000540	0.0598 J	<0.000240	0.381			0.000949 J		
		Apr-16		0.00359 J	0.0171 J			<0.00270	0.173 J	<0.00120	0.162			0.00232 J		
	MW-81	Mar-13	FD	0.005	0.0151			<0.00500	<0.200	<0.00500	2.170			<0.00500		
		Mar-13		0.005	0.0154			<0.00500	<0.200	<0.00500	2.12			<0.00500		
		Apr-14		0.0188	0.0151			<0.00200	<0.156	0.00152 J	0.124			0.00945 J		
		Apr-15		0.0188	0.0144			0.000736 J	0.0190 J	<0.000240	0.0128			0.0229		
	MW-82	Mar-13		0.0226	0.0137 J			<0.00270	<0.075	<0.00120	0.00553 J			0.0426		
		Apr-14	FD	0.0937	0.0175			<0.00500	0.63	<0.00500	1.47			<0.00500		
		Apr-14		0.071	0.0183			<0.00200	0.54	<0.00140	1.39			<0.00200		
		Apr-14		0.0684	0.0181			<0.00200	0.493	<0.00140	1.35			<0.00200		
	MW-83	Apr-15		0.0761	0.0303			0.0032	0.765	<0.000240	1.25			0.00265		
		Apr-16		0.0400	0.0326			<0.00270	0.121 J	<0.00120	1.64			0.00331 J		
		Mar-13		0.0398	0.0175			<0.00500	1.07	<0.00500	0.473			0.00511		
		Apr-14		0.0292	0.0171			0.00271 J	2.60	<0.000700	0.977			0.00741		
	MW-84	Apr-15		0.0253	0.0129			0.00766	6.99	<0.000240	0.741			0.00376		
		Apr-16		0.0282	0.0207 J			0.00814 J	3.77	<0.00120	0.532			0.0052 J		
		Mar-13		0.0828	0.0133			<0.00500	0.515	<0.00500	2.55			0.00513		
		Apr-14		0.0779	0.0127			0.00293 J	0.324 J	<0.00140	3.28			0.00690 J		
	MW-87	Apr-15		0.0885	0.0139			0.00335	0.265	<0.000240	2.90			0.005		
		Apr-16		0.0867	0.0146 J			0.00527 J	0.682	<0.00120	2.98			0.00813 J		
		Mar-13		<0.0250	<0.0250			<0.0250	<1.00	<0.0250	0.0302			<0.0250		
		Apr-14		0.00660 J	0.0160 J			<0.00500	<0.390	<0.00350	0.0205 J			<0.00500		
	MW-88	Apr-15		0.0057	0.0186			0.000544 J	<0.0150	0.000455 J	0.0419			0.00110 J		
		Apr-16		0.00841 J	0.0178 J			<0.00270	3.82 O1	<0.00120	2.39 V			0.00215 J		
		Mar-13		<0.0250	<0.0250			<0.0250	<1.00	<0.0250	0.690			<0.0250		
		Apr-14		0.0106	0.013			<0.00200	<0.156	<0.00140	0.914			<0.00200		
	MW-120	Apr-15		0.0106	0.0139 J			<0.00270	0.0753 J	<0.00120	1.31			<0.00190		
		Apr-16		0.00969 J	0.0111 J			<0.00270	<0.075	<0.00120	0.85			<0.00190		
		Mar-13		0.0152	0.00984 J			<0.00200	3.76	0.00156 J	1.27			<0.00200		
		Apr-15		0.00704	0.0113			<0.000540	1.35	<0.000240	1.28			0.0324		
	MW-121	Apr-16		0.00838 J	0.0155 J			<0.00270	3.28	<0.00120	1.85			0.00538 J		
		Mar-13		0.0339	0.017			<0.00200	0.415	0.00150 J	4.37			0.00511 J		
		Apr-15		0.0337	0.0138			<0.000540	0.567	<0.000240	3.86			0.00764		
		Apr-16		0.0369	0.0134 J			<0.00270	0.174 JB	<0.00120	2.92			0.00792 J		
	MW-122	Mar-13		0.00897 J	0.0337			<0.00200	4.810	0.00167 J	2.00			<0.00200		
		Apr-15		0.0108	0.025			<0.000540	0.224	<0.000240	1.85			0.00914		
		Apr-16		0.00405 J	0.028			<0.00270	0.541 B	<0.00120	1.39			<0.00190		
		Mar-13		0.0276	0.0207			<0.00200	<0.156	<0.00140	2.94			<0.00200		
	MW-123	Apr-15		0.0274	0.0210 J			<0.00270	<0.0750	<0.00120	2.67			<0.00190		
		Apr-16		0.0254	0.0211 J			<0.00270	<0.075	<0.00120	2.85			0.0022 J		
		Mar-13		0.00439 J	0.0241			<0.00200	0.613	<0.00140	0.518			<0.00200		
		Apr-15		0.00199 J	0.017			<0.000540	0.961	<0.000240	0.703			<0.000380		
	OCD-1R	Apr-16		0.00255 J	0.0198 J			<0.00270	2.70	<0.00120	0.601			<0.00190		
		Mar-13		0.00705 J	0.0156			<0.00200	<0.156	<0.00140	1.31			0.00716 J		
		Apr-15		0.00669 J	0.0184 J			<0.00270	<0.0750	<0.00120	0.690			0.0204		
		Apr-16		0.00566 J	0.0159 J			0.0508	0.91	<0.00120	0.599			0.00328 J		
	OCD-2A	Mar-13		<0.00500	0.00556			<0.00500	1.22	<0.00500	0.357			<0.00500		
		Apr-14		<0.00200	0.0203			<0.00200	<0.156	<0.00140	0.440			<0.00200		
		Apr-15		0.00138 J	0.0188 J			<0.00270	<0.0750	<0.00120	0.296			<0.00190		
		Apr-16		0.00460 J	0.0237 J			0.00345 J	4.22	<0.00120	1.41			<0.00190		
	OCD-3	Mar-13		<0.00500	<0.00500			<0.00500	<0.200	<0.00500	0.0894			<0.00500		
		Apr-14		<0.00200	0.0187			<0.00200	<0.156	<0.00140	0.0572			<0.00200		
		Apr-15		<0.00120	0.0180 J			<0.00270	0.341 J	<0.00120	0.105			<0.00190		
		Apr-16		0.00135 J	0.0219 J			<0.00270	0.0865 JB	<0.00120	0.0382			<0.00190		
	OCD-4	Mar-13		<0.0250	<0.0250			<0.0250	4.32	<0.0250	0.275			<0.0250		
		Apr-14		<0.00500	0.0212 J			<0.00500	3.10	<0.00350	0.287			<0.00500		
		Apr-15		0.00246 J	0.0228 J			<0.00270	1.89	<0.00120	0.29			<0.00190		
		Apr-16		0.00176 J	0.0263			<0.00270	0.800	0.00146 J	0.149			<0.00190		
	OCD-5	Mar-13		<0.0250	<0.0250			<0.0250	2.24	<0.0250	0.295			<0.0250		
		Apr-14	FD	<0.00500	0.0241 J			<0.00500	1.62	<0.00350	0.386			<0.00500		
		Apr-15		0.00550 J	0.0243 J			<0.00500	1.61	<0.00350	0.375			<0.00500		
		Apr-16		0.00721 J	0.0265			<0.00270	3.41	<0.00120	0.312			<0.00190		
	OCD-6	Apr-16		0.00259 J	0.0240 J			<0.00270	1.16	<0.00120	0.216			<0.00190		
		Mar-13		0.0374	<0.0250			<0.0250	12.4	<0.0250	2.33			<0.0250		</

**Appendix B.3 - Groundwater Analytical Data: Dissolved Metals**  
**2016 Annual Groundwater Report**  
**Navajo Refinery, Artesia, New Mexico**

Analyte Group:		Dissolved Metals												
Analyte:		Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	
Units:		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
CGWSL:		0.01	1.00	0.75	0.005	0.05	0.05	1.00	0.015	0.2	0.002	0.2	0.05	
CGWSL Source:		USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	
Area	Well ID	Date	Dup											
Field East of Refinery	KWB-11B	Apr-15		0.00241	0.0217			<0.000540	<0.0150	0.00817	0.265	0.00442	0.0026	0.0123
		Apr-16		0.00234 J	0.0283	0.477	<0.000800	0.00202 J	<0.00270	0.00533 J	0.240	0.00547 J	0.00847 J	0.0134 J
		Apr-13		<0.00500	0.0149			<0.00500	<0.200	<0.00500	<0.00500	<0.00500	0.0106	0.00824
		Apr-14		0.00165 J	0.0142			<0.00100	<0.0780	<0.000700	<0.00250	<4.2E-05	0.00946	0.0079
		Apr-15		0.00139 J	0.0135			0.000786 J	<0.0150	0.000825 J	0.000504 J	0.00972	0.00811	0.00811
	KWB-12A	Apr-16		0.00144 J	0.0119 J	0.154 J	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	<0.00125	<4.90E-05	0.00845 J
		Apr-15	FD	0.00150 J	0.0128			<0.000540	<0.0150	0.000359 J	0.000473 J	0.00374	0.00955	0.00955
		Apr-15		0.00167 J	0.016			<0.000540	0.0156 J	<0.000240	<0.000250	0.000471 J	0.00445	0.0112
	KWB-12B	Apr-16		0.00191 J	0.0184 J	0.621	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	<0.00125	<4.90E-05	0.00383 J
		Apr-13	FD	<0.0100	<0.0100			<0.0100	<0.400	<0.0100	<0.0100	<0.00200	<0.0100	0.013
		Apr-13		<0.0100	<0.0100			<0.0100	<0.400	<0.0100	<0.0100	<0.00200	<0.0100	0.0132
		Apr-14	FD	0.00222 J	0.0101			<0.00200	<0.156	<0.00140	<0.00500	<4.2E-05	0.00200	0.00341 J
		Apr-14		0.00336 J	0.00906			<0.00100	<0.0780	<0.000700	<0.00250	<4.2E-05	0.00460 J	0.0133
		Apr-15		0.00169 J	0.00905			<0.000540	<0.0150	<0.000240	0.000656 J	0.000442 J	0.00404	0.0112
		Apr-16	FD	0.00196 J	0.0132 J	0.625	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	0.0047 J	<4.90E-05	0.00397 J
		Apr-16		0.00196 J	0.0159 J	0.625	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	0.00501 J	<4.90E-05	0.00398 J
	MW-57	Apr-13		0.014	0.0245			<0.00500	0.84	<0.00500	0.53		<0.00500	
		Apr-14		0.056	0.065			<0.00100	2.67	0.000734 J	1.98		<0.00100	
		Apr-15		0.00508	0.0171			<0.000540	0.385	<0.000240	0.188		0.0331	
		Apr-16		0.00424 J	0.0144 J			<0.00270	<0.075	<0.00120	0.388		0.0116	
	MW-58	Apr-15		0.0116	0.89			<0.000540	1.33	0.00259	0.0974		0.000747 J	0.000588 J
		Apr-16		0.0109	0.632	0.519	<0.000800	<0.0013	<0.00270	0.429 J	0.00166 J	0.357	<4.90E-05	0.00864 JB
	MW-111	Apr-13		0.0132	0.179			<0.00500	5.56	<0.00500	1.86	<0.000200	0.00559	<0.00165
		Apr-14		0.0126	0.222			<0.00100	6.74	<0.000700	1.68		0.00119 J	<0.00500
		Apr-15		0.0123	0.239			<0.000540	5.920	<0.000240	1.60		<0.000380	
		Apr-16		0.0137	0.094			<0.00270	6.540	<0.00120	1.680		<0.00190	
	MW-113	Apr-13		<0.00500	0.017			<0.00500	<0.200	<0.00500	0.383	<0.000200	<0.00500	0.0103
		Apr-14		0.00267 J	0.018			<0.00100	0.0871 J	<0.000700	0.387		<0.00100	
		Apr-15	FD	0.00413	0.0254			<0.000540	0.35	<0.000240	0.946		0.000388 J	
		Apr-15		0.00445	0.0248			<0.000540	0.341	<0.000240	0.917		0.00328	
		Apr-16	FD	0.00251 J	0.0233 J			<0.00270	0.191 J	<0.00120	0.675		<0.00190	
		Apr-16		0.00282 J	0.0218 J			<0.00270	0.178 J	<0.00120	0.723 V		<0.00190	
		Apr-14		0.00406 J	0.00914			<0.00100	<0.0780	<0.000700	0.395		0.00773	
	MW-125	Apr-15		0.00367	0.00842 J			<0.000540	<0.0150	<0.000240	0.385		0.00797 J	
		Apr-16		0.00391 J	0.0101 J			<0.00270	<0.075	<0.00120	0.412		0.00379 J	
	MW-126A	Apr-14		0.00366 J	0.0136			<0.00100	<0.0780	<0.000700	0.174		0.00270 J	
		Apr-15		0.00257	0.0159			0.000604 J	1.17	<0.000240	0.829		<0.000380	
		Apr-16		0.00221 J	0.0178 J			<0.00270	0.714	<0.00120	0.820		0.00299 J	
	MW-126B	Apr-14		0.00344 J	0.0168			0.00379 J	1.17	<0.000700	0.930		0.00115 J	
		Apr-15		0.00384	0.0102			0.000682 J	0.0320 J	<0.000240	0.0807		0.00222	
		Apr-16		0.00350 J	0.00925			0.00119 J	<0.0150	<0.00024	0.0661		0.00538 JB	
	MW-127	Apr-14		0.00400 J	0.191			<0.00100	0.685	<0.000700	0.155		0.00106 J	
		Apr-15		0.00374	0.204			0.000841 J	0.486	0.000441 J	0.0919		<0.000380	
		Apr-16		0.00441 J	0.115			<0.00270	0.258 J	<0.00120	0.103		0.00298 J	
	MW-128	Apr-14		0.0563	0.0808			<0.00100	2.92	<0.000700	2.29		<0.00100	
		Apr-15		0.045	0.0674 J			<0.000540	2.23	<0.000240	2.20		0.00455 J	
		Apr-16		0.0646	0.0812			<0.00270	2.77	<0.00120	2.52		<0.00190	
	MW-129	Apr-15		0.0279	0.536			<0.000540	4.93	<0.000240	1.11		<0.000380	
		Apr-16		0.0256	0.614			<0.00270	5.58	<0.00120	1.17		0.00253 J	
	MW-130	Apr-14		0.00434 J	0.0238			<0.00100	0.0912 J	<0.000700	0.13		0.00713	
		Apr-15		0.00464	0.0233			0.00155 J	0.446 J	0.00165 J	0.119		0.00337 J	
		Apr-16		0.00450 J	0.0198 J			<0.00270	0.116 J	<0.00120	0.103		0.0126	
	MW-131	Apr-14		0.0205	2.21			<0.00100	1.56	<0.000700	0.384		0.00118 J	
		Apr-15		0.0219	2.82			<0.000540	1.84	0.000414 J	0.323		<0.000380	
		Apr-16		0.0218	2.76			<0.00270	1.46	<0.00120	0.322		0.00271 J	
	MW-133	Apr-15		0.0102	0.138			<0.000540	2.59	0.000513 J	0.290		0.00325	
		Apr-14		0.00761 J	0.00947 J			<0.00200	<0.156	<0.00140	0.0169		0.00508 J	
		Apr-15	FD	0.00571	0.00941			0.00147 J	0.182	<0.000240	0.00509		0.0134	
		Apr-15		0.00634 J	0.0115 J			<0.00270	<0.0750	<0.00120	0.00504 J		0.0180	
		Apr-16	FD	0.00504 J	0.00916 J			<0.00270	<0.075	<0.00120	0.00888 J		0.00888 J	
	MW-134	Apr-16		0.00551 J	0.0107 J			<0.00270	<0.075	<0.00120	0.00802 J		0.00963 J	
		Apr-14		0.00316 J	0.0122			<0.00100	<0.0780	<0.000700	0.0111		0.0349	
		Apr-15		0.00291	0.0106			0.000881 J	<0.0150	<0.000240	0.00329 J		0.0345	
		Apr-16		0.00339 J	0.0105 J			<0.00270	0.149 J	<0.00120	0.00261 J		0.0244	
	RW-12R	Apr-16		<0.00250	0.0398 J			0.0149 JB	<0.150	0.0031 J	0.489		<0.00740	
	RW-13R	Apr-16		0.00890 J	0.0888			<0.00270	0.470 J	<0.00120	1.36		<0.00190	
	RW-18	Apr-13		<0.0250	<0.0250			<0.0250	<1.00	<0.0250	<0.0250		<0.0250	
		Apr-14		0.00353 J	0.0108			<0.00200	<0.156	<0.00140	<0.00500		0.00964 J	
		Apr-16		0.00399	0.00975			0.000707 J	<0.0150	<0.00024	0.00112 J		0.00511 B	
	RW-20	Apr-15		0.00171 J	0.464			<0.000540	0.3	<0.000240	0.72		0.00488	
		Apr-15		<0.00250	0.802			<0.00540	0.394 J	0.0305 J	0.886		0.0326	
North Refinery	MW-23	Apr-13		0.0089	8.59			<0.00500	<0.200	<0.00500	0.0824		<0.00500	
		Apr-14		0.0101	9.4			<0.00100	<0.0780	0.0107	0.09		<0.00100	
		Apr-15		0.0206	0.215			0.000653 J	0.16	0.000295 J	0.203		0.000997 J	
		Apr-16		0.00911	10.9			0.000955 J	0.0206 J	0.000319 J	0.0697		0.00164 JB	
	MW-29	Apr-13		0.013	0.0165			<0.00500	<0.200	<0.00500	0.525		<0.00500	
		Apr-14		0.00753	0.014			<0.00100	0.241	<0.000700	0.624 J		<0.00100	
		Apr-15		0.000886 J	0.0185			<0.000540	<0.0150	<0.000240	0.378		0.00432	
		Apr-16		<0.00125	0.0210 J									

**Appendix B.3 - Groundwater Analytical Data: Dissolved Metals**  
**2016 Annual Groundwater Report**  
**Navajo Refinery, Artesia, New Mexico**

Analyte Group:			Dissolved Metals													
Analyte:			Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
Units:			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:			0.01	1.00	0.75	0.005	0.05	0.05	1.00	0.015	0.2	0.002	0.2	0.05	0.03	0.0631
CGWSL Source:			USEPA MCL	WQCC HH	WQCC Lrr	USEPA MCL	WQCC Lrr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Lrr	WQCC HH	WQCC HH	NMED TW
Area	Well ID	Date	Dup													
North Refinery	MW-60	Apr-13	FD	0.0128	0.0229				<0.0100	<0.400	<0.0100	0.326	<0.000200	<0.0100	<0.0100	<0.0100
		Apr-13		0.0131	0.0219				<0.0100	<0.400	<0.0100	0.34	<0.000200	<0.0100	<0.0100	<0.0100
		Apr-14		0.00796	0.02				<0.00100	0.136 J	<0.000700	0.334	<0.000200	<0.0100	0.00214 J	<0.000900
		Apr-15	FD	0.00160 J	0.0177				<0.000540	0.127	0.000283 J	0.349		0.000977 J		
		Apr-15		0.0171 J	0.0260 J				<0.000540	0.116 J	0.000316 J	0.321		0.000587 J	0.0470 J	0.000471 J
		Apr-16	FD	0.00871 J	0.0169 J	0.431	<0.000800	<0.0013	<0.00270	0.170 J	<0.00120	0.339	<4.9E-05	<0.00175	<0.00190	0.00239 J
	MW-61	Apr-16		0.00902 J	0.0184 J	0.439	<0.000800	<0.0013	<0.00270	0.139 J	<0.00120	0.333	<4.9E-05	<0.00175	0.00241 J	<0.000900
		Apr-13		<0.00500	0.027				<0.00500	<0.200	<0.00500	0.0213		<0.00500		
		Apr-14		0.00159 J	0.031				<0.00100	<0.0780	0.00173 J	0.0235		<0.00100		
		Apr-15		0.00381	0.0442				<0.000540	<0.0150	<0.000240	0.00470 J		0.000496 J		
		Apr-16		<0.00125	0.0205 J				<0.00270	0.103 J	<0.00120	0.062		<0.00190		
		Apr-13		<0.00500	0.704				<0.00500	<0.200	<0.00500	0.00658		<0.00500		
	MW-62	Apr-14		0.00406 J	0.0689				<0.00100	<0.0780	<0.000700	0.00390 J		0.00135 J		
		Apr-15		0.011	9.93				0.000662 J	<0.0150	0.000487 J	0.0688		0.000755 J		
		Apr-16		0.00286 J	0.0329				<0.00270	0.152 J	<0.00120	0.00388 JB		0.00392 J		
	MW-67	Apr-15		0.00402	0.129				<0.000540	0.0443 J	0.000620 J	0.0816		0.00369	<0.000380	0.000753 J
		Apr-16		0.011	0.231	0.458	<0.000800	<0.0013	<0.00270	0.156 J	<0.00120	0.133	<4.9E-05	0.00609 J	<0.00165	0.00283 J
	MW-90	Apr-13		<0.00500	0.0174				<0.00500	<0.200	<0.00500	0.0673		<0.00500		
		Apr-14		0.00379 J	0.0166				<0.00100	<0.0780	<0.000729 J	0.0754		<0.00100		
		Apr-15		0.00775	0.0207				0.000646 J	0.187	<0.000240	0.338		0.00101 J		
		Apr-16		0.00739 J	0.0116 J				<0.00270	<0.075	<0.00120	0.16		0.00584 J		
	MW-91	Apr-14		0.00323 J	0.115				<0.00100	<0.0780	0.00144 J	<0.00250		<0.00100		
		Apr-15		0.00974	0.0899				<0.000540	0.0216 J	0.00281	0.00489 J		<0.000380		
		Apr-16		0.00741 J3336	0.065 O1				<0.00270	<0.075	0.00386 J	0.00359 J		<0.00740 J3336		
	MW-92	Apr-16		0.00285 J	3.57				<0.00270	0.217 J	<0.00120	0.0349		<0.00190		
		Apr-13		0.00801	0.0634				<0.00500	<0.200	<0.00500	0.0187		<0.00500		
	MW-93	Apr-14		0.00718	0.065				0.00207 J	<0.0780	0.00113 J	0.04		0.00196 J		
		Apr-15		0.0124	0.0327				0.00341	0.0375 J	0.000293 J	0.215		0.00468		
		Apr-16		0.01	0.0197				0.00692	0.219	0.000301 J	0.054		0.018		
	MW-94	Apr-16		0.0163	0.356				<0.00270	<0.075	<0.00120	0.00601 J		0.0334		
		Apr-13		<0.00500	0.124				<0.00500	0.56	<0.00500	0.0657		<0.00500		
	MW-95	Apr-14		<0.00100	0.118				<0.00100	<0.0780	<0.000700	0.0413		<0.00100		
		Apr-15		0.00134 J	0.0681				<0.000540	0.0255 J	<0.000240	0.0368		<0.000380		
		Apr-16		0.00164 J	0.0732				<0.00270	<0.075	<0.00120	0.0269		0.00486 J		
		Apr-13		<0.00500	0.152				<0.00500	<0.200	<0.00500	<0.00500		<0.00500		
	MW-96	Apr-14		0.00477 J	0.114				<0.00100	<0.0780	<0.000700	<0.00250		<0.00100		
		Apr-15		0.00499	0.113				0.000705 J	0.0345 J	<0.000240	0.00338 J		0.000787 J		
		Apr-16		0.00429 J	0.141				<0.00270	<0.075	<0.00120	0.00127 J		0.00330 J		
		Apr-13		<0.00500	0.0152				<0.00500	<0.200	0.0102	0.0293		<0.00500		
	MW-98	Apr-14	FD	0.00239 J	0.016				0.00142 J	<0.0780	0.00986	0.0274		0.00200 J		
		Apr-14		0.00226 J	0.0145				<0.00100	<0.0780	0.00912	0.0273		0.00155 J		
		Apr-15		0.00139 J	0.0151				<0.000540	<0.0150	0.00908	0.0259		0.000446 J		
		Apr-16		0.00153 J	0.02				0.00107 J	<0.0150	0.00629	0.0222		0.00216 B		
	MW-137	Apr-16		0.0674	0.0397	0.76	<0.000160	<0.00026	0.000810 J	<0.0150	0.00429	0.103	<4.9E-05	0.00729	<0.000330	0.00646
		Apr-16		0.0062	0.169	1.08	<0.000160	<0.00026	0.00158 J	<0.0024	0.013	<4.9E-05	0.00484	0.00157 JB	<0.000330	0.00403 J
	RW-1	Apr-15		0.00426	0.0301				0.00131 J	0.0744 J	0.000323 J	0.12		0.00136 J		
		Apr-16		0.00435 J	0.0367				<0.00270	11.3	<0.00120	0.301		<0.00190		
	RW-2	Apr-15		0.0194	0.0174				0.00494	0.0471 J	0.000546 J	0.285		0.00133 J		
		Apr-16		0.00883 J	0.0206 J				0.00400 JB	0.77	<0.00120	0.0466		0.00516 J		
	RW-7	Apr-15		0.00249	0.404				0.000879 J	<0.0150	0.000482 J	0.0266		0.0165		
		Apr-16		0.0136	0.0303				<0.00270	0.509	<0.00120	1.25		0.00396 J		
	RW-8	Apr-15		0.00521	0.0797				<0.000540	0.163	0.000591 J	0.0744		<0.000380		
		Apr-16		<0.00500	0.0629				<0.00500	<0.200	<0.00500	0.286		<0.00500		
	RW-9	Apr-13		0.0061	0.0494				<0.00100	<0.0780	<0.000700	0.404		0.00393 J		
		Apr-15		0.00358	0.0468				<0.000540	0.179	0.000454 J	0.501		0.000418 J		
		Apr-16		0.00328 J	0.0453				<0.00270	<0.075	<0.00120	0.397		<0.00190		
		Apr-13		<0.00500	0.0185				<0.00500	<0.200	<0.00500	0.223		<0.00500		
	RW-10	Apr-14		0.00273 J	0.0186				<0.00100	0.132 J	<0.000700	0.212		0.00268 J		
		Apr-15		0.00177 J	0.0275				<0.000540	0.0573 J	<0.000240	0.25		0.00598		
		Apr-16		<0.00125	0.0324				<0.00270	0.0776 J	<0.00120	0.237		0.0121		
		Apr-13		0.0158	0.0167				<0.00500	<0.200	<0.00500	0.498		<0.00500		
	RW-16	Apr-14	FD	0.0127	0.0141				<0.00100	0.139 J	<0.000700	0.611		0.00300 J		
		Apr-14		0.0126	0.0139				<0.00100	0.125 J	<0.000700	0.601		0.00304 J		
		Apr-15		0.0133	0.0143				0.00101 J	0.0234 J	0.000255 J	0.400		0.00931		
		Apr-16		0.0122	0.0126 J				<0.00270	<0.075	<0.00120	0.379		0.00842 J		
	RW-17	Apr-13		0.00825	0.0256				<0.00500	0.325	<0.00500	0.71		<0.00500		
		Apr-14		0.0104	0.0219				<0.00200	0.54	0.00417 J	0.743		<0.00200		
		Apr-15		0.00838	0.0211				0.000835 J	<0.0150	0.00228	0.0992		0.0393		
		Apr-16		0.00847 J	0.0228 J				<0.00270	<0.075	0.0065 J	0.852		0.0133		
	MW-117	Feb-13		0.00498 J	0.0235	<0.000800		0.0141	<0.00120	<0.078	<0.00070	0.108	<4.2E-05	0.00413 J	0.00427 J	
		May-13		0.00367 J	0.0113	<0.000800		<0.0010	<0.00100	<0.078	<0.00070	0.00979 J	<4.2E-05	<0.00100	0.00585	
		Sep-13		0.00559	0.0108	<0.000800		<0.00100	<0.00100	<0.0780	<0.000700	0.00502	<4.2E-05	0.00189 J	0.00316 J	
		Nov-13		0.00347 J	0.0108		<0.000800	<0.00100	<0.00100	0.110 J	0.00125 J					

**Appendix B.3 - Groundwater Analytical Data: Dissolved Metals**  
**2016 Annual Groundwater Report**  
**Navajo Refinery, Artesia, New Mexico**

Analyte Group:			Dissolved Metals													
Analyte:			Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
Units:			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:			0.01	1.00	0.75	0.005	0.05	0.05	1.00	0.015	0.2	0.002	0.2	0.05	0.03	0.0631
CGWSL Source:			USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	WQCC HH	NMED TW
Area	Well ID	Date	Dup													
NCL	MW-55	Apr-13		<0.00500	0.00863			<0.00500	<0.200	<0.00500	0.0285	<0.000200	<0.00500	0.0195		0.0165
		Apr-14	FD	0.00659	0.00871			<0.00100	<0.0780	<0.000700	0.060	<4.2E-05	0.00345 J	0.0272		0.0156
		Apr-14		0.00641	0.00965			<0.00100	<0.0780	<0.000700	0.0595	<4.2E-05	0.00400 J	0.0253		0.0156
		Apr-15		0.00452	0.00832			0.00119 J	<0.0150	<0.000240	0.0421		0.00209	0.023		0.0141
		Apr-16		0.00504 J	0.0110 J	1.26	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	0.0251	4.9E-05 J6C	0.00242 J	0.0134	0.0445 J
		Apr-16		0.00602	0.0134			<0.00500	<0.200	<0.00500	0.344			<0.00500		
	MW-56	Apr-13		0.00883	0.0136			<0.00100	<0.0780	<0.000700	0.336			0.00579		
		Apr-14		0.00709	0.0136			<0.000540	<0.0150	0.000483 J	0.286			0.00334		
		Apr-15		0.00737 J	0.0158 J			<0.00270	0.112 J	0.00132 J	0.331			0.00369 J		
		Apr-16		<0.00500	0.0403			<0.00500	<0.200	<0.00500	0.0169			<0.00500		
	MW-108	Apr-13		0.00326 J	0.0457			0.00207 J	<0.0780	0.000952 J	0.029			<0.00100		
		Apr-14		0.00343	0.0299			0.00223	<0.0150	0.00105 J	0.0224			0.0184		
		Apr-15		0.00281 J	0.0408			<0.00270	0.154 J	0.00173 J	0.0367			<0.00190		
		Apr-16		0.0122	0.021			<0.00500	0.89	<0.00500	1.870			<0.00500		
	NCL-31	Apr-13		0.0112	0.0194			<0.00100	0.94	<0.000700	1.59			<0.00100		
		Apr-14		0.00908	0.0141			<0.000540	0.731	0.000439 J	1.59			0.00311		
		Apr-15		0.00599 J	0.0178 J			<0.00270	0.866	<0.00120	1.9			<0.00190		
		Apr-16		0.00262	0.0355			0.00120 J	0.42	0.000769 J	0.878			<0.000380		
	NCL-32	Apr-13		0.00412 J	0.0632			0.00772 J	1.65	0.00736 J	1.32			<0.00190		
		Apr-14		<0.00500	0.269			<0.00500	2.48	<0.00500	0.0848			<0.00500		
		Apr-15		0.00264 J	0.0247			<0.00100	2.68	<0.000700	0.0855			0.00104 J		
		Apr-16		0.00311	0.0223			<0.000540	1.49	<0.000240	0.104			0.000538 J		
	NCL-34A	Apr-13		0.00228 J	0.0202 J			<0.00270	0.134 J	<0.00120	0.146			0.0156		
		Apr-14		0.000947 J	0.492			<0.000540	<0.0150	<0.000240	0.0338			<0.000380		
		Apr-15		<0.00125	0.616			<0.00270	<0.075	<0.00120	0.0172 J			0.00268 J		
		Apr-16		0.0354	0.0279			<0.00500	1.3	<0.00500	0.753			<0.00500		
	NCL-44	Apr-13		0.0372	0.029			<0.00100	1.21	<0.000700	0.661			<0.00100		
		Apr-14		0.0536	0.0256			<0.000540	1.37	<0.000240	0.663			<0.000380		
		Apr-15		0.0362	0.0257			<0.00270	1.33	<0.00120	0.938			<0.00190		
		Apr-16		<0.00500	0.0111			<0.00500	<0.200	<0.00500	<0.00500			0.00506		
	NCL-49	Apr-13		0.00338 J	0.0112			<0.00100	<0.0780	<0.000700	<0.00250			0.00503		
		Apr-14		0.00152 J	0.0102			<0.000540	<0.0150	<0.000240	<0.000250			0.00364		
		Apr-15	FD	0.00145 J	0.0104			<0.000540	0.0227 J	<0.000240	0.000312 J			0.00471		
		Apr-16	FD	0.00155 J	0.0143 J			<0.00270	<0.075	<0.00120	<0.00125			0.00471 J		
		Apr-16		0.00163 J	0.0136 J			<0.00270	0.204 J	<0.00120	0.00168 J			0.00498 J		
		Apr-16		0.00249	0.273			<0.000540	0.216	0.000989 J	0.419			0.000612 J		
South Refinery	KWB-2R	Apr-13		0.00506 J	0.028			<0.00270	1.17	<0.00120	0.863			<0.00190		
		Apr-16		0.0227	3.64			<0.000540	3.64	0.000353 J	1.74			<0.000380		
	KWB-5	Apr-13		0.0237	3.61			<0.00270	4.22	<0.00120	1.85			<0.00190		
		Apr-16		0.00581	0.293			<0.000540	0.629	0.00116 J	2.18			<0.000380		
	KWB-6	Apr-13		0.00454	0.245			<0.00054	0.332	0.000729 J	2.13			0.00226 B		
		Apr-16		<0.00500	0.0467			<0.00500	<0.200	<0.00500	0.0328	<0.000200	0.00631	<0.00500	<0.00500	
	MW-28	Apr-13		0.00396 J	0.131			<0.00100	<0.0780	0.00126 J	0.0374	<4.2E-05 J	0.00839	<0.00100	<0.000900	
		Apr-14		0.0130 J	0.0644 J			0.000923 J	0.0283 J	0.012	0.0647		0.00417	0.0699 J	0.00527	
		Apr-15		0.0116	0.0685	1.15	<0.000800	<0.0013	<0.00270	<0.075	0.00812 J	0.0342	<4.9E-05	0.00599 J	<0.00165	0.00371 J
		Apr-16		0.00412	0.580 J			0.000777 J	0.255	0.00139 J	0.242 J			0.00302 J		
	MW-48	Apr-13		0.00857 J	2.64			<0.00270	<0.075	0.00134 J	0.402			0.00321 J		
		Apr-16		0.005	0.02			<0.00500	<0.200	<0.00500	1.210			<0.00500		
	MW-50	Apr-13		<0.00100	0.02			<0.00100	<0.0780	0.000770 J	1.38			<0.00100		
		Apr-14		0.00146 J	0.0223			<0.000540	0.0396 J	0.000670 J	1.62			<0.000380		
		Apr-15		0.00273 J	0.0143 J			<0.00270	0.104 J	<0.00120	0.276			0.0837		
		Apr-16		<0.00500	0.00941			<0.00500	<0.200	<0.00500	0.0729	<0.000200	<0.00500	<0.00500	0.0237	
	MW-52	Apr-13		0.00352 J	0.009			<0.00100	<0.0780	<0.000700	0.034	<4.2E-05	0.00416 J	0.00225 J	0.025	
		Apr-14	FD	0.00375 J	0.009			<0.00100	<0.0780	<0.000700	0.033	<4.2E-05	0.00448 J	0.00265 J	0.0256	
		Apr-15		0.00397	0.00909			<0.000540	<0.0150	<0.000240	0.0341		0.00635	0.00124 J	0.0268	
		Apr-16		0.00370 J	0.00904 J	0.749	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	0.0335	<4.9E-05	0.00641 J	0.00809 J	0.026
	MW-64	Apr-13		0.0311	2.24			<0.00270	<0.075	<0.00120	0.0624			0.00232 J		
	MW-65	Apr-13		0.0202	3.38			<0.000540	2.64	0.000681 J	0.814			0.000425 J		
		Apr-16		0.0128	3.3			<0.00270	2.030	<0.00120	0.75			0.00698 J		
	MW-66	Apr-13		<0.00500	1.72			<0.00500	0.452	<0.00500	0.286	<0.000200	0.00912	<0.00500	<0.00500	
		Apr-14		0.00139 J	1.47			<0.00100	0.480 J	<0.000700	0.294	<4.2E-05 J	0.00861	<0.00100	<0.000900	
		Apr-15		0.00297	2.17			<0.000540	0.549	<0.000240	0.201			0.00565	<0.000380	0.000494 J
		Apr-16		0.00279 J	2.37	0.321	<0.000800	<0.0013	<0.00270	0.715	<0.00120	0.224	<4.9E-05	0.00421 J	<0.00165	0.00166 J
	MW-99	Apr-13		0.00305	0.155			<0.000540	0.317	0.00200 J	0.0828			0.000714 J		
		Apr-16		0.00883 J	0.981			<0.00270	<0.075	<0.00120	0.236			<0.00190		
	MW-101	Apr-13		0.0113	0.104			<0.00500	0.5	<0.00500	0.928			<0.00500		
		Apr-14		0.0378 J	0.0718			0.00404 J	1.64 J	<0.000700	1.16			<0.00100		
		Apr-15		0.0767	0.0565			<0.000540	2.2	<0.000240	1.13			0.000395 J		
		Apr-16		0.021	0.0758			0.000621 J	1.11	<0.00024	1.09			0.00105 JB		
	MW-102	Apr-13		0.0102	6.52			<0.000540	0.0780 J	0.00273	0.0433			0.0031		
		Apr-16		0.0109	7.68			<0.00270	0.100 J	0.00205 J	0.0321			0.00549 J		
	MW-103	Apr-13		<0.00500	0.821			<0.00500	<0.200	<0.00500	<0.00500			<0.00500		
		Apr-14		<0.00100	0.988			<0.00100	<0.0780	0.00106 J	<0.00250			<0.00100		



**Appendix B.3 - Groundwater Analytical Data: Dissolved Metals**  
**2016 Annual Groundwater Report**  
**Navajo Refinery, Artesia, New Mexico**

Analyte Group:			Dissolved Metals														
Analyte:			Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium			
Units:			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l			
CGWSL:			0.01	1.00	0.75	0.005	0.05	0.05	1.00	0.015	0.2	0.002	0.2	0.05			
CGWSL Source:			USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH			
Area	Well ID	Date	Dup														
South RO Reject Field	MW-114	Feb-13		0.00561	0.0204			<0.000800		<0.00120	<0.078	<0.00070	1.51	<4.2E-05	0.00651	0.00222 J	
		May-13		0.00437 J	0.0129			<0.000800		<0.00100	<0.078	<0.00070	0.844	<4.2E-05	0.00410 J	0.00636	
		Sep-13		0.00502	0.017			<0.000800		<0.00100	<0.0780	<0.000700	1.42	<4.2E-05	0.00558	0.00245 J	
		Nov-13		0.00539	0.0112			<0.000800		0.00119 J	0.167 J	<0.000700	0.035		0.00369 J	0.00451 J	
		Apr-14		0.00297 J	0.0136			<0.00100	<0.0780	<0.000700			1.13			<0.00100	
		Apr-15		0.00273	0.0127 J			<0.000540	<0.0150	<0.000240			0.894			0.00180 J	
	MW-115	Apr-16		0.00298 J	0.0148 J			<0.00270	<0.075	<0.00120			1.00			<0.00190	
		Feb-13	FD	0.00499 J	0.0309			<0.00120	<0.078	<0.00070	0.255		<4.2E-05	0.00483 J	0.0081		
		May-13		0.00427 J	0.011			<0.00100	<0.078	<0.00070	0.023		<4.2E-05	0.00225 J	0.00734		
		May-13		0.00478 J	0.0107			<0.00100	<0.078	<0.00070	0.0267		<4.2E-05	<0.00100	0.00654 J		
		Sep-13		0.00467 J	0.011			<0.00100	<0.0780	<0.000700	0.0362		<4.2E-05	0.00208 J	0.00568		
		Nov-13		0.00616	0.011			<0.000800		<0.00100	<0.0780	<0.000700	0.0249		0.00206 J	0.00506	
	MW-116	Apr-14		0.00368 J	0.0087			<0.00100	<0.0780	<0.000700	0.0216				0.00166 J		
		Apr-15		0.00797 J	0.00965 J			0.000735 J	0.0283 J	<0.000240	0.102				0.00313		
		Apr-16		0.00477 J	0.00839 J			<0.00270	<0.075	<0.00120	0.060				<0.00190		
		Feb-13		0.00274 J	0.0161			<0.000800		<0.00120	<0.078	<0.00070	0.044	0.000131 J	0.00120 J	0.00203 J	
		May-13		0.00502	0.0111			<0.000800		0.00119 J	0.201		<0.00070	0.0342	0.0000460 J	0.00204 J	0.00733
		Sep-13	FD	0.00467 J	0.00946			<0.000800	<0.00100	<0.0780	<0.000700	0.00366 J	0.0000600 J	0.00112 J	0.00558		
TEL	MW-49	Sep-13		0.00535	0.00928			<0.000800	<0.00100	<0.0780	<0.000700	0.00478 J	0.0000610 J	0.00115 J	0.00493 J		
		Nov-13	FD	0.00526	0.011			<0.000800	<0.00100	0.132 J	<0.000700	0.0058			0.00144 J	0.00582	
		Nov-13		0.00525	0.00989			<0.000800	<0.00100	<0.0780	<0.000700	0.0092			0.00245 J	0.00611	
		Apr-14		0.00348 J	0.0095			<0.00100	<0.0780	<0.000700	<0.00250				0.00563		
		Apr-15		0.00507	0.00904 J			0.000586 J	<0.0150	<0.000240	0.00316 J				0.00417 J		
		Apr-16		0.00339 J	0.00902 J			<0.00270	<0.075	<0.00120	0.00731 J				0.00564 J		
	TEL-1	Apr-13	FD	0.00734	0.0398			<0.00500	<0.200	<0.00500	0.301	<0.000200	0.0093			<0.00500	<0.00500
		Apr-13		0.007	0.0402			<0.00500	<0.200	<0.00500	0.294	<0.000200	0.00912			<0.00500	<0.00500
		Apr-14		0.00460 J	0.0376			<0.00100	<0.0780	<0.000700	0.333	<4.2E-05	0.00825		<0.00100	<0.000900	
		Apr-15		0.00329	0.0394			<0.000540	0.0291 J	0.000467 J	0.240		0.00656	0.00302 J	0.000493 J		
		Apr-16		0.00578 J	0.0492	0.708	<0.000800	<0.0013	<0.00270	<0.075	<0.00120	0.300	<4.9E-05	0.00842 J	<0.00190	<0.00165	0.00123 J
		Apr-13		0.00553	0.012			<0.00500	<0.200	<0.00500	0.147				<0.00500		
	TEL-2	Apr-14	FD	0.00428 J	0.0131 J			<0.00100	<0.0780	<0.000700	0.0909 J				0.00110 J		
		Apr-14		0.00400 J	0.013			<0.00100	<0.0780	<0.000700	0.0837				<0.00100		
		Apr-15		0.0048	0.0113			0.00301	0.0488 J	<0.00120	0.052				0.00161 J		
		Apr-16		0.00441 J	0.0119 J			0.014	0.075 J	<0.00120	0.204				<0.00190		
		Apr-13		0.013	0.051			<0.00500	<0.200	<0.00500	0.0157				<0.00500		
		Apr-14		0.0119	0.0745			<0.00100	<0.0780	0.00246 J	0.0107				<0.00100		
	TEL-3	Apr-15		0.0173	0.0887			0.00111 J	0.0269 J	0.00254	0.00915				0.0136		
		Apr-16		0.012	0.0483			<0.00270	<0.075	0.00137 J	0.0224 J				<0.00190		
		Apr-13		<0.00500	0.014			<0.00500	<0.200	<0.00500	0.0121				<0.00500		
		Apr-14		0.00303 J	0.0129			0.00193 J	<0.0780	<0.000700	0.0105				<0.00100		
		Apr-15		0.00639	0.0123			0.00235	0.0316 J	0.000406 J	0.00717				0.0219		
		Apr-16		0.00979 J	0.0234 J			0.00350 J	<0.075	<0.00120	0.00813 J				<0.00190		
	TEL-4	Apr-13		0.00967	0.0299			0.00884	<0.200	<0.00500	0.577				<0.00500		
		Apr-14		0.0125	0.0349			0.00884	<0.0780	0.00196 J	0.444				<0.00100		
		Apr-15	FD	0.00568	0.022			0.0298	0.149	0.00143 J	0.835				<0.000380		
		Apr-15		0.00563	0.0208			0.0139	0.0279 J	0.00114 J	0.792				0.000882 J		
		Apr-16	FD	0.00836 J	0.0249 J			0.0272	<0.075	0.00377 J	0.808				<0.00190		
		Apr-16		0.00738 J	0.0263			0.0266	<0.075	0.00351 J	0.776				<0.00190		
TMD	MW-8	Apr-13		<0.0100	0.0114			<0.0100	<0.400	<0.0100	0.584				0.0213		
		Apr-14		0.00898	0.0116			<0.00100	<0.0780	<0.000700	0.587				0.0295		
		Apr-15		0.00679	0.01			0.000644 J	<0.0150	<0.000240	0.464				0.0174		
		Apr-16		<0.0100	0.0167			<0.0100	<0.400	<0.0100	0.0509				<0.0100		
		Apr-14		0.00546	0.0144			<0.00100	<0.0780	<0.000700	0.125				<0.00100		
		Apr-15		0.00465 J	0.0151 J			<0.00270	<0.0750	<0.00120	0.0513				0.00213 J		
	MW-16	Apr-13		<0.0100	<0.0100			<0.0100	<0.400	<0.0100	0.0569				0.0153		
		Apr-14	FD	0.00848	0.0103			<0.00100	<0.0780	<0.000700	0.0647				0.022		
		Apr-14		0.00931	0.00977			<0.00100	<0.0780	<0.000700	0.0645				0.0205		
		Apr-15		0.00586	0.00926			<0.000540	0.0359 J	<0.000240	0.00169 J				0.0254		
		Apr-16		0.00646 J	0.0112 J			<0.00270	<0.075	<0.00120	0.00432 J				0.0266		
		Apr-13		<0.0100	<0.0100			<0.0100	<0.400	<0.0100	0.272				0.0319		
	MW-20	Apr-14		0.00845	0.00996			<0.00100	<0.0780	<0.000700	0.422				0.0368		
		Apr-15		0.00681 J	0.00852 J			<0.00270	<0.0750	<0.00120	0.252				0.0269		
		Apr-13		<0.00500	0.0106			<0.00500	<0.200	<0.00500	0.0832				<0.00500		
		Apr-14		0.00575 J	0.0277			<0.00200	<0.156	<0.00140	0.121				0.00885 J		
		Apr-15		0.0104	0.0196 J			<0.00270	<0.0750	<0.00120	0.218				0.0204		
		Apr-16		0.00646 J	0.0161 J			<0.00270	<0.075	<0.00120	0.319 V				0.00234 J		
	MW-25	Apr-13		<0.0100	<0.0100			<0.0100	<0.400	<0.0100	0.0589				<0.0100		
		Apr-14		0.00617 J	0.00866 J			<0.00200	<0.156	<0.00140	0.52				0.0309		
		Apr-15		0.00338	0.00842			<0.000540	<0.0150	<0.000240	0.470				0.0184		
		Apr-16		0.00363 J	0.00913 J			<0.00270	<0.075	<0.00120	0.534				0.0186		
		Apr-13		<0.00500	0.0168			<0.00500	<0.200	<0.00500	0.0118				0.0262		
		Apr-14		0.00355 J	0.015			<0.00100	<0.0780	<0.000700	0.00617						

**Appendix B.3 - Groundwater Analytical Data: Dissolved Metals**  
**2016 Annual Groundwater Report**  
**Navajo Refinery, Artesia, New Mexico**

Analyte Group:				Dissolved Metals													
Analyte:				Arsenic	Barium	Boron	Cadmium	Cobalt	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Uranium	Vanadium
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.01	1.00	0.75	0.005	0.05	0.05	1.00	0.015	0.2	0.002	0.2	0.05	0.03	0.0631
CGWSL Source:				USEPA MCL	WQCC HH	WQCC Irr	USEPA MCL	WQCC Irr	WQCC HH	WQCC Dom	USEPA MCL	WQCC Dom	WQCC HH	WQCC Irr	WQCC HH	WQCC HH	NMED TW
Area	Well ID	Date	Dup														
Up-Gradient	UG-1	Apr-13		<0.00500	0.0121				<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500		0.0108
		Apr-14		0.00288 J	0.012				0.00187 J	<0.0780	<0.000700	<0.00250	<4.2E-05	<0.00100	0.00635		0.0107
		Apr-15		0.00124 J	0.0133				0.000833 J	<0.0150	<0.000240	0.000689 J		0.00139 J	0.0101 J		0.0109
		Apr-16		<0.00125	0.0144 J	0.525 O1V	<0.000800	<0.00130	<0.00270	<0.075	<0.00120	<0.00125	<4.9E-05	0.00179 J	0.0133	0.0264 J	0.0114 J
	UG-2	Apr-13	FD	<0.00500	0.0153				<0.00500	<0.200	<0.00500	0.0514	<0.000200	0.00997	<0.00500		0.0173
		Apr-13		<0.00500	0.0153				<0.00500	<0.200	<0.00500	0.0521	<0.000200	0.0102	<0.00500		0.0181
		Apr-14		0.00625	0.0147				<0.00100	0.334	<0.000700	0.346	<4.2E-05	0.0537	0.00369 J		0.0142
		Apr-15		0.00205	0.015				<0.000540	<0.0150	<0.000240	0.00934		0.00543	0.00373 J		0.0116
		Apr-16		0.00226 J	0.0153 J	0.315	<0.000800	<0.00130	<0.00270	<0.075	<0.00120	0.0142 J	<4.9E-05	0.00595 J	0.00342 J	0.0156 J	0.0129 J
	UG-3R	Apr-13		<0.00500	0.0143				<0.00500	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500		0.00822
		Apr-14	FD	0.00310 J	0.0172				<0.00100	<0.0780	<0.000700	<0.00250	<4.2E-05	<0.00100	0.00460 J		0.00834
		Apr-14		0.00253 J	0.0175				<0.00100	<0.0780	<0.000700	<0.00250	<4.2E-05	<0.00100	0.00422 J		0.00799
		Apr-15		0.00157 J	0.0193				<0.000540	0.0534 J	<0.000240	0.00492 J		0.00114 J	0.00375 J		0.00934
	UG-4	Apr-16		0.00171 J	0.0187 J	0.278	<0.000800	<0.00130	<0.00270	<0.075	<0.00120	0.00182 J	<4.9E-05	<0.00175	0.00406 J	0.0126 J	0.0102 J
		Apr-16		0.00144 J	0.0210 J	1.21	<0.000800	<0.00130	<0.00270	<0.075	<0.00120	<0.00125	<4.9E-05	<0.00175	0.00673 J	0.0365 J	0.00794 J

**Definitions**

X	Reported concentration, X, exceeds the CGWSL.
X	Analyte detected above the detection limit at a concentration equal to X
< x	Analyte not detected at detection limit equal to x.
< x	Analyte not detected at detection limit equal to x, but x exceeds the CGWSL.
	Blank cell indicates a sample was collected from the well during the indicated sampling event, but the analyte was not analyzed.

**Abbreviations**

CGWSL	Critical Groundwater Screening Level (see Table 3)
CGWSL Source	Source for CGWSL value (see Table 3)
FD	field duplicate sample
mg/L	milligrams per liter
NMED TW	NMED Risk Assessment Guidance for Site Investigations and Remediation, July 2015, Table A-1, Tap Water Screening Level
USEPA MCL	United States Environmental Protection Agency Maximum Contaminant Level, "Regional Screening Levels for Chemical Contaminants at Superfund Sites", November 2015
WQCC Dom	NMED Groundwater standard for domestic exposure taken from 20.6.2.3103.B
WQCC HH	NMED Groundwater standard for human health exposure, NMAL 20.6.2.3103.A
WQCC Irr	NMED Groundwater standard for irrigati

**Lab Footnote**

B	Analyte was also detected in the associated method blank.
J	Indicates an estimated value.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds												
Analyte:				1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2,4-Trimethyl-benzene	1,2-Dibromo-ethane	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	2-Butanone	2-Phenyl-butane	
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---	
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	USEPA TW	NMED TW	
Area	Well ID	Date	Dup													
Crossgradient	KWB-13	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00050	<0.00050	<0.00070	<0.00060	<0.0010		
		Apr-15		<0.000319	<0.000380	<0.000380	<0.000260	<0.000400	0.00302	<0.000380	<0.000360	<0.000310	0.000456 J	<0.00390	<0.000360	
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
	MW-17	Apr-14														
		NP-5	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	0.0009804 J	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360	
		RA-3156	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
	Nov-13			<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
	Apr-14			<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00050	<0.00050	<0.00070	<0.00060	<0.0010		
	Apr-16			<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
	MW-136	Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
		MW-1R	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
	Apr-13		FD		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
Apr-14			<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00050	<0.00050	<0.00070	<0.00060	<0.0010			
Apr-15			<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000360		
MW-2A	Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00050	<0.00050	<0.00070	<0.00060	<0.0010			
	Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039			
	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360		
	Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
	Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
	Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
	MW-3	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00050	<0.00050	<0.00070	<0.00060	<0.0010		
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039		
		Nov-14	FD		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360	
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
		Oct-15	FD		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
		Apr-16	FD		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
Oct-16		FD		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000367 J	
MW-4A		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00050	<0.00050	<0.00070	<0.00060	0.0028 J		
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039		
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360	
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	0.000502 J	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000502 J	
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	0.000553 J	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000607 J	
MW-4B	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050		
	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360		
	MW-5A	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00050	<0.00050	<0.00070	<0.00060	0.0025 J		
		Nov-14		<0.00032	<0.00013											

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HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	2-Butanone	2-Phenylbutane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	---
Area	Well ID	Date	Dup												
Evaporation Ports	MW-18B	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
	MW-22A	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	0.0070 J	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Nov-14	FD	<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Apr-15	FD	<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000428 J
		Oct-15	FD	<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000479 J
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	Apr-16	FD	<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.00066 J	
	Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
	MW-22B	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
	MW-70	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	0.000381 J
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	0.0036 J	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<			

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HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloro-ethane	1,1-Dichloro-ethane	1,2,4-Trimethyl-benzene	1,2-Dibromo-ethane	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	2-Butanone	2-Phenyl-butane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	---
Area	Well ID	Date	Dup												
Evaporation Ponds	MW-120	Apr-14		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Nov-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
		Apr-15		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Oct-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	MW-121	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	MW-122	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	MW-123	Apr-14		<0.00319	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010
		Nov-14		<0.00319	<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039
		Apr-15		<0.00319	<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390
		Oct-15		<0.00319	<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393
		Apr-16		<0.00319	<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393
		Oct-16		<0.00319	<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393
	MW-124	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	OCD-1R	Apr-14		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Nov-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
		Apr-15		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Oct-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	OCD-2A	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	OCD-3	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.0030			

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Chemicals**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethane	1,2-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	2-Butanone	2-Phenylbutane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	---
Area	Well ID	Date	Dup												
Field East of Refinery	KWB-10R	Nov-14		<0.0080	<0.0032	<0.0096	<0.0065	<0.01	0.410	<0.0095	<0.0090	<0.0076	0.11	0.4	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.457	<0.00380	<0.00360	<0.00310	0.136	<0.0390	0.0122
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.358	<0.00381	<0.00361	<0.00306	0.1	<0.0393	0.00927
		Apr-16		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.323	<0.0190	<0.0180	<0.0153	0.0886	<0.196	<0.0182
		Oct-16		<0.00638	<0.00260	<0.00766	<0.00518	<0.00796	0.307	<0.00762	<0.00722	<0.00612	0.0765	0.234	0.00903 J
	KWB-11A	Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	0.052	<0.0038	<0.0036	<0.0031	0.0013	<0.0039	
		Nov-14	FD	<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	0.047	<0.0038	<0.0036	<0.0031	0.0011	<0.0039 J4J3	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.0658	<0.00380	<0.00360	<0.00310	0.00168	<0.00390	0.000636 J
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.0528	<0.00381	<0.00361	<0.00306	0.00117	<0.00393	0.00457
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.0256	<0.00381	<0.00361	<0.00306	0.00122	<0.00393	0.00353
	KWB-11B	Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.0341	<0.00381	<0.00361	<0.00306	0.000945 J	<0.00393	0.00474
		Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	0.230	<0.0040	<0.0050	<0.0070	0.0046 J	0.0053 J	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.000489 J	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	KWB-12A	Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.000394 J	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Nov-14	FD	<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039 J4J3	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.000452 J	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
	KWB-12B	Oct-15	FD	<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	KWB-12B	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.0010	
		Apr-14	FD	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.0010	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	KWB-P4	Oct-15	FD	<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.000895 J	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16	FD	<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16	FD	<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	MW-57	Oct-16		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.00360
		Nov-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.0010	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.0163	<0.00380	<0.00360	<0.00310	0.000463 J	<0.00390	<0.00360
	MW-58	Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Nov-14		<0.0080	<0.0032	<0.0096	<0.0065	<0.01	0.860	<0.0095	<0.0090	<0.0076	0.098	<0.098	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	1.04	<0.00380	<0.00360	<0.00310	0.195	<0.0390	0.0119
	MW-111	Oct-15		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.893	<0.0381	<0.0361	<0.0306	0.0651 J	<0.0393	<0.0365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.753	<0.00381	<0.00361	<0.00306	0.0179	<0.00393	0.0112
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.387	<0.00381	<0.00361	<0.00306	0.00321	<0.00393	0.00811
		Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	0.0021 J	<0.0040	<0.0050	<0.0070	<0.0060	<0.0010	
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	0.0074	<0.0038	<0.0036	<0.0031	0.0017	<0.0039	
	MW-112	Nov-14		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.00256	<0.00380	<0.00360	<0.00310	0.000567 J	<0.00390	<0.00360
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.00122	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.00373	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.000539 J	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.00215	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365
	MW-113	Nov-14		<0.0080	<0.0032	<0.0096	<0.0065	<0.01	0.350	<0.0095	<0.0090	<0.0076	0.09	<0.098	
		Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	0.058	<0.0040	<0.0050	<0.0070	0.026	<0.0010	
		Nov-14		<0.0032	&lt										

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Chemicals**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds													
Area	Well ID	Date	Dup	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethane	1,2-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	2-Butanone	2-Phenylbutane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	---
Field East of Refinery	MW-130	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	MW-131	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	0.23	<0.00040	<0.00050	<0.00070	0.066	0.0078 J	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	0.058	<0.00038	<0.00036	<0.00031	0.016	<0.039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	0.0486	<0.000380	<0.000360	<0.000310	0.0119	<0.00390	0.00366
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	0.0231	<0.000381	<0.000361	<0.000306	0.00694	<0.00393	0.00437
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	0.0212	<0.000381	<0.000361	<0.000306	0.00562	<0.00393 J4	0.00318
		Oct-16		<0.00160	<0.000650	<0.00192	<0.00130	<0.00199	0.0133	<0.00190	<0.00180	<0.00153	0.00398 J	<0.0196	0.00269 J
	MW-133	Nov-14		<0.032	<0.013	<0.038	<0.026	<0.04	0.280	<0.038	<0.036	<0.031	0.053 J	<0.39 J4J3	
		Apr-15		<0.0319	<0.0130	<0.0380	<0.0260	<0.0400	0.138	<0.0380	<0.0360	<0.0310	<0.0390	<0.39	<0.0360
	MW-134	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393 J4	<0.000365
	MW-135	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	0.000793 J	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	RA-4196	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.00390	<0.000360
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	RA-4798	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	RW-12R	Apr-16		<0.00160	<0.000650	<0.00192	<0.00130	<0.00199	0.0145	<0.00190	<0.00180	<0.00153	<0.00194	<0.0196	0.00471 J
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	0.0443	<0.000381	<0.000361	<0.000306	0.00539	<0.00393	0.00270
	RW-13R	Apr-13		<0.000319	<0.00013	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-14		<0.000319	<0.00013	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-15		<0.000319	<0.00013	<0.000383	<0.000259	<0.000398	<0.000373	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	RW-20	Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.539	<0.00380	<0.00360	<0.00310	0.113	<0.0390	0.00931 J
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.575	<0.00380	<0.00360	<0.00310	0.0853	<0.0390	0.00967 J
	MW-23	Apr-14		<0.010	<0.010	<0.010	<0.0080	<0.010	0.020 J	<0.0080	<0.010	<0.010	<0.012	<0.020	
		Nov-14		<0.016	<0.0065	<0.019	<0.013	<0.02	0.37	<0.019	<0.018	<0.015	0.069	<0.2	
		Apr-15		<0.00798	<0.00320	<0.00960	<0.00650	<0.0100	0.473	<0.00950 J	<0.00900 J	<0.00760	0.0997	<0.0980 J	<0.00910
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	0.00126	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.0152
		Apr-16		<0.00160	<0.000650	<0.00192	<0.00130	<0.00199	<0.00186	<0.00190	<0.00180	<0.00153	<0.00194	<0.0196	0.0225
		Oct-16		<0.00798	<0.00325	<0.00958	<0.00648	<0.00995	<0.00932	<0.00952	<0.00902	<0.00765	<0.00968	<0.0982	0.0201 J
	MW-29	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	0.000750 J
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000791 J
	MW-39	Apr-16		<0.000319	<0.000130	<0.000383	&lt								

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Chemicals**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethane	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	2-Butanone	2-Phenylbutane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	---
Area	Well ID	Date	Dup												
North Refinery	MW-61	Apr-14		<0.0025	<0.0025	<0.0025	<0.0020	<0.0025	0.200	<0.0020	<0.0025	<0.0035	0.0058 J	<0.0050	
		Nov-14		<0.016	<0.0065	<0.019	<0.013	<0.02	0.430	<0.019	<0.018	<0.015	0.100	<0.2	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.531	<0.00380 J	<0.00360 J	<0.00310	0.130	<0.0390 J	0.0168
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.233	<0.00381	<0.00361	<0.00306	<0.00387	<0.0393	0.0115
		Apr-16		<0.00160	<0.000650	<0.00192	<0.00130	<0.00199	0.139	<0.00190	<0.00180	<0.00153	<0.00194	<0.0196	0.00730
		Oct-16		<0.00798	<0.00325	<0.00958	<0.00648	<0.00995	0.119	<0.00952	<0.00902	<0.00765	<0.00968	<0.0982	0.0114 J
	MW-62	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	0.27 E	<0.00040	<0.00050	<0.00070	0.060	<0.0010	
		Nov-14		<0.016	<0.0065	<0.019	<0.013	<0.02	<0.019	<0.019	<0.018	<0.015	<0.019	<0.2	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380 J	<0.00360 J	<0.00310	<0.00390	<0.0390 J	0.0144
		Oct-15		<0.00638	<0.00260	<0.00766	<0.00518	<0.00796	0.662	<0.00762	<0.00722	<0.00612	0.158	<0.0786	0.0202
		Apr-16		<0.00798	<0.00325	<0.00958	<0.00648	<0.00995	0.502	<0.00952	<0.00902	<0.00765	0.114	<0.0982	<0.00912
		Oct-16		<0.0319 J6	<0.0130 J6	<0.0383 J6	<0.0259 J6	<0.0398 J6	0.62 J6	<0.0381 J6	<0.0361 J6	<0.0306 J6	0.149 J6	<0.393 J6	<0.0365 J6
	MW-67	Nov-14		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.029	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	0.014
		Apr-15		<0.0016	<0.00065	<0.0019	<0.0013	<0.0020	0.0050 J	<0.0019	<0.0018	<0.0015	<0.0019	<0.02 J4	
		Oct-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.00108	<0.00380	<0.00360	<0.00310	<0.00390	<0.0390	0.00907
		Apr-16		<0.00638	<0.00260	<0.00766	<0.00518	<0.00796	<0.00746	<0.00762	<0.00722	<0.00612	<0.00774	<0.0786	<0.00730
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.0108	<0.00381	<0.00361	<0.00306	<0.00387	<0.0393	0.00716 J
	MW-90	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Nov-14		<0.0032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	0.00285
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.00206
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000888 J
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	MW-91	Apr-14		<0.0025	<0.0025	<0.0025	<0.0020	<0.0025	0.220	<0.0020	<0.0025	<0.0035	0.064	<0.0050	
		Nov-14		<0.08	<0.032	<0.096	<0.065	<0.1	0.18 J	<0.095	<0.09	<0.076	<0.097	<0.98 J4,J3	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.184	<0.00380	<0.00360	<0.00310	0.0476	<0.0390	0.00796 J
		Oct-15		<0.00798	<0.00325	<0.00958	<0.00648	<0.00995	0.226	<0.00952	<0.00902	<0.00765	0.0626	<0.0982	0.0134 J
		Apr-16		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.266	<0.00190	<0.0180	<0.0153	0.0719	<0.196	<0.0182
		Oct-16		<0.0798	<0.0325	<0.0958	<0.0648	<0.0995	0.218 J	<0.0952	<0.0902	<0.0765	<0.0968	<0.982	<0.0912
	MW-92	Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.0588	<0.00381	<0.00361	<0.00306	0.0174	<0.00393	0.00699
		Oct-16		<0.00638	<0.00260	<0.00766	<0.00518	<0.00796	0.0308	<0.00762	<0.00722	<0.00612	0.00835 J	<0.0786	<0.00730
	MW-93	Apr-14		<0.0025	<0.0025	<0.0025	<0.0020	<0.0025	0.370	<0.0020	<0.0025	<0.0035	0.076	<0.0050	
		Nov-14		<0.016	<0.0065	<0.019	<0.013	<0.02	0.240	<0.019	<0.018	<0.015	0.046 J	<0.2	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.206	<0.00380 J	<0.00360 J	<0.00310	0.0368	<0.0390 J	0.00716 J
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.241	<0.00381	<0.00361	<0.00306	0.0414	<0.0393	0.00653 J
		Apr-16		<0.00160	<0.000650	<0.00192	<0.00130	<0.00199	0.0331	<0.00190	<0.00180	<0.00153	0.00543	<0.0196	0.00208 J
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.103	<0.00381	<0.00361	<0.00306	0.0146	<0.0393	0.00379 J
	MW-94	Nov-14		<0.0064	<0.0026	<0.0077	<0.0052	<0.0080	0.540	<0.0076	<0.0072	<0.0061	0.12	<0.079 J4	
		Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.432	<0.00381	<0.00361	<0.00306	0.0857	<0.0393	0.0283
		Apr-16		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.489	<0.0190	<0.0180	<0.0153	0.100	<0.196 J4	0.0403 J
		Oct-16		<0.00160	<0.000650	<0.00192	<0.00130	<0.00199	0.458	<0.00190	<0.00180	<0.00153	0.0917	<0.0196	0.0303
	MW-95	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	0.00288
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393 J4	0.00330
	MW-96	Apr-14		<0.012	<0.012	<0.012	<0.010	<0.012	0.019 J	<0.010	<0.012	<0.018	<0.015	<0.025	
		Nov-14		<0.0080	<0.0032	<0.0096	<0.0065	<0.01	<0.0093	<0.0095	<0.0090	<0.0076	<0.0097	<0.098	
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.000553 J	<0.00380	<0.00360	<0.00310	<0.00390	<0.0390	0.00551
		Oct-15		<0.016	<0.00650	<0.0192	<0.0130	<0.0199	<0.186	<0.19	<0.18	<0.153	<0.194	<1.96	<0.182
		Apr-16		<0.00638	<0.00260	<0.00766	<0.00518	<0.00796	<0.00746	<0.00762	<0.00722	<0.00612	<0.00774	<0.0786	0.0104 J
		Oct-16		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.0186	<0.0190	<0.0180	<0.0153	<0.0194	<0.196	<0.0182
	MW-98	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	0.440	<0.0040	<0.0050	<0.0070	0.1	0.046 J	
		Nov-14	FD	<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	0.460	<0.0040	<0.0050	<0.0070	0.1	<0.010	
		Apr-15		<0.00798	<0.00325	<0.00958	<0.00648	<0.00995	0.360	<0.00950 J	<0.00900 J	<0.00765	0.087	<0.0980 J	0.00919 J
		Oct-15		<0.00798	<0.00325	<0.00958	<0.00648	<0.00995	0.380	<0.00952	<0.00902	<0.00765	0.0836	<0.0982	<0.00912
		Apr-16		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.177	<0.0381	<0.0361	<0.0306	0.0462 J	<0.393	<0.0365
		Oct-16		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.299	<0.0381	<0.0361	<0.0306	0.0823 J	<0.393	<0.0365
	MW-137	Apr-15		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.437	<0.0381	<0.0361	<0.0306	0.102	<0.393	<0.0365
		Oct-16		<0.0798	<0.0325</										



Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Chemicals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds												
Analyte:				1,1,1-Tri- chloroethane	1,1,2,2-Tetra- chloroethane	1,1,2-Tri- chloroethane	1,1-Dichloro- ethane	1,1-Dichloro- ethane	1,2,4- Trimethyl- benzene	1,2-Dibromo- ethane	1,2-Dichloro- ethane	1,2-Dichloro- propane	1,3,5- Trimethyl- benzene	2-Butanone	2-Phenyl- butane	
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---	
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	---	
Area	Well ID	Date	Dup													
North RO Reject Field	MW-119	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
		Apr-14	FD	<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039			
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360		
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
	MW-18	Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Oct-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360		
South Refinery	MW-45	Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039			
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360		
	MW-53	Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
	NCL	MW-54A	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
			Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039		
Apr-15				<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360		
Oct-15				<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
MW-54B		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360		
MW-55		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039			
	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360			
	Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365			
NCL-31	MW-56	Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	0.0599	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<0.00365	
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039			
	MW-108	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360		
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
	NCL-32	Apr-14		<0.00050	<0.00050	0.00063 J	<0.00040	<0.00050	0.031	<0.00040	0.0098	<0.00070	0.0034 J	<0.0010		
		Nov-14		<0.0016	<0.00065	<0.0019	<0.0013	<0.0020	0.039	<0.0019	<0.0018	<0.0015	0.0046 J	<0.02		
Apr-15			<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.0465	<0.00380	<0.00360	<0.00310	0.00603 J	<0.0390	0.00565 J		
Oct-15			<0.00319	<0.00130	<0.00383	<0.00259	<0.00400	0.0616	<0.00381	<0.00361	<0.00306	0.00805 J	<0.0393	0.00655 J		
NCL-32	NCL-31	Apr-16		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.0599	<0.0190	<0.0180	<0.0153	<0.0194	<0.196	<0.0182	
		Oct-16		<0.00798	<0.00325	<0.00958	<0.00648	<0.00995	0.0561	<0.00952	<0.00902	<0.00765	<0.00968	<0.00982	<0.00912	
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039			
	NCL-32	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360		
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	0.000554 J	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
	NCL-33	NCL-33	Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039		
			Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.000360	
Oct-15				<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
Apr-16				<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
NCL-34		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.000365		
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039			
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.0						

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Chemicals**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethane	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	2-Butanone	2-Phenylbutane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	---
Area	Well ID	Date	Dup												
South Refinery	KWB-6	Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	0.260	<0.0038	<0.0036	<0.0031	0.047	<0.039	
		Apr-15		<0.00798	<0.00320	<0.00960	<0.00650	<0.0100	0.680	<0.00950	0.0119 J	<0.00760	0.124	<0.0980	0.00954 J
		Oct-15		<0.16	<0.0650	<0.192	<0.13	<0.199	0.325 J	<0.19	<0.18	<0.153	<0.194	<1.96	<0.182
		Apr-16		<0.00160	<0.000650	<0.00192	<0.00130	<0.00199	0.876	<0.00190	0.00683	<0.00153	0.134	<0.0196	0.00944
		Oct-16		<0.00638	<0.00260	<0.00766	<0.00518	<0.00796	0.292	<0.00762	<0.00722	<0.00612	0.0449	<0.0786	<0.00730
		Nov-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	0.00069 J	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
	MW-28	Nov-14		<0.0080	<0.0032	<0.0096	<0.0065	<0.01	0.120	<0.0095	<0.0090	<0.0076	0.011 J	<0.098	
		Apr-15		<0.0319	<0.0130	<0.0380	<0.0260	<0.0400	0.0950 J	<0.0380	<0.0360	<0.0310	<0.0390	<0.39	<0.0360
		Oct-15		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.151	<0.0381	<0.0361	<0.0306	<0.0387	<0.393	<0.0365
		Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.113	<0.00381	<0.00361	<0.00306	0.00861 J	<0.0393	0.00530 J
		Oct-16		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.253	<0.0190	<0.0180	<0.0179	0.0202 J	<0.196	<0.0182
		Nov-14		<0.0080	<0.0032	<0.0096	<0.0065	<0.01	0.200	<0.0095	<0.0090	<0.0076	<0.0097	<0.098	
MW-48	Nov-14		<0.0080	<0.0032	<0.0096	<0.0065	<0.01	0.200	<0.0095	<0.0090	<0.0076	<0.0097	<0.098		
	Apr-15		<0.0319	<0.00130	<0.00380	<0.00260	<0.00400	0.140	<0.00380	<0.00360	<0.00310	0.00962 J	<0.0390	0.00641 J	
	Oct-15		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.211	<0.0190	<0.0180	<0.0153	0.00235 J	<0.0196	0.011	
	Apr-16		<0.00638	<0.00130	<0.00383	<0.00259	<0.00398	0.310	<0.00762	<0.00722	<0.00612	0.0223	<0.0786	0.00987 J	
	Oct-16		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.323	<0.0190	<0.0180	<0.0153	0.0284	<0.0196	0.0114	
	Nov-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
MW-50	Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.039		
	Apr-15		<0.000319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	0.000587 J	
	Oct-15		<0.000319 J	<0.000130 J	<0.000383 J	<0.000259	<0.000398	<0.000373 J	<0.000381 J	<0.000361	<0.000306 J	<0.000387 J	<0.00393	0.000946 J	
	Apr-16		<0.000319	<0.00130	<0.00383	<0.00259	<0.00398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.00365	
	Oct-16		<0.000319	<0.00130	<0.00383	<0.00259	<0.00398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000625 J	
	Nov-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
MW-52	Nov-14	FD	<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
	Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.039		
	Apr-15		<0.000319	<0.00130	<0.00380	<0.00260	<0.00400	<0.00370	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<0.000360	
	Oct-15		<0.000319	<0.00130	<0.00383	<0.00259	<0.00398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
	Apr-16		<0.000319	<0.00130	<0.00383	<0.00259	<0.00398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
	Oct-16		<0.000319	<0.00130	<0.00383	<0.00259	<0.00398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
MW-64	Nov-14		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	0.666	<0.0190	<0.0180	<0.0153	0.140	<0.196 J	<0.0182	
	Oct-16		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.435	<0.0381	<0.0361 J	<0.0306	0.0904 J	<0.393	<0.0365	
	Nov-14		<0.016	<0.0065	<0.019	<0.013	<0.02	0.060	<0.019	<0.018	<0.015	0.022 J	<0.2		
	Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.0514	<0.00380	<0.00360	<0.00310	0.0228	<0.0390	0.0105	
	Oct-15		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.0309	<0.00381	<0.00361	<0.00306	0.0165	<0.0393	0.00821 J	
	Oct-16		<0.00638	<0.00260	<0.00766	<0.00518	<0.00796	<0.00746	<0.00762	<0.00722	<0.00612	<0.00774	<0.0786	<0.00730	
MW-66	Nov-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010		
	Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	0.012	<0.0038	<0.0036	<0.0031	<0.0039	<0.039		
	Apr-15		<0.0160	<0.00650	<0.0190	<0.0130	<0.0200	<0.0190	<0.0180	<0.0160	<0.0150	<0.0190	<0.2	<0.0180	
	Oct-15		<0.000319	<0.00130	<0.00383	<0.000259	<0.000398	0.00409	<0.000381	<0.000361	<0.000306	0.000859 J	<0.00393	0.000938	
	Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.0094 J	<0.00381	<0.00361	<0.00306	<0.00387	<0.0393	0.00771 J	
	Oct-16		<0.000319	<0.00130	<0.00383	<0.000259	<0.000398	0.00241	<0.000381	<0.000361	<0.000306	0.000547 J	<0.00393	0.000983	
MW-99	Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	0.330	<0.0038	<0.0036	<0.0031	0.036	<0.039		
	Apr-15		<0.00798	<0.00320	<0.00960	<0.00650	<0.0100	0.337	<0.00950	<0.00900	<0.00760	0.0706	<0.0980	0.0108 J	
	Oct-15		<0.00798	<0.00325	<0.00958	<0.00648	<0.00995	0.400	<0.00952	<0.00902	<0.00765	0.0169 J	<0.0982	0.0113 J	
	Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	0.498	<0.00381	<0.00361	<0.00306	0.0129	<0.0393	0.00922 J	
	Oct-16		<0.00638	<0.00260	<0.00766	<0.00518	<0.00796	0.343	<0.00762	<0.00722	<0.00612	<0.00774	<0.0786	0.00804 J	
	Nov-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	0.0022 J	<0.00040	<0.00050	<0.00070	0.00092 J	<0.0010		
MW-101	Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.039		
	Apr-15		<0.0160	<0.00650	<0.0190	<0.0130	<0.0200	<0.0190	<0.0180 J	<0.0160	<0.0150	<0.0190	<0.0200 J	<0.0180	
	Oct-15		<0.00160	<0.000650	<0.00192	<0.00130	<0.00199	<0.00186	<0.00190	<0.00180	<0.00153	<0.00194	<0.0196	<0.0182	
	Apr-16		<0.000319	<0.00130	<0.00383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.00151	
	Oct-16		<0.000319	<0.00130	<0.00383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	0.000391 J	
	Nov-14		<0.016	<0.0065	<0.019	<0.013	<0.02	0.260	<0.019	<0.018	<0.015	0.059	<0.2		
MW-102	Nov-14		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	0.136	<0.00380	0.00548 J	<0.00310	0.0278	<0.0390	0.00509 J	
	Oct-15		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.465	<0.0381	<0.0361	<0.0306	0.115	<0.393	<0.0365	
	Apr-16		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.402	<0.0381	<0.0361	<0.0306	0.110	<0.393	<0.0365	
	Oct-16		<0.0319	<0.0130	<0.0383	<0.0259	<0.0398	0.337	<0.0381	<0.0361	<0.0306	0.0773 J	<0.393	<0.0365	
	Nov-14		<0.0050	<0.00050	<0.00050	&									

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Chemicals**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds													
Analyte:				1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloro-ethane	1,1-Dichloro-ethane	1,2,4-Trimethyl-benzene	1,2-Dibromo-ethane	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	2-Butanone	2-Phenyl-butane		
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---		
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	---		
Area	Well ID	Date	Dup														
South Refinery	RA-313	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050		
		Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.0010			
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393 J4	<0.000365		
	RW-4R	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<b>0.00302</b>		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<b>0.00269</b>		
	RW-5R	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<b>0.298</b>	<0.00380	<0.00360	<0.000310	<b>0.0558</b>	<0.0390	<b>0.00691 J</b>		
		Apr-16		<0.00638	<0.00260	<b>&lt;0.00766</b>	<0.00518	<b>&lt;0.00796</b>	<b>0.437</b>	<b>&lt;0.00762</b>	<b>&lt;0.00722</b>	<b>&lt;0.00612</b>	<b>0.100</b>	<0.0786	<b>0.0130 J</b>		
	RW-6	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<b>0.134</b>	<0.00380	<0.00360	<0.000310	<b>0.028</b>	<0.0390	<b>0.00944 J</b>		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.00555</b>	<0.000381	<0.000361	<0.000306	<b>0.00111</b>	<0.00393	<b>0.00590</b>		
South RO Reject Field	MW-114	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010			
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039			
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360		
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
	MW-115	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010			
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039			
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360		
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
	MW-116	Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365		
		Nov-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<0.0050	<0.0040	<0.0050	<0.0070	<0.0060	<0.010			
		Apr-15		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<0.0037	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039			
	TEL	MW-49	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<b>0.00954</b>	<0.00380	<0.00360	<0.000310	<0.000390	<0.00390	<b>0.00245</b>	
			Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.015</b>	<0.00381	<0.00361	<0.000306	<b>0.000858 J</b>	<0.00393	<b>0.00371</b>	
			Apr-16		<0.00638	<0.00260	<b>&lt;0.00766</b>	<0.00518	<b>&lt;0.00796</b>	<b>0.305</b>	<0.00381	<0.00361	<0.000306	<0.000387	<0.00393	<0.00730	
			Oct-16		<0.0319	<0.0130 J4	<b>&lt;0.0383</b>	<b>&lt;0.0259</b>	<b>&lt;0.0398</b>	<b>0.0457 J</b>	<b>&lt;0.0381</b>	<b>&lt;0.0361</b>	<b>&lt;0.0306</b>	<b>&lt;0.0387</b>	<b>&lt;0.393 J3</b>	<b>&lt;0.0365</b>	
			TEL-1	Apr-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<b>0.012 J</b>	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
				Nov-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<b>0.012 J</b>	<0.0040	<0.0050	<0.0070	<0.0060	<0.010	
		Apr-15			<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<b>0.00086 J</b>	<0.0038	<0.0036	<0.0031	<0.0039	<0.0039		
		Oct-15			<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.000971 J</b>	<0.00381	<0.00361	<0.000306	<0.000387	<0.00393	<b>0.00166</b>	
TEL-2		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.000807 J</b>	<0.00381	<0.00361	<0.000306	<0.000387	<0.00393	<b>0.00174</b>		
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.000939 J</b>	<0.00381	<0.00361	<0.000306	<0.000387	<0.00393	<b>0.00232</b>		
		Nov-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<b>0.200</b>	<0.0040	<0.0050	<0.0070	<b>0.032</b>	<0.010			
		Apr-15		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<b>0.140</b>	<0.0038	<0.0036	<0.0031	<b>0.026</b>	<0.0039			
TEL-3		Apr-15		<0.00638	<0.00260	<b>&lt;0.00770</b>	<0.00520	<0.00800 J	<b>0.138</b>	<0.00760	<0.00720	<0.00610	<b>0.0198 J</b>	<0.0790	<0.00730		
		Oct-15		<0.0160	<0.00650	<0.0192	<0.0130	<0.0199	<b>0.138</b>	<0.0190	<0.0180	<0.0153	<b>0.0109</b>	<0.0196	<b>0.00649</b>		
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.125</b>	<0.000381	<0.000361	<0.000306	<b>0.0143</b>	<0.00393	<b>0.00662</b>		
		Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<b>0.0976</b>	<0.00381	<0.00361	<0.00306	<b>0.00929 J</b>	<0.0393	<b>0.00607 J</b>		
TEL-4		Nov-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<b>0.027</b>	<0.0040	<0.0050	<0.0070	<b>0.0029 J</b>	<0.0010			
		Nov-14		<0.0032	<0.0013	<0.0038	<0.0026	<0.0040	<b>0.016</b>	<0.0038	<0.0036	<0.0031	<b>0.0017</b>	<0.0039			
		Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<b>0.0104</b>	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<b>0.00899 J</b>		
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.00103</b>	<0.00381	<0.00361	<0.000306	<b>0.00128</b>	<0.00393	<b>0.0111</b>		
		Apr-16		<0.00798	<0.00325	<b>&lt;0.00958</b>	<0.00648	<0.00995	<b>0.0128 J</b>	<0.00952	<0.00902	<0.00765	<0.00968	<0.0982	<b>0.0108 J</b>		
		Oct-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.0157</b>	<0.000381	<0.000361	<0.000306	<b>0.00115</b>	<0.00393	<b>0.00596</b>		
	Nov-14		<0.0050	<0.0050	<0.0050	<0.0040	<0.0050	<b>0.099</b>	<0.0040	<0.0050	<0.0070	<0.0060	<0.010				
	Nov-14		<0.0064	<0.0026	<b>&lt;0.0077</b>	<0.0052	<0.0080	<b>0.110</b>	<0.0076	<0.0072	<0.0061	<0.0077	<0.079				
	Nov-14	FD	<0.0064	<0.0026	<b>&lt;0.0077</b>	<0.0052	<0.0080	<b>0.110</b>	<0.0076	<0.0072	<0.0061	<0.0077	<0.079				
	Apr-15		<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<b>0.0742</b>	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<b>0.0117</b>			
	Apr-15	FD	<0.00319	<0.00130	<0.00380	<0.00260	<0.00400	<b>0.0758</b>	<0.00380	<0.00360	<0.00310	<0.00390	<0.00390	<b>0.0118</b>			
	Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<b>0.074</b>	<0.000381	<0.000361	<0.000306	<b>0.000524 J</b>	<0.00393	<b>0.0119</b>			
	Oct-15	FD	<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<b>0.0861</b>	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<b>0.0145</b>			
	Apr-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<b>0.142</b>	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<b>0.0161</b>			
Apr-16	FD	<0.000319	<0.000130	<0.00383	<0.00259	<0.00398	<b>0.147</b>	<0.00381	<0.00361	<0.00306	<0.00387	<0.00393	<b>0.0165</b>				
Oct-16		<0.00319	<0.00130	<0.00383	<0.00259	<0.00398	<b>0.0775</b>	<0.00381	<0.00361	<0.00306	<0.00387	&lt					

Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Chemicals

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				1,1,1-Tri-chloroethane	1,1,2,2-Tetra-chloroethane	1,1,2-Tri-chloroethane	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2,4-Trimethyl-benzene	1,2-Dibromo-ethane	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3,5-Trimethyl-benzene	2-Butanone	2-Phenyl-butane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				6.00E-02	1.00E-02	5.00E-03	2.50E-02	7.00E-03	1.50E-02	5.00E-05	5.00E-03	5.00E-03	1.20E-01	5.56E+00	---
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW	NMED TW	
Area	Well ID	Date	Dup												
TMD	MW-68	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00070	<0.00060	<0.0010		
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00360	<0.000360
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	MW-71	Oct-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00070	<0.00060	<0.0010		
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365
	MW-89	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00070	<0.00060	<0.0010		
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380 J	<0.000360 J	<0.000310	<0.000390	<0.00390 J	<0.000360
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393 J4	<0.000365
	NP-1	Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00050	<0.00070	<0.00060	<0.0010	
		Nov-14		<0.00032	<0.00013	<0.00038	<0.00026	<0.00040	<0.00037	<0.00038	<0.00036	<0.00031	<0.00039	<0.0039	
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	0.000581 J	<0.000310	<0.000390	<0.00390	<0.000360
		Oct-15		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	0.000443 J	<0.000306	<0.000387	<0.00393	<0.000365
		Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	0.000526 J	<0.000306	<0.000387	<0.00393 J4	<0.000365
		Oct-16		<0.000319	<0.000130 J4	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	0.000446 J	<0.000306	<0.000387	<0.00393 J3	<0.000365
	NP-2	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380 J	<0.000360 J	<0.000310	<0.000390	<0.00390 J	<0.000360
	UG-1	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
		Apr-14		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00070	<0.00060	<0.0010		
		Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360
Apr-16			<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
UG-2		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
UG-3R	Apr-13	FD	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
	Apr-14		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
	Apr-15		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00070	<0.00060	<0.0010			
	Apr-16		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360	
	UG-4	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	
UG-4	Apr-13		<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00070	<0.00060	<0.0010			
	Apr-14	FD	<0.00050	<0.00050	<0.00050	<0.00040	<0.00050	<0.00050	<0.00040	<0.00070	<0.00060	<0.0010			
	Apr-15		<0.000319	<0.000130	<0.000380	<0.000260	<0.000400	<0.000370	<0.000380	<0.000360	<0.000310	<0.000390	<0.00390	<0.000360	
	Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365	
	UG-4	Apr-16		<0.000319	<0.000130	<0.000383	<0.000259	<0.000398	<0.000373	<0.000381	<0.000361	<0.000306	<0.000387	<0.00393	<0.000365

Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds												
Analyte:				4-Methyl-2-Pentanone	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane	
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:				1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203	
CGWSL Source:				NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	
Area	Well ID	Date	Dup													
Cross-gradient	KWB-13	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050		
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	MW-17	Apr-14		<0.00214												
		NP-5	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
			Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
			RA-3156	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Nov-13				<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Apr-14			<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050		
	Apr-16			<0.00214	<0.0500	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	MW-136	Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
		Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
		MW-1R	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Apr-13		FD	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Apr-14			<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050			
Apr-15			<0.00214	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280		
Apr-16			<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
MW-2A	Apr-14			<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050		
	Nov-14			<0.0021	<0.01	<0.00033	<0.00038	<0.00087 J4	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	
	Apr-15			<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
	Oct-15			<0.00214	<0.0100	<0.000331	<0.000380	<0.000866 J	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Apr-16			<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	MW-3		Oct-16		<0.00214	<0.0100 J3	<0.000331	<0.000380	<0.000866 J4	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
			Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045 J4	<0.00032	<0.00028	
		Nov-14	FD	<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	
		Apr-15		<0.00210	<b>0.0120 J</b>	<b>0.000609 J</b>	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
		Apr-15	FD	<0.00210	<b>0.0191 J</b>	<b>0.000638 J</b>	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
Oct-15		FD	<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
Apr-16			<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
Apr-16		FD	<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
Oct-16			<0.00214	<0.0100 J3	<0.000331	<0.000380	<0.000866 J4	<b>0.000282 J</b>	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
Oct-16		FD	<0.00214	<0.0100 J3	<0.000331	<0.000380	<0.000866 J4	<b>0.000311 J</b>	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
MW-4A	Apr-14		<0.0010	<b>0.023</b>	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050			
	Nov-14		<0.0021	<0.01	<b>0.0013</b>	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045 J4	<0.00032	<0.00028		
	Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280		
	Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
	Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
	Oct-16		<0.00214	<0.0100 J3	<0.000331	<0.000380	<0.000866 J4	<b>0.000634 J</b>	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
	MW-4B	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
		Apr-15		<0.00210	<0.0100	<b>0.00183</b>	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
		Apr-14		<0.0010	<b>0.011</b>	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050		
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045 J4	<0.00032	<0.00028	
	MW-5A	Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866 J	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
Apr-16			<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
Oct-16			<0.00214	<0.0100 J3	<0.000331	<0.000380	<0.000866 J4	<b>0.00032 J</b>	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276		
MW-5B	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
	Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280		
	MW-5C	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
MW-6A		Mar-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
		Apr-14		<0.0010	<b>0.0068 J</b>	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050		
	Apr-15		<0.00210	<0.0100	<b>0.000715 J</b>	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	&lt				

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds												
Analyte:				4-Methyl-2-Pentane	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane	
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:				1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203	
CGWSL Source:				NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	
Area	Well ID	Date	Dup													
Evaporation Ponds	MW-18B	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
	MW-22A	Apr-14		<0.0010	0.019	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00060	<0.00050	
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087 J4	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	
		Nov-14	FD	<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320 J	<0.000280	
		Apr-15	FD	<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
		Oct-15	FD	<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
		Apr-16	FD	<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
		Oct-16		<0.00214	<0.0100 J4	<0.000331	<0.000380	<0.000866	0.000948 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
		Oct-16	FD	<0.00214	<0.0100 J4	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	MW-22B	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320 J	<0.000280	<0.000280
	MW-70	Apr-14		<0.0010	0.011	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00060	<0.00060	<0.00050
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087 J4	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866 J	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Oct-16		<0.00214	<0.0100 J3	<0.000331	<0.000380	<0.000866 J4	0.000292 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
	MW-72	Nov-13		<0.010	0.014	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00060	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
	MW-73	Oct-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	0.0092 J	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00060	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
	MW-74	Apr-14		<0.00214	0.020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00060	<0.00060	<0.00050
		Nov-14		<0.00214	0.011 J	<0.00033	<0.00038	<0.00087 J4	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	<0.00028
		Apr-15		<0.00214	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866 J	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Oct-16		<0.00214	0.0111 J4	<0.000331	<0.000380	<0.000866	0.000538 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
	MW-75	Nov-14		<0.0010	0.043	0.0011 J	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00060	<0.00060	<0.00050
		Nov-14		<0.0021	<0.05	<0.0016	<0.0019	<0.0043 J4	<0.0014	<0.0019	<0.0017	<0.0016	<0.0023	<0.0016	<0.0016	<0.0014
		Apr-15		<0.00210	<0.1	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280	<0.00280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Apr-16		<0.00214	<0.0100	0.00134	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Oct-16		<0.00214	0.0156 J4	<0.000331	<0.000380	<0.000866	0.00111	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
	MW-76	Apr-14		<0.0010	0.019	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00060	<0.00060	<0.00050
		Nov-14		<0.011	<0.05	0.0049 J	<0.0019	<0.0043 J4	<0.0014	<0.0019	<0.0017	<0.0016	<0.0023	<0.0016	<0.0016	<0.0014
		Apr-15		<0.00210	0.0203 J	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	0.000328 J	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Oct-16		<0.00214	0.0147 J4	0.00227	<0.000380	<0.000866	0.000396 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
	MW-77	Apr-14		<0.0010	0.041	0.0020 J	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00060	<0.00060	<0.00050
		Nov-14		<0.011	0.056 J	0.019	<0.0019	<0.0043 J4	<0.0014	<0.0019	<0.0017	<0.0016	<0.0023	<0.0016	<0.0016	<0.0014
		Apr-15		<0.00210	0.135	0.00962	<0.000380	<0.000870	0.00204	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	<0.000280
		Oct-15		<0.00214	0.0357 J	0.00156	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.000276
		Apr-16		<0.00214	0.0313 J	0.00287	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	<0.

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HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				4-Methyl-2-Pentanone	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203
CGWSL Source:				NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW
Area	Well ID	Date	Dup												
Evaporation Ponds	MW-120	Apr-14		<0.010	0.0067 J	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0010	<0.001	<0.0033	<0.0038	<0.0087 J4	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.0021	0.0158 J	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00210	<0.0100	<0.00331	<0.00380	<0.00866 J	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	0.0108 J	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-16		<0.00214	<0.0100 J3	<0.00331	<0.00380	<0.00866 J4	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
	MW-121	Apr-14		<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087 J4	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866 J	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	<0.0100 J3	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-16		<0.00214	<0.0100 J3	<0.00331	<0.00380	<0.00866 J4	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
	MW-122	Apr-14		<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.00210	0.0115 J	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866 J	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-16		<0.00214	<0.0100 J3	<0.00331	<0.00380	<0.00866 J4	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
	MW-124	Apr-14		<0.0010	<0.0010	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0021	<0.0021	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.00210	<0.00210	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00214	<0.00214	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-16		<0.00214	<0.0100 J3	<0.00331	<0.00380	<0.00866 J4	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
	OC-D-1R	Apr-14		<0.010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0010	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.0021	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00210	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-16		<0.00214	<0.0100 J4	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
	OC-D-2A	Apr-14		<0.010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320 J	<0.00280
		Oct-15		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866 J	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-16		<0.00214	<0.0100 J										

Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				4-Methyl-2-Pentanone	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203
CGWSL Source:				NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW
Area	Well ID	Date	Dup												
Field East of Refinery	KWB-10R	Nov-14		<0.054	<0.25 J3	5.10	<0.0095	<0.022	<0.0069	<0.0095	<0.0087	<0.0082	<0.011	<0.0081	<0.0069
		Apr-15		<0.0210	<0.1	5.65	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00214	<0.0100	6.77	<0.00380	<0.000866	<0.00275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.107	<0.500	5.26	<0.0190	<0.0433	0.0329 J	<0.0190	<0.0174	<0.0164	<0.0226	<0.0162	<0.0138
		Oct-16		<0.0428	<0.200	0.565	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552
	KWB-11A	Nov-14		<0.0021	<0.01	0.0078	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Nov-14	FD	<0.0021	<0.01	0.0072	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Apr-15		<0.00210	0.0176 J	0.0248	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	0.00571	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	0.00541	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	KWB-11B	Oct-16		<0.00214	<0.0100	0.00725	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	KWB-12A	Apr-16		<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Nov-14	FD	<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
	KWB-12B	Apr-15	FD	<0.00210	<0.0100	<0.000330	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276 J
		Apr-16		<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16	FD	<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	KWB-P4	Oct-16	FD	<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	0.000435 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Nov-14		<0.0010	<0.0020	0.0013 J	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.0021	<0.01	0.006	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
	MW-57	Apr-15		<0.00210	<0.0100	<0.000330	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	0.00123 J	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-15		<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	0.000681 J	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	<0.000331	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	MW-58	Nov-14		<0.054	<0.25	7.40	<0.0095	<0.022 J4	<0.0069	<0.0095	<0.0087	<0.0082	<0.011	<0.0081	<0.0069
		Apr-15		<0.0210	<0.1	6.03	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.214	<1	6.89	<0.0380	<0.0866	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276
		Apr-16		<0.0214	<0.100	4.12	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-16		<0.00214	<0.0100	5.92	<0.00380	<0.000866	0.000345 J V3	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	MW-111	Apr-14		<0.0010	0.054	0.110	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.0021	<0.01	0.180	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045 J4	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	0.0755	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	0.0243	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	0.0299	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	MW-112	Oct-16		<0.00214	<0.0100	0.0432	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Nov-14		<0.054	<0.25	8.50	<0.0095	<0.022 J4	<0.0069	<0.0095	<0.0087	<0.0082	<0.011	<0.0081	<0.0069
		Apr-14		<0.0010	<0.0020	2.30	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.0021	<0.01	1.50	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045 J4	<0.00032	<0.00028
		Nov-14	FD	<0.0021	<0.1	1.20	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
	MW-113	Apr-15		<0.00210	<0.0100	<0.000330	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Apr-15	FD	<0.00210	<0.0100	0.000402 J	<0.00380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	0.000477 J	<0.00380	<0.000866	<0.000275 J	<0.000379 J	<0.000348	<0.000327 J	<0.000453	<0.000324	<0.000276
		Oct-15	FD	<0.00214	<0.0100	0.000533 J	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16	FD	<0.00214	<0.0100	0.0148	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
MW-125	Oct-16		<0.00214	<0.0100	0.00660	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Oct-16	FD	<0.00214	<0.0100	0.00588	<0.00380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	&	



## Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:			Volatile Organic Compounds												
Analyte:			4-Methyl-2-Pentanone	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane	
Units:			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:			1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203	
CGWSL Source:			NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	
Area	Well ID	Date	Dup												
Field East of Refinery	MW-130	Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	
		Nov-14		<0.0021	<0.01 J3	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	MW-131	Apr-14		<0.0010	0.016	3.10	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00028
		Nov-14		<0.0021	<0.1 J3	1.80	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.00210	<0.0100	1.91	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	2.19	<0.000380	<0.000866	<0.0138	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	2.42	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.0107	<0.0500	1.58	<0.00190	<0.00433	<0.00138	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138
	MW-133	Nov-14		<0.21	<1	0.620	<0.038	<0.087	<0.028	<0.038	<0.035	<0.033	<0.045	<0.032	<0.028
		Apr-15		<0.21	<1	0.788	<0.0380	<0.0870	<0.0280	<0.0380	<0.0350	<0.0330	<0.0450	<0.0320	<0.0280
	MW-134	Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00028
		Nov-14		<0.0021	<0.01 J3	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Apr-15	FD	<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-15	FD	<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	0.000390 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16	FD	<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	MW-135	Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00028
		Nov-14		<0.0021	<0.01 J3	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	0.000328 J
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	RA-4196	Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		RA-4798	Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
	RA-4798	Apr-14	FD	<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00028
		Nov-14		<0.0021	<0.01 J3	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	RW-12R	Apr-16		<0.0107	<0.0500	0.424	<0.00190	<0.00433	0.00186 J	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138
	RW-13R	Apr-16		<0.00214	<0.0100	0.878	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	RW-18	Apr-13		<0.00214	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00214	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00028
		Apr-15		<0.00214	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	0.000636 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	RW-20	Apr-15		<0.0210	<0.1	1.87	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
	RW-22	Apr-15		<0.0210	<0.1	4.07	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
	MW-23	Apr-14		<0.020	<0.040	11.0	<0.012	<0.010	<0.018	<0.012	<0.0080	<0.010	<0.012	<0.010	<0.010
		Nov-14		<0.11	<0.5	15.0	<0.019	<0.043	<0.014	<0.019	<0.017	<0.016	<0.023	<0.016	<0.014
		Apr-15		<0.0540	<0.25	11.6	<0.00950	<0.0220	0.0664	<0.00950	<0.00870	<0.00820 J	<0.0110	<0.00810	<0.00690
		Oct-15		<0.00214	0.06	20.3	<0.000380	<0.000866	0.000766 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.0107	<0.0500	15.5	<0.00190	<0.00433	0.00185 J	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138
		Oct-16		<0.0535	<0.250 J3	12.2	<0.00950	<0.0216	<0.00688	<0.00948	<0.00870	<0.00818	<0.0113	<0.00810	<0.00690
	MW-29	Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00028
Nov-14			<0.0021	<0.01	<0.00033	<0.00038	<0.00087 J3	0.00030 J	<0.00038	<0.00035	<0.00033	<			

Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				4-Methyl-2-Pentanone	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203
CGWSL Source:				NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW
Area	Well ID	Date	Dup												
North Refinery	MW-61	Apr-14		<0.0050	<0.010	1.60	<0.0030	<0.0025	<0.0045	<0.0030	<0.0020	<0.0025	<0.0025	0.059	<0.0025
		Nov-14		<0.11	<0.5	1.30	<0.019	<0.043	<0.014	<0.019	<0.017	<0.016	<0.023	<0.016	<0.014
		Apr-15		<0.0210	0.254 J	1.74 J	<0.00380	<0.00870	0.0258	<0.00380	<0.00350	<0.00330 J	<0.00450	<0.00320	<0.00280
		Oct-15		<0.0214	<0.1	0.681	<0.00380	<0.00866	0.00867 J	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.0107	<0.0500	0.493	<0.00190	<0.00433	0.00218 J	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138
		Oct-16		<0.0535	<0.250	0.501	<0.00950	<0.0216	<0.00688	<0.00948	<0.00870	<0.00818	<0.0113	<0.00810	<0.00690
	MW-62	Apr-14		<0.0010	<0.0020	1.00	<0.00060	<0.00050	0.0026 J	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00050
		Nov-14		<0.11	<0.5	17.0	<0.019	<0.043	<0.014	<0.019	<0.017	<0.016	<0.023 J4	<0.016	<0.014
		Apr-15		<0.0210	0.106 J	12.8	<0.00380	<0.00870	0.0336	<0.00380	<0.00350	<0.00330 J	<0.00450	<0.00320	<0.00280
		Oct-15		<0.0428	<0.2	1.50	<0.00760	<0.0173	0.0161 J	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552
		Apr-16		<0.0535	<0.250	1.12	<0.00950	<0.0117	0.00903 J	<0.00948	<0.00870	<0.00818	<0.0113	<0.00810	<0.00690
		Oct-16		<0.214 J6	<1.00 J6	3.28 J6	<0.0380 J6	<0.0866	<0.0275 J6	<0.0379 J6	<0.0348 J6	<0.0327 J6	<0.0453	<0.0324 J6	<0.0276 J6
	MW-67	Nov-14		<0.010	<0.05 J4	0.140	<0.0019	<0.0043	0.0024 J	<0.0019	<0.0017	<0.0016	<0.0023	<0.0016	<0.0014
		Apr-15		<0.011	<0.0100	0.143	<0.000380	<0.000870	0.00159	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.0021	<0.2	0.172	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552
		Apr-16		<0.0428	<0.100	0.223	<0.00380	<0.00866	0.00300 J	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-16		<0.0214	<0.100 J3	0.214	<0.00380	<0.00866	0.00328 J	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-14		<0.0010	<0.0020	0.0035 J	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00050
	MW-90	Nov-14		<0.0021	<0.01	0.015	<0.00038	<0.00087	0.00037 J	<0.00038	<0.00035	<0.00033	<0.00045 J4	<0.00032	<0.00028
		Apr-15		<0.0021	<0.0100	0.0125	<0.000380	<0.000870	0.00171	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276 J
		Apr-16		<0.00214	<0.0100	0.00662	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100 J3	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-14		<0.0050	0.027 J	2.20	<0.0030	<0.0025	0.0079 J	<0.0030	<0.0025	<0.0025	<0.0030	<0.0025	<0.0025
	MW-91	Nov-14		<0.54	<2.5	2.50	<0.095	<0.22	<0.069	<0.095	<0.087	<0.082	<0.11	<0.081	<0.069
		Apr-15		<0.0021	<0.1	2.91	<0.00380	<0.00870	0.0151	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.0535	<0.25	3.47	<0.00950	<0.0216	0.00849 J	<0.00948	<0.00870	<0.00818	<0.0113	<0.00810	<0.00690
		Apr-16		<0.107	<0.500	3.85	<0.0190	<0.0433	<0.0138	<0.0190	<0.0174	<0.0164	<0.0226	<0.0162	<0.0138
		Oct-16		<0.535	<2.50 J3	3.15	<0.0950	<0.216	<0.0688	<0.0948	<0.0870	<0.0818	<0.113	<0.0810	<0.0690
		Apr-16		<0.00214	<0.0100	2.87	<0.000380	<0.000866	0.000589 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	MW-92	Oct-16		<0.0428	<0.200 J3	2.05	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552
		Apr-14		<0.0050	<0.010	1.80	<0.0030	<0.0025	0.0059 J	<0.0030	<0.0025	<0.0025	<0.0030	<0.0025	<0.0025
		Nov-14		<0.11	<0.5	1.30	<0.019	<0.043	0.014 J	<0.019	<0.017	<0.016	<0.023 J4	<0.016	<0.014
		Apr-15		<0.0210	<0.1	0.734 J	<0.00380	<0.00870	0.0188	<0.00380	<0.00350	<0.00330 J	<0.00450	<0.00320	<0.00280
		Oct-15		<0.0214	<0.1	1.21	<0.00380	<0.00866	0.00341 J	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.0107	<0.0500	0.258	<0.00190	<0.00433	0.00216 J	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138
	MW-94	Oct-16		<0.0214	<0.100 J3	0.567	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Nov-14		<0.043	<0.2 J4	0.370	<0.0076	<0.017	0.02	<0.0076	<0.0070	<0.0065	<0.0091	<0.0065	<0.0055
		Oct-15		<0.0214	<0.1	0.339	<0.00380	<0.00866	0.00445 J	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.107	<0.500	0.417	<0.0190	<0.0433	0.0155 J	<0.0190	<0.0174	<0.0164	<0.0226	<0.0162	<0.0138
		Oct-16		<0.0107	<0.0500 J3	0.297	<0.00190	<0.00433	0.00479 J	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138
		MW-95	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Apr-14			<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050	<0.00050
	Apr-15			<0.0021	<0.0100	0.00148	<0.000380	<0.000870	0.00181	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
	Apr-16			<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	0.000427 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	Apr-14			<0.025	<0.050	0.056 J	<0.015	<0.012	<0.022	<0.015	<0.010	<0.012	<0.015	<0.015	<0.012
	Nov-14			<0.054	<0.25	<0.0083	<0.0095	<0.022 J3	<0.0069	<0.0095	<0.0087	<0.0082	<0.011	<0.0081	<0.0069
	MW-96	Apr-15		<0.0021	<0.0100	0.00288	<0.000380	<0.000870	0.00168	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<1.07	<5.0	<0.166	<0.19	<0.433	<0.138	<0.19	<0.174	<0.164	<0.226	<0.162	<0.138
		Apr-16		<0.0428	<0.200	<0.000331	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552
		Oct-16		<0.107	<0.500 J3	<0.0166	<0.0190	<0.0433	<0.0138	<0.0190	<0.0174	<0.0164	<0.0226	<0.0162	<0.0138
		Apr-14		<0.010	0.038 J	5.80	<0.0060	<0.0050	0.016 J	<0.0060	<0.0040	<0.0050	<0.0060	<0.0050	<0.0050
		Nov-14		<0.010	0.059 J	6.10	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0060	<0.0050	<0.0050
	MW-98	Apr-15		<0.0540	<0.25	4.17	<0.00950	<0.0220	0.102	<0.00950	<0.00870	<0.00820 J	<0.0110	<0.00810	<0.00690
		Oct-15		<0.0535	<0.25	4.79	<0.00950	<0.0216	0.0344	<0.00948	<0.00870	<0.00818	<0.0113	<0.00810	<0.00690
		Apr-16		<0.214	<1.00	4.07	<0.0380	<0.0866	0.0306 J	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276
		Oct-16		<0.214	<1.00 J3	3.59	<0.0380	<0.0866	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276
		Oct-15		<0.214	<1.0	9.44	<0.0380	<0.0866	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276
		Apr-16		<0.535	<2.50	9.65	<0.0950	<0.216	0.0722 J	<0.0948	<0.0870	<0.0818	<0.113	<0.0810	<0.0690
	MW-138	Oct-16		<0.535	<2.50 J3	10.5	<0.0950	<0.216	<0.0688	<0.0948	<0.0870	<0.0818	<0.113	<0.0810	<0.0690
		Oct-15		<0.0428	<0.2	1.54	<0.00760	<0.0173	<0.00550	<					

Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				4-Methyl-2-Pentanone	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203
CGWSL Source:				NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW
Area	Well ID	Date	Dup												
North RO Reject Field	MW-119	Apr-14		<0.0010	<0.0020 B	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Apr-14	FD	<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045 J4	<0.0032	<0.0028
		Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
	MW-18	Oct-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Oct-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<b>0.0045 J</b>	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<b>0.000695 J</b>	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		MW-45	Apr-14		<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060
	Nov-14			<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
	Apr-15			<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
	Oct-15			<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
	Apr-16			<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
Oct-16			<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
MW-53	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0060	<0.0050	
	Apr-14		<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050	
	Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280	
	Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
	MW-54A	Apr-14		<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
Apr-15			<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280	
Oct-15			<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
Apr-16			<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
Oct-16			<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
MW-54B	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0060	<0.0050	
	Apr-15		<0.00210	<b>0.0128 J</b>	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280	
	MW-55	Apr-14		<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Apr-14	FD	<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
Oct-15			<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
Apr-16			<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
MW-56	Oct-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
	Apr-14		<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<0.0060	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050	
	Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028	
	Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280	
	Oct-15		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
	Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
MW-108	Oct-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
	Apr-14		<b>0.0012 J</b>	<b>0.0079 J</b>	<b>0.390</b>	<0.0060	<0.0050	<b>0.0020 J</b>	<b>0.009</b>	<0.0040	<0.0050	<0.0050	<b>0.0037 J</b>	<0.0050	
	Nov-14		<0.011	<0.05	<b>0.410</b>	<0.0019	<0.0043	<b>0.014</b>	<0.0019	<0.0017	<0.0016	<0.0023	<0.0016	<0.0014	
	Apr-15		<0.0210	<0.1	<b>0.423</b>	<0.00380	<b>0.00870</b>	<b>0.0317</b>	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280	
	Oct-15		<0.0214	<0.1	<b>0.394</b>	<0.00380	<b>0.00866</b>	<b>0.00291 J</b>	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
	Apr-16		<0.107	<0.500	<b>0.504</b>	<0.0190	<b>0.0433</b>	<0.0138	<b>0.0190</b>	<0.0174	<0.0164	<0.0226	<0.0162	<0.0138	
NCL	NCL-31	Oct-16		<0.0535	<0.250	<b>0.362</b>	<0.00950	<b>0.0216</b>	<b>0.0137 J</b>	<b>0.00948</b>	<0.00870	<0.00818	<0.0113	<0.00810	<0.00690
		Apr-14		<0.0010	<0.0020	<0.0060	<0.0060	<0.0050	<0.0090	<b>0.0094</b>	<0.0040	<0.0050	<0.0050	<0.0060	<0.0050
		Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
	NCL-32	Oct-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Nov-14		<0.0021	<0.01	<0.0033	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.00210	<0.0100	<0.00330	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Oct-15		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
		Apr-16		<0.00214	<0.0100	<0.00331	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				4-Methyl-2-Pentanone	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203
CGWSL Source:				NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW
Area	Well ID	Date	Dup												
South Refinery	KWB-6	Nov-14		<0.021	<0.1	5.1	<0.0038	<0.0087 J4	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.0540	<0.25	15.9	<0.00950	<0.0220	<0.00690	<0.00950	<0.00870	<0.00820	<0.0110	<0.00810	<0.00690
		Oct-15		<1.07	<5	8.61	<0.19	<0.433	<0.138	<0.19	<0.174	<0.164	<0.226	<0.162	<0.138
		Apr-16		<0.0107	<0.0500	12.4	<0.00190	<0.00433	0.00197 J	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138
	MW-28	Oct-16		<0.0428	<0.200	3.41	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552
		Apr-14		<0.0010	<0.0020 B	0.810	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.054	0.56 J	3.30	<0.0095	<0.022	<0.0069	<0.0095	<0.0087	<0.0082	<0.011	<0.0081	<0.0069
		Apr-15		<0.21	<1	3.02	<0.0380	<0.0870	0.0471 J	<0.0380	<0.0350	<0.0330	<0.0450	<0.0320	<0.0280
	MW-48	Oct-15		<0.214	<1	3.05	<0.0380	<0.0866	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276
		Apr-16		<0.0214	<0.100	1.37	<0.00380	<0.00866	0.00301 J	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276
Oct-16			<0.107	<0.500	2.55	<0.0190	<0.0433	0.0152 J	<0.0190	<0.0174	<0.0164	<0.0226	<0.0162	<0.0138	
MW-50		Nov-14		<0.054	<0.25 J3	0.140	<0.0095	<0.022	<0.0069	<0.0095	<0.0087	<0.0082	<0.011	<0.0081	<0.0069
	Apr-15		<0.0210	<0.1	0.890	<0.00380	<0.00870	0.00704 J	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280	
	Oct-15		<0.107	<0.0500	0.204 J	<0.00190	<0.00433	<0.00138	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138	
	Apr-16		<0.0428	<0.200	7.17	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552	
MW-52	Oct-16		<0.0107	<0.0500	5.12	<0.00190	<0.00433	<0.00138	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138	
	Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050	
	Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087	0.00031 J	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	
	Apr-15		<0.0021	<0.0100	<0.000330	<0.000380	<0.000870	0.000881 J	0.000553 J	<0.000379 J	<0.000348 J	<0.000327 J	<0.000453	<0.000324 J	<0.000276
MW-52	Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Oct-16		<0.00214	<0.0100 J3	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	MW-52	Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
Nov-14			<0.0021	<0.01	<0.00033	<0.00038	<0.00087	0.00031 J	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	
Apr-15			<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
MW-52	Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866 J	<0.000275 J	<0.000379 J	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276 J	
	Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	MW-64	Apr-16		<0.107	<0.500	25.3	<0.0190	<0.0433	<0.0138	<0.0190	<0.0174	<0.0164	<0.0226	<0.0162	<0.0138
Oct-16			<0.214	<1.00	30.9	<0.0380	<0.0866	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276	
MW-65		Nov-14		<0.11	<0.5 J3	8.90	<0.019	<0.043	<0.014	<0.019	<0.017	<0.016	<0.023	<0.016	<0.014
		Apr-15		<0.0021	<0.1	9.99	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
MW-66	Apr-16		<0.0214	<0.100	9.73	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
	Oct-16		<0.0428	<0.200	8.04	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552	
	MW-66	Apr-14		0.0031 J	<0.0020 B	0.890	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.021	<0.1	6.50	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045 J4	<0.0032	<0.0028
Apr-15			<0.11	<0.5	3.16	<0.0190	<0.0430	<0.0140	<0.0190	<0.0170	<0.0160	<0.0230	<0.0160 J	<0.0140	
Oct-15			<0.00214	<0.0100	4.1 J	<0.000380	<0.000866	0.000371 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
MW-66	Apr-16		<0.0214	<0.100	3.09	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
	Oct-16		<0.00214	<0.0100	3.80	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	MW-99	Nov-14		<0.021	<0.1 J3	2.60	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028
		Apr-15		<0.0540	<0.25	9.73	<0.00950	<0.0220	0.00720 J	<0.00950	<0.00870	<0.00820	<0.0110	<0.00810 J	<0.00690
Oct-15			<0.0535	<0.25	7.28	<0.00950	<0.0216	<0.00688	<0.00948	<0.00870	<0.00818	<0.0113	<0.00810	<0.00690	
Apr-16			<0.0214	<0.100	5.59	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
MW-101	Oct-16		<0.0428	<0.200	5.08	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.00648	<0.00552	
	Apr-14		<0.0010	<0.0020 B	1.10	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050	
	Nov-14		<0.021	<0.1	0.220	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045 J4	<0.0032	<0.0028	
	Apr-15		<0.0110	<0.0500	0.0187	<0.00190	<0.00430	<0.00140	<0.00190	<0.00170	<0.00160 J	<0.00230	<0.00160	<0.00140	
MW-102	Apr-16		<0.0107	<0.0500	<0.00166	<0.00190	<0.00433	<0.00138	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138	
	Oct-16		<0.00214	<0.0100	0.0664 J6	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Nov-14		<0.11	<0.5 J3	11.0	<0.019	<0.043	<0.014	<0.019	<0.017	<0.016	<0.023	<0.016	<0.014	
	Apr-15		<0.0210	<0.1	9.83	<0.00380	<0.00870	0.00959 J	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280	
MW-102	Oct-15		<0.214	<1.00	12.3	<0.0380	<0.0866	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276	
	Apr-16		<0.214	<1.00	10.8	<0.0380	<0.0866	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276	
	Oct-16		<0.214	<1.00	13.2	<0.0380	<0.0866	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453	<0.0324	<0.0276	
	MW-103	Apr-13		<0.010	<0.010	0.580	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Apr-14			<0.0010	<0.0020	0.760	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050	
Apr-15			<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	0.000597 J	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
Apr-16			<0.0107	<0.0500	1.35										

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				4-Methyl-2-Pentane	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203
CGWSL Source:				NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW
Area	Well ID	Date	Dup												
South Refinery	RA-313	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	0.000366 J	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-15		<0.00210	0.0289 J	0.0167	<0.000380	<0.000870	0.000854 J	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320 J	<0.000280
		Apr-16		<0.00214	<0.0100	0.0140	<0.000380	<0.000866	0.000466 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	RW-4R	Apr-16		<0.00214	<0.0100	2.92	<0.00380	<0.00870	<0.00280	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Apr-15		<0.0021	<0.1	3.48	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.0648	<0.00552
		Apr-16		<0.0428	<0.200	0.636	<0.00380	<0.00870	0.00771 J	<0.00380	<0.00350	<0.00330	<0.00450	<0.00320	<0.00280
		Apr-15		<0.0021	<0.1										
South RO Reject Field	MW-114	Apr-16		<0.00214	<0.0100	0.218	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045 J4	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
		Oct-15		<0.00214	<0.0100 J	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
	MW-115	Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045 J4	<0.00032	<0.00028
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
TEL	MW-49	Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-14		<0.0010	<0.0020 B	0.220	<0.00060	<0.00050	0.0022 J	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.0043	<0.02	0.170	<0.00076	<0.0017	0.0035	<0.00076	<0.00070	<0.00065	<0.00091	<0.00065	<0.00055
		Apr-15		<0.00210	<0.0100	0.077	<0.000380	<0.000870	0.00106 J	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280
	TEL-1	Oct-15		<0.00214	<0.0100	0.179	<0.000380	<0.000866	<0.000275 B	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276
		Apr-16		<0.0428	<0.200	0.196	<0.00760	<0.0173	<0.00550	<0.00758	<0.00696	<0.00654	<0.00906	<0.0648	<0.00552
		Oct-16		<0.214	<1.00 J3	0.241	<0.0380	<0.0866 J3	<0.0275	<0.0379	<0.0348	<0.0327	<0.0453 J3	<0.0324	0.113 JB
		Apr-14		<0.0010	<0.0020 B	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
Apr-14		FD	<0.0010	<0.0020 B	<0.00060	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050	
Nov-14			<0.0021	<0.01	<0.00033	<0.00038	<0.00087	0.0019	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	
TEL-2	Apr-15		<0.00210	0.0104 J	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000330	<0.000450	<0.000320	<0.000280	
	Oct-15		<0.00214	<0.0100	0.000378 J	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Oct-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	0.00046 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Apr-14		<0.0010	0.0071 J	1.20	<0.00060	<0.00050	0.0039 J	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050	
	Nov-14		<0.0021	<0.1	0.87	<0.0038	<0.0087	<0.0028	<0.0038	<0.0035	<0.0033	<0.0045	<0.0032	<0.0028	
	Apr-15		<0.0430	<0.2	0.905	<0.00760	<0.0170	0.00723 J	<0.00760	<0.00700	<0.00650	<0.00910	<0.00650	<0.00550	
	Oct-15		<0.0107	<0.0500	0.535	<0.00190	<0.00433	0.00194 J	<0.00190	<0.00174	<0.00164	<0.00226	<0.00162	<0.00138	
	Apr-16		<0.00214	<0.0100	0.709	<0.000380	<0.000866	0.00124	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Oct-16		<0.0214	<0.100	0.962	<0.00380	<0.00866	0.00325 J	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
TEL-3	Apr-14		<0.0010	<0.0020 B	0.0092	<0.00060	<0.00050	<0.00090	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050	
	Nov-14		<0.0021	<0.01	0.023	<0.00038	<0.00087	0.0047	<0.00038	<0.00035	<0.00033	<0.00045	<0.00032	<0.00028	
	Apr-15		<0.00210	<0.1	0.0206	<0.00380	<0.00870	0.00471 J	<0.00380	<0.00350	<0.00330	<0.000450	<0.000320	<0.000280	
	Oct-15		<0.00214	<0.0100	0.0385	<0.000380	<0.000866	0.00367	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	Apr-16		<0.0535	<0.250	0.317	<0.00950	<0.0117	<0.00688	<0.00948	<0.00870	<0.00818	<0.0113	<0.00810	<0.00690	
	Oct-16		<0.00214	0.0156 J	0.0123	<0.000380	<0.000866	0.000488 J	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
	TEL-4	Apr-14		<0.0010	<0.0020 B	0.370	<0.00060	<0.00050	0.0030 J	<0.00060	<0.00040	<0.00050	<0.00050	<0.00060	<0.00050
		Nov-14		<0.043	<0.2	1.20	<0.0076	<0.017	0.042	<0.0076	<0.0070	<0.0065	<0.0091	<0.0065	<0.0055
		Nov-14	FD	<0.043	<0.2	1.20	<0.0076	<0.017	0.038	<0.0076	<0.0070	<0.0065	<0.0091	<0.0065	<0.0055
		Apr-15		<0.00210	0.243 J	0.171	<0.00380	<0.00870	0.00333 J	<0.00380	<0.00350	<0.00330	<0.000450	<0.000320	<0.000280
Oct-15			<0.00210	0.216 J	0.155	<0.00380	<0.00870	0.00471 J	<0.00380	<0.00350	<0.00330	<0.000450	<0.000320	<0.000280	
Oct-15			<0.00214	<0.0100	0.637	<0.000380	<0.000866	<0.000275 B	<0.000379	<0.000348	<0.000327	<0.000453	<0.000324	<0.000276	
Oct-15		FD	<0.0214	<0.1	0.657	<0.00380	<0.00866	0.00858 J	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
Apr-16			<0.0214	<0.100	0.530	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
Apr-16		FD	<0.0214	<0.100	0.557	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.00327	<0.00453	<0.00324	<0.00276	
Oct-16			<0.0214	<0.100	0.514	<0.00380	<0.00866	<0.00275	<0.00379	<0.00348	<0.003				

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds											
Analyte:		4-Methyl-2-Pentanone	Acetone	Benzene	Bromo-dichloro-methane	Bromo-methane	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloro-dibromo-methane	Chloro-ethane	Chloroform	Chloro-methane
Units:		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:		1.24E+00	14.1	0.005	8.00E-02	7.54E-03	8.10E-01	0.005	1.00E-01	8.00E-02	2.09E+01	0.080	0.0203
CGWSL Source:		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW
Area	Well ID	Date	Dup										
TMD	MW-68	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000380	<0.000350	<0.000450	<0.000320	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453
	MW-71	Oct-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000380	<0.000350	<0.000450	<0.000320	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453
	MW-89	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000380	<0.000350	<0.000450	<0.000320	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453
	NP-1	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000380	<0.000350	<0.000450	<0.000320	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453
		Oct-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Nov-14		<0.0021	<0.01	<0.00033	<0.00038	<0.00087	<0.00028	<0.00038	<0.00035	<0.00033	<0.00045
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000450	<0.000320
		Oct-15		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453
Upgradient	NP-2	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000380	<0.000350	<0.000450	<0.000320	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453
	NP-6	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000380	<0.000350	<0.000450	<0.000320	<0.000280
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453
	UG-1	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-15		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000450	<0.000320
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453
		Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14	FD	<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-15		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-16		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000450	<0.000320
	UG-3R	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-15	FD	<0.0010	<0.0020	<0.00060	<0.00060	<0.00090	<0.00060	<0.00040	<0.00050	<0.00060	<0.00050
		Apr-16		<0.00210	<0.0100	<0.000330	<0.000380	<0.000870	<0.000280	<0.000380	<0.000350	<0.000450	<0.000320
	UG-4	Apr-13		<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-16		<0.00214	<0.0100	<0.000331	<0.000380	<0.000866	<0.000275	<0.000379	<0.000348	<0.000327	<0.000453

Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds												
Analyte:				cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene	
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:				0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---	
CGWSL Source:				USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQCC TW	---	---	WQCC TW	WQCC HH	---	---	
Area	Well ID	Date	Dup													
Crossgradient	KWB-13	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050	
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	0.00254	<0.00380	<0.000370	0.00317 J	<0.000360	0.000373 J	
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349	
	MW-17	Apr-14														
		NP-5	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
			Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
			RA-3156	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050
	MW-136	Nov-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050	
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349	
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349	
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349	
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349	
		MW-1R	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
			Apr-13	FD	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
			Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
			Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
MW-2A	Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050		
	Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038 J5	<0.00037	<0.0010	<0.00036	<0.00035		
	Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350		
	Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	MW-3	Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349	
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050	
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	0.00034 J	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035	
		Nov-14	FD	<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	0.00046 J	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035	
Apr-15			<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350		
Apr-15		FD	<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350		
MW-4A	Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.00247	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	Oct-15	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.00199	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	Apr-16	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.00327	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	Oct-16	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.00305	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349		
	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050		
	Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	0.0026	<0.00072	<0.0038	0.00044 J	<0.0010	<0.00036	<0.00035		
	Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	0.00159	0.00227	<0.00380	0.000461 J	<0.00100	<0.000360	<0.000350		
	Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.00613	0.00237	<0.00382	0.000641 J	<0.00100	<0.000361	0.000436 J		
MW-4B	Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.00698	0.00166	<0.00382	0.000605 J	<0.00100	<0.000361	0.000357 J		
	Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.0069	0.00278	<0.00382	0.000516 J	<0.00100	<0.000361	0.000434 J		
	MW-5A	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	0.000462 J	0.000845 J	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350	
Nov-14			<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	0.0032 J	<0.00070	<0.0010	<0.00050		
Apr-15			<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	0.00081 J	<0.0010	<0.000360	<0.000350		
MW-5B	Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	0.00174	<0.00100	<0.000361	<0.000349		
	Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	0.00212	<0.00100	<0.000361	<0.000349		
	Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	0.00130	<0.00100	<0.000361	<0.000349		
	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050		
	Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	0.00148	<0.00100	<0.000360	<0.000350		
	MW-5C	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	
MW-6A	Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	0.000507 J	<0.00100	<0.000360	<0.000350		
	MW-6B	Mar-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050	
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	0.000440 J	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350	
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.00116	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349	
	MW-7A	Mar-13		<0.0050	<0.0050	<0.0050	<0.01									

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Appendix B, Table B.4 - VOCs Groundwater Analytical Results



2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---
CGWSL Source:				USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQCC TW	---	---	WQCC TW	WQCC HH	---	---
Area	Well ID	Date	Dup												
Evaporation Ponds	MW-120	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	0.0026 J	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
	MW-121	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
	MW-122	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
	MW-123	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	0.014 J	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	0.0017	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	0.00124	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	0.00126	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	0.00143	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	0.00163	<0.00100	<0.000361	<0.000349
	MW-124	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
	OCD-1R	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
	OCD-2A	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000										

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---
CGWSL Source:				USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQCC TW	---	---	WQCC TW	WQCC HH	---	---
Area	Well ID	Date	Dup												
Field East of Refinery	KWB-10R	Nov-14		<0.0065	<0.01	0.013 J	<0.025	0.400	0.04	0.9	<0.096	5.20	0.190	0.011 J	0.062
		Apr-15		<0.00260	<0.00420	0.00673 J	<0.0100	0.528	0.0484	1.04	<0.0380	3.87	0.138	0.0113	0.069
		Oct-15		<0.00260	<0.00418	0.00543	<0.00100	0.523	0.0478	0.828	<0.00382	4.66	0.186	0.01	0.0699
		Apr-16		<0.0130	<0.0209	<0.0175	<0.0500	0.437	0.0442 J	0.645	<0.191	3.71	0.150 J	<0.0180	0.0616
		Oct-16		<0.00520	<0.00836	<0.00700	<0.0200	0.513	0.04	0.664	<0.0764	3.62	0.133	0.0099 J	0.0607
	KWB-11A	Nov-14		<0.00026	<0.00042	0.00062 J	<0.0010	<0.00038	0.0029	0.0017 J	<0.0038	0.0012	0.015	0.00094 J	<0.00035
		Nov-14	FD	<0.00026	<0.00042	0.00056 J	<0.0010	<0.00038	0.0024	0.0015 J	<0.0038	0.0015	0.019	0.00092 J	<0.00035
		Apr-15		<0.000260	<0.000420	0.000951 J	0.00102 J	<0.000380	<0.000330	0.00188	<0.00380	0.00648	0.0233	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	0.000552 J	<0.00100	<0.000384	0.00301	0.0013	<0.00382	0.00434	0.0165	0.00126	<0.000349
		Apr-16		<0.000260	<0.000418	0.000374 J	<0.00100	<0.000384	0.000412 J	<0.000719	<0.00382	0.00477	0.0134	0.00134	<0.000349
	KWB-11B	Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.00244	0.0011	<0.00382	0.00416	0.00936 J4	0.000858 J	<0.000349
		Apr-14		<0.00060	<0.00060	0.0065	<0.0010	0.020	0.031	0.0043 J	<0.0010	<0.00060	0.011	0.017	0.046
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	0.00106 J	<0.000380	<0.000330	<0.000720	<0.00380	0.00121	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
	KWB-12A	Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	0.00153 J4	<0.000361	<0.000349
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Nov-14	FD	<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15	FD	<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
	KWB-12B	Apr-15	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
	KWB-P4	Oct-16	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.000337 J	<0.000719	<0.00382	<0.000367	0.0139	<0.000361	0.000638 J
		Apr-13		<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Nov-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	0.0010 J	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
	MW-57	Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	0.000667 J	<0.000330	0.00141	<0.00380	<0.000370	0.00156 J	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100 J4	<0.000361	<0.000349
		Nov-14		<0.0065	<0.01	<0.0088	<0.025	2.40	0.066	1.6	<0.096	<0.092	0.48	<0.090	0.100
	MW-58	Apr-15		<0.00260	<0.00420	0.00770 J	<0.0100	1.98	0.0732	2.08	<0.0380	0.0187	0.318	0.00921 J	0.112
		Oct-15		<0.0260	<0.0418	<0.0350	<0.1	2.00	0.0720 J	2.12	<0.382	<0.0367	0.354 J	<0.0361	0.125
		Apr-16		<0.00260	<0.00418	0.00813 J	<0.0100	1.11	0.0594	0.830	<0.0382	0.200	0.257	0.00944 J	0.105
		Oct-16		<0.00260	<0.000418	0.00572	<0.00100	1.10	0.053	0.873	<0.00382	0.0468	0.0867	0.00517	0.093
		Nov-14		<0.00060	<0.00060	<0.00050	<0.0010	0.0085	0.0013 J	0.0046 J	<0.0010	2.00	0.0016 J	<0.0010	0.00082 J
	MW-111	Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	0.026	0.0024	0.022	<0.0038	1.6 E	0.0064 J4	<0.00036	0.0022
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	0.00824	0.000607 J	0.00723	<0.00380	<0.000370	0.00294 J	<0.000360	0.000827 J
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	0.00615	0.000862 J	0.00113	<0.00382	1.32	0.00645	<0.000361	0.000839 J
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	0.00122	0.000887 J	<0.000719	<0.00382	1.54	<0.00100	<0.000361	0.000690 J
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	0.00226	0.00062 J	0.00177 J	<0.00382	1.29	0.00103 J	<0.000361	0.000601 J
	MW-112	Nov-14		<0.0065	<0.01	<0.0088	<0.025	0.9070	0.057	1.4	<0.096	1.00	0.200	<0.090	0.100
		Apr-14		<0.00060	<0.00060	0.0015 J	<0.0010	0.400	0.013	0.82	<0.0010	0.01	<0.00070	<0.0010	0.011
		Nov-14		<0.00026	<0.00042	0.00094 J	<0.0010	0.007	0.0097	0.086	<0.0038	0.02	<0.048 J4	0.00081 J	0.0033
		Nov-14	FD	<0.0026	<0.0042	<0.0035	<0.01	0.0079 J	0.0097 J	0.085	<0.038	0.019	0.032 J	<0.0036	<0.0035
		Apr-15		<0.000260	<0.000420	<0.000350	0.00114 J	<0.000380	<0.000330	<0.000720	<0.00380	0.0178	<0.00100	<0.000360	<0.000350
	MW-113	Apr-15	FD	<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	0.0158	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	0.0158	<0.00100	<0.000361	<0.000349
		Oct-15	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	0.000723 J	<0.00382	0.0176	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	0.00354	<0.000326	0.00518	<0.00382	0.0143	<0.00100	<0.000361	<0.000349
		Apr-16	FD	<0.000260	<0.000418	<0.000350	<0.00100	0.00364	<0.000326	0.00531	<0.00382	0.0143	<0.00100	<0.000361	<0.000349
	MW-125	Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	0.0199	0.0014	0.0143	<0.00382	0.0137	0.00208 J4	<0.000361	0.00181
		Oct-16	FD	<0.000260	<0.000418	<0.000350	<0.00100	0.0175	0.00137	0.0127	<0.00382	0.0143	0.00200 J4	<0.000361	0.00163
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050							

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds													
Area	Well ID	Date	Dup	cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---
CGWSL Source:				USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQCC TW	---	---	WQCC TW	WQCC HH	---	---
Field East of Refinery	MW-130	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<b>0.0012</b>	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<b>0.000510 J</b>	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.000449 J</b>	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.000538 J</b>	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.0013</b>	<b>0.00112 J</b>	<0.000361	<0.000349
	MW-131	Apr-14		<0.00060	<0.00060	<b>0.006</b>	<0.0010	<b>0.210</b>	<b>0.036</b>	<b>0.47</b>	<0.0010	<b>5.30</b>	<b>0.058</b>	<b>0.031</b>	<b>0.084</b>
		Nov-14		<0.0026	<0.0042	<b>0.0036 J</b>	<0.01	<b>0.067</b>	<b>0.016</b>	<b>0.12</b>	<0.038	<b>5.6 E</b>	<b>0.043 J</b>	<b>0.0056 J</b>	<b>0.030</b>
		Apr-15		<0.000260	<0.000420	<b>0.00103</b>	<0.00100	<b>0.0692</b>	<b>0.0162</b>	<b>0.084</b>	<0.00380	<b>5.23</b>	<b>0.0468</b>	<b>0.00368</b>	<b>0.028</b>
		Oct-15		<0.000260	<0.000418	<b>0.00105</b>	<0.00100	<b>0.048</b>	<b>0.022</b>	<b>0.0615</b>	<0.00382	<b>4.54</b>	<b>0.0589</b>	<b>0.00375</b>	<b>0.037</b>
		Apr-16		<0.000260	<0.000418	<b>0.000697 J</b>	<0.00100	<b>0.0535</b>	<b>0.0183</b>	<b>0.0513</b>	<0.00382	<b>3.69</b>	<b>0.0353</b>	<b>0.00308</b>	<b>0.0315</b>
		Oct-16		<0.00130	<0.00209	<0.00175	<0.00500	<b>0.0324</b>	<b>0.015</b>	<b>0.0431</b>	<0.0191	<b>4.09</b>	<b>0.0135 JJ4</b>	<b>0.00183 J</b>	<b>0.0241</b>
Field East of Refinery	MW-133	Nov-14		<0.028	<b>&lt;0.042</b>	<0.035	<0.1	<b>0.300</b>	<b>0.057 J</b>	<b>0.18 J</b>	<0.38	<b>5.60</b>	<0.036	<b>0.084 J</b>	
		Apr-15		<0.0260	<b>&lt;0.0420</b>	<0.0350	<0.1	<b>0.199</b>	<0.0330	<b>0.108</b>	<0.38	<b>6.67</b>	<0.1	<0.0360	<b>0.0451 J</b>
	MW-134	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<b>0.00122 J</b>	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Apr-15	FD	<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-15	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16	FD	<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
Field East of Refinery	MW-135	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.00037	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<b>0.000829 J</b>	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.000608 J</b>	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.00197</b>	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.000685 J</b>	<0.00100 J4	<0.000361	<0.000349
	RA-4196	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<b>0.0026 J</b>	<0.00070	<0.0010	<0.00050
		Apr-15		<0.000260	<0.000420	<0.000350	<b>0.00114 J</b>	<0.000380	<0.000330	<0.000720	<0.00380	<b>0.00173</b>	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.00394</b>	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.00507</b>	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.00657</b>	<0.00100 J4	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.00657</b>	<0.00100 J4	<0.000361	<0.000349
Field East of Refinery	RA-4798	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<b>0.01</b>	<0.00070	<0.0010	<0.00050
		Apr-14	FD	<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<b>0.0027 J</b>	<0.00070	<0.0010	<0.00050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<b>0.0086</b>	<0.0010	<0.00036	<0.00035
		Apr-15		<0.000260	<0.000420	<0.000350	<b>0.00127 J</b>	<0.000380	<0.000330	<0.000720	<0.00380	<b>0.0163</b>	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.00858</b>	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.0121</b>	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.0124</b>	<0.00100 J4	<0.000361	<0.000349
	RW-12R	Apr-16		<0.00130	<0.00209	<0.00175	<0.00500	<b>0.00606</b>	<b>0.0359</b>	<b>0.014</b>	<0.0191	<b>0.00568</b>	<0.00500	<0.00180	<b>0.0482</b>
	RW-13R	Apr-16		<0.000260	<0.000418	<b>0.000561 J</b>	<0.00100	<b>0.0691</b>	<b>0.0117</b>	<b>0.0939</b>	<0.00382	<b>0.0779</b>	<b>0.0148</b>	<b>0.00124</b>	<b>0.0183</b>
	RW-18	Apr-13		<0.00050	<b>&lt;0.0050</b>	<0.0050	<b>&lt;0.010</b>	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
Field East of Refinery	RW-20	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-15		<0.000260	<0.000420	<b>0.00401 J</b>	<b>&lt;0.0100</b>	<b>0.973</b>	<b>0.0456</b>	<b>1.3</b>	<0.0380	<b>0.209</b>	<b>0.183</b>	<b>0.00846 J</b>	<b>0.098</b>
		Apr-15		<0.000260	<0.000420	<b>0.00521 J</b>	<b>&lt;0.0100</b>	<b>1.09</b>	<b>0.0525</b>	<b>0.85</b>	<0.0380	<b>0.178</b>	<b>0.164</b>	<b>0.00856 J</b>	<b>0.103</b>
		Apr-14		<0.012	<b>&lt;0.012</b>	<0.010	<b>&lt;0.020</b>	<b>0.320</b>	<b>0.097 J</b>	<b>0.035 J</b>	<0.020	<0.012	<b>0.200</b>	<0.020	<b>0.150</b>
	MW-23	Nov-14		<0.013	<b>&lt;0.021</b>	<0.018	<b>&lt;0.05</b>	<b>0.190</b>	<b>0.048 J</b>	<b>0.9</b>	<0.19	<b>0.019 J</b>	<b>0.12 J</b>	<0.018	<b>0.068</b>
		Apr-15		<0.00650	<b>&lt;0.0100</b>	<0.00880	<b>&lt;0.0250</b>	<b>0.146</b>	<b>0.0652</b>	<b>1.19</b>	<0.0960 J	<b>0.0253</b>	<b>0.15 J</b>	<0.00900	<b>0.0952</b>
		Oct-15		<0.000260	<0.000418	<b>0.000898 J</b>	<0.00100	<b>0.519</b>	<b>0.121</b>	<b>0.00568</b>					

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds													
Analyte:		cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene		
Units:		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
CGWSL:		0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---		
CGWSL Source:		USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQCC TW	---	---	WQCC TW	WQCC HH	---	---		
Area	Well ID	Date	Dup												
North Refinery	MW-61	Apr-14		<0.0030	<0.0030	<b>0.0045 J</b>	<0.0050	<b>0.11</b>	<b>0.065</b>	<b>0.41</b>	<0.0050	<0.0030	<b>0.140</b>	<b>0.0059 J</b>	<b>0.083</b>
		Nov-14		<0.013	< <b>0.021</b>	<0.018	< <b>0.05</b>	<b>0.16</b>	<b>0.11</b>	<b>1.2</b>	<0.19	<0.018	<b>0.14 J</b>	<0.018	<b>0.160</b>
		Apr-15		<0.00260	<0.00420	<b>0.00425 J</b>	<0.0100 J	<b>0.209</b>	<b>0.122</b>	<b>1.68</b>	<0.0380 J	<b>0.176 J</b>	<b>0.00782 J</b>	<b>0.201</b>	
		Oct-15		<0.00260	<0.00418	<b>0.00467 J</b>	< <b>0.0100</b>	<b>0.0659</b>	<b>0.107</b>	<b>0.369</b>	<0.0382	<0.00367	<b>0.0668</b>	<b>0.00529 J</b>	<b>0.137</b>
		Apr-16		<0.00130	<0.00209	<b>0.00375 J</b>	<0.00500	<b>0.0292</b>	<b>0.0787</b>	<b>0.223</b>	<0.0191	<0.00184	<b>0.0340</b>	<b>0.00378 J</b>	<b>0.110</b>
		Oct-16		<0.00650	< <b>0.0104</b>	<0.00875	< <b>0.0250</b>	<b>0.0353</b>	<b>0.104</b>	<b>0.225</b>	<0.0955	<0.00918	<b>0.0335 J</b>	<0.00902	<b>0.145</b>
	MW-62	Apr-14		<0.00060	<0.00060	<b>0.0034 J</b>	<0.0010	<b>0.093</b>	<b>0.07</b>	<b>0.72</b>	<0.0010	<b>0.0022 J</b>	<b>0.110</b>	<b>0.013</b>	<b>0.110</b>
		Nov-14		<0.013	< <b>0.021</b>	<0.018	< <b>0.05</b>	<b>0.910</b>	<b>0.14</b>	<b>0.08 J</b>	<0.19	<b>0.025 J</b>	<b>0.42 J4</b>	<0.018	<b>0.210</b>
		Apr-15		<0.00260	<0.00420	<0.00350	<0.0100 J	<b>0.457</b>	<b>0.112</b>	<b>0.0405</b>	<0.0380 J	<b>0.0151</b>	<b>0.158 J</b>	<b>0.00986 J</b>	<b>0.167</b>
		Oct-15		<0.00520	< <b>0.00836</b>	<0.00700	< <b>0.0200</b>	<b>0.163</b>	<b>0.138</b>	<b>1.72</b>	<0.0764	<0.00734	<b>0.186</b>	<b>0.00854 J</b>	<b>0.244</b>
		Apr-16		<0.00650	< <b>0.0104</b>	<0.00875	< <b>0.0250</b>	<b>0.356</b>	<b>0.0729</b>	<b>1.80</b>	<0.0955	<0.00918	<b>0.236</b>	<0.00902	<b>0.132</b>
		Oct-16		<0.0260 J6	<0.0418 J6	<0.0350 J6	< <b>0.100</b>	<b>0.0535 J6</b>	<b>0.123 J6</b>	<b>1.14 J6</b>	<0.382 J6	<0.0367 J6	<b>0.189 J6</b>	<0.0361 J6	<b>0.234 J6</b>
	MW-67	Nov-14		<0.0022 J	<0.0021	<0.0018	<0.0050	<b>0.005</b>	<b>0.027</b>	<b>0.0084 J</b>	<0.019	<b>0.0053 J</b>	<b>0.029 J</b>	<b>0.019</b>	
		Apr-15		<b>0.00198</b>	<0.00420	<b>0.00131</b>	<0.00100	<b>0.00447</b>	<b>0.0376</b>	<b>0.00291</b>	<0.00380	<b>0.869</b>	<0.00100	<b>0.00452</b>	<b>0.0234</b>
		Oct-15		<0.00520	< <b>0.00836</b>	<0.00700	< <b>0.0200</b>	<0.00768	<b>0.0301</b>	<0.0144	<0.0764	<b>0.924</b>	<0.0200	<0.00722	<0.00698
		Apr-16		<b>0.00527 J</b>	<0.00418	<0.00341	< <b>0.0100</b>	<b>0.00869 J</b>	<b>0.0321</b>	<0.00719	<0.0382	<b>0.359</b>	<0.0100	<0.00361	<b>0.0120</b>
		Oct-16		<b>0.00322 J</b>	<0.00418	<0.00350	< <b>0.0100</b>	<b>0.0124</b>	<b>0.0346</b>	<b>0.00797 J</b>	<0.0382	<b>0.253</b>	<b>0.0298 J</b>	<0.00361	<b>0.0167</b>
	MW-90	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<b>0.027</b>	<0.00060	<0.0010	<0.00060	<b>0.0025 J</b>	<0.0010	<b>0.0026 J</b>
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<b>0.00039 J</b>	<b>0.012</b>	<0.00072	<0.0038	<0.00037	<b>0.0049 J4</b>	<0.00036	<b>0.0038</b>
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<b>0.000433 J</b>	<b>0.0185</b>	<0.000720	<0.00380	<b>0.00575</b>	<b>0.00178 J</b>	<0.000360	<b>0.00291</b>
		Oct-15		<0.000260	<0.000418	<b>0.000725 J</b>	<0.00100	<0.000384	<b>0.0095</b>	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<b>0.000834 J</b>
		Apr-16		<b>0.000294 J</b>	<0.000418	<0.000350	<0.00100	<0.000384	<b>0.00803</b>	<0.000719	<0.00382	<0.000367	<b>0.00105 J</b>	<0.000361	<b>0.00142</b>
		Oct-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<b>0.000752 J</b>	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
	MW-91	Apr-14		<0.0030	<0.0030	<b>0.0077 J</b>	<0.0050	<b>0.150</b>	<b>0.1</b>	<b>0.54</b>	<0.0050	<0.0030	<b>0.062</b>	<b>0.014 J</b>	<b>0.110</b>
		Nov-14		<0.065	< <b>0.1</b>	<0.088	< <b>0.25</b>	<b>0.17 J</b>	<b>0.1 J</b>	<b>0.54</b>	<0.96	<0.092	< <b>0.25</b>	<0.09	<b>0.11 J</b>
		Apr-15		<0.00260	<0.00420	<b>0.00398 J</b>	< <b>0.0100</b>	<b>0.491</b>	<b>0.0876</b>	<b>0.702</b>	<0.0380	<0.00370	<b>0.0490 J</b>	<0.00360	<b>0.0882</b>
		Oct-15		<0.00650	< <b>0.0104</b>	<0.00875	< <b>0.0250</b>	<b>0.449</b>	<b>0.108</b>	<b>0.753</b>	<0.0955	<0.00918	<b>0.0884 J</b>	<0.00902	<b>0.119</b>
		Apr-16		<0.0130	< <b>0.0209</b>	<0.0175	< <b>0.0500</b>	<b>0.899</b>	<b>0.118</b>	<b>1.33</b>	<0.191	<0.0184	<b>0.124 J</b>	<0.0180	<b>0.140</b>
		Oct-16		<0.0650	< <b>0.104</b>	<0.0875	< <b>0.250</b>	<b>0.816</b>	<b>0.109 J</b>	<b>1.27</b>	<0.955	<0.0918	< <b>0.250</b>	<0.0902	<b>0.113 J</b>
	MW-92	Apr-16		<b>0.064</b>	<0.000418	<b>0.00344</b>	<0.00100	<b>0.462</b>	<b>0.0373</b>	<b>0.161</b>	<0.00382	<b>0.113</b>	<b>0.224 J</b>	<b>0.00634</b>	<b>0.0510</b>
		Oct-16		<b>0.0968</b>	< <b>0.00836</b>	<0.00700	< <b>0.0200</b>	<b>0.400</b>	<b>0.0242</b>	<b>0.0947</b>	<0.0764	<b>0.134</b>	<b>0.174</b>	<0.00722	<b>0.0329</b>
	MW-93	Apr-14		<0.0030	<0.0030	<b>0.0085 J</b>	<0.0050	<b>0.067</b>	<b>0.068</b>	<b>0.6</b>	<0.0050	<b>0.0059 J</b>	<b>0.120</b>	<b>0.024 J</b>	<b>0.110</b>
		Nov-14		<0.013	< <b>0.021</b>	<0.018	< <b>0.05</b>	<b>0.039 J</b>	<b>0.05 J</b>	<b>0.45</b>	<0.19	<0.018	<b>0.17 J4</b>	<0.018	<b>0.074</b>
		Apr-15		<0.00260	<0.00420	<b>0.00479 J</b>	<0.0100 J	<b>0.0675</b>	<b>0.0425</b>	<b>0.31</b>	<0.0380 J	<0.00370	<b>0.0554 J</b>	<b>0.00461 J</b>	<b>0.0625</b>
		Oct-15		<0.00260	<0.00418	<0.00350	< <b>0.0100</b>	<b>0.0717</b>	<b>0.0518</b>	<b>0.483</b>	<0.0382	<0.00367	<b>0.100</b>	<b>0.00496 J</b>	<b>0.0743</b>
		Apr-16		<0.00130	<0.00209	<0.00175	<0.00500	<b>0.0106</b>	<b>0.0119</b>	<b>0.0567</b>	<0.0191	<0.00184	<b>0.0113 J</b>	<0.00180	<b>0.00919</b>
		Oct-16		<0.00260	<0.00418	<0.00350	< <b>0.0100</b>	<b>0.0114</b>	<b>0.0258</b>	<b>0.25</b>	<0.0382	<0.00367	<b>0.0326 J</b>	<0.00361	<b>0.0309</b>
	MW-94	Nov-14		<0.0052	< <b>0.0084</b>	<b>0.0200</b>	< <b>0.02</b>	<b>0.58</b>	<b>0.084</b>	<b>0.31</b>	<0.076	<b>1.30</b>	<b>0.220</b>	<b>0.04</b>	<b>0.13</b>
		Oct-15		<0.00260	<0.00418	<b>0.0301</b>	< <b>0.0100</b>	<b>0.509</b>	<b>0.0646</b>	<b>0.214</b>	<0.0382	<b>0.798</b>	<b>0.202</b>	<b>0.0219</b>	<b>0.0923</b>
		Apr-16		<b>0.0149 J</b>	< <b>0.0209</b>	<0.0175	< <b>0.0500</b>	<b>0.553</b>	<b>0.0776</b>	<b>0.228</b>	<0.191	<b>0.621</b>	<b>0.228 J</b>	<b>0.0379 J</b>	<b>0.120</b>
		Oct-16		<0.00130	<0.00209	<b>0.0163</b>	<0.00500	<b>0.564</b>	<b>0.0705</b>	<b>0.202</b>	<0.0191	<b>2.01</b>	<b>0.128</b>	<b>0.0207</b>	<b>0.104</b>
	MW-95	Apr-13		<0.0050	< <b>0.0050</b>	<0.0050	< <b>0.010</b>	<0.0050	<b>0.0053</b>	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<b>0.0058</b>	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010	<0.00050
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<b>0.007</b>	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360	<0.000350
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<b>0.0101</b>	<0.000719	<0.00382	<b>0.000379 J</b>	<0.00100	<0.000361	<0.000349
	MW-96	Apr-14		<0.015	< <b>0.015</b>	<0.012	< <b>0.025</b>	<0.012	<b>0.076 J</b>	<b>0.037 J</b>	<0.025	<b>35.0</b>	<b>0.065 J</b>	<0.025	<b>0.070 J</b>
		Nov-14		<0.0065	< <b>0.01</b>	<0.0088	< <b>0.025</b>	<0.0096	<b>0.055</b>	<0.018	<0.096	<b>28 E</b>	<0.025	<0.0090	<b>0.044</b>
		Apr-15		<0.000260	<0.000420	<b>0.000719 J</b>	<0.00100	<b>0.00172</b>	<b>0.055</b>	<b>0.00438</b>	<0.00380	<b>35.0</b>	<b>0.00126 J</b>	<b>0.00185</b>	<b>0.0395</b>
		Oct-15		< <b>0.13</b>	< <b>0.209</b>	<0.175	< <b>0.5</b>	<0.192	<0.163	<0.36	<1.91	<b>39.2</b>	< <b>0.5</b>	<0.18	<0.174
		Apr-16		<0.00520	< <b>0.00836</b>	<0.00700	< <b>0.0200</b>	<0.00768	<b>0.0853</b>	<0.0144	<0.0764	<b>32.9</b>	<0.0200	<0.00722	<b>0.0861</b>
		Oct-16		<0.0130	< <b>0.0209</b>	<0.0175	< <b>0.0500</b>	<0.0192	<b>0.0675</b>	<0.0360	<0.191	<b>39.6</b>	< <b>0.0500</b>	<0.0180	<b>0.0551</b>
	MW-98	Apr-14		<0.0060	< <b>0.0060</b>	<b>0.0080 J</b>	< <b>0.010</b>	<b>1.00</b>	<b>0.085</b>	<b>1.9</b>	<0.010	<0.0060	<b>0.230</b>	<b>0.020 J</b>	<b>0.11</b>
		Apr-14	FD	<0.0060	< <b>0.0060</b>	<0.0050	< <b>0.010</b>	<b>1.00</b>	<b>0.078</b>	<b>2</b>	<0.010	<0.0060	<b>0.210</b>	<0.010	<b>0.11</b>
		Nov-14		<0.065	< <b>0.1</b>	<0.088	< <b>0.25</b>	<b>0.630</b>	<0.082	<b>1.6</b>	<0.96	<0.092	<b>0.45 J4</b>	<0.09	<b>0.097 J</b>
		Apr-15		<0.00650	< <b>0.0100</b>	<0.00880	<0.0250 J	<b>0.927</b>	<b>0.0716</b>	<b>1.7</b>	<0.0960 J	<0.00920	<b>0.174 J</b>	<0.00900	<b>0.0968</b>

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds											
Analyte:				cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---
CGWSL Source:				USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQC TW	---	---	WQC TW	WQC HH	---	---
Area	Well ID	Date	Dup												
North RO Reject Field	MW-119	Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Apr-14	FD	<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Nov-14		<0.0026	<0.0042	<0.0035	<0.0010	<0.0038	<0.0033	<0.0072	<0.0038	<0.0037	<0.0010 J4	<0.0036	<0.0035
		Apr-15		<0.00260	<0.00420	<0.00350	<0.00100	<0.00380	<0.00330	<0.00720	<0.00380	<0.00370	<0.00100	<0.00360	<0.00350
		Oct-15		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	<0.00367	<0.00100	<0.00361	<0.00349
		Apr-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	<0.00367	<0.00100	<0.00361	<0.00349
	MW-18	Oct-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	<0.0060	<0.0070	<0.010	<0.0050
		Apr-15		<0.00260	<0.00420	<0.00350	<0.00100	<0.00380	<0.00330	<0.00720	<0.00380	<0.00370	<0.00100	<0.00360	<0.00350
		Apr-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	<0.00367	<0.00100	<0.00361	<0.00349
		Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	<0.0060	<0.0070	<0.010	<0.0050
		Apr-15		<0.00260	<0.00420	<0.00350	<0.00100	<0.00380	<0.00330	<0.00720	<0.00380	<0.00370	<0.00100	<0.00360	<0.00350
	MW-45	Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	0.0043 J	<0.0070	<0.010	<0.0050
		Nov-14		<0.0026	<0.0042	<0.0035	<0.0010	<0.0038	<0.0033	<0.0072	<0.0038	0.0048	<0.0010	<0.0036	<0.0035
		Apr-15		<0.00260	<0.00420	<0.00350	<0.00100	<0.00380	<0.00330	<0.00720	<0.00380	0.00356	<0.00100	<0.00360	<0.00350
		Oct-15		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	0.00268	<0.00100	<0.00361	<0.00349
Apr-16			<0.00418	<0.00418	<0.00326	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	0.00152	<0.00100	<0.00361	<0.00349	
Oct-16			<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	0.00206	<0.00100	<0.00361	<0.00349	
MW-53	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	
	Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	<0.0060	<0.0070	<0.010	<0.0050	
	Apr-15		<0.00260	<0.00420	<0.00350	<0.00100	<0.00380	<0.00330	<0.00720	<0.00380	<0.00370	<0.00100	<0.00360	<0.00350	
	Apr-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	<0.00367	<0.00100	<0.00361	<0.00349	
	Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	<0.0060	<0.0070	<0.010	<0.0050	
	Nov-14		<0.0026	<0.0042	<0.0035	<0.0010	<0.0038	<0.0033	<0.0072	<0.0038	<0.0037	<0.0010	<0.0036	<0.0035	
MW-54A	Apr-15		<0.00260	<0.00420	<0.00350	<0.00100	<0.00380	<0.00330	<0.00720	<0.00380	<0.00370	<0.00100	<0.00360	<0.00350	
	Oct-15		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	<0.00367	<0.00100	<0.00361	<0.00349	
	Apr-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	<0.00367	<0.00100	<0.00361	<0.00349	
	Oct-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	<0.00367	<0.00100	<0.00361	<0.00349	
	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	
	Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	<0.0060	<0.0070	<0.010	<0.0050	
MW-54B	Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	<0.0060	<0.0070	<0.010	<0.0050	
	Nov-14		<0.0026	<0.0042	<0.0035	<0.0010	<0.0038	<0.0033	<0.0072	<0.0038	0.0049 J	<0.0010	<0.0036	<0.0035	
	Apr-15		<0.00260	<0.00420	<0.00350	<0.00100	<0.00380	<0.00330	<0.00720	<0.00380	<0.00370	<0.00100	<0.00360	<0.00350	
	Oct-15		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	0.00433	<0.00100	<0.00361	<0.00349	
	Apr-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	0.0163	<0.00100	<0.00361	<0.00349	
	Oct-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	0.00521	<0.00100	<0.00361	<0.00349	
MW-55	Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	<0.0060	<0.0070	<0.010	<0.0050	
	Apr-14	FD	<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0050	<0.0060	<0.010	<0.0060	<0.0070	<0.010	<0.0050	
	Nov-14		<0.0026	<0.0042	<0.0035	<0.0010	<0.0038	<0.0033	<0.0072	<0.0038	0.0049 J	<0.0010	<0.0036	<0.0035	
	Apr-15		<0.00260	<0.00420	<0.00350	<0.00100	<0.00380	<0.00330	<0.00720	<0.00380	<0.00370	<0.00100	<0.00360	<0.00350	
	Oct-15		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	0.00433	<0.00100	<0.00361	<0.00349	
	Apr-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	<0.00719	<0.00382	0.0163	<0.00100	<0.00361	<0.00349	
MW-56	Oct-16		<0.00260	<0.00418	<0.00350	<0.00100	<0.00384	<0.00326	&						

Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds													
Area	Well ID	Date	Dup	cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---
CGWSL Source:				USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQCC TW	---	---	WQCC TW	WQCC HH	---	---
South Refinery	KWB-6	Nov-14		<0.0026	<0.0042	0.0042 J	<0.01	0.810	0.04	0.93	<0.038	0.160	0.098	<0.0036	0.058
		Apr-15		<0.00650	<0.0100	<0.00880	<0.0250	2.04	0.0738	2.71	<0.0960	0.119	0.239	<0.00900	0.121
		Oct-15		<0.13	<0.209	<0.175	<0.5	0.831	<0.163	1.03	<1.91	9.07	<0.5	<0.18	<0.174
		Apr-16		<0.00130	<0.00209	0.00591	<0.00500	0.799	0.0477	1.64	<0.0191	0.138	0.137	0.00837	0.0883
		Oct-16		<0.00520	<0.00836	<0.00700	<0.0200	0.241	0.0173 J	0.394	<0.0764	0.135	0.0549 J	<0.00722	0.032
	MW-28	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	0.0052	0.019	0.0080 J	<0.0010	3.60	0.0042 J	0.0013 J	0.02
		Nov-14		<0.0065	<0.01	<0.0088	<0.025	0.150	0.066	0.22	<0.096	2.00	0.06 J	<0.0090	0.081
		Apr-15		<0.0260	<0.0420	<0.0350	<0.1	0.0625 J	0.0689 J	0.194	<0.38	1.33	<0.1	<0.0360	0.0744 J
		Oct-15		<0.0260	<0.0418	<0.0350	<0.1	0.0441 J	0.0671 J	0.243	<0.382	1.11	<0.1	<0.0361	0.0890 J
		Apr-16		<0.00260	<0.00418	<0.00341	<0.0100	0.0276	0.0433	0.156	<0.0382	0.261	0.0247 J	<0.00361	0.0577
South Refinery	MW-48	Oct-16		<0.0130	<0.0209	<0.0175	<0.0500	0.0796	0.0876	0.338	<0.191	0.630	0.0504 J	0.0552	0.117
		Nov-14		<0.0065	<0.01	<0.0088	<0.025	0.075	0.041	0.12	<0.096	1.10	0.028 J	<0.0090	0.068
		Apr-15		<0.00260	<0.00420	<0.00350	<0.0100	0.158	0.0361	0.143	<0.0380	0.223	0.0245 J	<0.00360	0.0478
		Oct-15		<0.00130	<0.00209	0.00472 J	<0.00500	0.0655	0.0549	0.119	<0.0191	0.832	0.0128 J	0.0065	0.0957
		Apr-16		<0.00520	<0.00836	<0.00700	<0.0200	0.790	0.0670	0.671	<0.0764	0.326	0.101	<0.00722	0.0983
	MW-50	Oct-16		<0.00130	<0.00209	0.0052	<0.00500	0.448	0.0689	0.502	<0.0191	0.851	0.0832	0.00827	0.111
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.0050	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Nov-14		<0.0026	<0.0042	0.00086 J	<0.0010	<0.00038	<0.00038	<0.00072	<0.0038	<0.0037	<0.0010	<0.0036	<0.0035
		Apr-15		<0.00260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	0.00219	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260 J	<0.000418 J	<0.000350 J	<0.00100	<0.000384 J	<0.000326 J	<0.000719 J	<0.00382	<0.000367	<0.00100 J	<0.000361 J	<0.000349
South Refinery	MW-52	Apr-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Nov-14	FD	<0.00060	<0.00060	<0.00050	<0.0010	<0.0050	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.0050	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<0.0038	<0.0037	<0.0010	<0.0036	<0.0035
	MW-64	Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.00370	<0.00100	<0.000360	<0.000350
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100 J	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361	<0.000349
		Nov-14		<0.0130	<0.0209	<0.0175	<0.0500	3.11	0.0817	5.26	<0.0382	0.666	0.195 J	<0.0180	0.122
South Refinery	MW-65	Oct-16		<0.0260	<0.0418	<0.0350	<0.100	2.61	0.0602 J	3.79	<0.382	0.531	0.140 J	<0.0361	0.0878 J
		Nov-14		<0.013	<0.021	<0.018	<0.05	1.20	0.053	0.18	<0.19	3.40	0.22 J	<0.018	0.083
		Apr-15		<0.00260	<0.00420	<0.00350	<0.0100	1.03	0.0578	0.135	<0.0380	3.22	0.239	0.0101	0.085
		Oct-16		<0.00260	<0.00418	<0.00341	<0.0100	0.288	0.0444	0.0822	<0.0382	3.71	0.155	0.00732 J	0.0577
		Apr-16		<0.00520	<0.00836	<0.00700	<0.0200	0.0574	0.045	0.0205 J	<0.0764	2.70	0.194	0.00791 J	0.0628
	MW-66	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	0.0039 J	0.03	0.0055 J	<0.0010	2.30	0.055	0.0069	0.038
		Nov-14		<0.0026	<0.0042	<0.0035	<0.01	0.19	0.079	0.1	<0.038	1.90	0.22 J4	0.01 J	0.12
		Apr-15		<0.0130	<0.0210	<0.0180	<0.0500	0.0615	0.0266 J	0.0668	<0.19	1.66	0.0617 J	<0.0180	0.0342 J
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	0.0234	0.0565	0.0281	<0.00382	2.42	0.133	0.007	0.0807
		Apr-16		<0.00260	<0.00418	<0.00341	<0.0100	0.0181	0.0337	0.0285	<0.0382	1.48	0.0638	0.00609 J	0.0523
South Refinery	MW-99	Oct-16		<0.00260	<0.000418	<0.000350	<0.00100	0.0214	0.0617	0.0228	<0.00382	1.48	0.0979	0.00948	0.104
		Nov-14		<0.0026	<0.0042	0.0083 J	<0.01	0.59	0.037	0.69	<0.038	3.4 E	0.044 J	0.0065 J	0.052
		Apr-15		<0.00650	<0.0100	<0.00880	<0.0250	0.252	0.0295	0.622	<0.0960	0.0799	0.0376 J	<0.00900	0.0338
		Oct-15		<0.00650	<0.0104	0.0122 J	<0.0250	0.551	0.0559	0.509	<0.0955	3.96	0.0453 J	0.0104 J	0.0768
		Apr-16		<0.00260	<0.00418	0.00375 J	<0.0100	0.629	0.0459	0.531	<0.0382	1.99	0.0656	0.00756 J	0.0706
	MW-101	Oct-16		<0.00520	<0.00836	<0.00700	<0.0200	0.635	0.0462	0.591	<0.0764	2.45	0.0343 J	<0.00722	0.071
		Apr-14		<0.0013 R	<0.00060	<0.00050	<0.0010	0.015	0.0074	0.011	<0.0010	<0.0060	0.0029 J	<0.0010	0.0032 J
		Nov-14		<0.0026	<0.0042	<0.0035	<0.01	0.0050 J	0.0078 J	<0.0072	<0.038	0.120	0.01 J44	<0.0036	0.0050 J
		Apr-15		<0.00130	<0.00210	<0.00180	<0.00500 J	0.00202 J	0.00279 J	<0.00360	<0.0190 J	0.113	<0.00500 J	<0.00180	<0.00170
		Oct-15		<0.00130	<0.00209	<0.00175	<0.00500	<0.00192	<0.00163	<0.00360	<0.0191	0.0981	<0.00500	<0.00180	<0.00174
South Refinery	MW-102	Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	0.00176	0.00564	<0.000719	<0.00382	0.119	<0.00100	0.000427 J	0.00597
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	0.000381 J	<0.000719	<0.00382	0.104	<0.00100	<0.000361	<0.000349
		Nov-14		<0.013	<0.021	<0.018	<0.05	0.990	0.04 J	1.3	<0.19	2.00	0.18 J	<0.018	0.057
		Apr-15		<0.00260	<0.00420	<0.00350	<0.0100	0.602	0.0207	0.598	<0.0380	1.88	0.129	<0.00360	0.0257
		Oct-15		<0.0260	<0.0418	<0.0350	<0.1	1.04	0.0583 J	1.06	<0.382	2.12	0.256 J	<0.0361	0.0897 J
	MW-103	Apr-16		<0.0260	<0.0418	<0.0350	<0.100	0.858	0.0503 J	0.544	<0.382	2.07	0.278 J	<0.0361	0.0846 J
		Oct-16		<0.0260	<0.0418	<0.0350	<0.100	1.03	0.0524 J	0.624	<0.382	1.61	0.278 J	<0.0361	0.0814 J
		Apr-13		<0.0050	<0.0050	<0.0050	<0.010	0.036	0.02	<0.010	<0.010	<0.0050	0.013	<0.0050	0.024
		Apr-14		<0.00060	<0.00060	0.0036 J	<0.0010	0.150	0.031	0.012	<0.0010	<0.0060	0.051	0.0061	0.046
		Apr-15		<0.000260	<0.000420	0.00207	<0.00100	0.0879	0.0247	0.00819	<0.00380	0.000441 J	0.022	0.00291	0.0357
South Refinery	MW-104	Apr-16		<0.00130	<0.00209	<0.00175	<0.00500	0.0508	0.0220	<0.00360	<0.0191	<0.00184	0.0108 J	0.00286 J	0.0311
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	0.0012 J	0.052	<0.00060	<0.0010	<0.00060	0.0030 J		

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:			Volatile Organic Compounds											
Analyte:			cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene
Units:			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:			0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---
CGWSL Source:			USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQCC TW	---	---	WQCC TW	WQCC HH	---	---
Area	Well ID	Date	Dup											
South Refinery	RA-313	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.0060	<0.0060	<0.0050	<0.0010	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Apr-15		<0.00260	<0.000420	<0.000350	<b>0.00129 J</b>	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
	RW-4	Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<b>0.00245</b>	<b>0.00966</b>	<0.000720	<0.00380	<b>0.0902</b>	<0.00100	<b>0.000393 J</b>
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<b>0.00999</b>	<0.000719	<0.00382	<b>0.191</b>	<0.00100	<0.00361
	RW-4R	Apr-15		<0.00260	<0.00420	<0.00350	<0.0100	<b>1.03</b>	<b>0.398</b>	<b>1.39</b>	<0.0380	<b>2.15</b>	<0.0380	<b>0.00606 J</b>
		Apr-16		<0.00520	<0.00836	<0.00700	<0.0200	<b>1.20</b>	<b>0.0643</b>	<b>1.68</b>	<0.0764	<b>1.64</b>	<b>0.205</b>	<b>0.0117 J</b>
	RW-6	Apr-15		<0.00260	<0.00420	<0.00350	<0.0100	<b>0.0476</b>	<b>0.0173</b>	<b>0.102</b>	<0.0380	<b>2.27</b>	<b>0.0602</b>	<b>0.00738 J</b>
		Apr-16		<0.00260	<0.000418	<b>0.000401 J</b>	<0.00100	<b>0.00474</b>	<b>0.00797</b>	<b>0.00472</b>	<0.00382	<b>2.68</b>	<b>0.00574</b>	<b>0.00138</b>
	MW-114	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Nov-14		<0.0026	<0.00042	<0.00035	<0.0010	<0.0038	<0.0033	<0.0072	<0.0038	<0.0037	<b>0.0012 J</b>	<0.0036
		Apr-15		<0.00260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360
		Oct-15		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
South RO Reject Field	MW-115	Apr-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
		Oct-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
		Nov-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Nov-14		<0.0026	<0.00042	<0.00035	<0.0010	<0.0038	<0.0033	<0.0072	<0.0038	<0.0037	<0.0010 J	<0.0036
	MW-116	Apr-15		<0.00260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360
		Oct-15		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
		Apr-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
		Oct-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
	MW-116	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.0050	<0.0060	<0.0010	<0.0060	<0.0070	<0.0010	<0.0050
		Nov-14		<0.0026	<0.00042	<0.00035	<0.0010	<0.0038	<0.0033	<0.0072	<0.0038	<0.0037	<0.0010 J	<0.0036
		Apr-15		<0.00260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100	<0.000360
		Oct-15		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
	MW-49	Apr-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
		Oct-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100	<0.000361
		Nov-14		<0.00060	<0.00060	<b>0.00090 J</b>	<0.0010	<b>0.0043 J</b>	<b>0.018</b>	<b>0.034</b>	<0.0010	<b>0.049</b>	<b>0.0054</b>	<b>0.0032 J</b>
		Nov-14		<0.0052	<0.00084	<b>0.00095 J</b>	<0.0020	<b>0.0036</b>	<b>0.022</b>	<b>0.026</b>	<0.0076	<b>0.055</b>	<b>0.0031 J</b>	<b>0.0026</b>
	TEL-1	Apr-15		<0.00260	<0.000420	<b>0.000537 J</b>	<0.00100 J	<b>0.00274</b>	<b>0.014</b>	<b>0.0175</b>	<0.00380	<b>0.0553 J</b>	<b>0.00117 J</b>	<b>0.00116</b>
		Oct-15		<0.00260	<0.000418	<b>0.000770 J</b>	<0.00100	<b>0.00457</b>	<b>0.0247</b>	<b>0.038</b>	<0.00382	<b>0.0447</b>	<b>0.00255 J</b>	<b>0.00158</b>
		Apr-16		<0.00520	<0.00836	<0.00700	<0.0200	<0.00768	<b>0.0219</b>	<b>0.0540</b>	<0.0764	<b>0.0535</b>	<0.0200	<0.00722
		Oct-16		<0.0260	<0.0418	<0.0350	<0.100	<0.0384	<0.0326	<b>0.0831 J</b>	<0.382	<b>0.0628 J</b>	<0.100	<0.0361
	TEL-2	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.0050	<b>0.0020 J</b>	<0.0060	<0.0010	<b>0.0039 J</b>	<b>0.0029 J</b>	<0.0010
		Nov-14	FD	<0.00060	<0.00060	<b>0.0021 J</b>	<0.0010	<0.0050	<b>0.0019 J</b>	<0.0060	<0.0010	<b>0.0040 J</b>	<b>0.0029 J</b>	<0.0010
		Apr-15		<0.0026	<0.00042	<0.00035	<0.0010	<b>0.00047 J</b>	<b>0.0013</b>	<0.00072	<0.0038	<b>0.0018</b>	<0.0010	<0.0036
		Oct-15		<0.00260	<0.000418	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<b>0.00478</b>	<0.00100	<0.000360
	TEL-3	Apr-16		<0.00260	<0.000418	<0.000350	<0.00100	<0.000384	<b>0.000924 J</b>	<0.000719	<0.00382	<b>0.00245</b>	<b>0.00102 J</b>	<0.00361
		Oct-16		<0.00260	<0.000418	<0.000350	<0.00100	<b>0.000718 J</b>	<b>0.00136</b>	<0.000719	<0.00382	<b>0.00229</b>	<0.00100	<0.000361
		Nov-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.0050	<b>0.00066 J</b>	<b>0.001</b>	<0.000719	<0.00382	<b>0.000724 J</b>	<0.00361
		Oct-16		<0.0026	<0.00042	<b>0.0043</b>	<0.010	<b>0.0099 J</b>	<b>0.043</b>	<b>0.18</b>	<0.038	<b>0.012</b>	<b>0.017 J</b>	<b>0.0040 J</b>
	TEL-4	Apr-15		<0.00520	<0.00840	<0.00700	<0.0200 J	<b>0.0119 J</b>	<b>0.0407</b>	<b>0.171</b>	<0.0760	<b>0.0113 JJ3</b>	<0.0200	<0.00720
		Oct-15		<0.0130	<0.0209	<b>0.00397 J</b>	<0.00500	<b>0.00577</b>	<b>0.0405</b>	<b>0.146</b>	<0.0191	<b>0.011</b>	<b>0.00630 J</b>	<b>0.00382 J</b>
		Apr-16		<0.00260	<0.000418	<b>0.00438</b>	<0.00100	<b>0.00692</b>	<b>0.0380</b>	<b>0.136</b>	<0.00382	<b>0.0156</b>	<b>0.00966</b>	<b>0.00424</b>
		Oct-16		<0.00260	<0.000418	<0.00350	<0.010	<b>0.00418 J</b>	<b>0.0325</b>	<b>0.116</b>	<0.0382	<b>0.0110</b>	<0.0100	<b>0.00404 J</b>
TEL	TEL-5	Apr-14		<0.00060	<0.00060	<b>0.0015 J</b>	<0.0010	<0.0050	<b>0.06</b>	<b>0.018</b>	<0.0010	<b>0.0030 J</b>	<b>0.0034 J</b>	<0.0010
		Nov-14		<0.0026	<0.00042	<b>0.00088 J</b>	<0.0010	<b>0.00068 J</b>	<b>0.05</b>	<b>0.012</b>	<0.0038	<0.0037	<b>0.0010 J</b>	<b>0.0016</b>
		Apr-15		<0.00260	<0.000420	<0.00350	<0.0100	<0.00380	<b>0.0471</b>	<b>0.00929 J</b>	<0.0380	<b>0.00560 J</b>	<0.0100	<0.00360
		Oct-15		<0.00260	<0.000418	<b>0.00128</b>	<0.00100	<b>0.000880 J</b>	<b>0.0605</b>	<b>0.0171</b>	<0.00382	<b>0.000964 J</b>	<b>0.00123 J</b>	<b>0.00133</b>
	TEL-6	Apr-16		<0.00650	<0.0104	<0.00875	<0.0250	<0.00960	<b>0.0593</b>	<0.0180	<0.0955	<b>0.0445</b>	<0.0250	<0.00902
		Oct-16		<0.000260	<0.000418	<b>0.000629 J</b>	<0.00100	<b>0.000539 J</b>	<b>0.0336</b>	<b>0.00823</b>	<0.00382	<b>0.00109</b>	<b>0.00107 J</b>	<b>0.00134</b>
		Nov-14		<0.00060	<0.00060	<b>0.0029 J</b>	<0.0010	<b>0.0035 J</b>	<b>0.044</b>	<b>0.06</b>	<0.0010	<b>0.120</b>	<b>0.0035 J</b>	<b>0.0073</b>
		Nov-14	FD	<0.0052	<0.0084	<0.0070	<0.02	<b>0.0087 J</b>	<b>0.048</b>	<b>0.12</b>	<0.076	<b>0.064</b>	<0.02	<0.0072
	TEL-7	Apr-15		<0.0052	<0.0084	<0.0070	<0.02	<b>0.0085 J</b>	<b>0.048</b>	<b>0.12</b>	<0.076	<b>0.066</b>	<0.02	<0.0072
		Apr-15		<0.00260	<0.000420	<0.00350	<0.0100	<0.00380	<b>0.0332</b>	<b>0.0394</b>	<0.0380	<b>0.140</b>	<0.0100	<b>0.00396 J</b>
		Apr-15	FD	<0.00260	<0.000420	<0.00350	<0.0100	<0.00380	<b>0.0334</b>	<b>0.0407</b>	<0.0380	<b>0.142</b>	<0.0100	<b>0.00405 J</b>
		Oct-15		<0.00260	<0.000418	<b>0.00179</b>	<0.00100	<b>0.00655</b>	<b>0.053</b>	<b>0.0703</b>	<0.00382	<b>0.00902</b>	<b>0.00422 J</b>	<b>0.00309</b>
	TEL-8	Apr-16		<0.00260										

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds											
Analyte:		cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Cymene	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butyl-benzene	N-Propyl-benzene
Units:		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:		0.070	4.70E-03	---	0.005	0.700	4.47E-01	---	---	0.143	0.030	---	---
CGWSL Source:		USEPA MCL	USEPA TW	---	USEPA MCL	USEPA MCL	WQCC TW	---	---	WQCC TW	WQCC HH	---	---
Area	Well ID	Date	Dup										
TMD	MW-68	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
	MW-71	Oct-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
	MW-89	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100 J	<0.000380	<0.000330	<0.000720	<0.00380 J	<0.000370	<0.00100 J
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
	NP-1	Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<b>0.0056</b>	<0.00070	<0.0010
		Nov-14		<0.00026	<0.00042	<0.00035	<0.0010	<0.00038	<0.00033	<0.00072	<b>0.094</b>	<0.0010	<0.00036
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100 J	<0.000380	<0.000330	<0.000720	<0.00380	<b>0.294</b>	<0.00100
		Oct-15		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.291</b>	<0.00100
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.213</b>	<0.00100
		Oct-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<b>0.283</b>	<0.00100
	NP-2	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100 J	<0.000380	<0.000330	<0.000720	<0.00380 J	<b>0.00678</b>	<0.00100 J
	NP-6	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
		Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
		Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
Upgradient	UG-1	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
	UG-2	Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-13	FD	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100
	UG-3R	Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
		Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
		Apr-14	FD	<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010
	UG-4	Apr-15		<0.000260	<0.000420	<0.000350	<0.00100	<0.000380	<0.000330	<0.000720	<0.00380	<0.000370	<0.00100
		Apr-16		<0.000260	<0.000418	<0.000350	<0.00100	<0.000384	<0.000326	<0.000719	<0.00382	<0.000367	<0.00100
		Apr-13		<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050
		Apr-14		<0.00060	<0.00060	<0.00050	<0.0010	<0.00050	<0.00060	<0.0010	<0.00060	<0.00070	<0.0010



**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds									
Analyte:				o-Xylene	Styrene (Monomer)	Tetra-chloroethene	Toluene	Total Xylenes	trans-1,2-Di-chloroethene	trans-1,3-Dichloro-propene	Tribromo-methane	Trichloro-ethene	Vinyl Chloride
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	---	5.00E-03	1.00E-03
CGWSL Source:				WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
Area	Well ID	Date	Dup										
Crossgradient	KWB-13	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<b>0.00254 J</b>	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	NP-5	Apr-14											
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
	RA-3156	Nov-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-136	Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-1R	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-13	FD	<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-2A	Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-3	Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
	MW-4A	Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<b>0.000658 J</b>	<0.000310	<0.000370	<0.000780	<b>0.00293 J</b>	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<b>0.00237 J</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<b>0.000352 J</b>	<0.000310	<0.000372	<0.000780	<b>0.00201 J</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-4B	Oct-16		<b>0.000870 J</b>	<0.000307	<0.000372	<0.000780	<b>0.00365</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-5A	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-5B	Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-5C	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-6A	Mar-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-14		<b>0.0016 J</b>	<0.00050	<0.00060	<0.00050	<b>0.0016 J</b>	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<b>0.000920 J</b>	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-16		<b>0.00119</b>	<0.00100	<0.000372	<0.000780	<b>0.00119 J</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-6B	Mar-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Mar-13	FD	<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
	MW-7A	Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15	FD	<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-15	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-7B	Oct-15	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16	FD	<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
Evaporation Ponds	MW-7B	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
	MW-10	Apr-15		<0.000340	<0.000310 J	<0.000370	<0.000780 J	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	&								

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds									
Analyte:				o-Xylene	Styrene (Monomer)	Tetra-chloroethene	Toluene	Total Xylenes	trans-1,2-Di-chloroethene	trans-1,3-Dichloro-propene	Tribromo-methane	Trichloro-ethene	Vinyl Chloride
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	—	5.00E-03	1.00E-03
CGWSL Source:				WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
Area	Well ID	Date	Dup										
Evaporation Ponds	MW-18B	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<b>&lt;0.0050</b>	<0.0050	<0.0050	<b>&lt;0.0020</b>
	MW-22A	Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Nov-14	FD	<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310 J	<0.000370	<0.000780 J	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-15	FD	<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-15	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16	FD	<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-22B	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<b>&lt;0.0050</b>	<0.0050	<0.0050	<b>&lt;0.0020</b>
		Apr-15		<0.000340	<0.000310 J	<0.000370	<0.000780 J	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-70	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-72	Nov-13		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-73	Oct-13		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-74	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-75	Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.0017	<0.0015	<0.0019	<0.0039	<0.0053	<0.0020	<0.0021		<0.0020	<b>&lt;0.0013</b>
		Apr-15		<0.00340	<0.00310	<0.00370	<0.00780	<0.0110	<0.00400	<0.00420	<0.00470	<0.00400	<b>&lt;0.00260</b>
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-76	Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.0017	<0.0015	<0.0019	<0.0039	<0.0053	<0.0020	<0.0021		<0.0020	<b>&lt;0.0013</b>
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-77	Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<b>0.0011 J</b>	<b>0.0027 J</b>	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<b>0.0036 J</b>	<0.0015	<0.0019	<b>0.0073 J</b>	<b>0.01 J</b>	<0.0020	<0.0021		<0.0020	<b>&lt;0.0013</b>
	MW-78	Apr-15		<b>0.00101</b>	<0.000310	<0.000370	<b>0.00216 J</b>	<b>0.00531</b>	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<b>0.00112</b>	<0.000307	<0.000372	<b>0.00386 J</b>	<b>0.00589</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<b>0.000583 J</b>	<0.00100	<0.000372	<b>0.00138 J</b>	<b>0.00390</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.00341	<0.00307	<0.00372	<0.00780	<0.0106	<0.00396	<0.00419	<0.000469	<0.00398	<b>&lt;0.00259</b>
		Mar-13		<0.025	<0.025	<b>&lt;0.025</b>	<0.025	<0.075	<0.025	<b>&lt;0.025</b>	<0.025	<b>&lt;0.025</b>	<b>&lt;0.010</b>
	MW-79	Apr-14		<b>0.0021 J</b>	<0.00050	<0.00060	<b>0.0014 J</b>	<b>0.0021 J</b>	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<b>0.00356</b>	<0.000310	<0.000370	<b>0.00385 J</b>	<b>0.00502</b>	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-16		<b>0.00135</b>	<0.00100	<0.000372	<b>0.00125 J</b>	<b>0.00135 J</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Nov-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-80	Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Mar-13		<0.0050	<0.0050	<0.0060	<0.0050	<0.015	<0.0050	<b>&lt;0.0050</b>	<0.0050	<0.0050	<b>&lt;0.0020</b>
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040				

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HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds										
				Analyte:		Styrene (Monomer)	Tetra- chloroethene	Toluene	Total Xylenes	trans-1,2-Di- chloroethene	trans-1,3- Dichloro- propene	Tribromo- methane	Trichloro- ethene	Vinyl Chloride
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
				0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	---	5.00E-03	1.00E-03	
CGWSL Source:				WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH	
Area	Well ID	Date	Dup											
Evaporation Ponds	MW-120	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.0040	<0.0060		<0.00050	<0.0040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.0040	<0.0042		<0.00040	<0.0026	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	MW-121	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.0040	<0.0060		<0.00050	<0.0040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.0040	<0.0042		<0.00040	<0.0026	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	MW-122	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.0040	<0.0060		<0.00050	<0.0040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.0040	<0.0042		<0.00040	<0.0026	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	MW-123	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.0040	<0.0060		<0.00050	<0.0040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.0040	<0.0042		<0.00040	<0.0026	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	MW-124	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.0040	<0.0060		<0.00050	<0.0040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.0040	<0.0042		<0.00040	<0.0026	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	OCD-1R	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.0040	<0.0060		<0.00050	<0.0040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.0040	<0.0042		<0.00040	<0.0026	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-16		<0.000341	<0.00100	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	OCD-2A	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.0040	<0.0060		<0.00050	<0.0040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.0040	<0.0042		<0.00040	<0.0026	
		Apr-15		<0.000340	<0.000310 J	<0.000370	<0.000780 J	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	OCD-3	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.0040	<0.0060		<0.00050	<0.0040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.0040	<0.0042		<0.00040	<0.0026	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398		

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

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HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds									
Analyte:				o-Xylene	Styrene (Monomer)	Tetra-chloroethene	Toluene	Total Xylenes	trans-1,2-Di-chloroethene	trans-1,3-Dichloro-propene	Tribromo-methane	Trichloro-ethene	Vinyl Chloride
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	---	5.00E-03	1.00E-03
CGWSL Source:				WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
Area	Well ID	Date	Dup										
Field East of Refinery	KWB-10R	Nov-14		0.320	<0.0077	<0.0093	0.180	1.200	<0.0099	<0.01		<0.01	<0.0065
		Apr-15		0.343	<0.00310	<0.00370	0.141	1.38	<0.00400	<0.00420	<0.00470	<0.00400	<0.00260
		Oct-15		0.254	<0.000307	<0.000372	0.124	1.08	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		0.184	<0.0154	<0.0186	0.0937 J	0.829	<0.0198	<0.0210	<0.0234	<0.0199	<0.0130
		Oct-16		0.196	<0.00614	<0.00744	0.110	0.860	<0.00792	<0.00838	<0.00938	<0.00796	<0.00518
	KWB-11A	Nov-14		0.00076 J	<0.00031	<0.00037	<0.00078	0.0025 J	<0.00040	<0.00042		<0.00040	<0.00026
		Nov-14	FD	0.00068 J	<0.00031	<0.00037	<0.00078	0.0022 J	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		0.000869 J	<0.000310 J	<0.000370	<0.000780	0.00275 J	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		0.000511 J	<0.000307	<0.000372	<0.000780	0.00181 J	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		0.000423 J	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	KWB-11B	Oct-16		0.000483 J	<0.000307	<0.000372	<0.000780	0.00158 J	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	0.0043 J	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	KWB-12A	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Nov-14	FD	<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	KWB-12B	Apr-15	FD	<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
	KWB-P4	Apr-14	FD	<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-57	Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Nov-14		0.076	<0.0077	<0.0093	<0.02	1.60	<0.0099	<0.01		<0.01	<0.0065
		Apr-15		0.083	<0.00310	<0.00370	0.0174 J	2.16	<0.00400	<0.00420	<0.00470	<0.00400	<0.00260
		Oct-15		0.0603 J	<0.0307	<0.0372	<0.0780	2.18	<0.0396	<0.0419	<0.0469	<0.0398	<0.0259
		Apr-16		0.0183	<0.00307	<0.00372	0.00806 J	0.848	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259
	MW-58	Oct-16		0.0201	<0.00307	<0.00372	0.0159	0.893	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		0.0011 J	<0.00050	<0.00060	0.0011 J	0.0057 J	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		0.0052	<0.00031	<0.00037	0.0016 J	0.027	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		0.00158	<0.000310	<0.000370	<0.000780	0.00881	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	0.00113 J	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-111	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	0.00177 J	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Nov-14		0.600	<0.0077	<0.0093	0.730	2.00	<0.0099	<0.01		<0.01	<0.0065
		Apr-14		0.090 J	<0.00050	<0.00060	0.064	0.910	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		0.016	<0.00031	<0.00037	0.0046 J	0.100	<0.00040	<0.00042		<0.00040	<0.00026
	MW-112	Nov-14	FD	0.015	<0.0031	<0.0037	<0.0078	0.100	<0.0040	<0.0042		<0.0040	<0.0026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-15	FD	<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372 J	<0.000780	<0.00106	<0.000396 J	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-15	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-113	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	0.00518	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16	FD	<0.000341	<0.000307	<0.000372	<0.000780	0.00531	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	0.0143	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16	FD	<0.000341	<0.000307	<0.000372	<0.000780	0.0127	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
	MW-125	Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-126A	Apr-14		0.0011 J	<0.00050	<0.00060	0.0022 J	0.0045 J	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259

Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds										
Analyte:		o-Xylene	Styrene (Monomer)	Tetra-chloroethene	Toluene	Total Xylenes	trans-1,2-Di-chloroethene	trans-1,3-Dichloro-propene	Tribromo-methane	Trichloro-ethene	Vinyl Chloride	
Units:		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:		0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	—	5.00E-03	1.00E-03	
CGWSL Source:		WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH	
Area	Well ID	Date	Dup									
Field East of Refinery	MW-130	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
	MW-131	Apr-14		<b>0.180</b>	<0.00050	<0.00060	<b>1.40</b>	<b>0.650</b>	<0.00040	<0.00060	<0.00050	<0.00040
		Nov-14		<b>0.065</b>	<0.00031	<0.00037	<b>0.310</b>	<b>0.180</b>	<0.00040	<0.00042	<0.00040	<0.00026
		Apr-15		<b>0.0606</b>	<0.000310	<0.000370	<b>0.215</b>	<b>0.145</b>	<0.000400	<0.000420	<0.000400	<0.000260
		Oct-15		<b>0.0243</b>	<0.000307	<0.000372	<b>0.0522</b>	<b>0.0859</b>	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-16		<b>0.0370</b>	<0.000307	<0.000372	<b>0.142</b>	<b>0.0883</b>	<0.000396	<0.000419 J4	<0.000469	<0.000259
		Oct-16		<b>0.0182</b>	<0.00154	<0.00186	<b>0.0299</b>	<b>0.0613</b>	<0.00198	<0.00210	<0.00234	<0.00199
	MW-133	Nov-14		<b>0.038 J</b>	<0.031	<0.037	<b>0.1 J</b>	<b>0.22 J</b>	<0.04	<0.042	<0.044	<0.026
		Apr-15		<0.0340	<0.0310	<0.0370	<0.0780	<0.11	<0.0400	<0.0420	<0.0470	<0.0260
	MW-134	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000400	<0.000260
		Apr-15	FD	<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Oct-15	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-16		<0.00100	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419 J4	<0.000469	<0.000259
		Apr-16	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419 J4	<0.000469	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Oct-16	FD	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
	MW-135	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
	RA-4196	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
	RA-4798	Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Apr-14	FD	<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
	RW-12R	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-16		<0.00170	<0.00154	<0.00186	<0.00390	<b>0.0140 J</b>	<0.00198	<0.00210	<0.00234	<0.00199
		Apr-16		<b>0.0139</b>	<0.000307	<0.000372	<b>0.0175</b>	<b>0.108</b>	<0.000396	<0.000419	<0.000469	<0.000398
		Apr-16		<b>0.0139</b>	<0.000307	<0.000372	<b>0.0175</b>	<b>0.108</b>	<0.000396	<0.000419	<0.000469	<0.000398
	RW-18	Apr-13		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000400	<0.000260
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
	RW-20	Apr-15		<b>0.059</b>	<0.00310	<0.00370	<b>0.211</b>	<b>1.35</b>	<0.00400	<0.00420	<0.00470	<0.00400
		Apr-15		<b>0.0952</b>	<0.00310	<0.00370	<b>0.216</b>	<b>0.945</b>	<0.00400	<0.00420	<0.00470	<0.00400
	MW-23	Apr-14		<0.010	<0.010	<0.012	<0.010	<b>0.035 J</b>	<0.0080	<0.012	<0.010	<0.0080
		Nov-14		<b>0.17</b>	<0.015	<0.019	<b>0.52</b>	<b>1.10</b>	<0.02	<0.021	<0.02	<0.013
		Apr-15		<b>0.181</b>	<0.00770	<0.037	<b>0.431</b>	<b>1.37</b>	<0.00990	<0.0100	<0.0120 J	<0.00650
		Oct-15		<b>0.00237</b>	<0.000307	<0.000372	<b>0.00501</b>	<b>0.00805</b>	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-16		<b>0.00284 J</b>	<0.00154	<0.00186	<b>0.00412 J</b>	<b>0.0176</b>	<0.00198	<0.00210	<0.00234	<0.00199
		Oct-16		<0.00852	<0.00768	<0.00930	<0.0195	<0.0265	<0.00990	<0.0105	<0.0117	<0.00995
	MW-29	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
	MW-39	Oct-13		<b>0.041</b>	<0.0050	<0.0050	<b>0.0093</b>	<b>0.086</b>	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-15		<b>0.00632</b>	<0.000310	<0.000370	<b>0.00137 J</b>	<b>0.00753</b>	<0.000400	<0.000420	<0.000470	<0.000400
		Oct-15		<b>0.0053</b>	<0.000307	<0.000372	<b>0.00108 J</b>	<b>0.00645</b>	<0.000396	<0.000419	<0.000469	<0.000398
		Apr-16		<b>0.0365</b>	<0.00768	<0.00930	<b>0.0293 J</b>	<b>0.181</b>	<0.00990	<0.0105	<0.0117	<0.00995
	MW-40	Oct-16		<b>0.0428 J</b>	<0.0307	<0.0372	<0.0780	<b>0.204 J</b>	<0.0396	<0.0419	<0.0469	<0.0398
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<b>0.0056 J</b>	<0.00040	<0.00060	<0.00050	<0.00040

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds										
Analyte:		o-Xylene	Styrene (Monomer)	Tetra-chloroethene	Toluene	Total Xylenes	trans-1,2-Di-chloroethene	trans-1,3-Dichloro-propene	Tribromo-methane	Trichloro-ethene	Vinyl Chloride	
Units:		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:		0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	---	5.00E-03	1.00E-03	
CGWSL Source:		WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH	
Area	Well ID	Date	Dup									
North Refinery	MW-61	Apr-14		0.0041 J	<0.0025	<0.0030	0.093	0.420	<0.0020	<0.0030	<0.0025	<0.0020
		Nov-14		<0.017	<0.015	<0.019	<0.039	1.20	<0.02	<0.021	<0.02	<0.013
		Apr-15		0.00784 J	<0.00310	<0.00370	0.0130 J	1.69	<0.00400	<0.00420	<0.00470 J	<0.00260
		Oct-15		0.00496 J	<0.00307	<0.00372	0.0379 J	0.374	<0.00396	<0.00419	<0.00469	<0.00259
		Apr-16		0.00263 J	<0.00154	<0.00186	0.0185 J	0.226	<0.00198	<0.00210	<0.00234	<0.00130
		Oct-16		<0.00852	<0.00768	<0.00930	0.0260 J	0.225	<0.00990	<0.0105	<0.0117	<0.00955
	MW-62	Apr-14		<0.0050	<0.00050	<0.00060	0.0056	0.72	<0.00040	<0.00060	<0.00050	<0.00040
		Nov-14		<0.017	<0.015	<0.019	<0.039	0.08 J	<0.02	<0.021	<0.02	<0.013
		Apr-15		<0.00340	<0.00310	<0.00370	0.019	<0.00780	0.0405	<0.00400	<0.00420	<0.00470 J
		Oct-15		0.00886 J	<0.00614	<0.00744	<0.0156	1.73	<0.00792	<0.00838	<0.00938	<0.00796 J
		Apr-16		<0.00852	<0.00768	<0.00930	<0.0195	1.80	<0.00990	<0.0105	<0.0117	<0.00955
		Oct-16		<0.0341 J6	<0.0307 J6	<0.0372 J6	<0.0780 J6	1.14 J6	<0.0396 J6	<0.0419 J6	<0.0469 J6	<0.0259 J6
	MW-67	Nov-14		<0.0017	<0.0015	<0.0019	<0.0039	0.0084 J	<0.0020	<0.0021	<0.0020	<0.0013
		Apr-15		<0.000340	<0.000310	<0.000370	0.00260 J	0.00291 J	<0.000400	<0.000420	<0.000470	<0.000260
		Oct-15		<0.00682	<0.00614	<0.00744	<0.0156	<0.0212	<0.00792	<0.00838	<0.00938	<0.00796
		Apr-16		<0.00341	<0.00307	<0.00372	<0.00780	0.012 J	<0.00396	<0.00419	<0.00469	<0.00398
		Oct-16		0.00407 J	<0.00307	<0.00372	<0.00780	0.012 J	<0.00396	<0.00419	<0.00469	<0.00398
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
	MW-90	Nov-14		0.00037 J	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.000470	<0.000260
		Apr-15		<0.000340	<0.000310	<0.000370	0.00194 J	<0.00110	<0.000400	<0.000420	<0.000470	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396 J	<0.000419	<0.000469	<0.000259 J
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000259
		Apr-14		0.036	<0.0025	<0.0030	0.410	0.580	<0.0020	<0.0030	<0.0025	<0.0020
	MW-91	Nov-14		<0.085	<0.077	<0.093	0.92 J	0.54 J	<0.099	<0.1	<0.1	<0.065
		Apr-15		0.150	<0.00310	<0.00370	1.91	0.852	<0.00400	<0.00420	<0.00470	<0.00260
		Oct-15		0.180	<0.00768	<0.00930	0.652	0.933	<0.00990	<0.0105	<0.0117	<0.00955
		Apr-16		0.365	<0.0154	<0.0186	4.01	1.69	<0.0198	<0.0210	<0.000469	<0.0199
		Oct-16		0.310	<0.0768	<0.0930	3.33	1.58	<0.0990	<0.105	<0.117	<0.0955
		Apr-16		0.0268	<0.000307	0.000488 J	0.0173	0.188	0.000917 J	<0.000419	<0.000469	0.000398 J
	MW-92	Oct-16		0.0151 J	<0.00614	<0.00744	<0.0156	0.110	<0.00792	<0.00838	<0.00938	<0.00796
		Apr-14		0.015 J	<0.0025	<0.0030	0.019 J	0.610	<0.0020	<0.0030	<0.0025	<0.0020
		Nov-14		<0.017	<0.015	<0.019	<0.039	0.450	<0.02	<0.021	<0.02	<0.013
		Apr-15		0.00938 J	<0.00310	<0.00370	0.00961 J	0.319	<0.00400	<0.00420	<0.00470 J	<0.00260
		Oct-15		0.011	<0.00307	<0.00372	0.0170 J	0.494	<0.00396	<0.00419	<0.00469	<0.00398
		Apr-16		<0.00170	<0.00154	<0.00186	<0.00390	0.0567	<0.00198	<0.00210	<0.00234	<0.00199
	MW-94	Oct-16		<0.00341	<0.00307	<0.00372	<0.00780	0.250	<0.00396	<0.00419	<0.00469	<0.00398
		Nov-14		0.400	<0.0061	<0.0074	0.700	0.71	<0.0079	<0.0084	<0.0080	<0.0052
		Oct-15		0.360	<0.00307	<0.00372	0.553	0.574	<0.00396	<0.00419	<0.00469	<0.00398
		Apr-16		0.387	<0.0154	<0.0186	0.687	0.615	<0.0198	<0.0210 J4	<0.0234	<0.0199
		Oct-16		0.390	<0.00154	<0.00186	0.468	0.592	<0.00198	<0.00210	<0.00234	<0.00199
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0020
	MW-95	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000260
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419 J4	<0.000469	<0.000398
		Apr-14		<0.012	<0.012	<0.015	0.015 J	<0.038	<0.010	<0.015	<0.012	<0.010
		Nov-14		<0.0085	<0.0077	<0.0093	<0.02	<0.028	<0.0099	<0.01	<0.01	<0.0065
		Apr-15		0.0011	<0.000310	<0.000370	0.00156 J	0.00547	<0.000400	<0.000420	<0.000470	<0.000260
	MW-96	Oct-15		<0.17	<0.154	<0.186	<0.39	<0.53	<0.198	<0.21	<0.234	<0.13
		Apr-16		<0.00682	<0.00614	<0.00744	<0.0156	<0.0212	<0.00792	<0.00838	<0.00938	<0.00796
		Oct-16		<0.0170	<0.0154	<0.0186	<0.0390	<0.0530	<0.0198	<0.0210	<0.0234	<0.0199
		Apr-14		0.031 J	<0.0050	<0.0060	0.300	1.90	<0.0040	<0.0060	<0.0050	<0.0040
		Nov-14	FD	0.033 J	<0.0050	<0.0060	0.320	2.00	<0.0040	<0.0060	<0.0050	<0.0040
		Apr-15		<0.085	<0.077	<0.093	0.280 J	1.60	<0.099	<0.1	<0.1	<0.065
	MW-98	Apr-15		0.0358	<0.00770	<0.00930	0.283	1.74	<0.00990	<0.0100	<0.0120 J	<0.0100
		Oct-15		0.0316	<0.00768	<0.00930	0.268	1.71	<0.00990	<0.0105	<0.0117	<0.00955
		Apr-16		<0.0341	<0.0307	<0.0372	0.220 J	0.865	<0.0396	<0.0419	<0.0469	<0.0398
		Oct-16		<0.0341	<0.0307	<0.0372	0.245 J	1.37	<0.0396	<0.0419	<0.0469	<0.0398
		Oct-15		0.480	<0.0307	<0.0372	2.16	1.16	<0.0396	<0.0419	<0.0469	<0.0398
		Apr-16		0.539	<0.0768	<0.0930	2.53	1.23	<0.0990	<0.105	<0.117	<0.0955
	MW-137	Oct-16		0.343	<0.0768	<0.0930	1.51	1.10	<0.0990	<0.105	<0.117	<0.0955
		Oct-15		<0.00682	<0.00614	<0.00744	<0.0156	<0.0212	<0.00792	<0.00838	<0.00938	<0.00796
		Apr-16		<0.00341	<0.00307	<0.00372	0.0158 J	<0.0106	<0.00396	<0.00419	<0.00469	<0.00398
		Oct-16		<0.00341	<0.00307	<0.00372	<0.00780	<0.0106	<0.00396	<0.00419	<0.00469	<0.00398
		RW-1	Apr-15	<0.0170	<0.0150	<0.0190	<0.0390	<0.0530	<0.0200	<0.0210	<0.0230	<0.0130
		RW-1R	Apr-16	0.00110	<0.000307	0.00258	0.00542	0.0122	0.0250	<0.000419	<0.000469	0.00059
	RW-2	Apr-15		0.0853	<0.00310	<0.00370	0.115	0.53	<0.00400	<0.00420	<0.00470 J	<0.00260
		RW-2R	Apr-16	0.0461 J	<0.0154	<0.0186	0.0569 J	0.299	<0.0198	<0.0210	<0.0234	0.0285 J
		RW-7	Apr-15	0.00176	<0.000310	<0.000370	0.00396 J	0.0367	<0.000400	<0.000420	<0.000470	<0.000260
		RW-7R	Apr-16	<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419 J4	<0.000469	<0.000398
		RW-8	Apr-15	<0.00340	<0.00310	<0.00370	<0.00780	<0.0110	<0.00400	<0.00420	<0.00470	<0.00260
		RW-9	Apr-13	<0.0050	<0.0050	<0.0050	<0.0050	0.015	<0.0050	<0.0050	<0.0050	<0.0020
	RW-9	Apr-14		<0.00050	<0.00050	<0.00060	0.0019 J	0.024	<0.00040	<0.00060	<0.00050	<0.00040
		Apr-15		<0.0170	<0.0150	<0.0190	<0.0390	<0.0530	<0.0200	<0.0210	<0.0230	<0.0130
		Apr-16		<0.00170	<0.00154	<0.00186	<0.00					

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds									
Analyte:		o-Xylene	Styrene (Monomer)	Tetra-chloroethene	Toluene	Total Xylenes	trans-1,2-Di-chloroethene	trans-1,3-Dichloro-propene	Tribromo-methane	Trichloro-ethene	Vinyl Chloride
Units:		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:		0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	—	5.00E-03	1.00E-03
CGWSL Source:		WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
Area	Well ID	Date	Dup								
North RO Reject Field	MW-119	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Apr-14	FD	<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
	MW-18	Oct-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0020
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
NCL	MW-45	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
	MW-53	Apr-13		<0.0050	<0.0050	<0.0060	<0.0050	<0.015	<0.0050	<0.0050	<0.0020
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
NCL	MW-54A	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
	MW-54B	Apr-13		<0.0050	<0.0050	<0.0060	<0.0050	<0.015	<0.0050	<0.0050	<0.0020
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Nov-14	FD	<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
NCL	MW-55	Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
	MW-56	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
NCL	MW-108	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Apr-14		<b>0.0028 J</b>	<0.00050	<b>0.0065</b>	<b>0.054</b>	<0.00040	<0.00060	<0.00050	<0.00040
		Nov-14		<b>0.0031 J</b>	<0.0015	<0.0019	<b>0.0078 J</b>	<b>0.059</b>	<0.0020	<0.0021	<0.0020
		Apr-15		<b>0.00412 J</b>	<0.00310	<0.00370	<b>0.00956 J</b>	<b>0.0706</b>	<0.00400	<0.00420	<0.00470
		Oct-15		<b>0.00444 J</b>	<0.00307	<0.00372	<b>0.00978 J</b>	<b>0.0855</b>	<0.00396	<0.00419	<0.00469
	NCL-31	Apr-16		<0.0170	<0.0154	<b>&lt;0.0186</b>	<0.0390	<b>0.0795 J</b>	<0.0198	<0.0210	<0.0234
		Oct-16		<0.00852	<0.00768	<b>&lt;0.00930</b>	<0.0195	<b>0.0721 J</b>	<0.00990	<b>&lt;0.0105</b>	<0.0117
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040
NCL	NCL-32	Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
	NCL-33	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
		Oct-15		<0.000341	<0.000307	<0.000372 J	<0.000780 J	<0.00106	<0.000396 J	<0.000419	<0.000469 J
NCL	NCL-34A	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Nov-14		<0.0017	<0.0015	<0.0019	<0.0039	<b>0.1</b>	<0.0020	<0.0021	<0.0020
		Apr-15		<b>0.00121</b>	<0.000310	<0.000370	<0.000780	<b>0.0952</b>	<0.000400	<0.000420	<0.000470
		Oct-15		<b>0.000477 J</b>	<0.000307	<0.000372	<0.000780	<b>0.0658</b>	<0.000396	<0.000419	<0.000469
		Apr-16		<0.0170	<0.0154	<b>&lt;0.0186</b>	<0.0390	<b>0.188</b>	<0.0198	<0.0210	<0.0234
	NCL-44	Oct-16		<0.0341	<0.0307	<b>&lt;0.0372</b>	<0.0780	<b>0.111 J</b>	<0.0396	<b>&lt;0.0419</b>	<0.0469
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470
South Refinery	KWB-2R	Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469
		Nov-14		<b>0.031</b>	<0.0077	<b>&lt;0.0093</b>	<b>0.035 J</b>	<b>0.740</b>	<0.0099	<0.01	<0.0065
		Apr-15		<b>0.0115</b>	<0.00310	<0.00370	<b>0.0140 J</b>	<b>0.236</b>	<0.00400	<0.00420	<0.00470
		Oct-15		<0.0341	<0.0307	<b>&lt;0.0372</b>	<0.0780	<b>0.448</b>	<0.0396	<b>&lt;0.0419</b>	<0.0469
	KWB-5	Apr-16		<b>0.00189</b>	<0.000307	<0.000372	<b>0.00152 J</b>	<b>0.0515</b>	<0.000396	<0.000419	<0.000469
		Oct-16		<b>0.00185</b>	<0.000307	<0.000372	<b>0.00290 J</b>	<b>0.0289</b>	<0.000396	<0.000419	<0.000469
		Nov-14		<0.0034	<0.0031	<0.0037	<0.0078	<0.011	<0.0040		

**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:		Volatile Organic Compounds											
Analyte:		o-Xylene	Styrene (Monomer)	Tetra-chloroethene	Toluene	Total Xylenes	trans-1,2-Di-chloroethene	trans-1,3-Dichloro-propene	Tribromo-methane	Trichloro-ethene	Vinyl Chloride		
Units:		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
CGWSL:		0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	---	5.00E-03	1.00E-03		
CGWSL Source:		WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH		
Area	Well ID	Date	Dup										
South Refinery	KWB-6	Nov-14		0.200	<0.0031	<0.0037	0.530	1.10	<0.0040	<0.0042	<0.0040	<0.0026	
		Apr-15		0.760	<0.00770	<0.00930	1.70	3.47	<0.00990	<0.0100	<0.0120	<0.00650	
		Oct-15		0.297 J	<0.154	<0.186	<0.39	1.33 J	<0.198	<0.21	<0.234	<0.199	<0.13
		Apr-16		0.243	<0.00154	<0.00186	0.120	1.88	<0.00198	<0.00210	<0.00234	<0.00199	<0.00130
		Oct-16		0.0232	<0.00614	<0.00744	0.0167 J	0.417	<0.00792	<0.00838	<0.00938	<0.00796	<0.00518
	MW-28	Apr-14		0.00053 J	<0.00050	<0.00060	0.0053	0.0086 J	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.0085	<0.0077	<0.0093	0.054 J	0.22	<0.0099			<0.01	<0.0065
		Apr-15		<0.0340	<0.0310	<0.0370	<0.0780	0.194 J	<0.0400	<0.0420	<0.0470	<0.0400	<0.0260
		Oct-15		<0.0341	<0.0307	<0.0372	<0.0780	0.243 J	<0.0396	<0.0419	<0.0469	<0.0398	<0.0259
		Apr-16		0.00496 J	<0.00307	<0.00372	0.0350 J	0.161	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259
	MW-48	Oct-16		<0.0170	<0.0154	<0.0186	0.0683 J	0.338	<0.0198	<0.0210		<0.0199	<0.0130
		Nov-14		0.01 J	<0.0077	<0.0093	0.03 J	0.13	<0.0099	<0.01	<0.0234	<0.01	<0.0065
		Apr-15		0.00973 J	<0.00310	<0.00370	0.0146 J	0.153	<0.00400	<0.00420	<0.00470	<0.00400	<0.00260
		Oct-15		0.00658	<0.00154	<0.00186	0.0120 J	0.125	<0.00198	<0.00210	<0.00234	<0.00199	<0.00130
		Apr-16		0.0788	<0.00614	<0.00744	0.214	0.750	<0.00792	<0.00838	<0.00938	<0.00796	<0.00518
	MW-50	Oct-16		0.0356	<0.00154	<0.00186	0.214	0.538	<0.00198	<0.00210	<0.00234	<0.00199	<0.00130
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307 J	<0.000372 J	<0.000780 J	<0.00106 J	<0.000396 J	<0.000419 J	<0.000469 J	<0.000398 J	<0.000259
	MW-52	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14	FD	<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-64	Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396 J	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		2.44	<0.0154	<0.0186	18.8	7.70	<0.0198	<0.0210 J4	<0.0234	<0.0199	<0.0130
		Oct-16		1.51	<0.0307	<0.0372	11.6	5.30	<0.0396	<0.0419	<0.0469	<0.0398	<0.0259
	MW-65	Nov-14		0.025 J	<0.015	<0.019	<0.039	0.210	<0.02	<0.021		<0.02	<0.013
		Apr-15		0.0228	<0.00310	<0.00370	0.0294 J	0.158	<0.00400	<0.00420	<0.00470	<0.00400	<0.00260
		Apr-16		0.0149	<0.00307	<0.00372	0.0211 J	0.0971	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259
		Oct-16		0.00937 J	<0.00614	<0.00744	0.0271 J	0.0298 J	<0.00792	<0.00838	<0.00938	<0.00796	<0.00518
	MW-66	Apr-14		0.0014 J	<0.00050	<0.00060	0.0027 J	0.0069 J	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		0.015	<0.0031	<0.0037	0.052	0.120	<0.0040	<0.0042		<0.0040	<0.0026
		Apr-15		<0.0170	<0.0150 J	<0.0190	<0.0390 J	0.0668 J	<0.0200	<0.0210	<0.0230	<0.0200	<0.0130
		Oct-15		0.0039	<0.00307	<0.00372	0.00722	0.032	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.00341	<0.00307	<0.00372	<0.0078	0.0285 J	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259
	MW-99	Oct-16		0.00365	<0.00307	<0.00372	0.0109	0.0265	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Nov-14		0.15	<0.0031	<0.0037	0.58	0.840	<0.0040	<0.0042		<0.0040	<0.0026
		Apr-15		0.315	<0.00770 J	<0.00930	0.149 J	0.937	<0.00990	<0.0100	<0.0120	<0.0100	<0.00650
		Oct-15		0.0953	<0.00768	<0.00930	0.221	0.604	<0.00990	<0.0105	<0.0117	<0.00995	<0.00648
		Apr-16		0.0843	<0.00307	<0.00372	0.0427 J	0.615	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259
	MW-101	Oct-16		0.108	<0.00614	<0.00744	0.190	0.699	<0.00792	<0.00838	<0.00938	<0.00796	<0.00518
		Apr-14		<0.00050	<0.00050	<0.00060	0.0038 J	0.011 J	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.0034	<0.0031	<0.0037	<0.0078	<0.011	<0.0040	<0.0042		<0.0040	<0.0026
		Apr-15		<0.00170	<0.00150	<0.00190	<0.00390	<0.00530	<0.00200	<0.00210	<0.00230 J	<0.00200	<0.00130
		Oct-15		<0.00170	<0.00154	<0.00186	<0.00390	<0.00530	<0.00198	<0.00210	<0.00234	<0.00199	<0.00130
	MW-102	Apr-16		<0.000341	<0.000307	<0.00372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Oct-16		<0.000341	<0.000307	<0.00372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Nov-14		0.54	<0.015	<0.019	2.00	1.80	<0.02	<0.021		<0.02	<0.013
		Apr-15		0.247	<0.00310	<0.00370	1.45	0.846	<0.00400	<0.00420	<0.00470	<0.00400	<0.00260
		Oct-15		0.361	<0.0307	<0.0372	1.20	1.43	<0.0396	<0.0419	<0.0469	<0.0398	<0.0259
	MW-103	Apr-16		0.0881 J	<0.0307	<0.0372	0.541	0.632	<0.0396	<0.0419	<0.0469	<0.0398	<0.0259
		Oct-16		0.0952 J	<0.0307	<0.0372	0.626	0.719	<0.0396	<0.0419	<0.0469	<0.0398	<0.0259
		Apr-13		<0.0050	<0.0050	<0.0060	0.006	<0.015	<0.0050	<0.0050		<0.0050	<0.0020
		Apr-14		0.0045 J	<0.00050	<0.00060	0.0094	0.017	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		0.00549	<0.000310	<0.000370	0.0154	0.0137	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	MW-104	Apr-16		0.00422 J	<0.00154	<0.00186	0.0153 J	<0.00530	<0.00198	<0.00210	<0.00234	<0.00199	<0.00130
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14	FD	<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Nov-14	FD	<0.0034	<0.0031	<0.0037	<0.0078	<0.011	<0.0040	<0.0042		<0.0040	<0.0026
	MW-105	Apr-15		<0.000340	<0.000310 J	<0.000370	<0.000780 J	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-15	FD	<0.000340	<0.000310 J	<0.000370	<0.000780 J	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.00170	<0.00154	<0.00186	<0.00390	<0.00530	<0.00198	<0.00210	<0.00234	<0.00199	<0.00130
		Oct-15	FD	<0.000341	0.000881 J	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
		Apr-16		<0.000341	<0.000307	<0.00372	<0.000780	<0.00106	<0.000396</				



**Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds									
Analyte:				o-Xylene	Styrene (Monomer)	Tetra-chloroethene	Toluene	Total Xylenes	trans-1,2-Di-chloroethene	trans-1,3-Dichloro-propene	Tribromo-methane	Trichloro-ethene	Vinyl Chloride
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	---	5.00E-03	1.00E-03
CGWSL Source:				WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
Area	Well ID	Date	Dup										
South Refinery	RA-313	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419 J4	<0.000469	<0.000398	<0.000259
	RW-4	Apr-15		<0.000340	<0.000310 J	<0.000370	<0.000780 J	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	RW-4R	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	RW-5R	Apr-15		<b>0.522</b>	<0.00310	<0.00370	<b>2.26</b>	<b>1.91</b>	<0.00400	<0.00420	<0.00470	<0.00400	<0.00260
		Apr-16		<b>0.570</b>	<0.00614	<0.00744	<b>2.51</b>	<b>2.25</b>	<0.00792	<0.00838	<0.00938	<0.00796	<0.00518
	RW-6	Apr-15		<b>0.0558</b>	<0.00310	<0.00370	<b>0.0126 J</b>	<b>0.158</b>	<0.00400	<0.00420	<0.00470	<0.00400	<0.00260
	RW-6R	Apr-16		<b>0.00275</b>	<0.000307	<0.000372	<b>0.00683</b>	<b>0.00747</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
South RO Reject Field	MW-114	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	MW-115	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	MW-116	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259		
Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259		
TEL	MW-49	Apr-14		<0.00050	<0.00050	<0.00060	<b>0.0040 J</b>	<b>0.034</b>	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<0.00068	<0.00061	<0.00074	<b>0.0029 J</b>	<b>0.026</b>	<0.00079	<0.00084		<0.00080	<0.00052
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<b>0.0175</b>	<0.000400 J	<0.000420	<0.000470	<0.000400	<0.000260
		Oct-15		<0.000341	<0.000307	<0.000372	<b>0.00201 J</b>	<b>0.038</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	Apr-16		<0.00682	<0.00614	<0.00744	<0.0156	<b>0.0540 J</b>	<0.00792	<0.00838	<0.00938	<0.00796	<0.00518	
	Oct-16		<0.0341	<0.0307	<0.0372	<0.0780	<0.106	<0.0396	<0.0419	<0.0469	<0.0398	<0.0259	
	TEL-1	Apr-14		<b>0.0024 J</b>	<0.00050	<0.00060	<b>0.0010 J</b>	<b>0.0024 J</b>	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14	FD	<b>0.0023 J</b>	<0.00050	<0.00060	<b>0.0011 J</b>	<b>0.0023 J</b>	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<b>0.0022</b>	<0.00031	<0.00037	<b>0.00099 J</b>	<b>0.0022 J</b>	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<b>0.00214</b>	<0.000310	<0.000370	<0.000780	<b>0.00214 J</b>	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
	Oct-15		<b>0.00197</b>	<0.000307	<0.000372	<b>0.00108 J</b>	<b>0.00197 J</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	Apr-16		<b>0.00160</b>	<0.000307	<0.000372	<b>0.000793 J</b>	<b>0.00160 J</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	Oct-16		<b>0.00183</b>	<0.000307	<0.000372	<0.000780	<b>0.00183 J</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	TEL-2	Apr-14		<b>0.018</b>	<0.00050	<0.00060	<b>0.043</b>	<b>0.260</b>	<0.00040	<0.00060		<0.00050	<0.00040
		Nov-14		<b>0.016</b>	<0.00031	<0.00037	<b>0.034 J</b>	<b>0.200</b>	<0.00040	<0.00042		<0.00040	<0.00026
		Apr-15		<b>0.0182 J</b>	<0.000610	<0.000740	<b>0.0372 J</b>	<b>0.189</b>	<0.000790	<0.000840	<0.000940	<0.000800	<0.000520
Oct-15			<b>0.0097</b>	<0.00154	<0.00186	<b>0.0186 J</b>	<b>0.155</b>	<0.00198	<0.00210	<0.00234	<0.00199	<0.00130	
Apr-16		<b>0.0102</b>	<0.000307	<0.000372	<b>0.0243</b>	<b>0.146</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259		
Oct-16		<b>0.0066 J</b>	<0.000307	<0.000372	<b>0.0218 J</b>	<b>0.123</b>	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259		
TEL-3	Apr-14		<b>0.0032 J</b>	<0.00050	<0.00060	<0.00050	<b>0.021</b>	<0.00040	<0.00060		<0.00050	<0.00040	
	Nov-14		<b>0.0023</b>	<0.00031	<0.00037	<b>0.0010 J</b>	<b>0.014</b>	<0.00040	<0.00042		<0.00040	<0.00026	
	Apr-15		<0.00340	<0.00310	<0.00370	<0.00780	<0.0110	<0.00400	<0.00420	<0.00470	<0.00400	<0.00260	
	Oct-15		<b>0.00316</b>	<0.000307	<0.000372	<b>0.00154 J</b>	<b>0.0202</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
Apr-16		<0.00852	<0.00768	<0.00930	<0.0195	<0.0265	<0.00990	<0.0105	<0.0117	<0.00995	<0.00648		
Oct-16		<b>0.00232</b>	<0.000307	<0.000372	<b>0.00119 J</b>	<b>0.0105</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259		
TEL-4	Apr-14		<b>0.0013 J</b>	<0.00050	<0.00060	<b>0.0046 J</b>	<b>0.061</b>	<0.00040	<0.00060		<0.00050	<0.00040	
	Nov-14		<0.0068	<0.0061	<0.0074	<0.016	<b>0.120</b>	<0.00079	<0.00084		<0.00080	<0.00052	
	Nov-14	FD	<0.0068	<0.0061	<0.0074	<0.016	<b>0.120</b>	<0.00079	<0.00084		<0.00080	<0.00052	
	Apr-15		<0.00340	<0.00310	<0.00370	<0.00780	<b>0.0394</b>	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
Oct-15	FD	<0.00340	<0.00310	<0.00370	<0.00780	<b>0.0407</b>	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260		
Apr-16		<b>0.00162</b>	<0.000307	<0.000372	<b>0.00623</b>	<b>0.0719</b>	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259		
Oct-15	FD	<0.00341	<0.00307	<0.00372	<b>0.00878 J</b>	<b>0.0837</b>	<0.00396	<0.00419	<0.00469	<0.000398	<0.000259		
Apr-16		<0.00341	<0.00307	<0.00372	<b>0.0132 J</b>	<b>0.142</b>	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259		
Apr-16	FD	<0.00341	<0.00307	<0.00372	<b>0.0128 J</b>	<b>0.147</b>	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259		
Oct-16		<0.00341	<0.00307	<0.00372	<0.00780	<b>0.0668</b>	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259		
Oct-16	FD	<0.00341	<0.00307	<0.00372	<0.00780	<b>0.0863</b>	<0.00396	<0.00419	<0.00469	<0.00398	<0.00259		
TMD	MW-8	Oct-13		<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020		<b>454</b>	<b>399</b>
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060		<0.00050	<0.00040
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259
	MW-16	Apr-13		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106</					

# Appendix B, Table B.4 - Summary of Groundwater Analytical Data - Volatile Organic Compounds

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HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Volatile Organic Compounds										
Analyte:				o-Xylene	Styrene (Monomer)	Tetra- chloroethene	Toluene	Total Xylenes	trans-1,2-Di- chloroethene	trans-1,3- Dichloro- propene	Tribromo- methane	Trichloro- ethene	Vinyl Chloride	
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CGWSL:				0.193	1.00E-01	5.00E-03	0.750	0.620	1.00E-01	4.70E-03	---	5.00E-03	1.00E-03	
CGWSL Source:				WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH	USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH	
Area	Well ID	Date	Dup											
TMD	MW-68	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.000469	<0.0050	<0.0020	
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00040		
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	MW-71	Oct-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020	
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00050	<0.00040	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	MW-89	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020	
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00050	<0.00040	
		Apr-15		0.000538 J	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470 J	<0.000400	<0.000260	
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.00100 J4	<0.000469	<0.000398	<0.000259	
	NP-1	Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00050	<0.00040	
		Nov-14		<0.00034	<0.00031	<0.00037	<0.00078	<0.0011	<0.00040	<0.00042	<0.00040	<0.00040	<0.00026	
		Apr-15		<0.000340	<0.000310 J	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.00047	<0.000400	<0.000260	
		Oct-15		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
	NP-6	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.00100 J4	<0.000469	<0.000398	<0.000259	
		Oct-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		NP-2	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
		NP-6	Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020
Upgradient	UG-1	Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470 J	<0.000400	<0.000260	
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020	
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00050	<0.00040	
		Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
	UG-2	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020	
		Apr-13	FD	<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020	
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00050	<0.00040	
	UG-3R	Apr-15		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260	
		Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259	
		Apr-13		<0.0050	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0020	
		Apr-14		<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00050	<0.00040	
UG-4	Apr-15	FD	<0.00050	<0.00050	<0.00060	<0.00050	<0.0015	<0.00040	<0.00060	<0.00050	<0.00050	<0.00040		
	Apr-14		<0.000340	<0.000310	<0.000370	<0.000780	<0.00110	<0.000400	<0.000420	<0.000470	<0.000400	<0.000260		
	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259		
	Apr-16		<0.000341	<0.000307	<0.000372	<0.000780	<0.00106	<0.000396	<0.000419	<0.000469	<0.000398	<0.000259		

## Definitions

X	Reported concentration, X, exceeds the CGWSL.
X	Analyte detected above the detection limit at a concentration equal to X
< x	Analyte not detected at detection limit equal to x.
< x	Analyte not detected at detection limit equal to x, but x exceeds the CGWSL.
	Blank cell indicates a sample was collected from the well during the indicated sampling event, but the analyte was not analyzed.

## Abbreviations

1,2,4-TMB	1,2,4-trimethylbenzene
1,3,5-TMB	1,3,5-trimethylbenzene
cis-1,2-DCE	cis-1,2-dichloroethene
CGWSL	Critical Groundwater Screening Level (see Table 3)
CGWSL Source	Source for CGWSL value (see Table 3)
FD	field duplicate sample
mg/L	milligrams per liter
MTBE	methyl tert-butyl ether
NMED TPH	NMED Risk Assessment Guidance for Site Investigations and Remediation, February 2012, Table 6-2 TPH Screening Guidelines for Potable Groundwater
NMED TW	NMED Risk Assessment Guidance for Site Investigations and Remediation, July 2015, Table A-1, Tap Water Screening Level
USEPA TW	United States Environmental Protection Agency Tap Water screening level, "Regional Screening Levels for Chemical Contaminants at Superfund Sites", November 2015
USEPA MCL	United States Environmental Protection Agency Maximum Contaminant Level, "Regional Screening Levels for Chemical Contaminants at Superfund Sites", November 2015
WQCC HH	NMED Groundwater standard for human health exposure, NMAC 20.6.2.3103.A

## Lab Footnote

B	Analyte was also detected in the associated method blank.
E	The sample concentration exceeds machine calibration.
H	The reported result is from a sample analyzed outside of Holding Time.
J	Indicates an estimated value.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
R	The sample concentration is rejected based on data validation.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide

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HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Water Quality Parameters							Cyanide
Analyte:				Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				250	1,600	1.60	---	---	600	1,000	10.0
CGWSL Source:				WQCC Dom	WQCC HH	---	---	---	WQCC Dom	WQCC Dom	USEPA MCL
Area	Well ID	Date	Dup								
Crossgradient	KWB-13	Apr-13		457	141	0.701	1.31	176	1,820	3,910	14.1
		Apr-14		418	158	0.580	0.724	143	1,820	3,750	14.6
		Apr-15		474	788	0.704	6.65	148	1,970	3,060	15.3
		Apr-16		626	148	0.630	2.26 J	258	2,500	3,720	13.7
	MW-17	Apr-14		395	174	1.19	2.31	72.2	1,200	2,340	2.19
		Apr-13		465	413	2.58	<0.400	253	3,090	5,980	2.33
	NP-5	Apr-15		448	993	2.13	0.484 J	209	3,030	6,060 J	1.38
		Apr-13		516	245	<0.500	3.03	162	1,560	3,050	6.62
	RA-3156	Nov-13		537	238	0.208	3.06	169	1,450	3,390	9.09
		Apr-14		<0.500	278	0.299	2.67		1,800	3,280	7.89
		Apr-16		370	1,140	0.478	3.67 J	695	1,070	3,050	<0.197
		Oct-15		706	265	1.56	3.20	144	2,740	4,020	22.1
	MW-136	Apr-16		699	336	1.23	2.95 J	149	2,870	4,250	9.76
		Oct-16		651	355	1.66	2.81	140	2,530	4,400	12.4
Evaporation Ponds	MW-1R	Apr-13		633	1,650	0.877	4.56	816	1,980	5,460	<1.00
		Apr-13	FD	592	1,610	0.869	4.66	904	1,920	5,400	<1.00
		Apr-14		540	1,560	0.567	4.27	1,010	1,900	5,740	<0.150
		Apr-15		765 J	1,970	0.821	4.52 J	1,080 J	2,400	5,020	<0.0200
	MW-2A	Apr-16		1,030	3,330	0.603 J6	6.54	2,090	3,320	10,100	<0.197
		Apr-14		794	5,440	2.19	6.58	3,440	4,310	16,200	<0.150
		Nov-14			4,900	2.30	5.80		3,900	13,000	1.30
		Apr-15		944	6,730	1.06	7.71 J	4,780	4,830	14,200	0.0404 J
	MW-3	Oct-15		677	3,870	2.14	5.85	2,590	3,670	10,500	0.0390 J
		Apr-16		933	8,400	1.53	7.35	5,280	7,640	20,700	0.501 J
		Oct-16		598	3,290	3.43	4.91	2,270	3,450	9,660	0.122
		Apr-14		827	2,300	1.39	6.57	1,300	1,930	7,400	9.07
	MW-4A	Nov-14		760	2,000	1.70	6.80	1,200	2,600	7,200	4.80
		Nov-14	FD	780	2,600	2.20	7.00	1,200	2,700	7,100	5.20
		Apr-15		839	33.2	2.10	6.16	1,850	25.0	12,200	24.5
		Apr-15	FD	927	3,270	1.60	6.80	1,790	3,000	17,800	20.2
	MW-4B	Oct-15		613	1,950	1.99	7.17	1,220	2,810	6,140	0.182
		Oct-15	FD	636	1,920	1.84	7.11	1,210	2,730	6,480	0.0580 J
		Apr-16		728	1,360	1.87	5.64	1,160	2,640	6,260	0.404 J
		Apr-16	FD	690	1,290	1.87	5.47	1,140	2,530	6,240	0.231 J
	MW-5A	Oct-16		574	1,290	2.21	5.69	865	2,380	5,180	0.052 J
		Oct-16	FD	591	1,270	2.20	5.85	854	2,380	5,040	0.049 J
		Apr-14		571		1.47	4.24	990		5,600	0.199 J
		Nov-14		690	1,400	1.60	5.10	1,000	2,500	5,700	0.960
	MW-5B	Apr-15		660	1,560	1.29	4.12 J	1,080	2,850	7,470	<0.0200
		Oct-15		394	1,380	1.92	5.23	1,010	2,110	4,290	0.0530 J
		Apr-16		507	1,860	1.78	4.03 J	1,060	2,990	5,090	<0.197
		Oct-16		393	1,510	2.06	4.06	890	1,970	4,610	0.064 J
	MW-5C	Apr-13		371	928	0.870	3.64	556	1,330	3,660	<1.00
		Apr-15		367	1,110	0.963	2.32	696	1,340	3,410 J	<0.0200
		Apr-14		562	4,710	3.03	6.58	4,230	8,160	18,100	<0.150
		Nov-14		580	3,300	1.90	6.40	4,200	8,100	16,000	<0.02
	MW-6A	Apr-15		519	4,100	1.53	6.15 J	4,220	9,370	17,000	<0.0200
		Oct-15		513	4,760	1.78	7.27	4,500	8,480	17,800	0.0450 J
		Apr-16		472	3,010	3.11	7.39	2,990	5,610	13,700	1.72
		Oct-16		500	3,500	3.43	6.34	3,880	7,950	16,300	0.044 JJ6
	MW-6B	Apr-13		473	1,840	2.20	10.8	1,600	2,950	7,500	2.93
		Apr-15		482	1,590	1.41	9.01	1,580	3,510	5,980	<0.0200
		Apr-13		420	639	1.20	4.21	446	1,580	3,620	<1.00
		Apr-15		427	585	0.910	3.97 J	485	2,020	3,290	<0.0200
	MW-7A	Mar-13		301	980	2.05	1.36	735	1,610	3,950	<1.00
		Apr-14		762	1,620	1.31	2.44	998	1,980	5,600	0.245 J
		Apr-15		809	2,010	1.85	2.14 J	1,090	2,240	6,500	0.875
		Apr-16		449	1,300	1.52	1.74 J	835	2,360	4,290	0.461 J
	MW-7B	Mar-13		530	1,370	0.533	4.31	710	1,640	4,480	<1.00
		Mar-13	FD	478	1,420	0.814	4.87	753	1,690	4,510	<1.00
		Apr-15		568	1,740	0.669 J	5.09	873	2,280	4,760	<0.0200
		Apr-14		469	2,670	1.19	4.46	1,750	3,290	7,760	<0.150
	MW-7C	Nov-14		760	3,600	0.690	5.20	2,600	4,100	11,000	<0.02 J6
		Nov-14	FD	770	1,800	1.20	5.20	2,500	2,100	11,000	<0.02
		Apr-15		609	3,080	0.693	4.18	2,060	3,620	9,840	<0.0200
		Apr-15	FD	593	3,100	0.996	4.21	2,060	3,190	9,300	0.0262 J
	MW-7D	Oct-15		403	2,470	1.08	3.96	1,590	4,020	7,100	<0.0197
		Oct-15	FD	404	2,230	1.12	3.95	1,690	3,150	7,180	<0.0197
		Apr-16		459	2,500	1.24	4.18 J	1,810	3,360	7,620	<0.197
		Apr-16	FD	423	2,550	1.24	3.94 J	1,690	3,710	7,540	<0.197 J6
	MW-7E	Oct-16		466	2,790	1.49	4.22	1,600	3,420	7,460	0.026 J
		Oct-16	FD	395	2,240	1.45	4.01	1,550 O1V	2,790	7,340	0.047 J
		Apr-13		545	1,030	3.09	6.66	540	1,800	4,280	<1.00
		Apr-15		556	1,060	0.795	6.27	672	2,200	4,640	<0.0200
	MW-7F	Apr-14		545	1,660	0.551	4.06	1,060	2,290	5,540	<0.150
		Nov-14		750	1,700	0.88 J6	4.30	1,200 V	2,800	5,900	0.230
		Apr-15		466	1,380	0.919	3.54 J	941	2,110	5,030	<0.0200
		Oct-15		518	1,580	0.783	3.68	1,080	2,620	5,340	0.28 J
	MW-7G	Apr-16		523	1,530	0.826	3.83 J	1,110	2,220	5,120	<0.197
		Oct-16		647	2,100	1.18	3.54	1,180	3,740	6,550	0.097 J
	MW-7H	Apr-14		1,250	12,400	0.647	22.9	5,140	2,410	25,400	0.488 J
		Nov-14		2,600	17,000	<0.0099	21.0	8,300	3,000	30,000	15.0
		Apr-15		1,630	11,800	0.0639 J	19 J	6,090	2,910	24,900 J	1.47
		Oct-15		1,200	9,930	0.152	20.3	5,260	3,780	18,300	0.265
	MW-7I	Apr-16		1,280 V	9,440	0.414 J6	19.0	5,150	3,510	18,600	0.715 JJ6
		Oct-16		1,230	9,180	0.752	20.8	4,850	3,250	16,600	0.048 JB
		Mar-13		855	6,560	<0.500	35.2	3,340	3,030	15,100	<1.00
		Apr-15		1,070	6,000	0.562	36.6	4,040	3,860	12,700	<0.0200
	MW-7J	Apr-14		728	2,460	0.685	5.57	1,280	2,490	7,960	4.10
		Apr-14		682	1,780	0.354	5.56	914	2,180	6,520	0.463 J
		Mar-13		771	2,640	2.13	6.02	1,240	2,180	8,120	13.3
		Apr-14		849	2,960	2.33	5.68	1,420	1,770	19,900	40.2
	MW-7K	Apr-15		565	2,150	2.12	5.01	1,300	2,000	5,470	16.0
		Apr-16		487	611	2.01	5.53	795	1,240	4,720	3.99
		Apr-14		723	10,200	3.63	61.4	6,620	6,760	27,700	2.61
		Nov-14		850	12,000	<0.0099	54.0	7,500	10,000	32,000	<0.02
	MW-7L	Apr-15		718	11,600	6.14	56.7	7,290	9,490	32,600	2.18
		Oct-15		711	9,930	5.43	51.8	6,250	10,600	27,400	0.146
		Apr-16		704	6,820	2.83	46.6	4,730	6,360	20,500	0.371 J
		Oct-16		662	7,270	3.22	42.4	4,740	6,870	20,200	<0.00180

**Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide**

2016 Annual Groundwater Report

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Water Quality Parameters						Cyanide		
Analyte:				Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite	Cyanide
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				250	1,600	1.60	---	---	600	1,000	10.0	0.200
CGWSL Source:				WQCC Dom	WQCC HH	---	---	---	WQCC Dom	WQCC Dom	USEPA MCL	USEPA MCL
Area	Well ID	Date	Dup									
Evaporation Ponds	MW-18B	Apr-13		592	803	1.10	6.32	474	1,870	4,060	<1.00	
		Apr-15		581	763	0.931	5.91	460	1,840	4,410	0.0280 J	
	MW-22A	Apr-14		514	2,290	0.766	4.02	1,290	2,540	6,640	<0.150	
		Nov-14		610	2,000	0.580	3.90	1,400	2,600	6,600	<0.02	
		Nov-14	FD	720	1,700	0.770	3.9 J	1,700	2,200	6,600	<0.02	
		Apr-15		549	2,150	0.758	3.79 J	1,450	2,500	7,270	<0.0200	
		Apr-15	FD	494	2,020	0.682	3.16 J	1,240	2,590	6,630	<0.0200	
		Oct-15		529	1,980	0.621	3.64	1,480	2,660	6,330	0.358 J	
		Oct-15	FD	527	1,970	0.610	3.65	1,640	2,650	6,090	0.441 J	
		Apr-16		548	1,890	0.645	4.08 J	1,440	2,340	6,190	<0.197	
		Apr-16	FD	541	1,900	0.660	4.04 J	1,440	2,560	6,160	<0.197	
		Oct-16		570	1,940	0.752	3.96	1,490	2,380	6,970	0.219 B	
		Oct-16	FD	563	2,030	0.733	3.88	1,450	2,400	7,220	0.049 JB	
	MW-22B	Apr-13		530	1,470	0.619	4.48	932	2,240	5,460	<1.00	
		Apr-15		477	1,400	0.823	4.02 J	1,150	2,170	5,590	<0.0200	
	MW-70	Apr-14		697	1,310	0.560	5.38	729	2,950	5,080	0.210 J	
		Nov-14		700			5.50	730				
		Apr-15		695	1,240	0.740	4.90	774	2,230	5,700	<0.0200 J	
		Oct-15		756			5.51	782				
		Apr-16		720	1,370	0.775	5.46	908	2,240	5,730	0.416 J	
		Oct-16										
	MW-72	Nov-13		753	3,540	6.26	9.43	2,340	2,200	9,890	<0.500	
		Apr-14		795	4,350	6.27	9.87	2,440	3,020	10,300	3.10	
		Apr-15		896	5,240	3.91	13.3	3,030	3,800	12,900	6.37	
		Apr-16		700	3,310	5.88	8.82	2,060	3,400	9,140	1.88	
	MW-73	Oct-13		571	2,110	2.19	2.73	2,430	3,140	9,720	<0.500	
		Apr-14		590	2,260	2.09	2.54	2,160	3,510	9,120	<0.150	
		Apr-15		659	2,480	1.94	3.12 J	2,200	4,560	9,360	0.757	
		Apr-16		597	2,790	1.96	2.32 J	2,240	5,090	9,360	0.501 J	
	MW-74	Apr-14		656	1,970	8.66	45.6	2,250	4,050	8,940	67.0	
		Nov-14		670	1,600	6.40	45.0	2,300	4,400	8,700	420	
		Apr-15		552	1,170	6.02	39.4	2,230	4,450	9,360	176	
		Oct-15		558	1,810	6.19	39.2	2,330	4,140	8,720	12.3	
		Apr-16		632	1,640	7.44	35.6	2,080	3,100	8,280	0.796 J	
		Oct-16		566	1,900	8.61	44.9	3,120	4,880	10,200	211	
	MW-75	Apr-14		379	1,610	8.37	21.4	1,550	1,930	6,180	<0.150	
		Nov-14		410	1,400	6.90	20.0	1,500	2,400	5,700	<0.02	
		Apr-15		372	11.8 J	8.20	20.3	1,490	14.2 J	4,020	<0.2	
		Oct-15		352	1,550	7.80	19.3	1,560	2,510	5,280	0.0590 J	
		Apr-16		374	1,530	7.62	21.5	1,640	1,940	5,940	<0.197	
		Oct-16		351	1,400	7.88	17.5	1,480	2,080	6,000	0.0490 JB	
	MW-76	Apr-14		470	1,200	3.16	30.0	980	1,730	4,980	<0.150	
		Nov-14		610	1,300	3.00	31.0	1,100	2,800	6,000	<0.02	
		Apr-15		558	18.1 J	3.15	29.7	1,120	22 J	4,650	<0.2	
		Oct-15		445	1,370	3.10	28.0	1,070	2,480	4,840	0.0310 J	
		Apr-16		531	1,180	2.96	29.4	1,110	2,250	5,220	<0.197	
		Oct-16		553	1,200	3.26	28.6	1,130	2,490	6,010	0.0470 JB	
	MW-77	Apr-14		627	781	3.50	72.1	1,540	3,390	8,060	2.85	
		Nov-14		630	500	2.70	84.0	1,300	4,100	8,200	<0.02	
		Apr-15		609	10.8 J	4.21	72.1	1,410	37.7 J	5,350	<0.2	
		Oct-15		557	433	2.42	82.5	1,490	4,820	7,510	0.211	
		Apr-16		589	378	3.03	82.9	1,610	4,010	7,110	0.4060 J	
		Oct-16		579	294	3.14	82.1	1,380	4,000	7,850	0.0470 JB	
	MW-78	Mar-13		286	655	19.7	22.7	660	2,270	5,260	2.51	
		Apr-14		542	215	10.9	25.2	524	2,650	5,760	<0.150	
		Apr-15		576	63.2	0.0979 J	18.9	320	19.6 J	2,560	4.24	
		Apr-16		659	72.5	9.96	22.9	540	2,690	5,270	<0.197	
	MW-79	Apr-14		599	1,810	8.56	9.27	1,510	2,690	6,920	12.5	
		Nov-14		650	1,600	5.80	8.60	1,100	2,500	5,600	2.90	
		Apr-15		649	1,570	5.52	7.98	1,150	2,930	5,660	1.9 J	
		Oct-15		517	1,440	6.43	7.61	857	2,440	5,210	0.147	
		Apr-16		603	1,390	7.08	8.43	1,140	2,040	5,320	1.87	
		Oct-16		525 V	1,380	7.01	7.28	869 V	2,000	5,180	0.070 JB	
	MW-80	Mar-13		635	1,310	3.82	4.02	911	2,260	5,130	<1.00	
		Apr-14		645	1,470	3.62	3.84	983	2,070	6,080	2.73	
		Apr-15		693	1,600	3.15	3.08 J	1,210	2,700	5,600	0.519	
		Apr-16		875	1,970	3.30	4.07 J	1,240	2,270	6,340	0.523 J	
	MW-81	Mar-13		560	1,260	7.57	6.47	915	2,070	4,950	12.2	
		Mar-13	FD	563	1,280	7.66	6.57	903	2,120	5,040	4.61	
		Apr-14		111	1,140	8.13	9.51	255	2,350	6,500	79.1	
		Apr-15		583	1,110	6.20	9.40	1,380	2,800	6,260	99.5	
		Apr-16		687	1,120	5.93	12.2	1,690	2,790	6,730	105	
	MW-82	Mar-13		298	1,520	19.2	10.3	1,890	2,600	6,270	<1.00	
		Apr-14		279	2,880	18.2	9.55	1,800	3,910	6,260	<0.150	
		Apr-14	FD	286	1,510	18.0	9.02	1,810	2,070	5,460	<0.150	
		Apr-15		284	1,110	10.7	9.28	1,700	2,200	5,770	<0.0200	
		Apr-16		350	1,360	12.1	9.87	1,790	2,350	5,410	0.262 J	
	MW-83	Apr-14		484	271	4.58	53.8	616	3,920	7,400	4.54	
		Nov-14		520	14.0	3.90	56.0	410	4,200	6,400	<0.02	
		Apr-15		566	55.5	3.96	58.4	364	32.7 J	4,810	<0.2	
		Oct-15		388	202	7.32	34.0	271	3,210	4,530	0.0860 J	
		Apr-16		483	769	4.80	36.7	563	3,770	4,980	<0.197	
		Oct-16		417	11.0	6.99	45.9	139	3,300	4,610	0.101	
	MW-84	Apr-14		698	1,620	6.07	8.80	1,750	3,660	10,500	<0.150	
		Nov-14		610	1,300	5.20	14.0	1,600	5,800	11,000	0.140	
		Apr-15		555	1,460	4.41	7.41	1,480	4,620	4,230	<0.2	
		Oct-15		596	1,070	8.23	17.0	1,580	7,300	12,400	4.83	
		Apr-16		643	1,410	5.54	10.2	1,840	4,550	9,480	<0.197	
		Oct-16		561	1,230	5.96	12.2	1,460	5,280	9,560	0.048 J	
	MW-87	Apr-14		662	5,340	1.50	28.6	3,120	4,760	13,600	2.11	
		Nov-14		750			26.0	2,700				
		Apr-15		740	4,880	1.19	27.3	3,190	4,390	13,800	0.241	
		Oct-15		737			26.5	3,250				
		Apr-16		728 V	4,180	1.40	27.9 V	3,230 V	4,310	12,000	<0.197	
		Oct-16										
	MW-88	Apr-14		377	2,000	1.26	3.11	1,330	2,820	7,340	<0.150	
		Nov-14		570			3.00	1,300				
		Apr-15		519	3,000	1.80	2.66 J	2,250	4,970	11,000	<0.0200	
		Oct-15		397			3.03	1,270				
		Apr-16		417	1,610	1.22	3.10 J	1,220	2,600	5,800	<0.197	
		Oct-16										

Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide

2016 Annual Groundwater Report

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:			Water Quality Parameters							Cyanide	
Analyte:	Units:		Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite	Cyanide
CGWSL:	CGWSL:		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL Source:			---	---	---	---	---	---	---	---	---
			WQCC Dom	WQCC HH				WQCC Dom	WQCC Dom	USEPA MCL	USEPA MCL
Area	Well ID	Date	Dup								
Evaporation Ponds	MW-120	Apr-14		587	2,180	3.56	3.99	1,470	3,430	8,000	<0.150
		Nov-14		850	2,800	2.00	5.00	1,900	3,600	8,700	1.80
		Apr-15		677	2,480	2.49	3.92 J	1,620	3,080	7,660	2.49
		Oct-15		860 J	3,640	2.38	3.60	1,790 J	3,100	9,720	0.0350 J
		Apr-16		939	3,690	2.56	4.25 J	1,910	2,510	9,100	<0.197
		Oct-16		919	3,830	2.68	3.71	1,520	2,410	9,080	0.047 JJ6
	MW-121	Apr-14		750	1,880	3.85	3.15	922	2,210	6,040	2.41
		Nov-14		720	1,400	3.20	3.40	940	3,100	6,100	3.8 J6
		Apr-15		642	1,370	3.69	2.67	854	2,740	6,040	2.08
		Oct-15		619	1,220	4.24	3.38	942	3,360	6,290	2.96
		Apr-16		718	1,520	4.34	3.39 J	968	3,790	5,550	2.13
		Oct-16		588	1,150	5.24	3.18	834	3,070	5,470	1.69
	MW-122	Apr-14		492	1,370	3.53	5.14	1,050	2,190	5,740	<0.150
		Nov-14		860	4,200	2.10	5.90	3,900	5,700	16,000	0.940
		Apr-15		658	2,970	3.38	5.51 J	2,660	4,380	10,700	0.229
		Oct-15		382	1,580	3.29	4.06	1,090	2,560	5,700	0.0380 J
		Apr-16		549	1,920	3.57	4.78 J	1,350	3,430	6,700	0.499 J
		Oct-16		491	1,760	3.29	4.31	1,160	2,270	5,730	0.028 J
	MW-123	Apr-14		539	1,680	1.21	4.25	1,170	2,050	5,900	<0.150
		Nov-14		580	1,400	1.00	3.90	1,100	2,300	5,600	<0.02
		Apr-15		532	1,560	1.16	3.84 J	1,120	2,220	5,650	<0.0200
		Oct-15		527	1,710	1.11	3.71	1,190	2,360	5,490	0.27 J
		Apr-16		570	1,880	1.09	3.73 J	1,320	2,410	5,850	<0.197
		Oct-16		510	1,600	1.20	3.59	1,090	2,420	4,990	0.047 J
	MW-124	Apr-14		798	3,380	0.968	6.94	1,610	3,800	10,000	<0.150
		Nov-14		820	3,000	0.660	7.10	1,700	3,800	9,500	<0.02
		Apr-15		779	3,240	0.922	6.80	1,970	3,610	11,400	0.0265 J
		Oct-15		780	3,210	0.915	7.41	1,840	4,120	10,100	0.0310 J
		Apr-16		929	1,490	1.20	8.45	2,150	1,720	9,800	0.415 J
		Oct-16		719	3,270	1.31	6.37	1,670	3,930	9,340	0.047 J
	OCD-1R	Apr-14		656	3,940	3.40	4.52	3,000	3,410	11,400	0.808 J
		Nov-14		840	5,800	1.10	4.10	4,700	6,300	11,000	1.10
		Apr-15		837	5,290	2.50	4.95 J	4,050	4,860	14,900	1.29
		Oct-15		641	3,100	2.78	4.86	2,660	3,710	9,160	0.144
		Apr-16		641	2,570	2.90	4.54 J	2,220	3,550	8,960	0.928 J
		Oct-16		701	2,560	3.36	4.76	1,800	3,060	8,900	0.053 JB
	OCD-2A	Apr-14		662	2,490	0.770	4.78	1,460	2,060	7,300	<0.150
		Nov-14		840			4.5	2,700			
		Apr-15		788	2,960	0.969	5.05	1,600	2,740	8,340	0.264
		Oct-15		707			7.05	1,490			
		Apr-16		678	1,800	0.705	5.98	1,340	2,750	5,870	0.417 J
		Oct-16									
	OCD-3	Apr-14		514	990	0.768	13.4	680	2,000	5,160	<0.150
		Nov-14		760			13.0 J5	1,700 Q1V			
		Apr-15		659	1,610	1.02	12.6	1,060	2,240	6,070	0.0878 J
		Oct-15		760			14.1	904			
		Apr-16		746	1,640	0.899	14.5	1,100	3,080	5,890	<0.197
		Oct-16									
	OCD-4	Apr-14		818	5,370	0.787	37.1	2,520	2,880	12,900	<0.150
		Nov-14		1,100			36.0	3,400			
		Apr-15		1,010	5,850	0.506	36.5	3,590	4,550	12,900	<0.0200
		Oct-15		833			33.2	2,560			
		Apr-16		927	5,320	0.608	36.2	3,400	3,610	12,700	0.446 J
		Oct-16									
	OCD-5	Apr-14		744	4,810	0.613	35.7	2,580	2,710	12,400	<0.150
		Apr-14	FD	694	5,250	0.670	35.1	2,400	2,970	11,900	<0.150
		Nov-14		1,000	5,100	0.420	35.0	3,500	3,400	12,000	<0.02
		Apr-15		901	4,490	0.691	39.6	2,930	3,090	10,800	0.0434 J
		Oct-15		836	4,700	0.548	39.6	3,130	3,430	12,000	0.0380 J
		Apr-16		900	5,030	0.774 JJ6	41.2	2,960	3,780	9,960	0.222 J
	OCD-6	Oct-16		851	4,700	0.892	39.0	2,830	3,080	12,700	0.052 JBJ6
		Apr-14		806	4,500	2.34	13.4	3,120	2,770	11,900	0.232 J
		Nov-14		780	2,900	2.50	11.0	1,700	2,600	7,700	<0.02
		Apr-15		779	4,050	1.85	15.5	2,470	3,320	10,300	0.211
		Oct-15		756	4,510	2.09	15.0	3,380	3,400	10,700	0.0280 J
		Apr-16		866	4,440	2.47	17.0	2,700	3,410	10,600	1.22
	OCD-7AR	Oct-16		790	4,110	2.79	14.1	2,600	2,850	10,200	0.092 J
		Apr-14		646	2,290	2.74	6.92	2,250	3,450	8,060	<0.150
		Apr-14	FD	651	2,890	2.82	7.22	2,220	4,330	8,700	<0.150
		Nov-14		700	2,800	3.50	6.60	2,500	3,900	9,100	0.150
		Apr-15		609	2,110	2.91	5.52	2,050	3,650	8,260	0.260
		Oct-15		635	2,490	2.55	5.83	2,870	4,500	8,960	0.025 J
	OCD-7B	Apr-16		694	2,550	2.78	6.27	2,580	4,740	8,480	1.03
		Oct-16		596	3,020	3.50	5.78	2,410	4,870	8,860	0.043 J
		Mar-13		552	867	1.33	12.2	650	2,270	4,670	<1.00
		Apr-15		641	910	0.852	11.9	685	2,580	4,520	<0.0200
	OCD-8A	Apr-14		671	3,200	2.04	8.7	2,170	3,690	10,300	<0.150
		Apr-14	FD	657	3,030	1.92	8.73	2,260	3,330	9,780	<0.150
		Nov-14		1200	6,300	1.70	13	3,500	3,500	13,000	<0.02
		Apr-15		1190	6,270	0.826	10.8	3,330	3,620	13,700	<0.0200
		Oct-15		946	5,140	1.36	11	2,870	3,690	11,900	<0.0197
		Apr-16		762	3,480	1.88	9.09	2,410	3,630	11,000	<0.0180
	OCD-8B	Oct-16		680	3,270	2.39	9.22	2,380	3,660	9,600	0.0870 J
		Apr-13		716	2,180	0.980	8.75	1,330	2,880	7,400	<1.00
		Apr-15		680	2,020	0.934	9.51	1,520	2,910	7,110	0.0233 J
	KWB-1A	Apr-14		583	459	0.916	1.28	206	2,440	5,180	<0.150
		Nov-14		590	470	1.00	0.99 J	220	2,800	4,500	<0.0018
		Apr-15		596	555	1.17	1.01	202	3,400	5,320	4.22
		Oct-15		549	539	1.15	1.09	230	2,800	4,580	0.666 J
		Apr-16		619	575	1.26	1.37 J	271	3,080	4,990	4.61
		Oct-16		553	553	1.21	1.21	274	2,950	4,600	0.514 B
Field East of Refinery	KWB-1C	Apr-13		474	380	1.03	5.68	161	2,150	4,420	1.75
		Apr-15		619	1,160	25.3	1.23	210	2,920	5,340	0.180
		Nov-14		360	440	0.780	0.26 J	280	1,000	2,800	<0.02
		Apr-15		279	301	0.754	0.209 J	238	886	2,100	<0.2
		Oct-15		320	358	0.813	0.152 J	252	1,120	2,570	0.202 J
		Apr-16		325	281	0.917	0.236 J	248	953	2,830	<0.197
	KWB-8	Oct-16		355	420	0.933	0.194 J	281	1,160	3,030	0.0580 JB
											<0.00180
											<0.00180
											<0.00180

Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide

2016 Annual Groundwater Report

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group: Analyte: Units: CGWSL: CGWSL Source:				Water Quality Parameters								Cyanide	
				Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite	Cyanide	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
				---	250	1.60	---	---	600	1,000	10.0	0.200	
				WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL	USEPA MCL		
Field East of Refinery	Area	Well ID	Date	Dup									
	KWB-10R		Nov-14		170	190	0.590	0.51 J	160	<0.077	1,200	<0.02	
			Apr-15		132	800	19.7	0.44 J	141	1.03 J	1,190	<0.2	
			Oct-15		132	192	1.31	0.491 J	136	0.117 J	1,090	0.0420 J	
			Apr-16		149	190	1.42	0.573 J	153	<0.0774	1,090	<0.197	
			Oct-16		148	189	1.28	0.548 J	135	110	1,160	0.364 B	
	KWB-11A		Nov-14		720	1,200	0.590	0.79 J	400	1,100	4,700	47.0	<0.0018
			Nov-14	FD	740	1,500	0.590	0.81 J	430	1,400	4,500	46.0	<0.0018
			Apr-15		568	1,270	0.580	0.305 J	370	2,280	4,020	15.7	<0.00180 J
			Oct-15		674	1,620	0.660	0.748 J	406	1,570	5,320	49.3	<0.00180
			Apr-16		710	1,600	0.642	0.797 J	426	1,570	5,840	42.4	0.023
	KWB-11B		Oct-16		647	1,460	0.742	0.719 J	450	1,590	5,940	30.9	<0.00180
			Apr-14		396	291	0.291	2.15	77.4	1,250	2,480	2.25	<0.00500 H
			Nov-14		450	240	0.400	2.20	86.0	1,400	2,100	2.40	<0.0018
			Apr-15		469	275	0.318	2.12	93.0	1,760	2,630	2.80	<0.00180 J
			Oct-15		410	247	0.467	2.07	80.6	1,340	2,350	2.17	<0.00180
	KWB-12A		Apr-16		438	218	0.441	2.11 JO1	81.3 V	1,200	2,160	2.43	<0.00120
			Oct-16		408	239	0.479	2.00	81.0	1,290	2,410	2.17	<0.00180
			Nov-14		590	140	0.470	0.89 J	140	2,300	3,400	4.30	<0.0018
			Nov-14	FD	610	130	0.450	0.67 J	150	2,400	3,700	4.30	<0.0018
			Apr-15		528	668	18.5	0.723 J	128	2,380	3,660	4.31	<0.00180
	KWB-12B		Apr-15	FD	493	133	0.605	0.63 J	123	2,110	3,630	4.34	<0.00180
			Oct-15		560	138	0.618	0.963 J	155	2,730	3,490	4.55	<0.00180
			Apr-16		579	539	0.879	0.811 J	155	2,360	3,670	6.18	<0.00180
			Oct-16		549	163	0.757	1.15	161	2,400	3,930	7.34	<0.00180
			Apr-14		526	122	0.296	0.756	138	2,130	3,800	5.56	<0.00500
	KWB-P4		Apr-14	FD	569	129	0.291	0.795	143	2,070	3,620	5.55	<0.00500
			Nov-14		650	120	0.310	0.720 J	170	2,400	3,600	4.50	<0.0018
			Apr-15		549	689	20.2	0.523 J	130	2,520	3,730	3.80	<0.00180
			Oct-15		537	124	0.398	0.537 J	131	2,580	3,320	4.77	<0.00180
			Oct-15	FD	538	123	0.430	0.569 J	127	2,450	3,270	4.82	<0.00180
	MW-57		Apr-16		528	121	0.438	0.466 J	132	2,520	3,600	6.42	<0.00120
			Apr-16	FD	500	108	0.459	0.445 J	123	1,930	3,930	4.30	<0.00120
			Oct-16		497	129	0.500	0.565 J	128	2,210	3,620	5.44	<0.00180
			Oct-16	FD	505	116	0.474	0.584 J	129	2,190	3,740	5.56	<0.00180
			Apr-13										
	MW-58		Apr-14		674	152	0.395	11.2	118	464	1,700	<0.150	
			Nov-14		570	540	1.80	1.20	440	1,900	4,100	2.70	
			Apr-15		641	1,430	22.3	1.57	460	2,890	6,010	16.2	
			Oct-15		487	541	1.69	1.16	342	2,050	3,330	12.9	
			Apr-16		593	386	2.02	1.59 J	368	2,350	3,660	11.0	
	MW-111		Oct-16		538	210	2.99	2.00	387	2,710	4,730	33.3	
			Nov-14		340	140	1.40	0.55 J	66.0	160	1,300	<0.02	<0.0018
			Apr-15		200	149	1.15	0.317 J	58.8	9.63	1,150	<0.2	<0.00180
			Oct-15		234	239	1.35	0.459 J	71.5	4.8 J	1,240	<0.197	<0.00180
			Apr-16		262	278 J	1.24	0.421 J	123	134	1,510	0.518 J	<0.00120
	MW-112		Oct-16		210	174	1.57	0.392 J	94.2	3.77 J	1,140	0.062 JB	<0.00180
			Apr-14		214	525	1.01	0.456	198	235	2,020	0.153 J	
			Nov-14		260	510	2.00	0.49 J	220	250	1,700	<0.02	
			Apr-15		270	427	1.01	0.521 J	172	294	1,600	<0.0200	
			Oct-15		227	408	1.51	0.415 J	222	473 J	1,530	0.0220 J	
	MW-113		Apr-16		248	402	1.33	<0.185	229	355	2,130	0.0640 J	
			Oct-16		224	426	1.39	0.222 JB	192	390	1,820	0.088 JB	
			Nov-14		190	230	1.00	0.31 J	190	5.40	1,200	<0.02	
			Apr-14		300	205	0.282	1.45	152	693	2,440	<0.150	
			Nov-14		300	180	0.560	0.4 J	160	800	1,900	<0.02	
	MW-125		Nov-14	FD	320	190	0.490	0.4 J	170	860	2,000	<0.02	
			Apr-15		285	194	0.606	0.526 J	151	957	2,030	<0.0200	
			Apr-15	FD	259	191	0.607	0.622 J	132	877	1,980	<0.0200	
			Oct-15		287	197	0.503	0.528 J	153	1,000	2,020	0.243 J	
			Oct-15	FD	288	197	0.493	0.529 J	156	998	2,140	<0.197	
	MW-126A		Apr-16		314	199	0.294 J3	0.611 J	154	1,090	2,370	0.393 J	
			Apr-16	FD	327	207	0.389	0.612 J	167	1,080	2,400	0.0480 J	
			Oct-16		298 V	182	0.488	0.429 J	156	925	2,150	0.047 JB	
			Oct-16	FD	299	195	0.594	0.408 J	160	945	2,240	0.051 JB	
			Apr-14		636	361	1.17	1.56	297	2,700	4,960	0.399 J	
	MW-126B		Nov-14		610	340	1.0000	1.30	260	2,900	4,100	0.200	
			Apr-15		523 J	329	1.17	1.21	217	2,680	4,700	0.295	
			Oct-15		524	316	1.22	1.31	224	2,750	4,200	0.348 J	
			Apr-16		577	342	1.18	1.39 J	245	2,900	4,440	0.537 J	
			Oct-16		530	294	1.25	1.33	220	2,660	4,370	0.247 B	
	MW-127		Apr-14		472	331	0.599	3.09	197	2,080	4,510	<0.150	
			Nov-14		360	190	0.980	0.66 J	180	1,400	2,400	<0.02	
			Apr-15		355	898	0.833	0.602 J	189	1,530	2,900	<0.2	
			Oct-15		281	200	1.03	0.511 J	178	1,300	2,500	<0.197	
			Apr-16		342	245	1.02	0.465 J	124	1,270	2,360	0.258 J	
	MW-128		Oct-16		192	78.9	1.28	0.379 J	132	875	1,860	0.139 B	
			Apr-14		354	341	0.795	0.531	196	1,600	4,030	<0.150	
			Nov-14		600	290	0.680	2.40	210	2,400	3,500	0.390	
			Apr-15		548	319	0.658	2.1 J	196	2,550	3,660	0.684 J	
			Oct-15		531	295	0.850	2.18	201	2,330	4,060	0.438 J	
	MW-129		Apr-16		574	314	0.837	2.54 J	214	2,700	3,590	0.737 JB	
			Oct-16		542	286	0.862	2.19	220	2,210	3,650	0.295 B	
			Apr-14		185	275	0.950	0.612	145	392	2,040	<0.150	
			Nov-14		290	240	0.930	0.99 J	160	620	1,800	<0.02	
			Apr-15		238	209	0.902	0.579 J	147	511	1,750	<0.2	
	MW-129		Oct-15		234	243	1.06	0.256 J	143	642	1,900	<0.197	
			Apr-16		244	245	1.10	0.335 J	153	552	1,910	<0.197	
			Oct-16		248	237	1.14	0.282 J	146	713	3,840	0.049 JB	
			Apr-14		207	283	0.991	0.515	106	172	1,380	<0.150	
			Nov-14		250	320	1.10	1.20	110	250	1,400	<0.02	
	MW-129		Apr-15		214 J	307	1.22	0.414 J	104	290	1,490	<0.0200	
			Oct-15		202	282	1.22	0.341 J	105	280	1,560	<0.197	
			Apr-16		1010	266	1.22	1.92 J	560	286	1,580	1.28	
			Oct-16		203	249	1.28	0.586 J	108	280	1,470	0.046 JB	
			Nov-14		270	320	0.980	0.8 J	210	52.0	1,300	<0.02	
			Apr-15		192	302	0.900	0.53 J	195	69.4	1,330	<0.2	
			Oct-15		169	313	1.08	0.315 J	194	57.8	1,280	<0.197	
			Apr-16		170	300	1.10	0.331 J	210	44.1	1,520	<0.197	
			Oct-16		162	293	1.13	0.270 J	198	44.1	1,340	0.077 JB	

**Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Water Quality Parameters							Cyanide
Analyte:				Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				250	1,600	1.60	---	---	600	1,000	10.0
CGWSL Source:				WQCC Dom	WQCC HH	---	---	---	WQCC Dom	WQCC Dom	USEPA MCL
Area	Well ID	Date	Dup								
Field East of Refinery	MW-130	Apr-14		321	316	0.533	1.34	284	1,020	3,080	0.975 J
		Nov-14		310	250	0.730	1.00	310	1,200	2,600	0.350
		Apr-15		81.8 J	259	0.952	6.71	125	1,080	3,710	0.471
		Oct-15		261	237	0.829	0.688 J	293	1,200	2,380	0.495 J
		Apr-16		281	293	0.907	0.870 J	324	1,030	2,570	3.82 J6
		Oct-16		260	253	0.914	0.695 J	285	1,110	2,600	0.631
	MW-131	Apr-14		147	337	0.637	0.573	150	12.2	1,360	<0.150
		Nov-14		200	290	0.470	0.64 J	160	8.30	1,200	<0.02
		Apr-15		168	271	0.683	0.328 J	157	9.57	1,980	<0.0200
		Oct-15		197	295	0.787	0.622 J	161	16.1	1,180	0.0380 J
		Apr-16		158	288	0.774	0.238 J	167	9.49	1,250	<0.197
		Oct-16		158	291	0.868	0.250 J	158	9.61	1,270	0.053 JB
	MW-133	Nov-14		200	270	1.10	0.46 J	140 V	140	1,300	<0.02
		Apr-15		163	174	1.19	0.323 J	122	116	1,190	<0.2
	MW-134	Apr-14		569	459	0.952	1.94	273	2,650	5,540	2.64
		Nov-14		660	580	0.910	1.80	310	3,100	4,600	7.40
		Apr-15		840	767	1.24	2.21 J	454	3,470	5,520	8.15
		Apr-15	FD	710	752	1.35	1.46	307	3,380	6,400	8.04
		Oct-15		532	521	1.31	1.60	302	2,980	5,040	3.33
		Oct-15	FD	529	516	1.32	1.58	301	3,030	4,690	2.98
		Apr-16		576 V	498	1.24	1.70 J	311 V	2,800	4,560	2.79
		Apr-16	FD	565	497	1.24	1.69 J	303	2,780	4,910	2.73
		Oct-16		518	460	1.23	1.60	288	2,980	5,020	2.10
		Oct-16	FD	512	473	1.18	1.58	286	2,910	4,860	2.28
	MW-135	Apr-14		618	1,030	0.739	1.58	507	2,090	5,700	47.3
		Nov-14		840	1,300	0.780	2.80	570	2,500	5,600	69.0
		Apr-15		848	1,100	0.764	1.42 J	552	2,170	5,040	67.8
		Oct-15		677	1,380	1.17	1.32	544	2,460	5,800	76.9
		Apr-16		2780	1,010	0.993	5.74	2,640	2,470	5,320	34.7
		Oct-16		590	1,310	1.18	0.993 J	624	2,500	5,980	58.9
	RA-4196	Apr-14		813	137	0.375	2.15		1,100	2,600	<0.150
		Apr-15		391	144	0.410	2.07	93.4	1,400	2,170	<0.0200
		Oct-15		417	145	0.324	2.26	104	1,470	2,290	0.269 J
		Apr-16		422	122	0.344	2.36 J	103	1,150	2,800	0.0700 J
		Oct-16		382	151	0.299	2.11	103	1,310	2,410	0.0490 JB6
	RA-4798	Apr-14		412	137	0.389	2.07		1,270	2,340	2.73
		Apr-14	FD	489	146	0.370	2.49		1,150	2,280	<0.150
		Nov-14		400	150	0.330	2.20	110	1,400	2,200	1.50
		Apr-15		465	183	0.415	2.21	128	1,740	2,740	0.936
		Oct-15		396	142	0.335	2.12	105	1,520	2,230	1.53
		Apr-16		449	142	0.347	2.40 J	117	1,290	2,290	1.28
	RW-12R	Oct-16		437	174	0.359	2.27	129	1,560	2,880	0.930
		Apr-16		448	174	0.334	0.437 J	181	1,610	3,130	0.326 J
	RW-13R	Apr-16		202	222	0.691	0.346 J	167	341	1,190	0.0460 J
	RW-18	Apr-13		474	411	2.400	1.13	226	3,230	5,820	3.24
		Apr-14		545	347	1.78	0.984	218	2,860	5,600	3.33
		Apr-15		482	232	2.46	1.30	230	3,670	4,440	6.55
		Apr-16		542	193	2.85	1.13 J	186	3,800	4,640	2.79
	RW-20	Apr-15		228	256	0.53	<0.18	228	125	1,430	<0.2
		Apr-15		184	402	0.86	0.319 J	274	78.4	1,680	<0.2
North Refinery	MW-23	Apr-14		88.3	509	1.33	1.12	483	24.0	1,940	<0.150
		Nov-14		260	920	2.40	1.30	740	740	4,000	<0.02
		Apr-15		222	864	1.63	0.562 J	577	509	3,030	0.0259 J
		Oct-15		114	480	1.72	1.92	463	29.9	2,190	2.7 J
		Apr-16		110	500	1.81	2.14 J	561	1.84 J	1,990	<0.197
		Oct-16		259	445	1.58	2.16	430	0.536 J	2,140	<0.197
	MW-29	Apr-14		539	319	2.66	9.84	293	2,450	4,860	<0.150
		Nov-14		570	320	1.80	4.60	300	2,500	4,100	<0.02 J6
		Apr-15		427	283	0.795	1.52	207	2,100	1,000	<0.0200
		Oct-15		397	115	0.722	0.823 J	167	2,080	3,330	<0.197
		Apr-16		465	134	1.04	1.29 J	210	2,620	3,830	0.105 J6
		Oct-16		398	282	0.919	0.964 J	227	1,660	3,210	0.502 J
	MW-39	Oct-13		89.9	385	2.31	0.353	1,080	893	3,600	<0.500
		Apr-15		509	190	3.09	3.62 J	179	1,380	2,640	<0.2
		Oct-15		432	152	2.48	3.14	133	1,660	2,960	0.300 J
		Apr-16		113	305	2.68	0.459 J	1,290	951	4,010	0.530 J
		Oct-16		189	334	2.35	0.546 J	1,510	2,360	5,950	<0.197
	MW-40	Apr-13		374	153	1.34	1.34	109	1,220	2,720	<1.00
		Apr-14		386	179	1.28	1.56	124	1,340	2,700	<0.150
		Apr-15		571	298	1.66	1.89 J	134	1,380	2,640	<0.2
		Apr-16		504	146	1.70	1.76 J	127	1,680	2,670	<0.197
	MW-41	Oct-13		232	373	1.05	0.404	425	1,170	3,140	<0.500
		Apr-14		242	275	0.747	0.444	387	1,450	3,760	<0.150
		Apr-15		313	290	1.07	0.648 J	501	1,410	2,710	<0.0200
		Apr-16		258	312	1.04	0.393 J	453	1,180	2,530	<0.197
	MW-42	Oct-13		233	697	0.987	0.535	455	862	3,610	<0.500
		Apr-14		248	914	0.545	0.560	508	954	3,440	<0.150
		Apr-15		309	562	0.962	0.579 J	611	1,110	3,440	<0.0200
		Apr-16		295	457	0.867	0.617 J	601	1,090	3,010	<0.197
	MW-43	Apr-14		205	886	0.250	0.596	531	218	2,650	<0.150
		Nov-14		200	750	0.780	0.61 J	590 V	98.0	2,300	<0.02
		Apr-15		186	726	0.709	<0.18	511	122	2,290	<0.0200
		Oct-15		241	984	2.19	1.26	658	677	4,160	<0.197 J
		Apr-16		178	1,010	2.27	0.956 J	812	747	4,820	0.270 J
		Oct-16		212	855	2.00	1.23	664	619	4,470	<0.197
	MW-59	Apr-13		478	197	1.06	0.657	152	1,790	3,320	<1.00
		Apr-14		514	176	0.475	0.643	156	1,890	3,420	<0.150
		Apr-15		489 J	178	1.23	0.489 J	139	1,760	3,300	0.0241 J
		Apr-16		2,370	126	1.28	2.61 J	711	1,790	3,300	0.374 J
	MW-60	Apr-14		374	238	2.50	0.586	181	1,860	3,440	<0.150
		Nov-14		530	200	1.10	0.63 J	240	1,900	3,400	<0.02
		Apr-15		411 J	198	0.968	0.558 J	190	1,810	3,530	<0.2
		Apr-15	FD	403 J	241	1.07	0.541 J	186	1,910	3,710	<0.2
		Oct-15		395	209	0.964	0.565 J	185	1,910	3,560	<0.197
		Oct-15	FD	416	210	0.996	0.569 J	191 J	1,990	3,660	<0.0180
		Apr-16		446	212	0.568	0.624 J	227	2,090	3,980	0.0410 J
		Apr-16	FD	447	190	1.00	0.588 J	226	2,140	3,200	0.0650 J J6
		Oct-16		408	163	1.04	0.540 J	151	2,020	3,610	0.071 JB
		Oct-16	FD	410	162	1.05	0.509 J	149	2,050	3,280	0.066 JB6

Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide

2016 Annual Groundwater Report

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group: Analyte: Units: CGWSL: CGWSL Source:				Water Quality Parameters								Cyanide
				Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite	Cyanide
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				---	250	1.60	---	---	600	1,000	10.0	0.200
				WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL	USEPA MCL	
Area	Well ID	Date	Dup									
North Refinery	MW-61	Apr-14		365	520	0.813	0.629	420	1,070	3,400	<0.150	
		Nov-14		470	250	1.50	1.10	290	930	2,700	<0.02	
		Apr-15		457	287	1.30	1.1 J	349	1,280	2,910	<0.2	
		Oct-15		375	179	2.61	2.28	286	2,080	2,520	<0.197	
		Apr-16		439	240	2.65	2.82 J	278	2,120	2,680	0.552 J	
		Oct-16		409	115	3.14	3.89	226	1,400	2,430	<0.197	
	MW-62	Apr-14		285	240	1.11	1.12	224	440	3,430	<0.150	
		Nov-14		160	470	1.60	1.80	480	5.50	2,100	<0.02	
		Apr-15		126	485	1.52	1.72	478	21.0	1,930	<0.0200	
		Oct-15		425	273	1.93	1.31	399	1,900	4,050	<0.197	
		Apr-16		481	276	1.92	1.42 J	456	1,850	3,830	0.322 J	
		Oct-16		371	243	1.79	1.15	359	1,390	3,460	<0.197	
	MW-67	Nov-14		240	170	0.610	0.59 J	160	380	1,600	<0.02	<0.0018
		Apr-15		194	208	0.698	0.531 J	160	329	1,510	<0.2	<0.00180
		Oct-15		192	225	0.589	0.533 J	177	311	1,450	<0.197	<0.00180
		Apr-16		202	312	0.548	0.427 J	218	281	1,790	<0.197	0.0440 J
		Oct-16		205	310	0.620	0.574 J	211	303	1,880	<0.0197 J6	<0.0180
		Apr-14		270	162	0.892	0.928	185	1,070	2,600	<0.150	
	MW-90	Nov-14		520	160	9.30	3.50	500	6,200	8,800	4.80	
		Apr-15		302	104	2.73	1.63	286	2,230	3,800	<0.2	
		Oct-15		481	22.7	6.77	2.07	135	4,530	5,130	3.44	
		Apr-16		411	85.9	6.25	1.69 J	246	3,250	5,180	0.377 J	
		Oct-16		534	74.7	8.22	1.84	142	3,610	5,730	14.7	
		Apr-14		251	29.0	0.933	0.435	38.8	240	1,540	<0.150	
	MW-91	Nov-14		460	36.0	1.30	1.00	37.0	830	2,000	<0.02	
		Apr-15		355	32.8	1.40	0.523 J	30.8	643	1,980	<0.2	
		Oct-15		361	35.7	1.34	0.686 J	35.0	854	2,280	<1.97	
		Apr-16		379	37.1	1.37	0.464 J	36.6	776	2,270	0.320 J	
		Oct-16		366	37.4	1.45	0.525 J	35.1	862	2,260	<0.0197	
		Apr-16		130 O1	415	1.30	1.73 J	450 O1V	24.1	2,310	0.602 J	
	MW-93	Oct-16		134	539	1.63	2.02	454	14.6	2,150	<0.985	
		Apr-14		414	173	1.16	3.11	103	645	2,130	<0.150	
		Nov-14		640	200	3.10	4.70	130	1,700	3,100	<0.02	
		Apr-15		579	221	2.23	2.58 J	126	2,050	3,080	<0.0200	
		Oct-15		516	251	2.37	5.23	133	3,070	3,080	2.92 J	
		Apr-16		677	206	3.06	1.76 J	164	2,130	3,270	<0.197	
	MW-94	Oct-16		553 V	200	2.78	3.45 O1	167 V	1,630	3,260	<0.197	
		Nov-14		190	230	0.590	0.58 J	370	240	2,600	<0.02	
		Oct-15		109	245	1.01	0.224 J	355	75.8	2,530	<0.197	
		Apr-16		124	217	1.02	0.189 J	532	199	2,980	<0.197	
		Oct-16		137	172	1.04	0.467 J	319	175	2,530	<0.0197	
		Apr-13		177	207	0.569	0.541	136	169	1,450	<1.00	
	MW-95	Apr-14		177	226	0.560	0.494	143	160	1,440	<0.150	
		Apr-15		178	275	1.02	0.655 J	177	359	1,680	<0.2	
		Apr-16		191	280	0.805	0.518 J	180	326	1,670	<0.197	
		Apr-14		154	146	0.606	0.891	234	286	1,750	<0.150	
		Nov-14		390	220	1.80	1.90	310	1,200	3,000	<0.02	
		Apr-15		208	884	1.19	1.03	224	1,730	1,680	0.211 J	
	MW-96	Oct-15		230	190	1.23	1.21	244	583	1,990	0.202 J	
		Apr-16		187	159	1.18	1.10 J	234	255	1,590	0.313 J	
		Oct-16		210	169	1.19	1.03	225	456	1,990	0.023 J	
		Apr-14		471	36.3	0.962	0.218	92.1	1,800	3,360	<0.150	
		Apr-14	FD	475	38.0	1.02	0.229	92.8	1,810	3,390	<0.150	
		Nov-14		460	32.0	1.90	0.2 J	81.0	1,600	2,800	<0.02	
	MW-98	Apr-15		497	41.6	1.29	<0.18	91.5	2,010	3,040	<0.0200	
		Oct-15		427	55.7	1.53	0.134 J	74.9	1,790	3,340	<0.197	
		Apr-16		539	74.2	1.43	<0.185	89.6	1,690	3,040	<0.197	
		Oct-16		450	88.0	1.52	0.241 J	72.7	1,610	3,370	<0.197	
		Oct-15		142	390	1.97	1.90	1,320	1,090	3,880	<0.197	0.144
		Apr-16		178	343	1.87	2.43 J	1,740	2,160	3,950	<0.197	0.348 J
MW-137	Oct-16		142	445	1.32	1.23	960	1,040	3,550	<0.197	<0.0450	
	Oct-15		139	490	1.08	1.75	410	154	1,920	<0.197	<0.00180	
	Apr-16		160	571	1.13	2.03 J	568	164	2,180	<0.197	0.0290 J	
	Oct-16		138	527	0.927	1.84	426	122	2,380	<0.197	<0.0450	
	Apr-15		358	224	1.33	3.57	210	1,330	2,410	<0.2		
	Apr-16		505	180	1.38	6.39	203	1,500	2,990	0.422 J		
RW-1R	Apr-16		726	365	1.75	5.55 J	383	3,510	5,310	<0.2		
	Apr-16		875	430	2.09	5.80	396	2,200	3,810	0.281 J		
	Apr-15		252	237	1.15	1.88 J	192	19.0	1,500	<0.2		
	Apr-16		262	186	0.651	0.651 J	110	624	878	<0.197		
	Apr-15		227	115	0.801	0.353 J	209	473	1,600	<0.2		
	Apr-13		262	292	1.46	1.95	314	775	2,670	<1.00		
RW-9	Apr-14		291	318	1.10	1.57	306	1,260	3,380	<0.150		
	Apr-15		315	313	1.68	1.69	318	1,310	3,150	<0.2		
	Apr-16		336	313	1.69	1.96 J	356	1,440	3,370	1.73		
	Apr-13		343	190	2.38	6.78	236	1,730	3,190	<1.00		
	Apr-14		324	231	2.17	5.84	227	2,060	3,420	<0.150		
	Apr-15		494	187	3.34	9.04	172	2,010	3,290	0.639		
RW-16	Apr-16		638	159	4.28	13.2	176	2,040	3,330	1.21		
	Apr-13		580	451	4.54	1.14	522	2,700	5,350	<1.00		
	Apr-14		531	452	3.74	0.799	430	2,680	5,130	<0.150		
	Apr-14	FD	556	429	3.89	0.767	455	2,550	5,150	<0.150		
	Apr-15		641	534	4.61	1.69 J	594	3,220	5,430	2.87		
	Apr-16		604	416	3.01	1.15 J	502	3,360	5,610	2.45		
RW-17	Apr-13		598	505	2.19	4.13	383	2,960	5,470	<1.00		
	Apr-14		585	524	1.84	3.88	405	3,280	6,100	<0.150		
	Apr-15		683	494	2.58	9.10	631	4,180	5,840	31.6		
	Apr-16		2,840	377	2.22	28.7	1,800	3,400	5,880	4.77		
	Apr-14		646	97.0	3.03	9.29	167	2,140	4,980	<0.150		
	Nov-14		610	96.0	3.00	5.20	110	2,000	3,000	0.650		
North RO Reject Field	Nov-14	FD	640	96.0	2.40	5.00	98.0	2,200	3,300	0.640		
	Apr-15		613	87.2	3.79	5.97	102	2,220	3,670	0.372 J		
	Oct-15		478	55.4	3.40	6.44	109	1,690	2,980	0.779 J		
	Apr-16		554	94.4	3.45	5.82	112	2,060	3,390	0.349		
	Oct-16		592	272	3.57	6.90	115	2,240	3,590	0.137 JB6		
	Apr-14		732	92.3	5.58	6.15	134	2,190	5,200	<0.150		
	Nov-14		670	160	4.9 J6	6.20	140	2,700	3,700	0.98		
	Apr-15		601	767	4.14	5.30	153	2,510	3,960	1.70		
	Oct-15		583	86.6	5.13	5.64	162	2,690	3,960	0.622 J		
	Apr-16		573	189	5.86	4.80 J	152	2,480	3,950	1.57		



Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide

2016 Annual Groundwater Report

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area		Well ID	Date	Dup	Water Quality Parameters							Cyanide			
					Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite			
Analyte Group:					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			
Units:					---	---	---	---	---	---	---	---			
CGWSL:					---	---	---	---	---	---	---	---			
CGWSL Source:					WQCC Dom	WQCC HH	---	---	---	WQCC Dom	WQCC Dom	USEPA MCL			
												USEPA MCL			
North RO Reject Field	MW-119	Apr-14			680	235	2.61	1.13	140	1,980	4,200	0.176 J			
		Apr-14	FD		655	216	2.82	1.08	136	1,830	4,140	0.174 J			
		Nov-14			670	49.0	2.60	1.80	77.0	2,300	3,200	<0.02			
		Apr-15			590	48.2	1.99	0.232 J	54.5	2,040	3,030	0.292 J			
		Oct-15			624	152	2.65	0.985 J	86.3	2,290	3,500	0.437 J			
		Apr-16			595	191	2.50	0.614 J	101	1,900	3,330	0.518 J			
		Oct-16			619	280	2.91	0.991 J	132	2,010	3,690	0.189 B			
	MW-18	Oct-13			456	114	2.26	13.3	64.7	1,450	3,260	21.3			
		Apr-14			507	159	0.954	2.89	83.2	1,830	3,700	35.2			
		Apr-15			407	185	1.45	7.18	66.7	1,600	3,110 J	36.1			
		Apr-16			504	178	1.39	3.69 J	107	1,600	2,920	42.6			
NCL	MW-45	Apr-14			524	441	0.877	4.12	348	2,130	4,640	<0.150			
		Nov-14			590	470	1.50	4.60	360	2,000	4,300	<0.0018			
		Apr-15			605	1,260	1.44	4.47	346	2,580	5,300 J	<0.0200			
		Oct-15			610	454	1.37	5.02	376	2,910	4,660	0.0290 J			
	MW-53	Apr-16			689	524	1.51	6.33	429	2,710	4,760	<0.197			
		Oct-16			640	546	1.48 J6	5.30	392	2,810	4,730	0.377 B			
		Apr-13			284	107	1.20	1.06	103	1,080	2,570	<1.00			
		Apr-14			290	95.4	0.827	0.935	87.6	1,190	2,060	<0.150			
	MW-54A	Apr-15			348	1,010	0.922	1.16	104	1,290	2,810 J	34.5			
		Apr-16			459	346	1.06	1.42 J	161	1,340	2,890	25.3			
South Refinery	MW-54B	Apr-14			354	211	0.600	0.275	69.2	666	1,800	<0.150			
		Nov-14			370	190	1.20	0.38 J	74.0	680	1,900	0.85 J			
		Apr-15			318	192	1.10	0.276 J	62.9	712	2,080 J	0.450			
		Oct-15			356	210	1.10	0.33 J	70.2	796	2,140	4.32 J			
	MW-55	Apr-16			381	176	1.12	0.303 J	69.4	625	1,780	<0.197 J6			
		Oct-16			331	175	0.997	0.254 J	61.5	670	1,770	0.134 J6B			
		Apr-13			345	176	<0.500	1.16	48.8	747	2,050	<1.00			
		Apr-15			307	166	0.613	0.767 J	48.0	752	1,890 J	0.0276 J			
	MW-56	Apr-14			560	357	1.14	0.926	233	2,670	5,100	9.61			
		Nov-14	FD		573	445	1.10	0.882	231	2,600	5,360	9.43			
		Apr-15			610	190	2.40	0.9 J	130	2,300	3,600	6.5 J			
		Oct-15			627	266	1.88	0.692 J	167	2,940	4,910 J	15.5			
NCL	MW-108	Apr-16			411	216	1.85	0.756 J	166	2,300	4,000	5.57			
		Oct-16			472	442	1.04	0.829 J	253	2,080	4,200	2.26			
		Apr-14			465	219	2.09	0.732 J	174	2,190	3,810	3.65			
		Nov-14			559	365	0.639	1.88	237	1,840	4,320	2.32			
	NCL-31	Apr-15			540	340	1.20	2.10	250	1,900	3,500	<0.02			
		Oct-15			485	927	1.11	1.90	272	1,900	3,640 J	1.28			
		Apr-16			514	399	1.12	2.05	342	2,490	4,080	4.34			
		Oct-16			559 V	403	1.10	2.32 J01	379 V	1,970	3,790	2.76			
	NCL-32	Apr-14			446 V	263	1.19	1.97	317 V	1,910	4,110	0.151 B			
		Nov-14			316	101	1.58	1.07	89.3	1,130	2,820	<0.150			
		Apr-15			350	82.0	3.30	3.20	110	1,200	2,500	0.190			
		Oct-15			289	78.8	2.52	1.50	76.8	962	2,540 J	<0.39			
NCL	NCL-33	Apr-16			298	77.5	2.30	1.31	88.9	1,090	2,530	<0.197			
		Oct-16			333	79.6	2.04	1.28 J	92.6	981	2,120	0.304 J			
		Nov-14			343	112	2.75	3.88	116	1,340	2,830	0.046 JB			
		Apr-14			267	69.6	0.776	0.321	112	1,030	2,300	<0.150			
	NCL-34A	Nov-14			380	160	1.40	0.43 J	150	1,300	2,600	0.110			
		Apr-15			266	89.5	1.25	0.22 J	100	1,240	2,670 J	<0.2			
		Oct-15			392	129	1.20	0.418 J	125	2,100	3,220	<0.197			
		Apr-16			340	78.9	1.14	0.272 J	109	1,420	3,020	0.385 J			
	NCL-44	Oct-16			445	67.8	1.57	0.564 J	148	2,400	3,820	0.084 JB			
		Nov-14			440	460	4.60	19.0	82.0	800	2,000	0.570			
		Apr-15			446	177	1.92	4.15 J	92.6	1,050	2,250	<0.2			
		Oct-15			540	329	1.57	4.98	97.0	1,430	2,280	<0.197			
NCL	NCL-49	Apr-16			697	206	2.05	7.60	115	1,340	2,740	<0.197			
		Oct-16			390	128	1.48	3.26	102	1,220	2,230	1.77			
		Apr-14			358	302	1.83	3.78	105	557	1,920	<0.150			
		Nov-14			450	340	2.60	5.00	110	720	2,100	<0.02			
	NCL-44	Apr-15			431	281	2.58	4.31 J	111	800	2,280	<0.0200			
		Oct-15			419	404	2.49	4.86	119	847	2,140	<0.197			
		Apr-16			622	280	2.82	7.58	113	1,370	3,200	0.367 J			
		Oct-16			462	400	2.65	5.28	109	900	2,790	0.075 JB			
	NCL-44	Nov-14			250	180	1.40	0.86 J	120	100	1,200	<0.02			
		Apr-15			275	249	1.36	0.57 J	117	110	1,490	<0.2			
South Refinery		Oct-15			202	182	1.43	0.877 J	103	104 J	1,250	0.284 J			
		Apr-16			347	416	1.31	2.20 J	140	82.2	1,540	0.265 J			
KWB-2R	Oct-16			249	238	1.43	1.27	107	95.0	1,370	0.047 JB				
	Apr-14			265	149	1.20	2.06	66.0	454	1,720	<0.150				
	Nov-14			290	850	1.80	2.20	70.0	450	1,500	<0.02				
	Apr-15			269	161	1.78	1.64 J	73.4	468	2,510	<0.2				
KWB-5	Oct-15			276	182	1.69	2.07	71.4	633	1,890	<0.197				
	Apr-16			414	234	1.59	2.62 J	98.3	965	2,120	<0.197				
	Oct-16			373	222	1.67	2.29	94.9	1,030	2,130	0.081 JB				
	Nov-14			430	104	0.501	0.625	116	1,680	3,000	5.21				
South Refinery	KWB-2R	Nov-14			440	98.0	0.650	0.72 J	120	1,500	2,600	4.30			
		Nov-14	FD		430	98.0	0.590	0.75 J	120	1,700	2,600	4.50			
		Apr-15			377	109	1.64	0.552 J	105	1,400	2,840 J	4.53			
		Apr-15	FD		380	395	0.531	0.589 J	105	1,650	2,850 J	4.50			
	KWB-5	Oct-15			406	112	0.593	0.607 J	115	1,770	2,830	5.79			
		Oct-15	FD		407	113	0.598	0.613 J	114	1,800	2,860	5.79			
		Apr-16			468	119	0.685	0.749 J	136	1,570	2,820	5.71			
		Apr-16	FD		470	119	0.685	0.792 J	137	1,580	2,790	5.63			
		Oct-16			425	128	0.600	0.590 J	120	1,700	2,770	6.08			
		Oct-16	FD		429	130	0.600	0.597 J	122	1,670	3,290	6.01			

**Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide**

2016 Annual Groundwater Report  
HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Water Quality Parameters							Cyanide
Analyte:				Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				250	1.60	---	---	---	600	1,000	10.0
CGWSL Source:				WQCC Dom	WQCC HH	---	---	---	WQCC Dom	WQCC Dom	USEPA MCL
Area	Well ID	Date	Dup								
South Refinery	KWB-6	Nov-14		260	240	0.800	0.2 J	150	330	1,600	0.370
		Apr-15		212	305	0.366	0.22 J	193	16.2	1,460	0.148
		Oct-15		229	265	0.935	0.181 J	144	264	1,410	0.273 J
		Apr-16		246	313	1.03	0.206 J	199	83.1	1,410	<0.197
		Oct-16		232	280	0.977	0.219 JB	109	275	1,590	0.077 JB
	MW-28	Apr-14		164	157	1.02	0.382	102	166	1,560	<0.150
		Nov-14		590	140	0.730	0.92 J	96.0	1,300	3,000	<0.0018
		Apr-15		439 J	160	1.59	0.685 J	89.5	1,080	2,760	<0.39
		Oct-15		379	159	1.67	0.632 J	92.7	1,060	3,000	0.211 J
		Apr-16		1500	135	1.42	4.06 J	450	672	3,040	0.470 J
	MW-48	Oct-16		480	147	1.40	0.640 J	74.0	1,320	1,900	0.046 JB
		Nov-14		190	410	0.290	2.40	380	260	1,800	<0.02
		Apr-15		258 J	161	0.498	0.68 J	276	47.6	725	<0.2
		Oct-15		186	391	0.644	2.61	355	235	1,940	<0.197
		Apr-16		234	1110	1.45	1.80 J	314	20.5	2,950	<0.197
	MW-50	Oct-16		200	580	1.07	1.18	339	239	2,270	0.030 JB
		Apr-14		410	172	0.671	2.36	130	1,300	2,910	<0.150
		Nov-14		450	200	0.830	2.30	160	1,600	2,800	<0.02
		Apr-15		450	259	0.966	2.18	178	1,680	2,860	<0.2
		Oct-15		403	226	0.899	2.29	175	1,740	2,770	2.61 J
	MW-52	Apr-16		645	491	3.96	8.60	969	4,280	4,580	150
		Oct-16		546	511	3.86 J6	12.4	912	4,690	9,320	0.594
		Apr-14		156	223	1.57	0.204	257	820	2,580	1.19
		Nov-14	FD	161	225	1.51	0.186 J	218	821	2,510	1.38
		Apr-15		190	150	1.50	0.3 J	320	990	2,000	1.90
	MW-64	Oct-15		168 J	158	1.88	0.252 J	267	832	3,740	1.54
		Apr-16		196	144	1.76	0.242 J	285	998	2,040	3.13
		Oct-16		778	160	1.79	1.20 J	1,350	995	1,920	1.73
		Nov-14		194	144	1.77	0.262 J	278	1,100	2,370	1.04
		Apr-16		109	379	1.08	0.754 J	396	39.9	1,510	<0.197
	MW-65	Oct-16		109	356	0.855	0.689 J	361	4.08 J	1,650	0.079 JB
		Nov-14		260	470	0.720	0.89 J	290	310	1,900	<0.02
		Apr-15		147	382	1.21	0.783 J	257	<0.0770	1,410	0.0613 J
		Oct-16		155 V	394	1.28	0.691 J	311 V	0.323 J	1,750	0.0490 JJ6
		Nov-14		157	356	1.48	1.46	287	0.431 J	1,380	0.219 B
	MW-66	Apr-14		151	209	1.12	0.785	180	<0.200 B	1,170	<0.00500 B
		Oct-15		140	150	1.20	1.00	160	0.51 J	990	<0.0018
		Apr-15		120	141	1.53	0.858 J	134	0.596 J	948	0.0292 J
		Oct-15		134	201	1.34	0.742 J	163	0.11 J	1,090	<0.197
		Apr-16		600	134	1.36	4.83 J	740	0.591 J	942	0.363 J
	MW-99	Oct-16		131	174	1.42	0.770 J	155	0.327 J	1,020	0.048 JB
		Nov-14		170	180	0.420	3.90	170	140	1,100	<0.02
		Apr-15		48.7	33.4	0.328	5.30	23.9	41.3	267	0.789
		Oct-15		176	249	0.706	0.955 J	215	127	1,390	<0.197
		Apr-16		805	208	0.866	6.37	1,100	153	1,410	0.0330 JJ6
	MW-101	Oct-16		137	192	0.656	3.60	168	39.0	1,200	0.035 JB
		Nov-14		209	217	0.779	0.504	153	161	1,440	<0.150
		Apr-15		280	230	1.00	0.81 J	150	340	1,600	<0.02
		Oct-15		188	201	0.708	0.485 J	141	188	1,340	<0.2
		Apr-16		188	236	0.993	0.483 J	138	206	1,470	0.23 J
	MW-102	Oct-16		220	239	0.940	0.522 J	169	168	1,270	0.197 J
		Nov-14		183	229	1.00	0.509 J	112	191	1,400	0.127 B
		Apr-14		290	220	0.610	0.8 J	430	590	2,200	<0.02
		Oct-15		94.4	175	0.825	0.419 J	357	1.75 J	1,470	0.0642 J
		Apr-16		193	219	1.13	0.683 J	385	296	1,750	<0.197
	MW-103	Oct-16		127	245	0.901	0.372 J	437	2.35 J	1,530	0.339 J
		Nov-14		176	271	1.28	0.772 J	418	217	1,740	0.062 JB6
		Apr-13		19.2	661	6.88	0.759	1,120	82.2	2,800	<1.00
		Oct-15		24.5	1,040	7.45	0.831	1,420	<10.0 B	3,820	<0.150
		Apr-16		192	7,890	3.44	2.46 J	6,710	19.6	12,500	<0.0200
	MW-104	Oct-16		193	13,700	5.44	3.73 J	7,960	2.24 J	21,100	0.430 J
		Nov-14		232	86.0	2.26	5.06	95.7	690	1,390	<0.150
		Apr-14	FD	235	82.4	2.24	5.52	91.9	679	1,440	<0.150
		Oct-15		230	54.0	2.10	6.00	69.0	710	1,300	<0.02
		Nov-14	FD	230	54.0	1.80	6.30	67.0	800	1,300	<0.02
	MW-105	Apr-15		208	31.4	1.67	4.73	42.7	856	1,070	<0.0200
		Oct-15		207	31.0	2.12	4.63	42.3	679	1,130	0.185
		Apr-16		169	21.0	2.01	4.92	38.6	510	912	<0.197
		Oct-15	FD	170	21.6	2.07	4.86	40.3	473	925	<0.197
		Apr-16		179 V	25.9	2.49	4.96 JJ501	43.6 V	408	819	0.455 JB
	MW-106	Oct-16		178	25.6	2.51	5.16	44.7	439	809	0.286 JB
		Nov-14		165	72.9	1.94	4.77	38.4	322	975	0.064 JB
		Apr-16	FD	164	73.4	1.90	4.78	37.9	323	928	0.082 JB
		Nov-14		660	37.0	0.960	7.00	29.0	1,300	2,400	<0.02
		Apr-15		111	25.3	0.7 J	4.26	17.2	263	530	<0.2
	MW-107	Oct-15		148	13.4	0.330	4.41	12.0	297	664	0.221 J
		Apr-16		257	42.0	1.48	4.55 J	52.6	278	1,300	0.414 J
		Oct-16		227	12.7	2.06	4.97	20.7	20.6	1,050	0.105 B
		Nov-14		400	160	1.00	1.90	195	1,500	3,350	<0.150
		Apr-15		197	280	6.81	10.4	162	559	1,400	22.3
	MW-108	Oct-15		373	148	1.76	2.43	221	1,790	3,420	<0.197
		Apr-16		422	185	1.51	4.40 J	271	1,380	3,120	<0.197
		Oct-16		347	216	1.30	1.37	240	1,410	3,080	0.053 JB
		Nov-14		144	261	1.20	0.562	75.2	<0.200 B	1,250	<0.150
		Apr-15		230	300	1.70	0.73 J	83.0	160	1,200	<0.02
	MW-109	Oct-15		160 J	291	1.54	0.583 J	73.1	27.1	1,220	<0.0200
		Apr-16		176	297	1.67	0.88 J	76.9	102	1,390	<0.197
		Oct-16		727	277	1.67	3.22 J	381	6.07	1,850	0.376 J
		Nov-14		186	271	1.82	0.965 J	80.1	72.4	1,480	0.170 B
		Apr-14		92.9	393	1.26	0.634	465	237	1,980	<0.150
	MW-110	Oct-15		280	270	2.40	1.30	490	920	2,500	<0.02
		Apr-15		192 J	261	2.04	0.929 J	406	931	2,910	<0.39
		Oct-15		181	232	1.81	0.862 J	438	950	2,170	<0.197
		Apr-16		707	204	1.90	4.01 J	2,200	848	2,190	0.384 J
		Oct-16		153	226	2.06	0.802 J	431	751	2,590	0.036 JB
	MW-111	Nov-14		79.0	92.4	1.25	0.129 J	249	364	1,260	<0.150
		Apr-15		100	86.0	1.50	0.14 J	270	1,100	1,200	<0.02
		Oct-15		107 J	93.8	1.64	0.244 J	244	283	1,420	<0.0200
		Apr-16		174	136	1.62	0.268 J	294	787	1,680	<0.197
		Oct-16		555	99.0	1.53	1.19 J	1,380	2,100	1,360	0.765 J
		Nov-14		115	97.6	1.50	0.150 J	276	555	1,430	0.062 JB

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Appendix B. Table B.5 - Water Quality Parameters and Cyanide Groundwater Analytical Results

Appendix B, Table B.5 - Summary of Groundwater Analytical Data - Water Quality Parameters and Cyanide

2016 Annual Groundwater Report

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Analyte Group:				Water Quality Parameters							Cyanide
Analyte:				Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
CGWSL:				---	250	1.60	---	---	600	1,000	10.0
CGWSL Source:				---	WQCC Dom	WQCC HH	---	---	WQCC Dom	WQCC Dom	USEPA MCL
Area	Well ID	Date	Dup								
TMD	MW-68	Apr-13		376	426	1.68	5.57	238	1,380	3,240	7.58
		Apr-14		375	299	1.79	4.84	207	1,330	2,920	5.10
		Apr-15		552	397	1.15	4.65	242	2,610	4,460	4.52
		Apr-16		489	263	1.75	5.58	206	1,840	2,980	0.51
	MW-71	Oct-13		656	1,080	1.49	3.76	472	2,790	6,250	52.3
		Apr-14		558	887	1.39	4.15	399	2,740	6,280	53.6
		Apr-15		642	906	1.09	3.59	447	3,150	6,110	50.6
		Apr-16		669	907	1.62	3.72 J	502	2,890	5,450	45.6
	MW-89	Apr-13		456	200	2.48	9.81	150	1,530	2,960	<1.00
		Apr-14		542	248	2.40	10.5	188	2,030	3,360	1.34
		Apr-15		528	324	3.61	13.5	302	2,200	3,720	2.34
		Apr-16		556	399	3.58	12.0	299	1,490	3,640	3.64
	NP-1	Apr-14		439	434	1.82	4.95	352	2,560	4,820	11.6
		Nov-14									
		Apr-15		473	436	2.06	3.53 J	451	2,930	4,450	8.41
		Oct-15									
	NP-2	Apr-16		470	391	1.96	3.12 J	403	2,620	4,460	0.494 J
		Oct-16									
	NP-2	Apr-13		517	379	1.70	1.63	258	2,660	5,160	1.74
		Apr-13									
	NP-6	Apr-13									
		Apr-15									
Upgradient	UG-1	Apr-13		466	132	0.620	1.62	79.8	1,580	3,090	7.80
		Apr-14		474	126	0.580	1.59	79.6	1,720	2,960	10.1
		Apr-15		455 J	133	0.865	1.11	84.6	1,880	2,920	14.4
		Apr-16		512	102	0.926	1.07 J	99.7	1,920	4,050	17.0
	UG-2	Apr-13		331	137	1.16	2.52	123	1,090	2,410	4.44
		Apr-13	FD	338	136	1.13	2.52	117	1,080	2,400	4.59
		Apr-14		403	97.1	1.14	1.75	104	1,530	2,660	3.77
		Apr-15		337 J	72.2	1.65	1.73	82.6	1,080	1,170	4.62
	UG-3R	Apr-16		402	86.5	1.75	2.04 J	103	1,210	2,240	5.46
		Apr-13		270	20.9	0.561	1.57	42.0	785	1,590	1.11
		Apr-14		422	46.8	0.492	1.65	56.9	1,480	2,340	2.26
		Apr-14	FD	389	46.8	0.496	1.53	53.6	1,500	2,400	2.20
	UG-3R	Apr-15		420 J	27.5	0.716	2.36	59.1	1,450	1,420	1.03
		Apr-16		440	47.7	0.690	1.86	75.8	1,350	2,340	1.73
	UG-4	Apr-16		590	49.2	0.668	1.99 J	224	2,480	4,140	0.407

#### Definitions

X	Reported concentration, X, exceeds the CGWSL.
X	Analyte detected above the detection limit at a concentration equal to X
< x	Analyte not detected at detection limit equal to x.
< x	Analyte not detected at detection limit equal to x, but x exceeds the CGWSL.
	Blank cell indicates a sample was collected from the well during the indicated sampling event, but the analyte was not analyzed.

#### Abbreviations

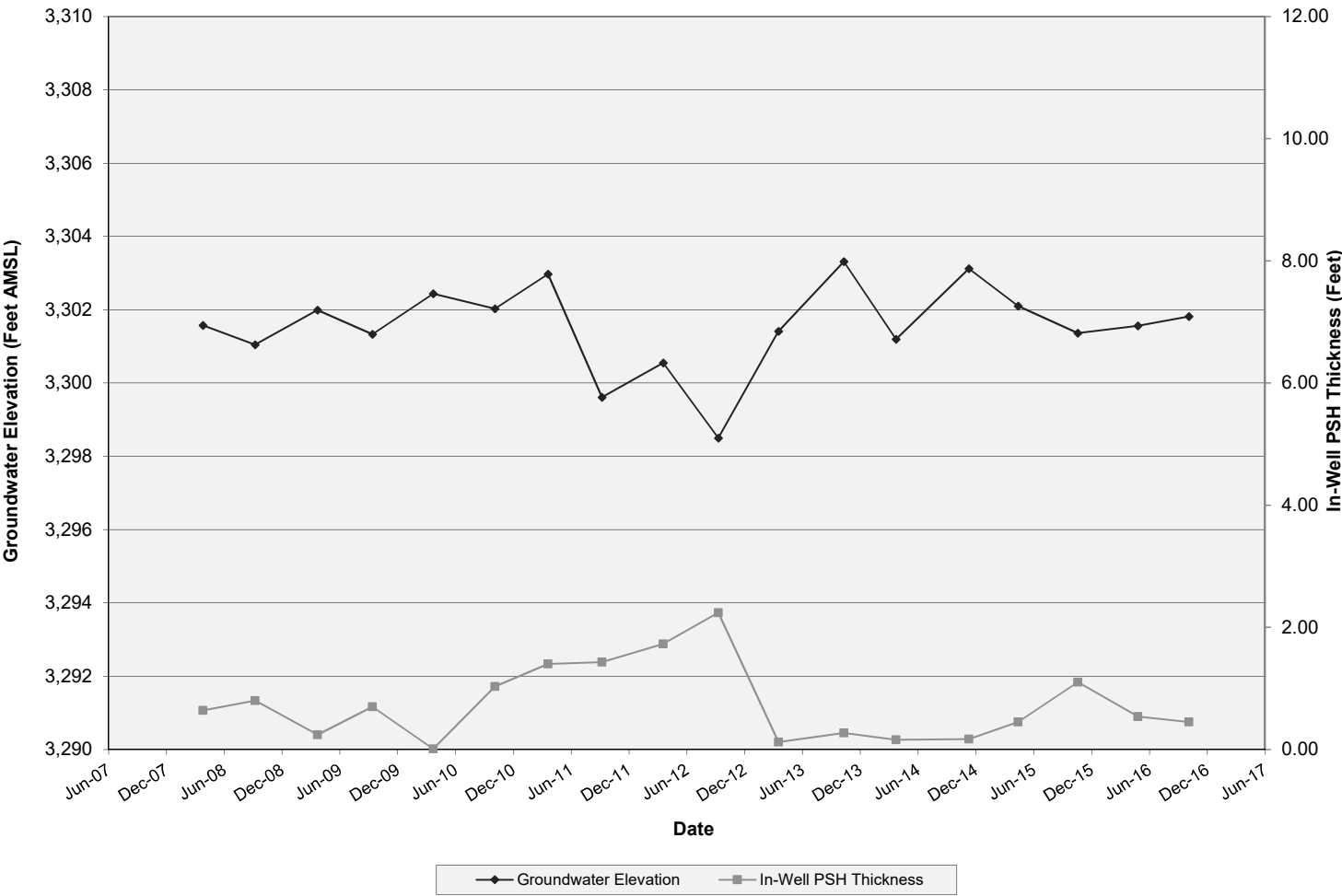
mg/L	milligrams per liter
CGWSL	Critical Groundwater Screening Level (see Table 3)
CGWSL Source	Source for CGWSL value (see Table 3)
WQCC Dom	NMED Groundwater standard for domestic exposure taken from 20.6.2.3103.B
WQCC HH	NMED Groundwater standard for human health exposure, NMAC 20.6.2.3103.A
USEPA MCL	United States Environmental Protection Agency Maximum Contaminant Level, "Regional Screening Levels for Chemical Contaminants at Superfund Sites", November 2015
FD	field duplicate sample

#### Lab Footnote

J	Indicates an estimated value.
B	Analyte was also detected in the associated method blank.
H	The reported result is from a sample analyzed outside of Holding Time.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

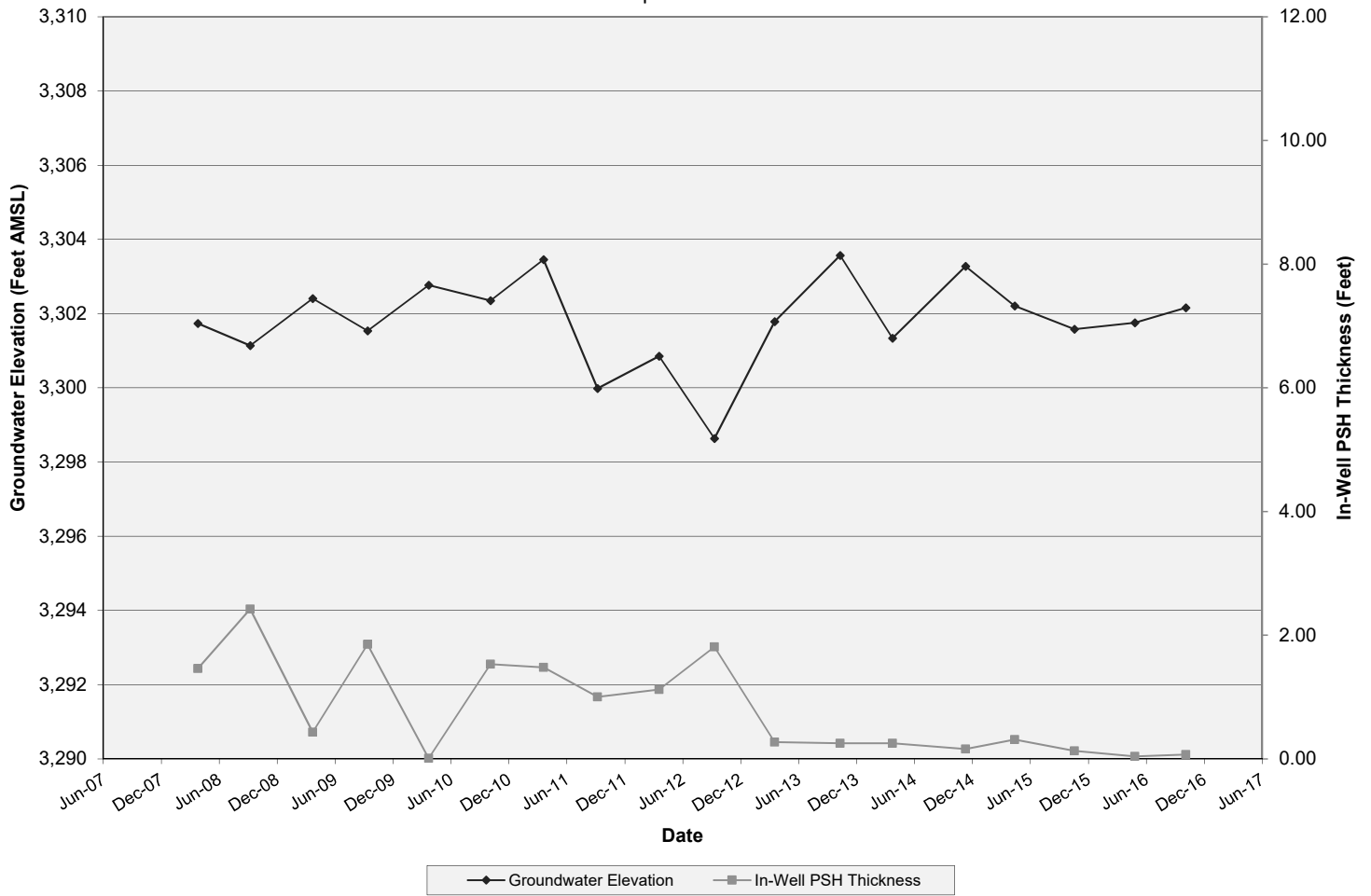
MW-85: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



## MW-86: Groundwater Elevations and In-Well PSH Thicknesses

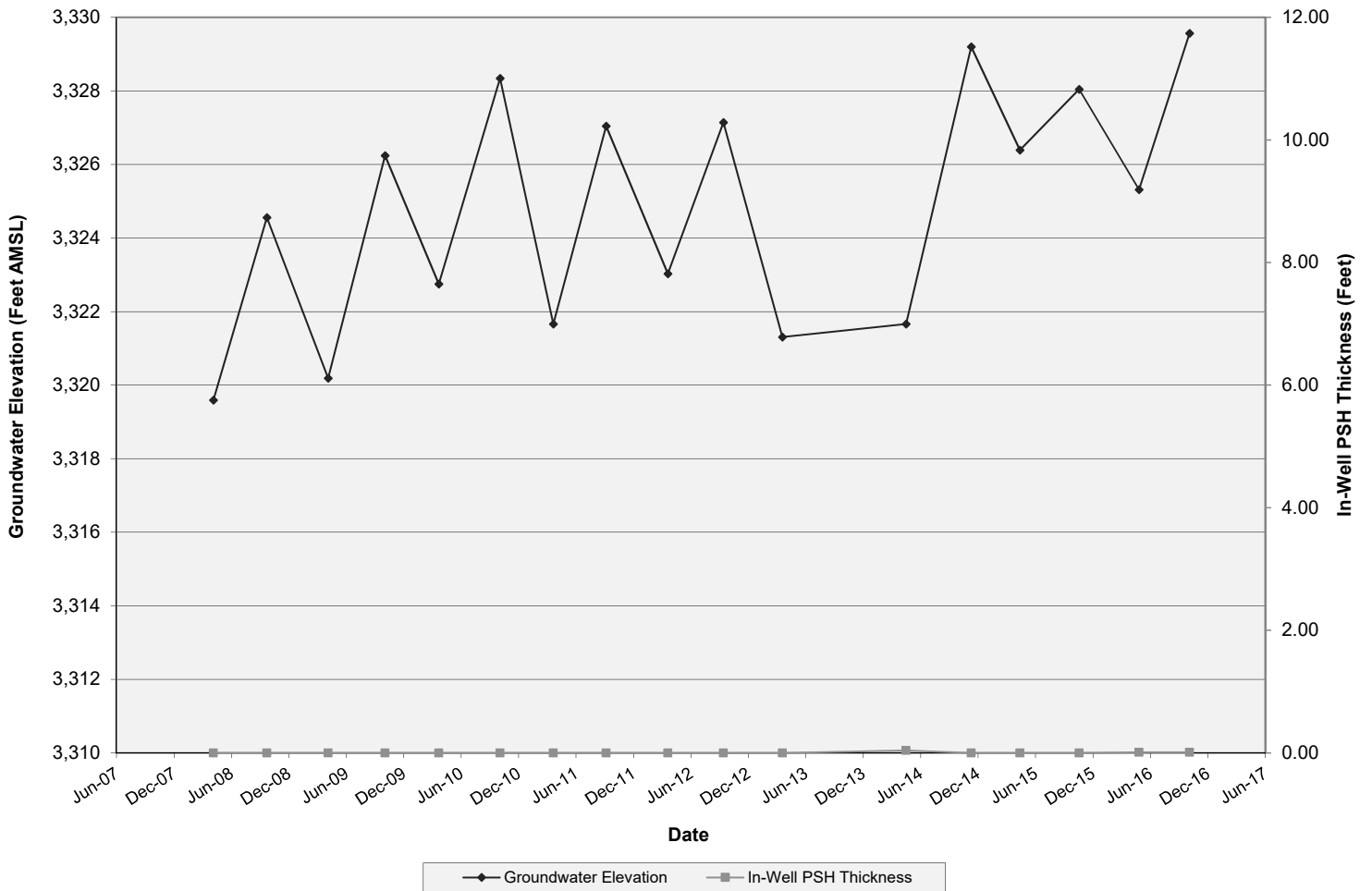
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



## KWB-7: Groundwater Elevations and In-Well PSH Thicknesses

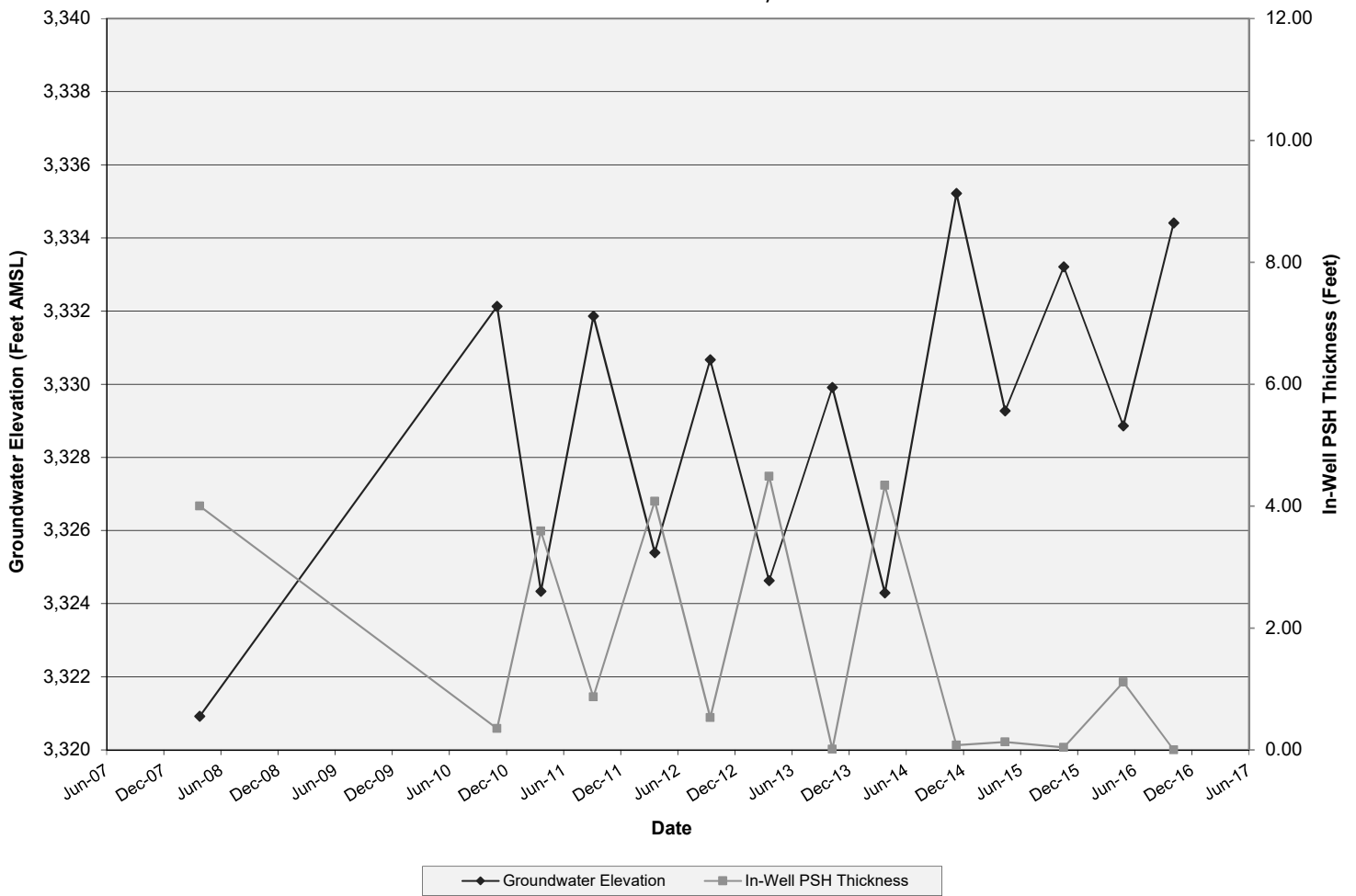
HollyFrontier Navajo Refining LLC - Artesia Refinery

Field East of Refinery



## KWB-8: Groundwater Elevations and In-Well PSH Thicknesses

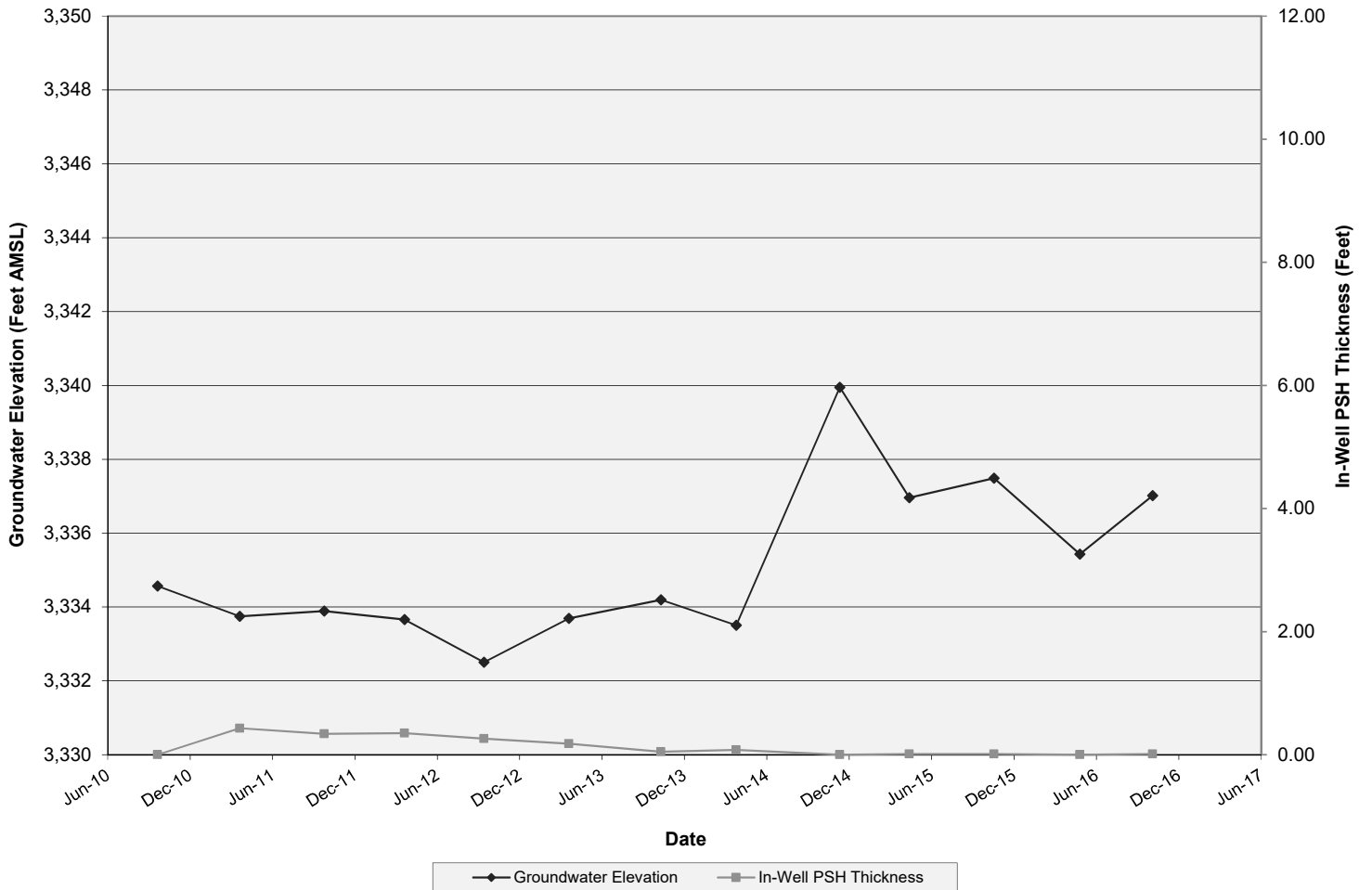
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery





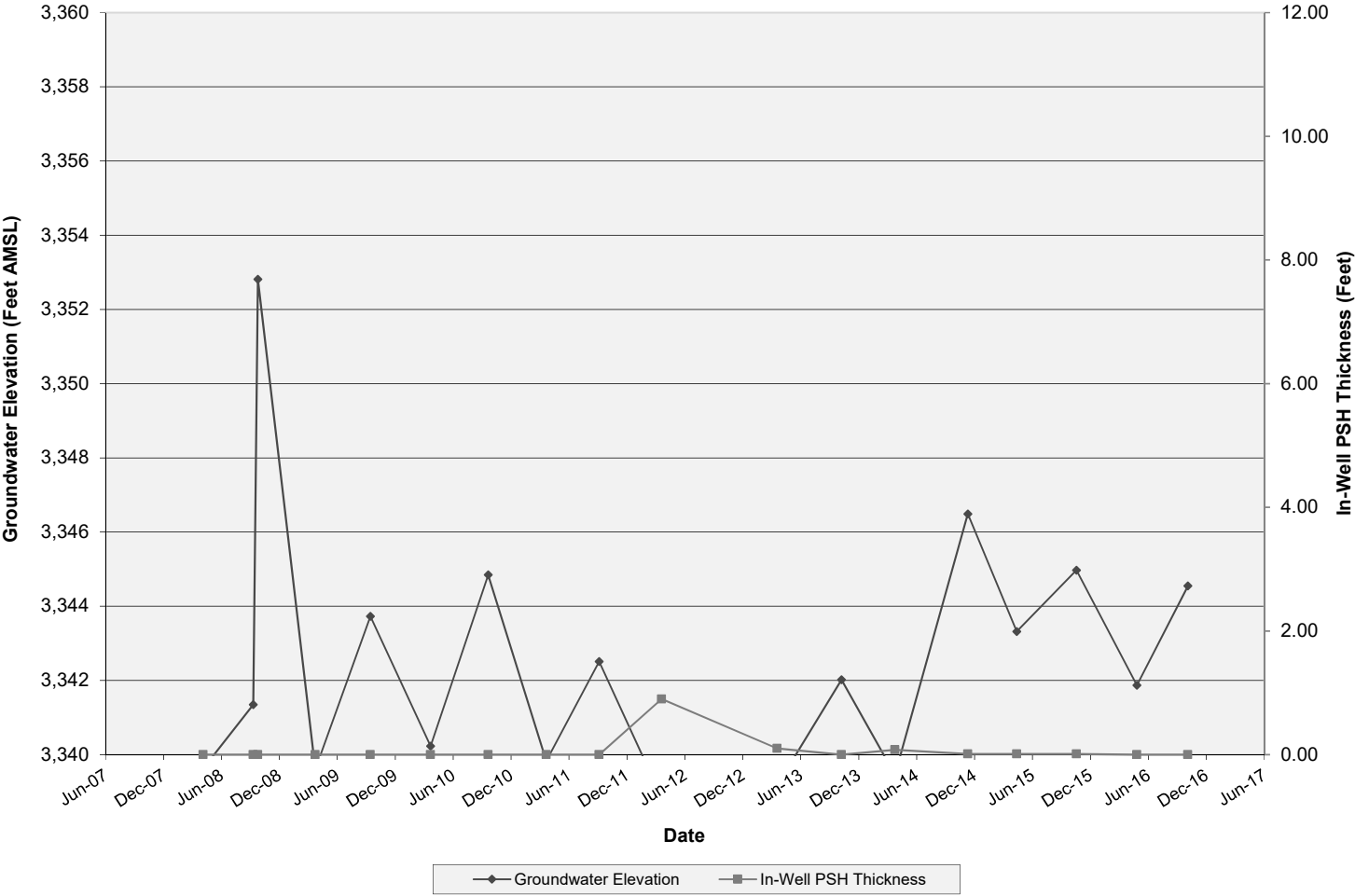
## KWB-10R: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



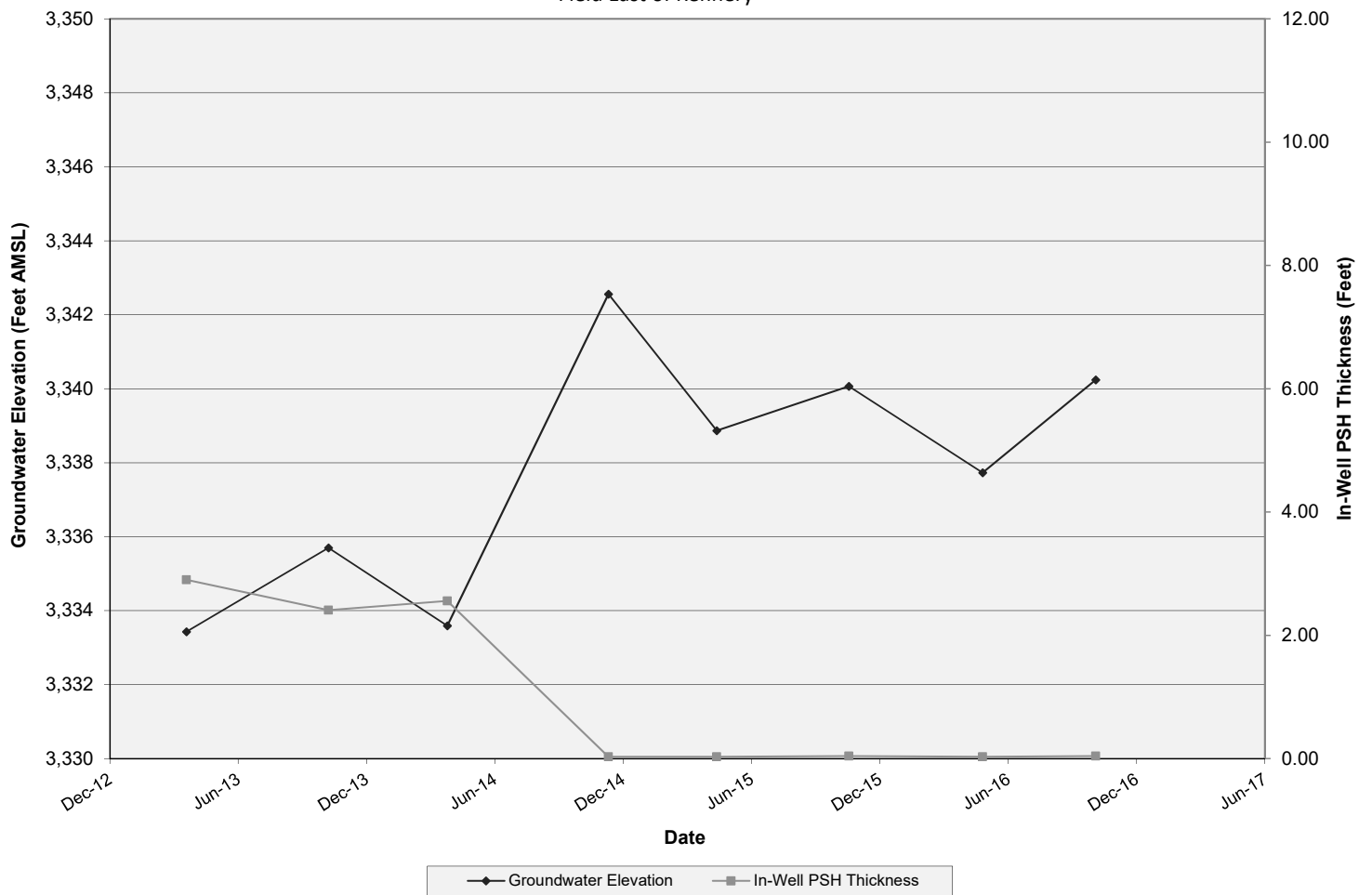
MW-58: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



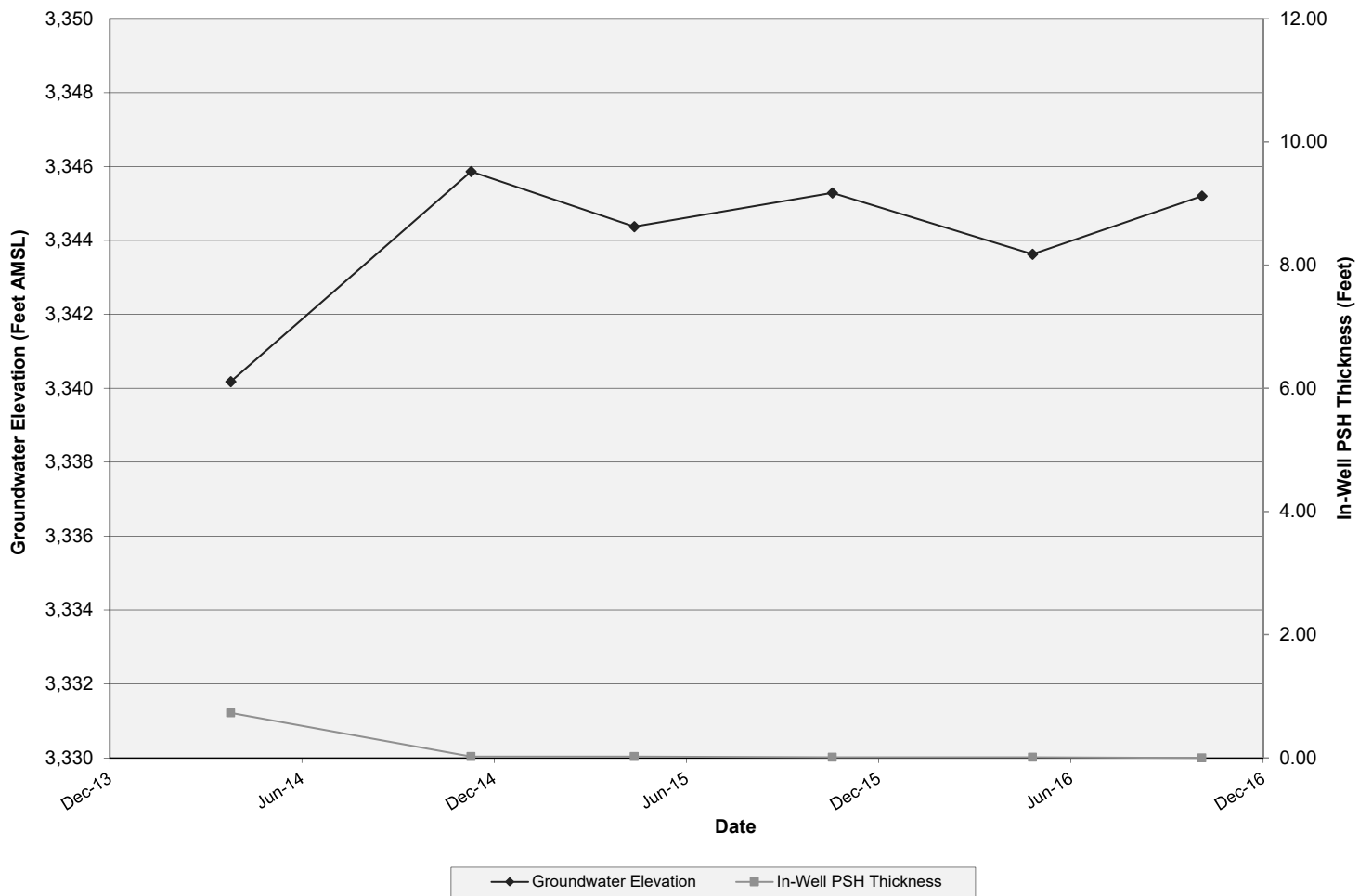
## MW-112: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



## MW-129: Groundwater Elevations and In-Well PSH Thicknesses

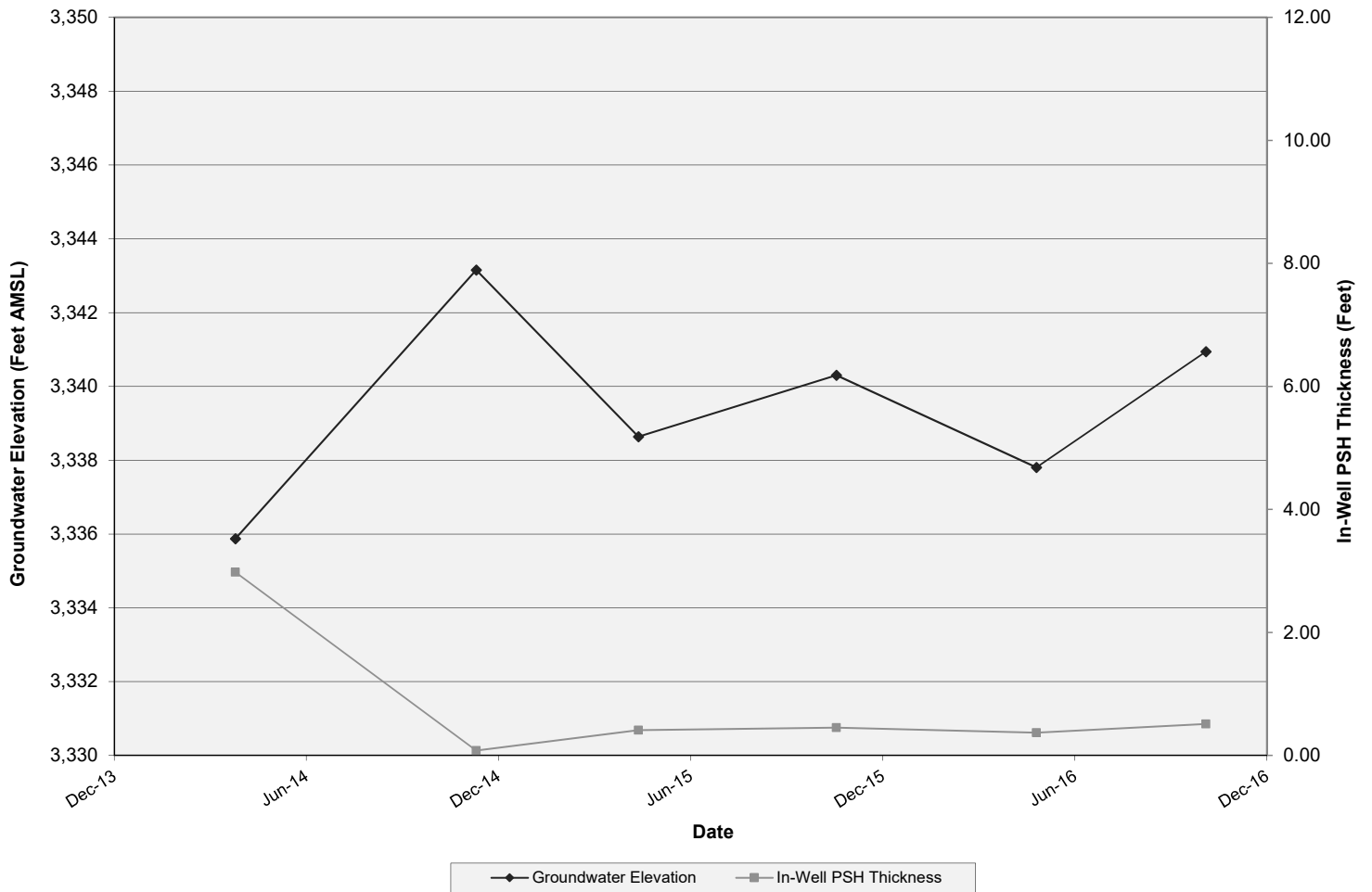
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



## MW-132: Groundwater Elevations and In-Well PSH Thicknesses

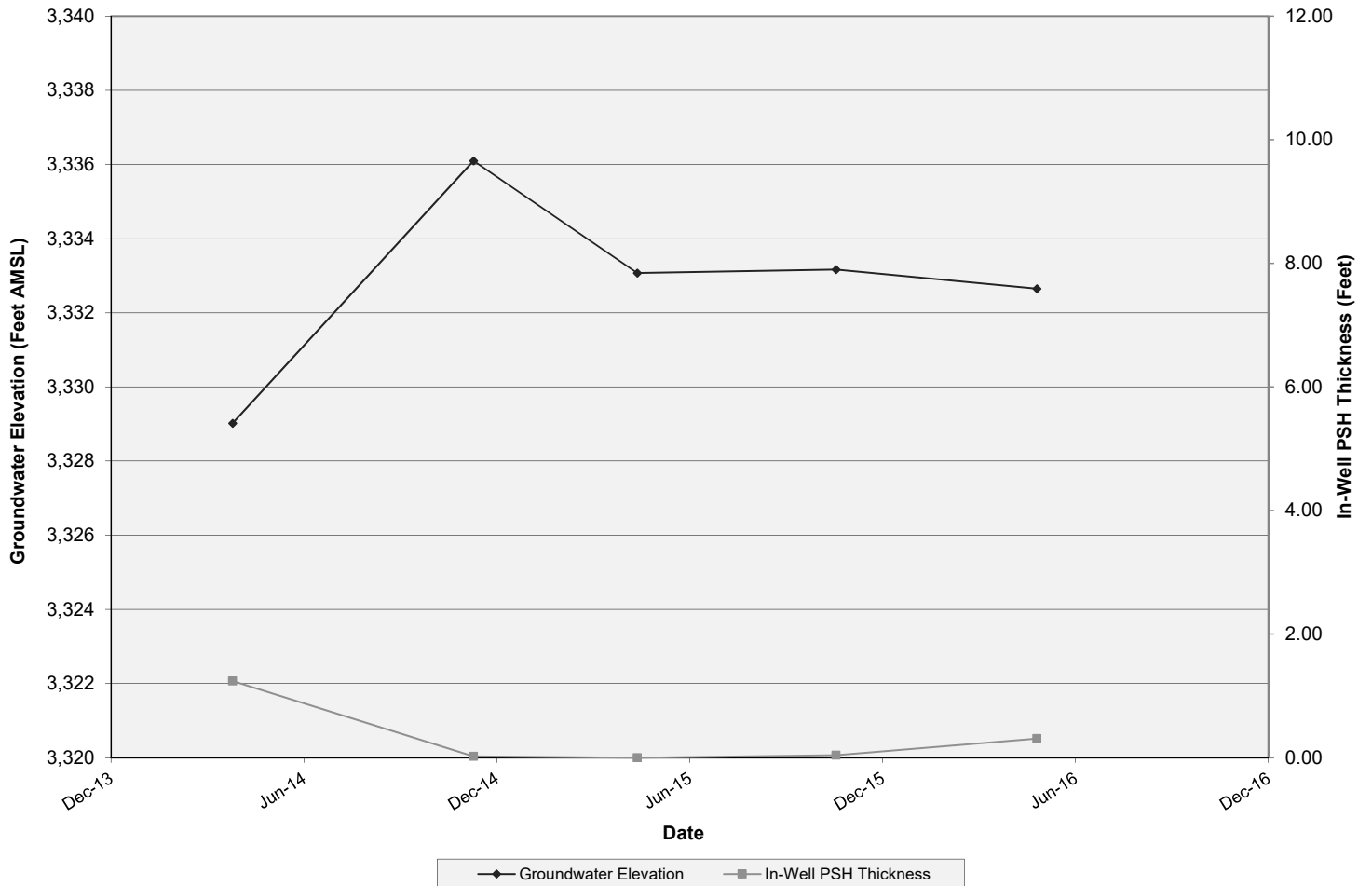
HollyFrontier Navajo Refining LLC - Artesia Refinery

Field East of Refinery



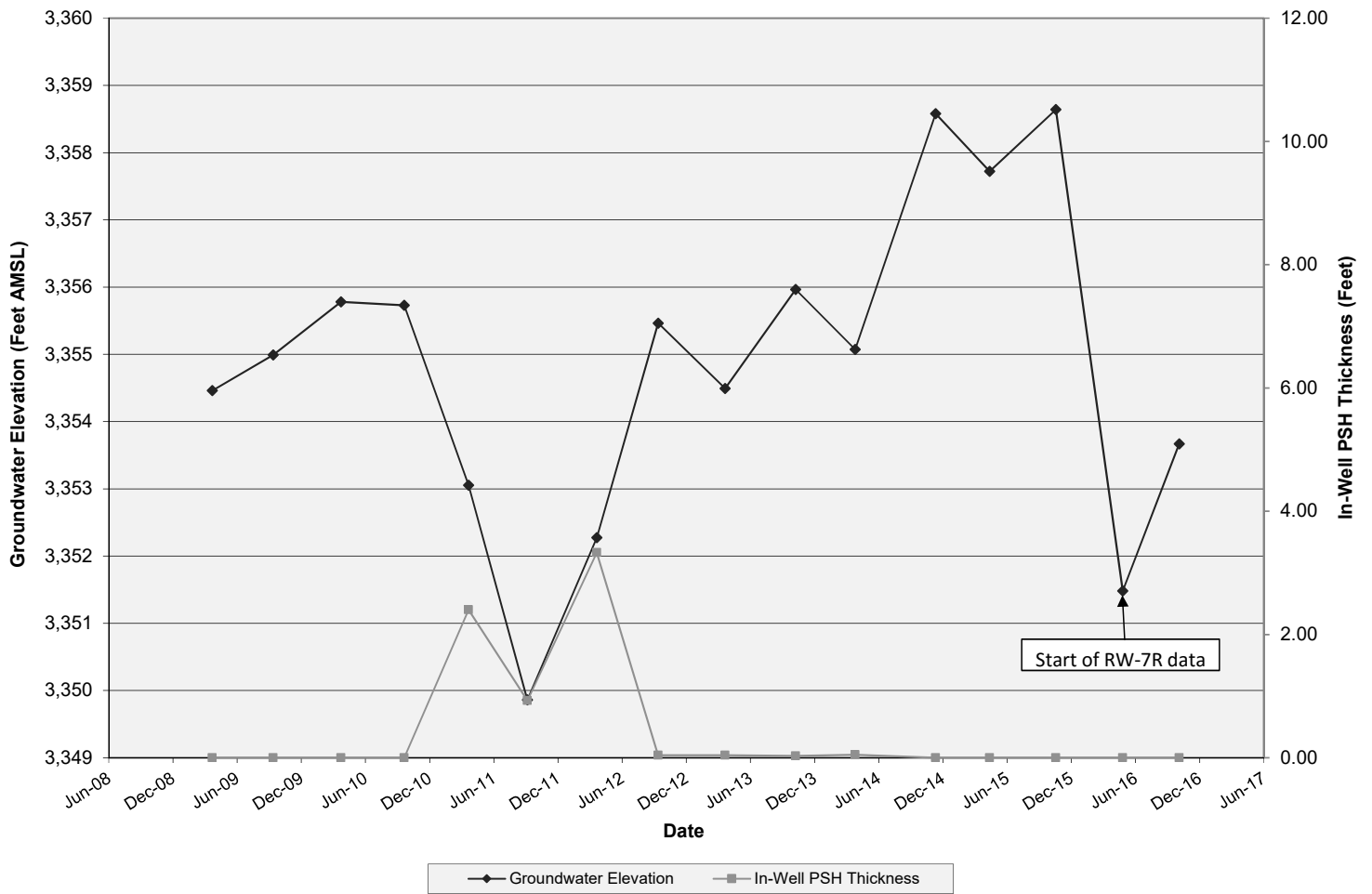
## MW-133: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



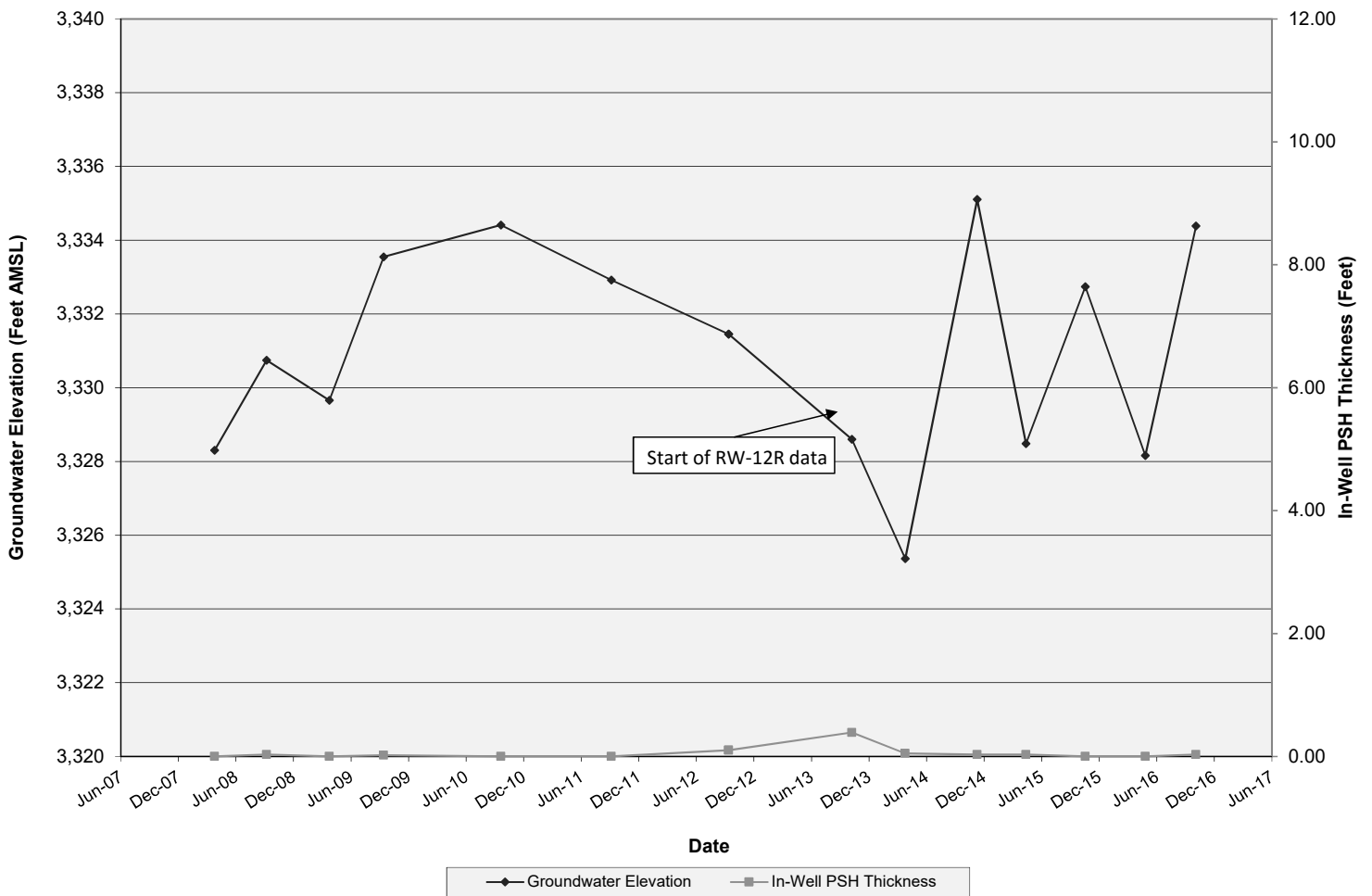
## RW-7 and RW-7R: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Refinery Area



## RW-12 & RW-12R: Groundwater Elevations and In-Well PSH Thicknesses

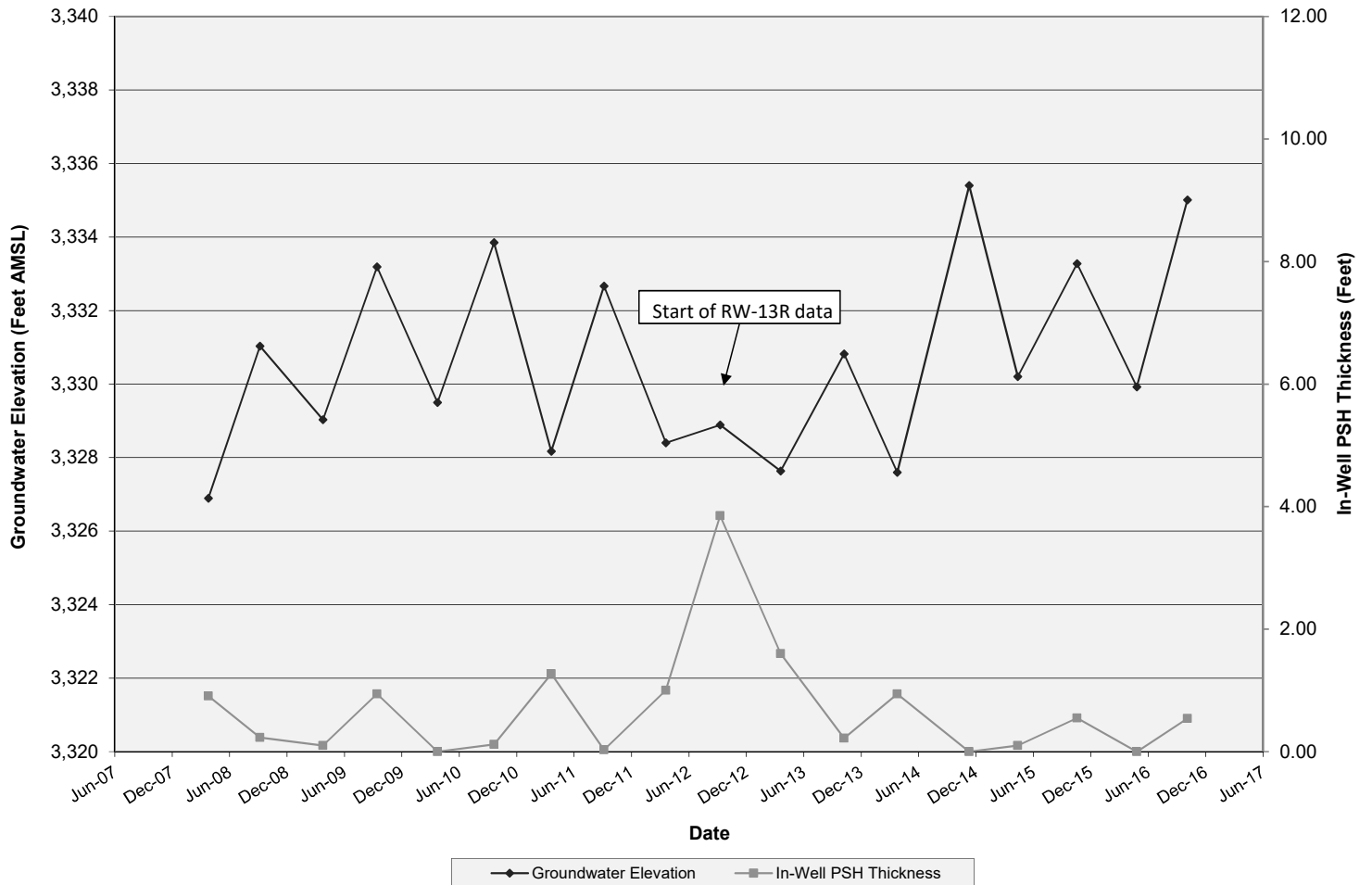
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery





## RW-13 & RW-13R: Groundwater Elevations and In-Well PSH Thicknesses

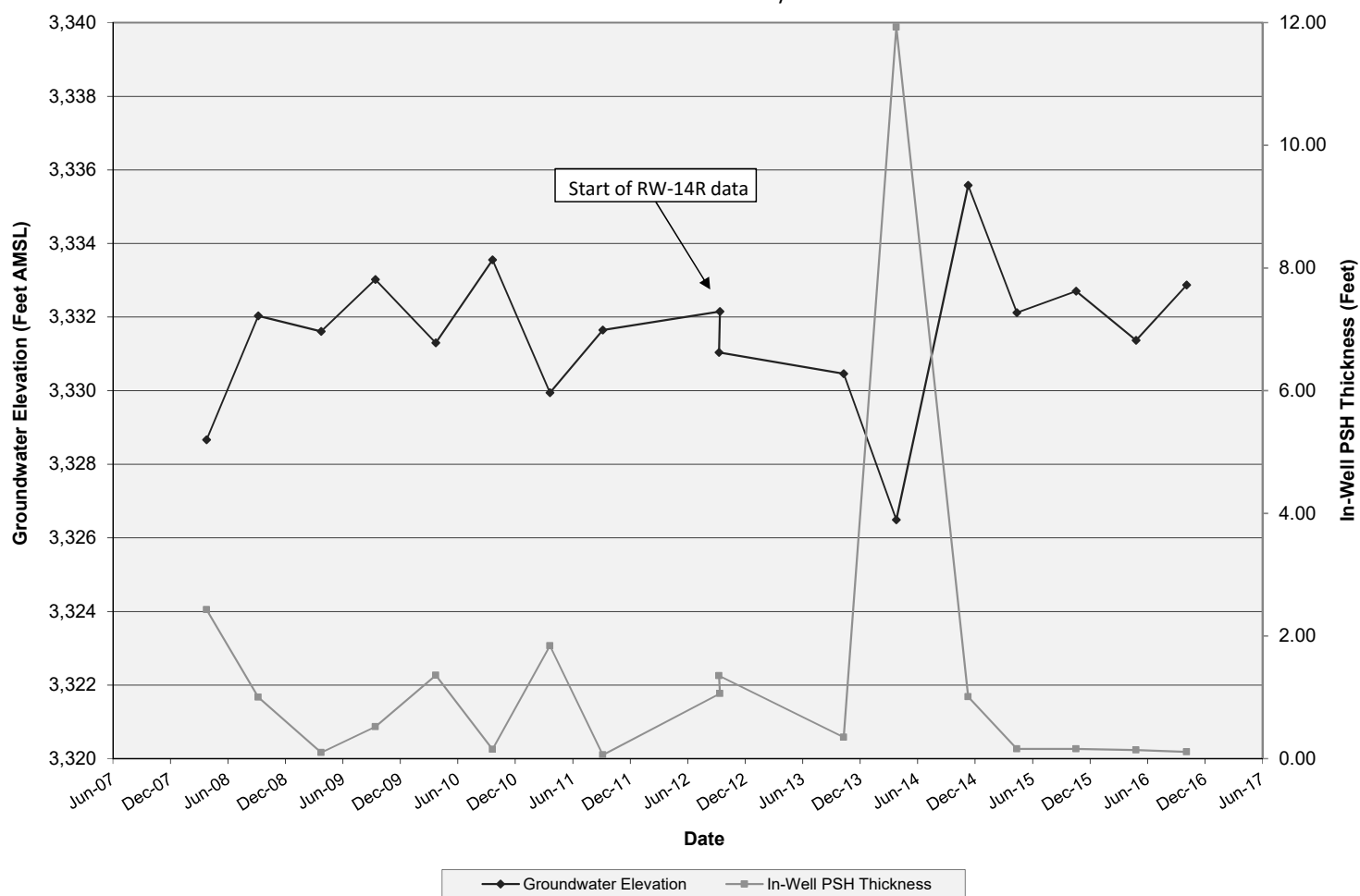
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



## RW-14 & RW-14R: Groundwater Elevations and In-Well PSH Thicknesses

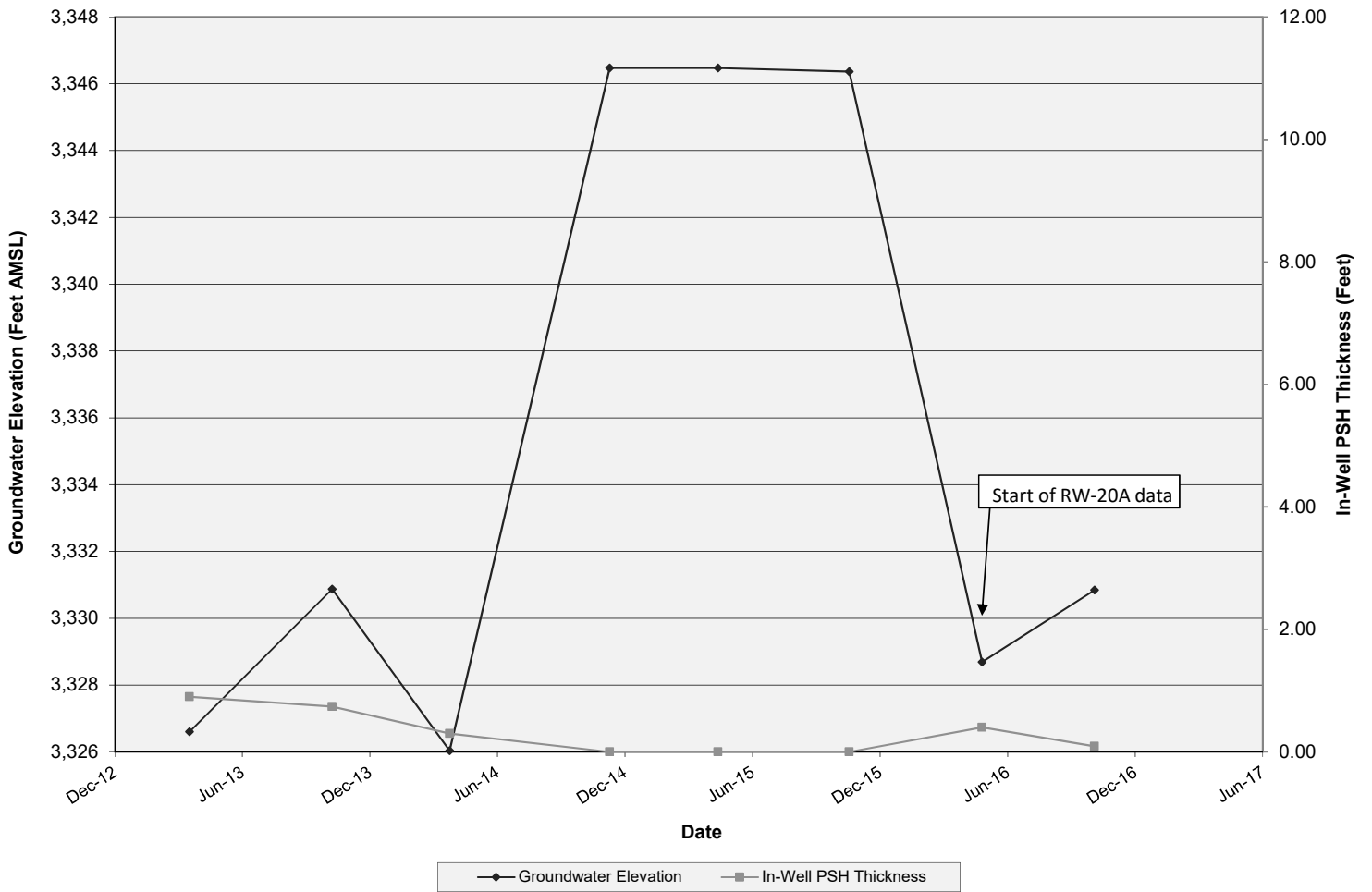
HollyFrontier Navajo Refining LLC - Artesia Refinery

Field East of Refinery



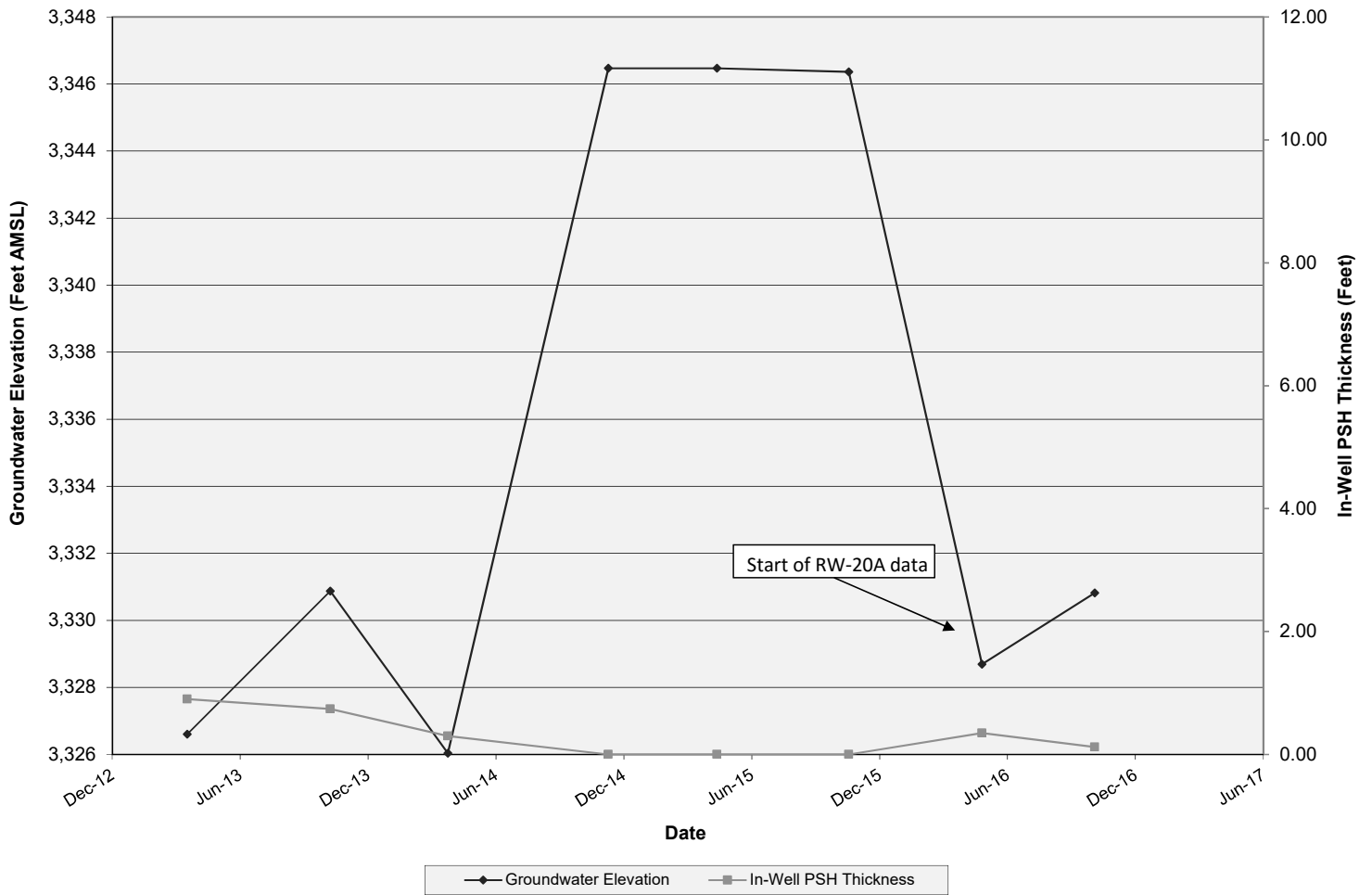
## RW-20 & RW-20A: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



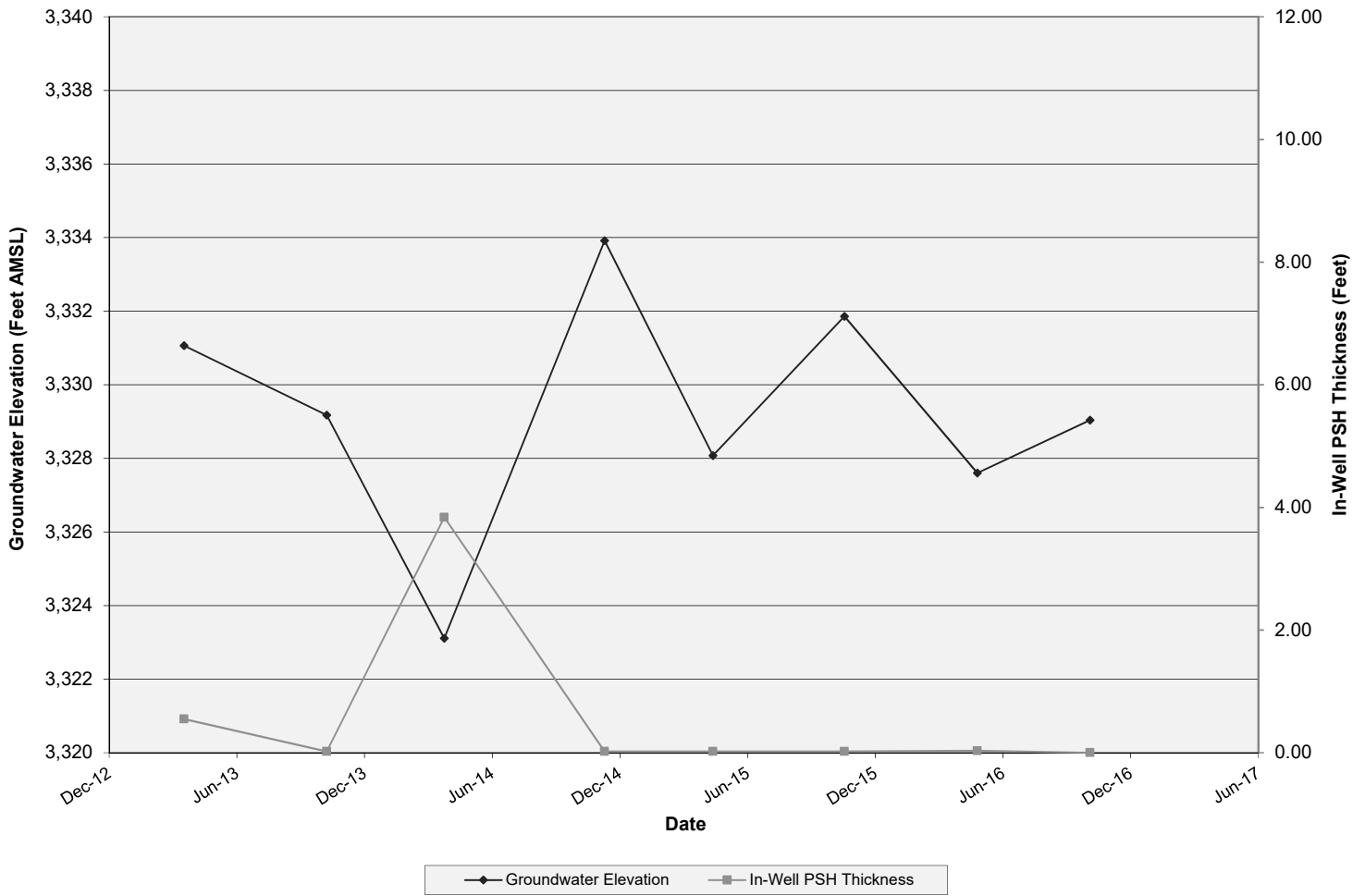
## RW-20 & RW-20B: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



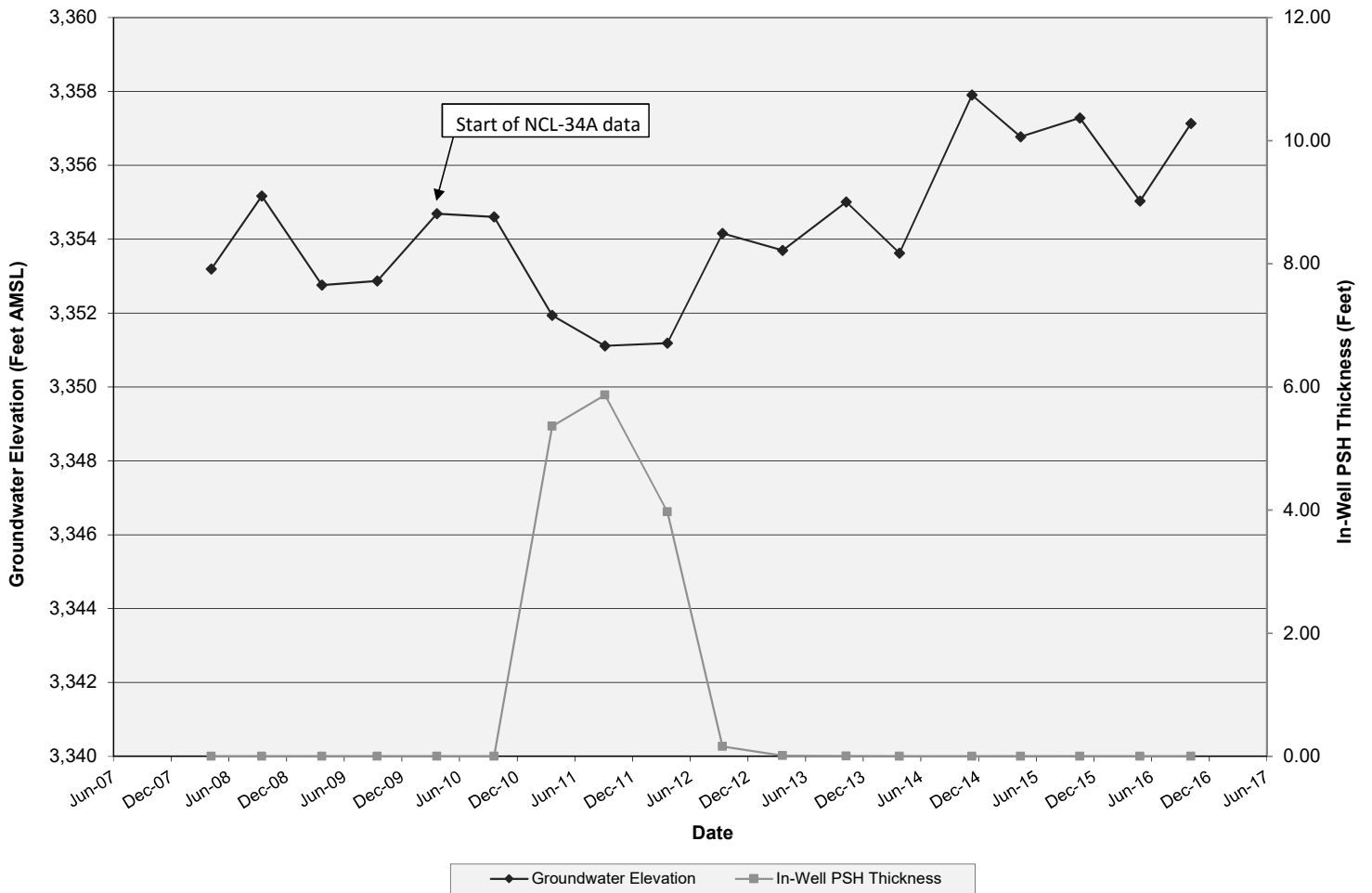
## RW-22: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Field East of Refinery



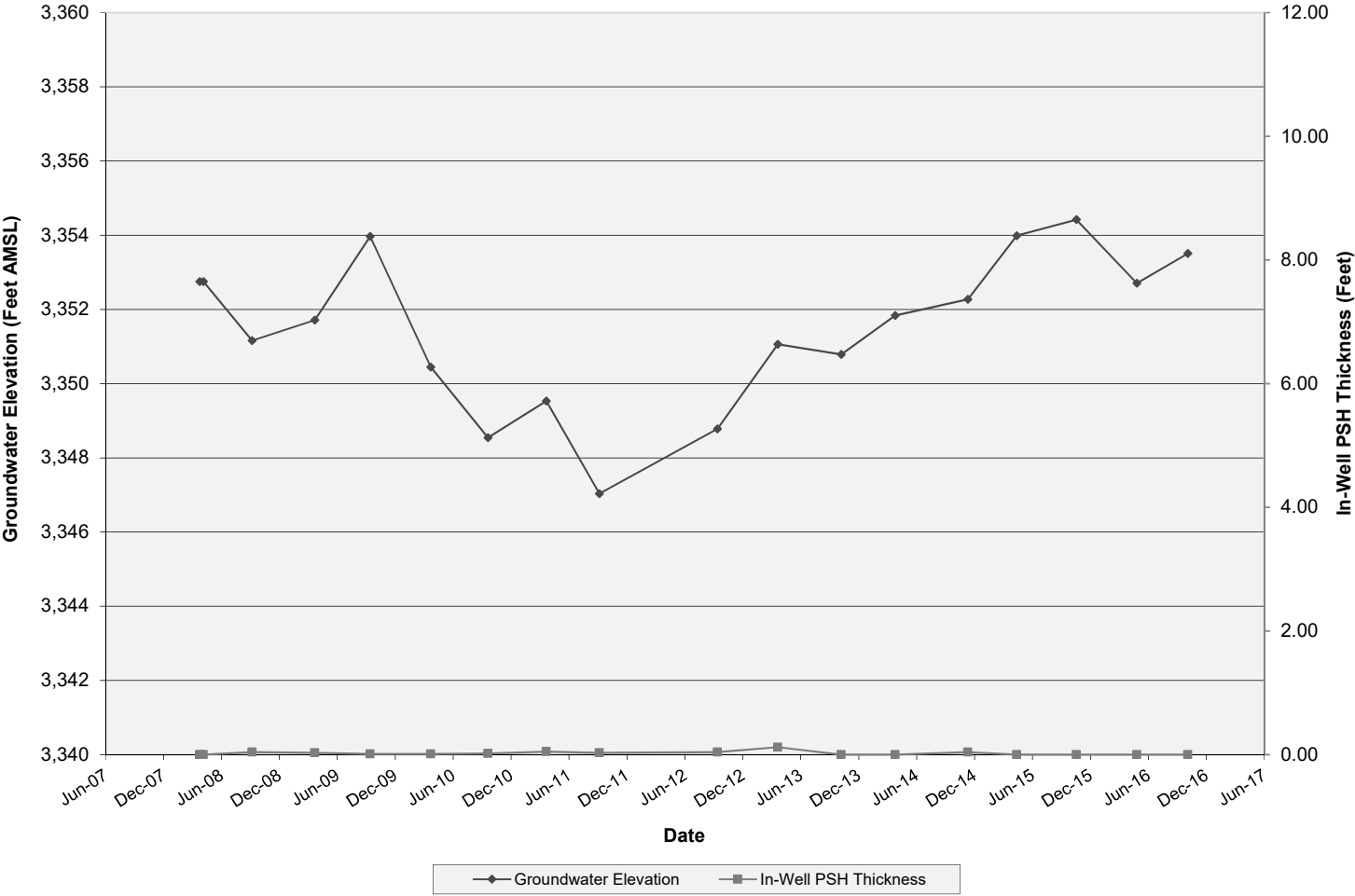
## NCL-34 and NCL-34A: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Colony Landfarm



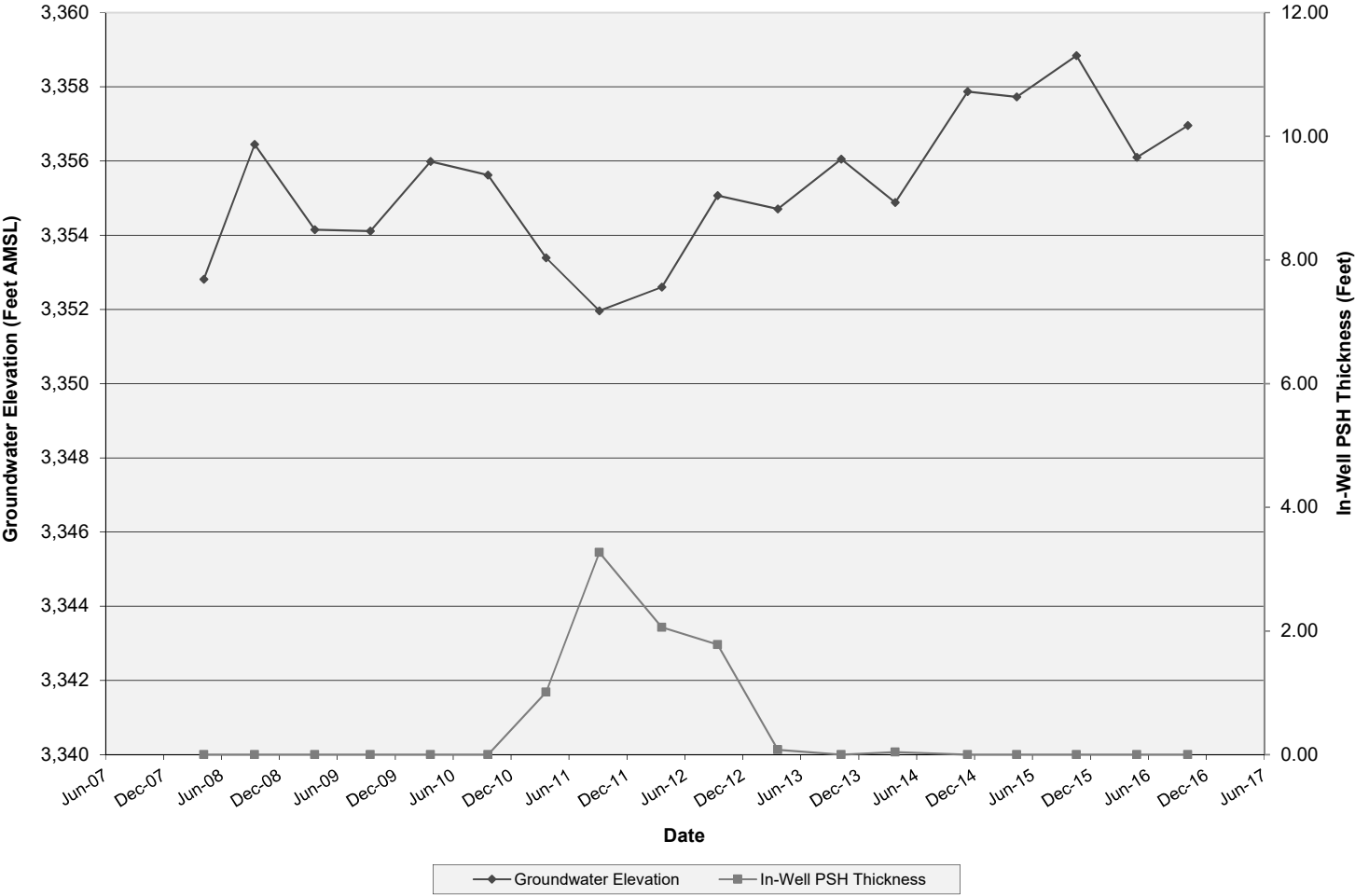
MW-39: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Refinery Area



MW-67: Groundwater Elevations and In-Well PSH Thicknesses

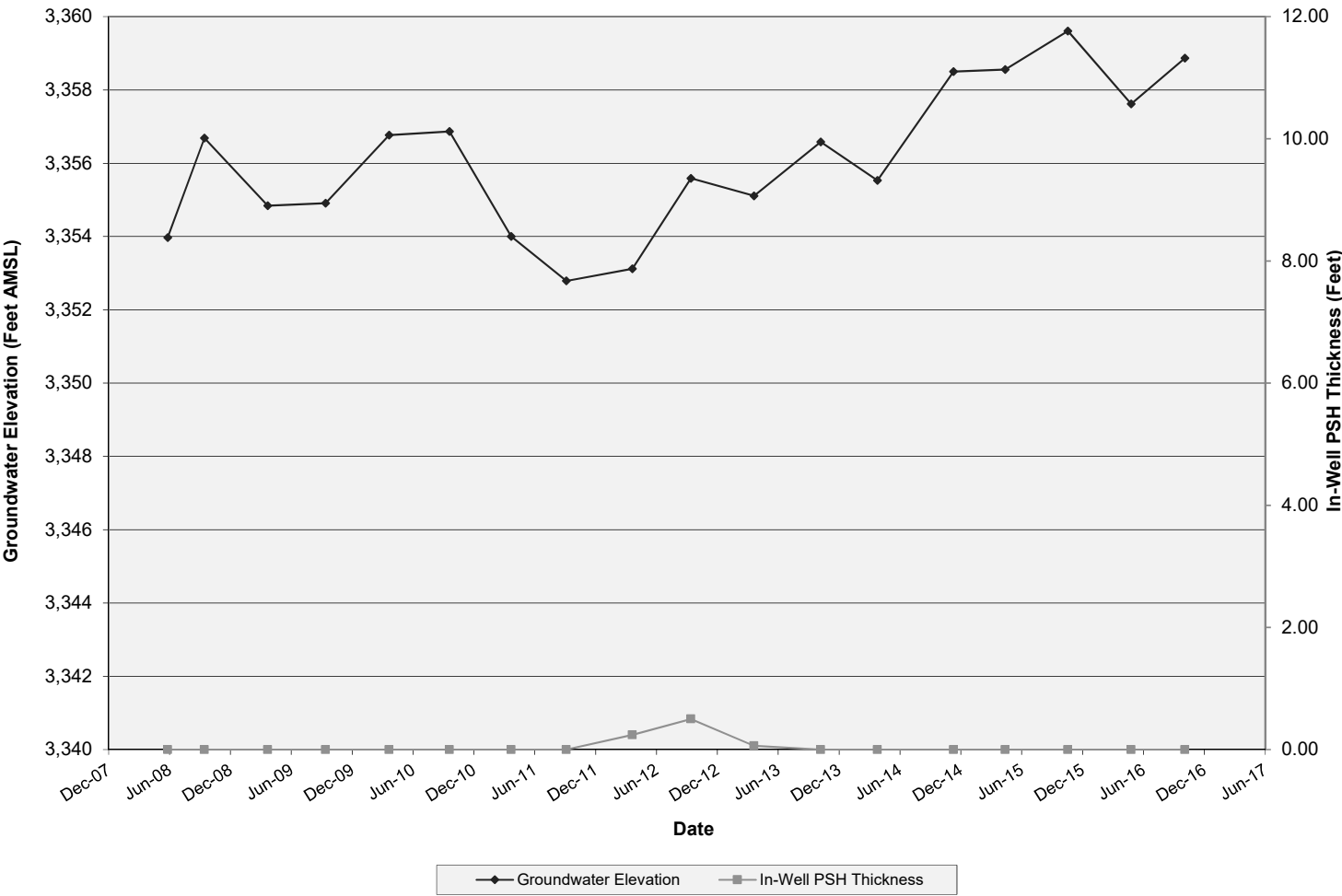
HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Refinery Area





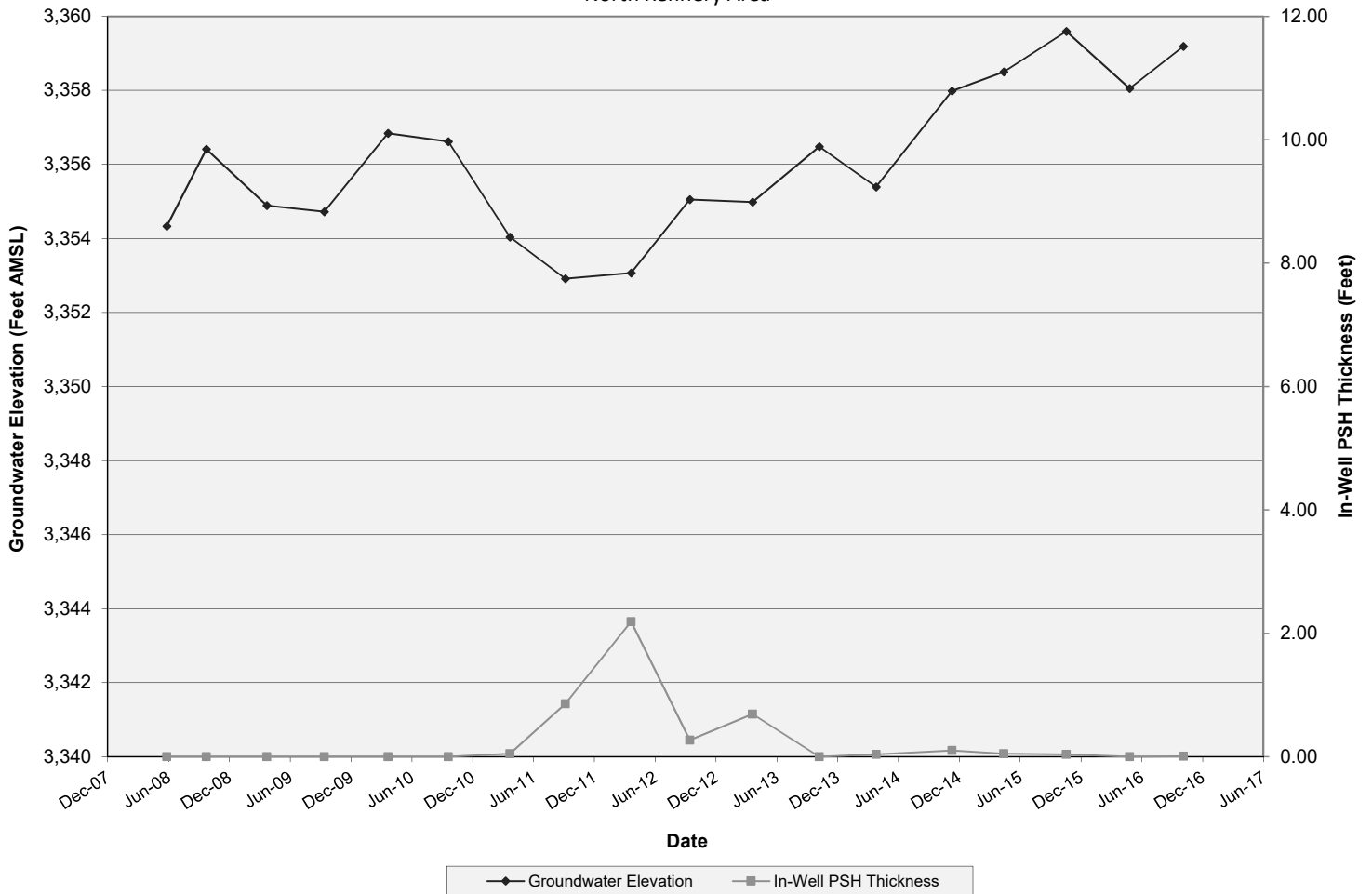
MW-91: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Refinery Area



## MW-92: Groundwater Elevations and In-Well PSH Thicknesses

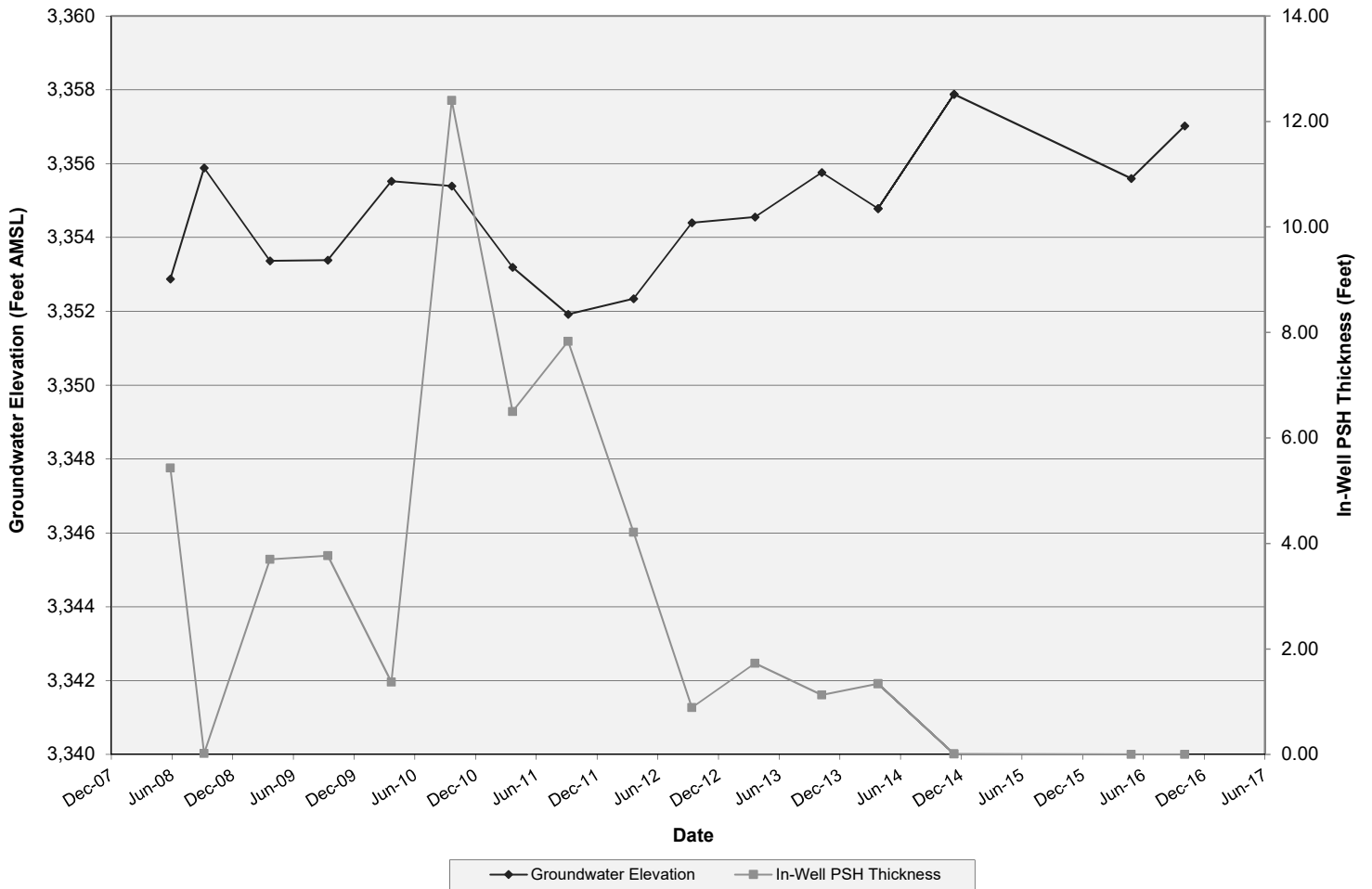
HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Refinery Area



## MW-94: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery

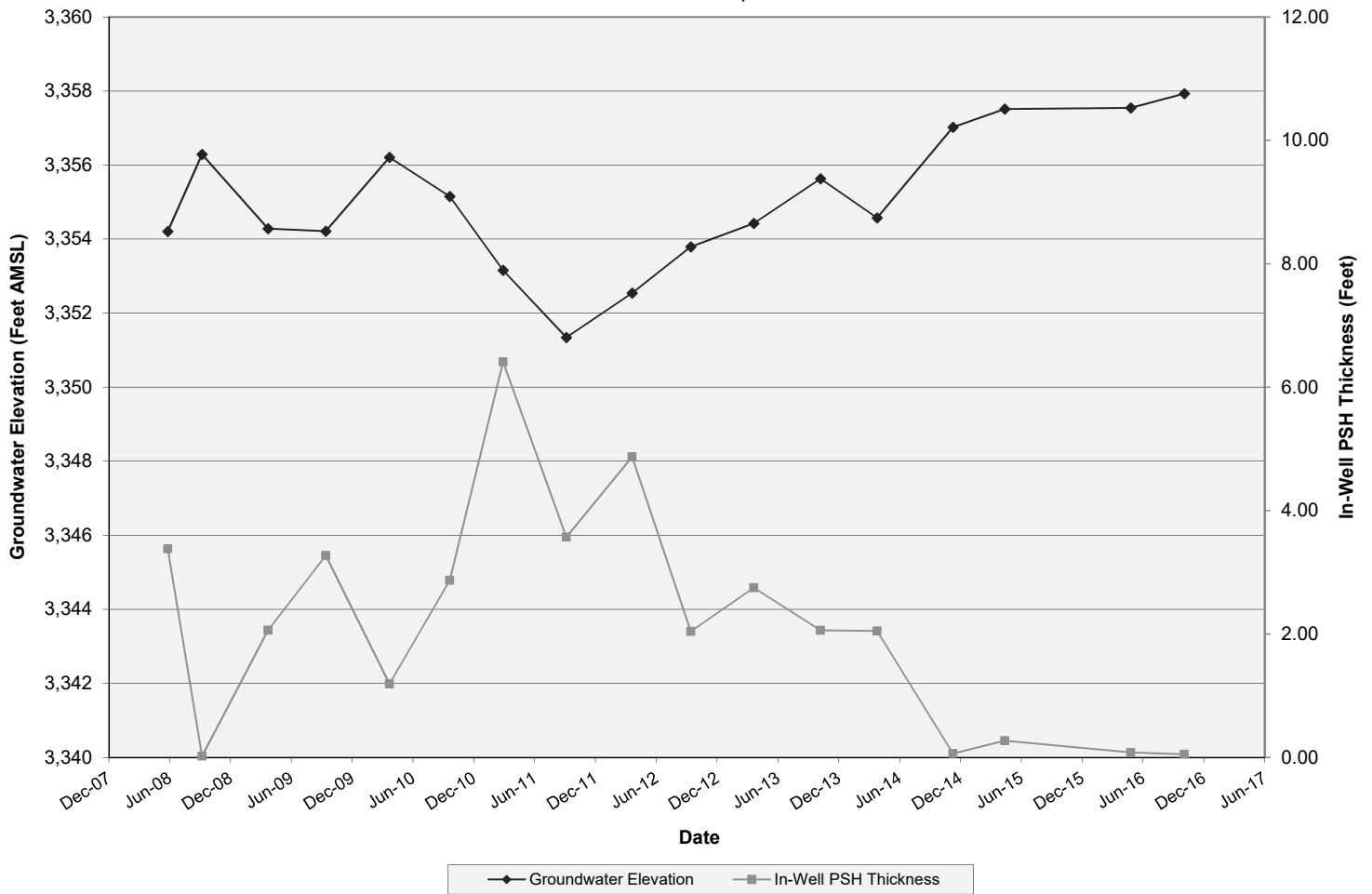
North Refinery Area



## MW-97: Groundwater Elevations and In-Well PSH Thicknesses

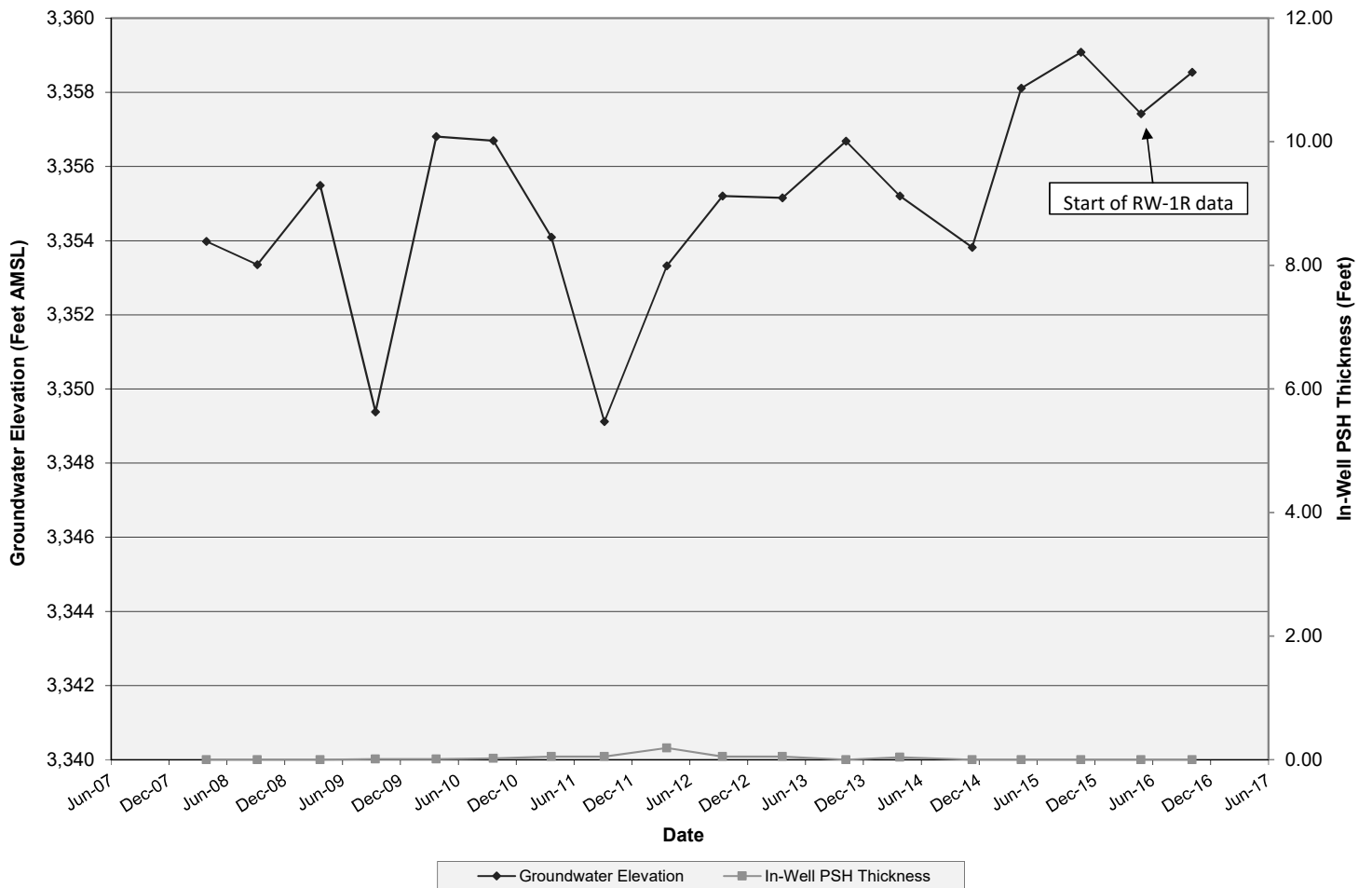
HollyFrontier Navajo Refining LLC - Artesia Refinery

North Refinery Area



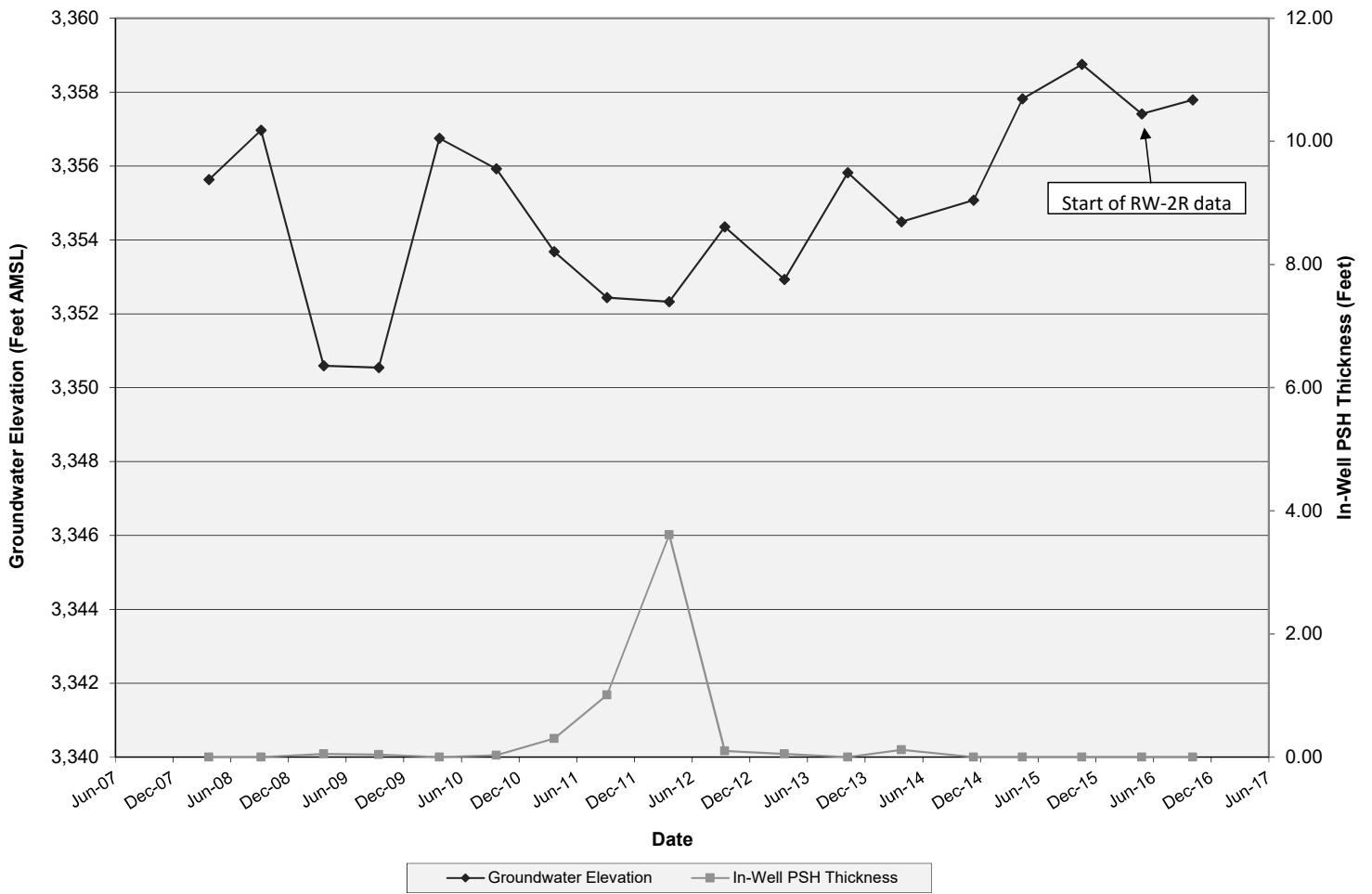
## RW-1 and RW-1R: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Refinery Area



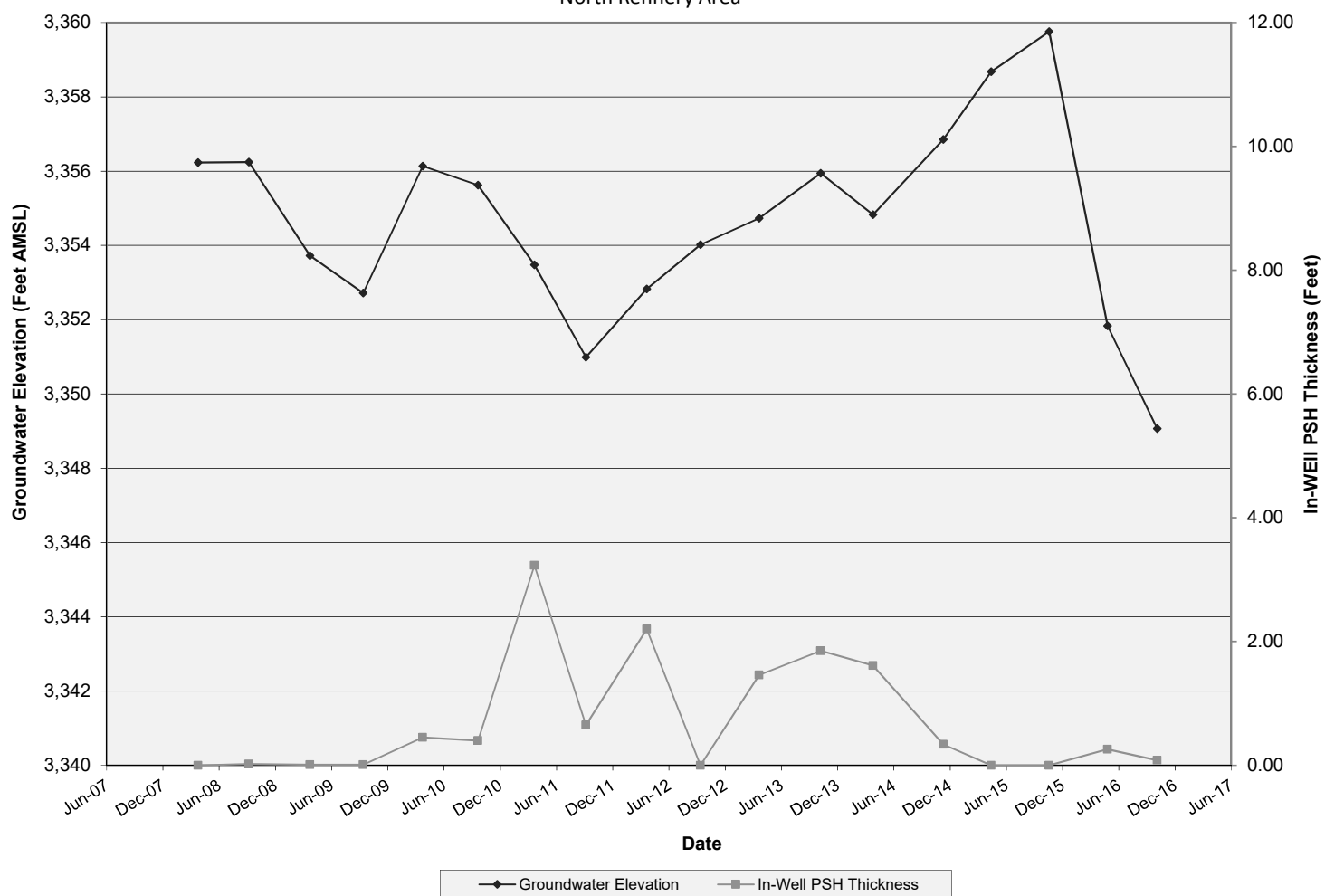
## RW-2 and RW-2R: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Refinery Area



## RW-8: Groundwater Elevations and In-Well PSH Thicknesses

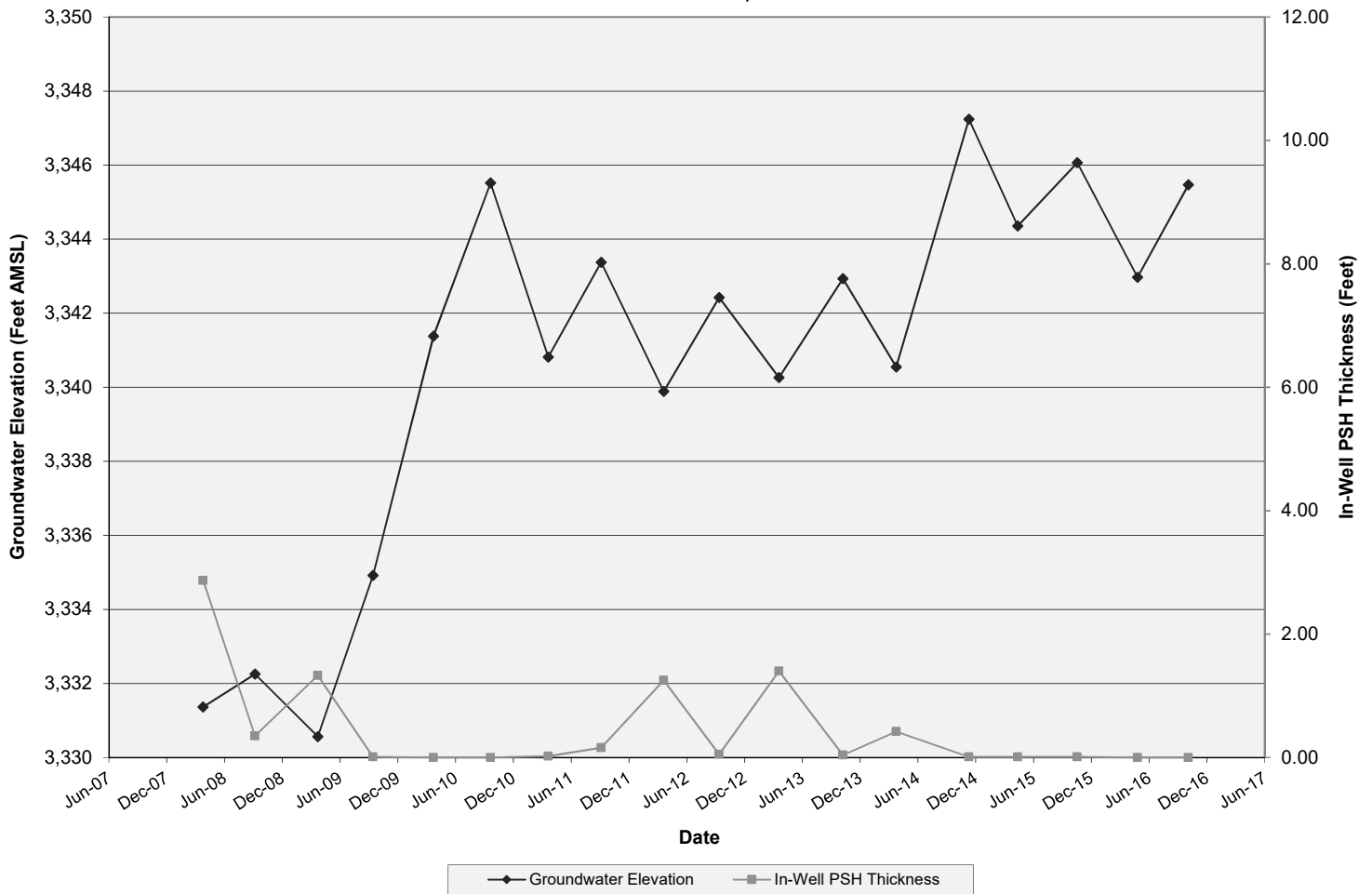
HollyFrontier Navajo Refining LLC - Artesia Refinery  
North Refinery Area



## KWB-2R: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery

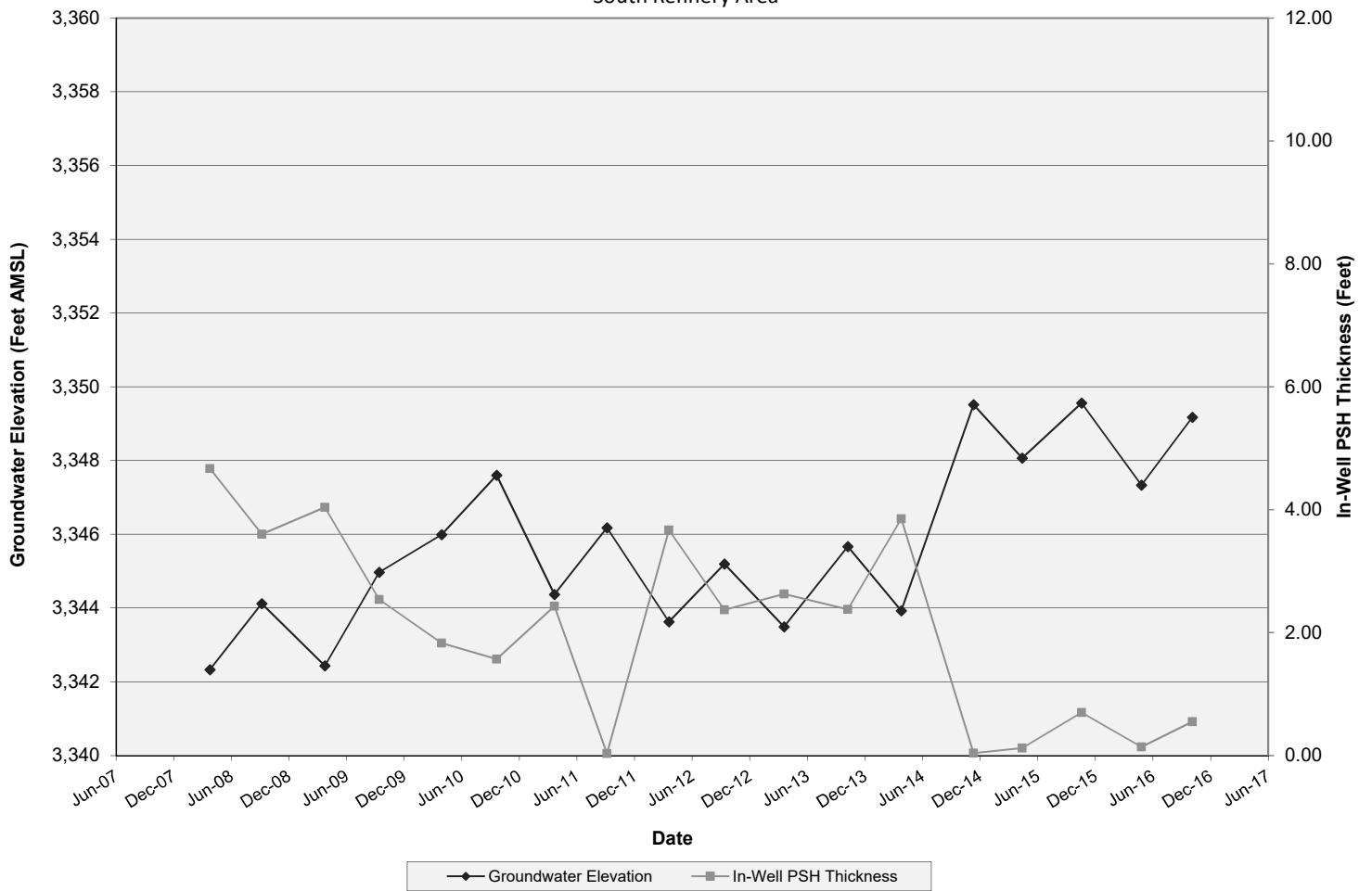
South Refinery Area





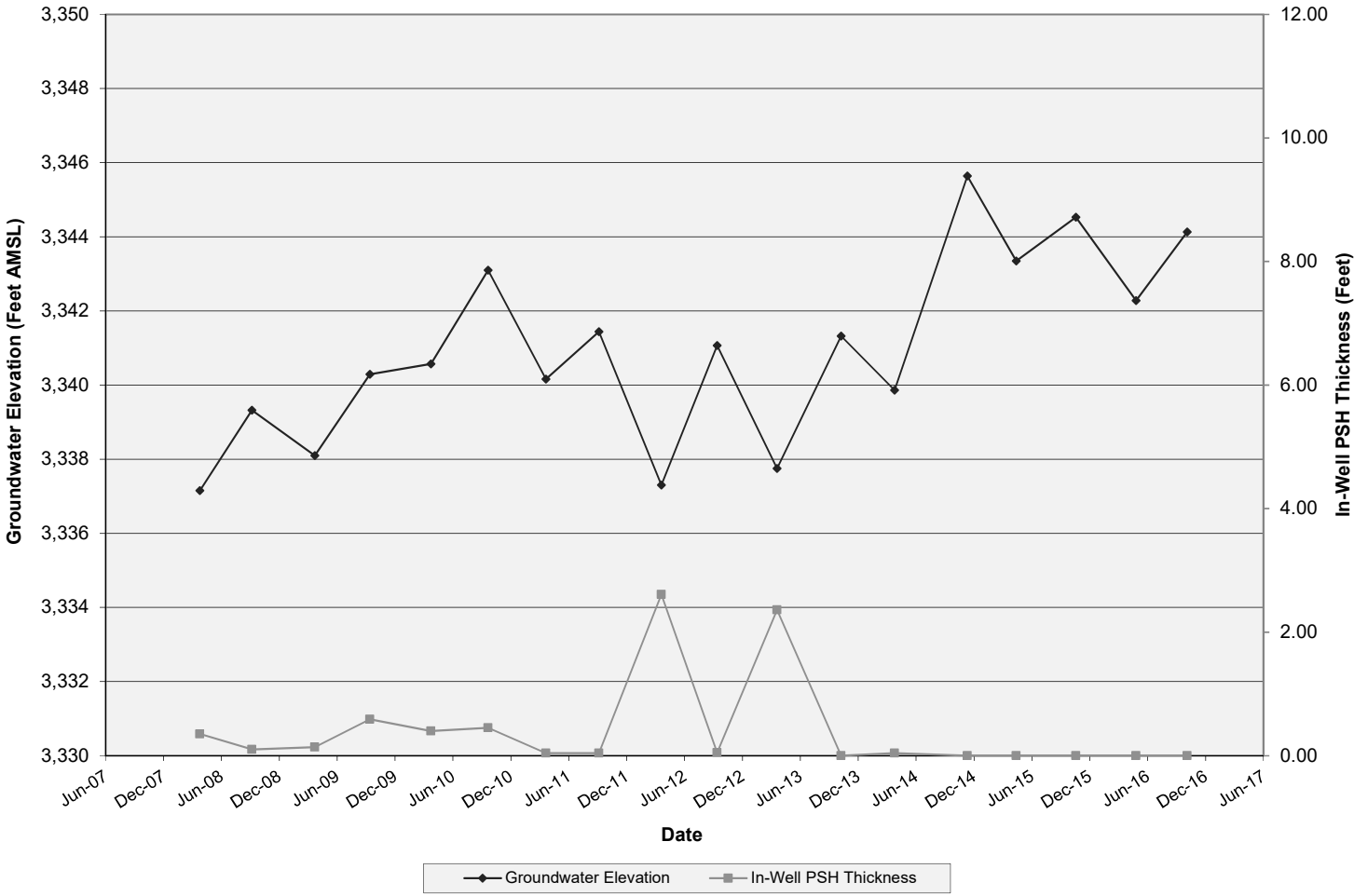
## KWB-4: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



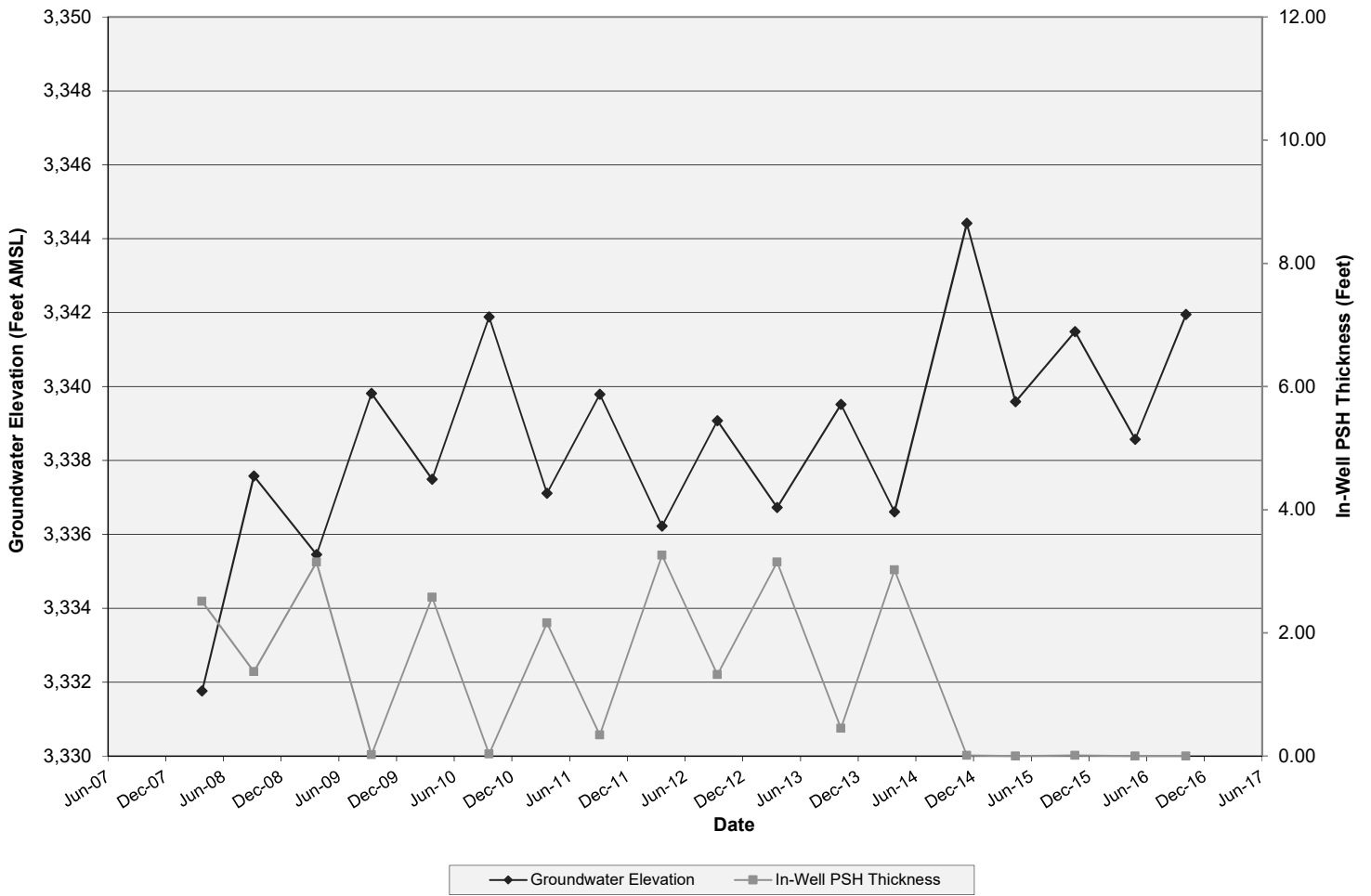
**KWB-5: Groundwater Elevations and In-Well PSH Thicknesses**

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



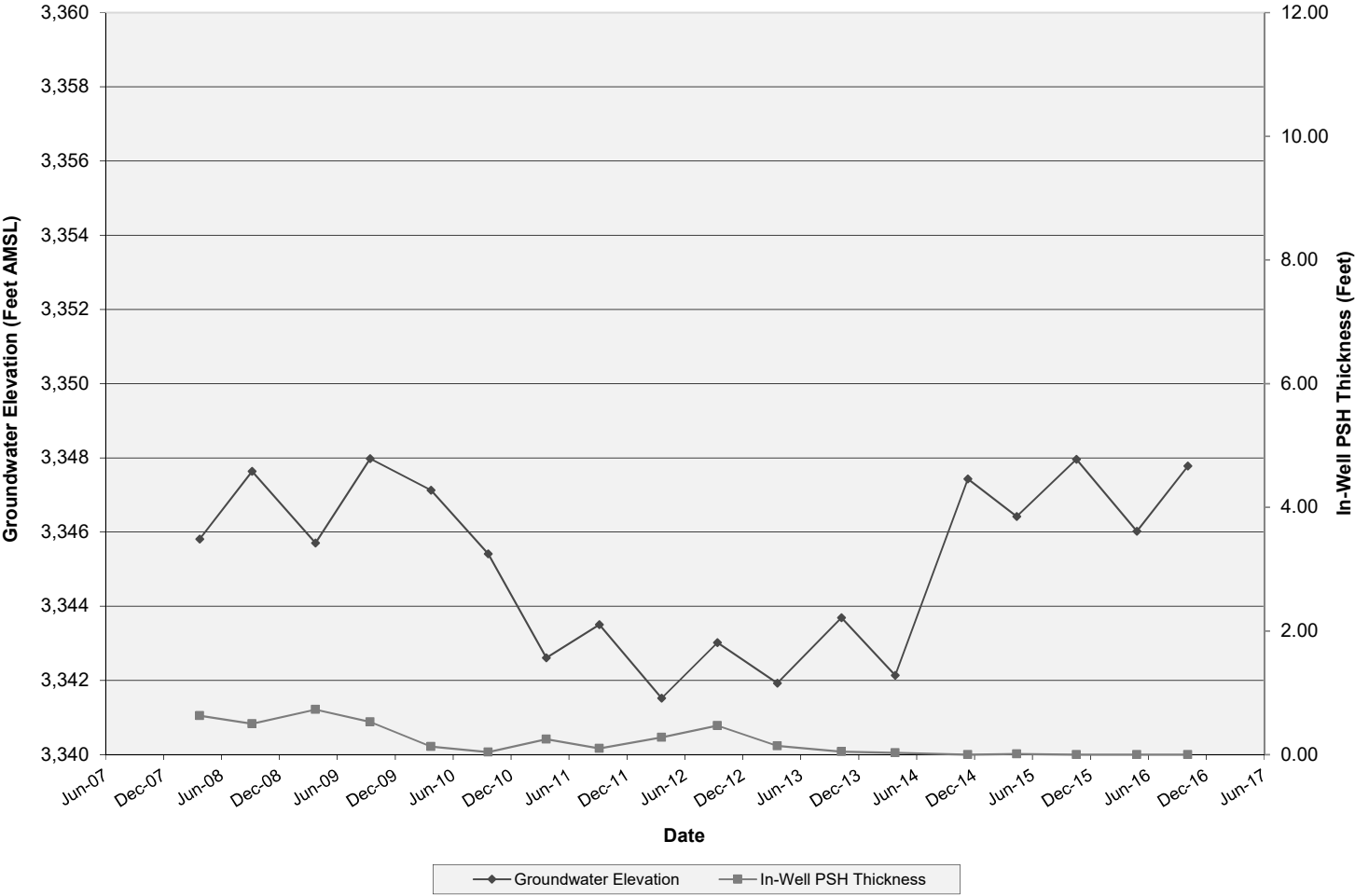
## KWB-6: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



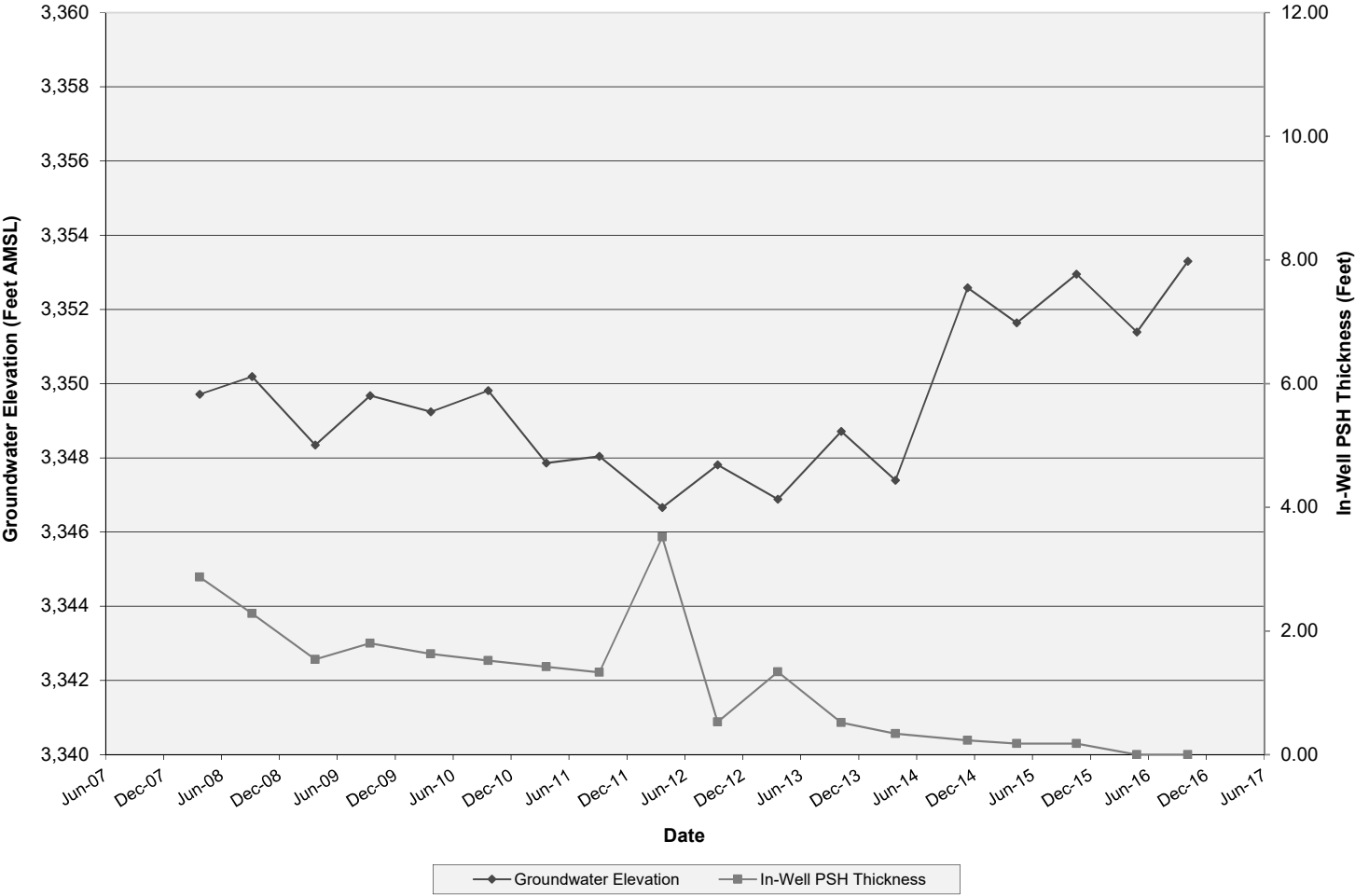
MW-48: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



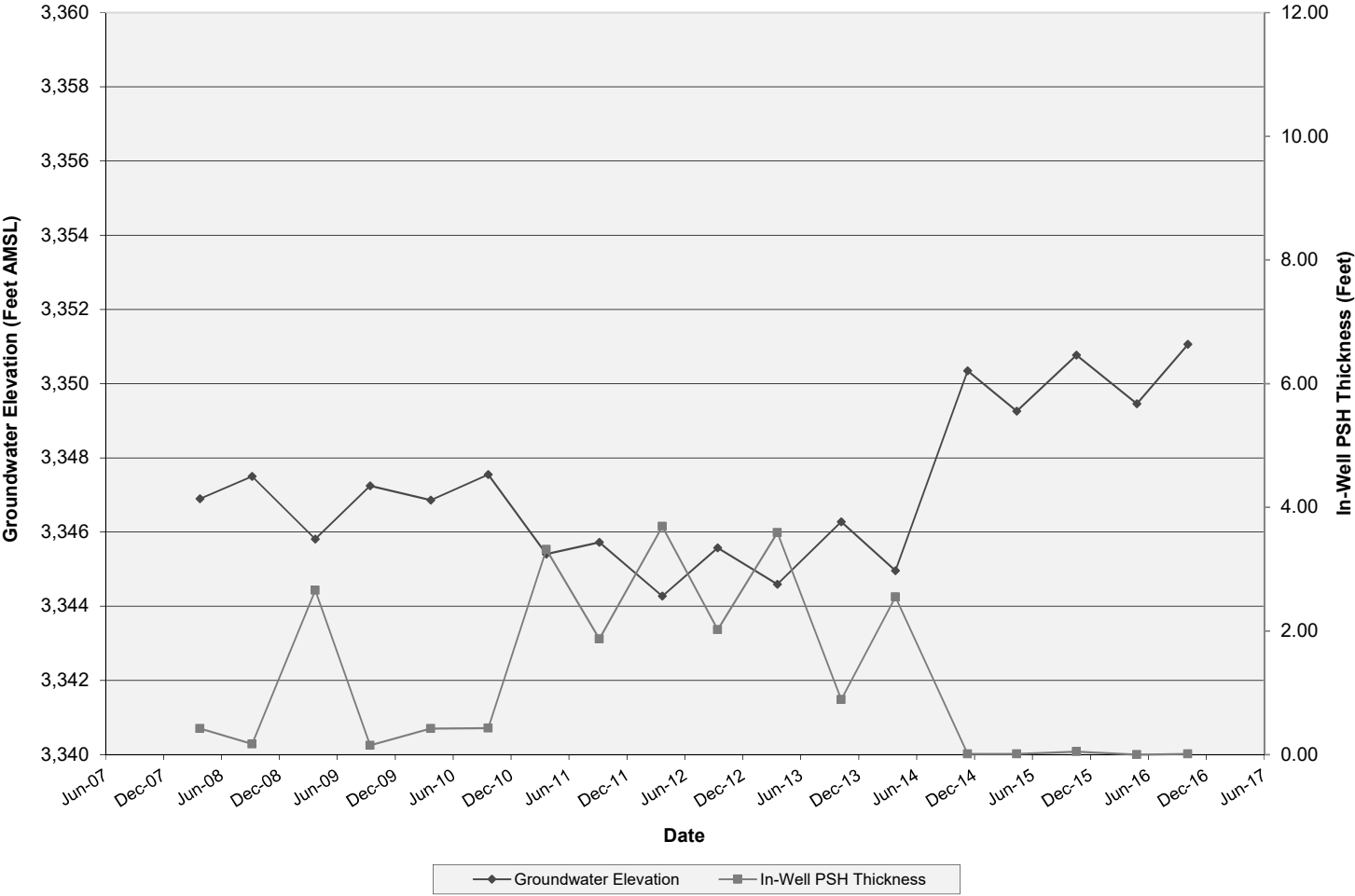
MW-64: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



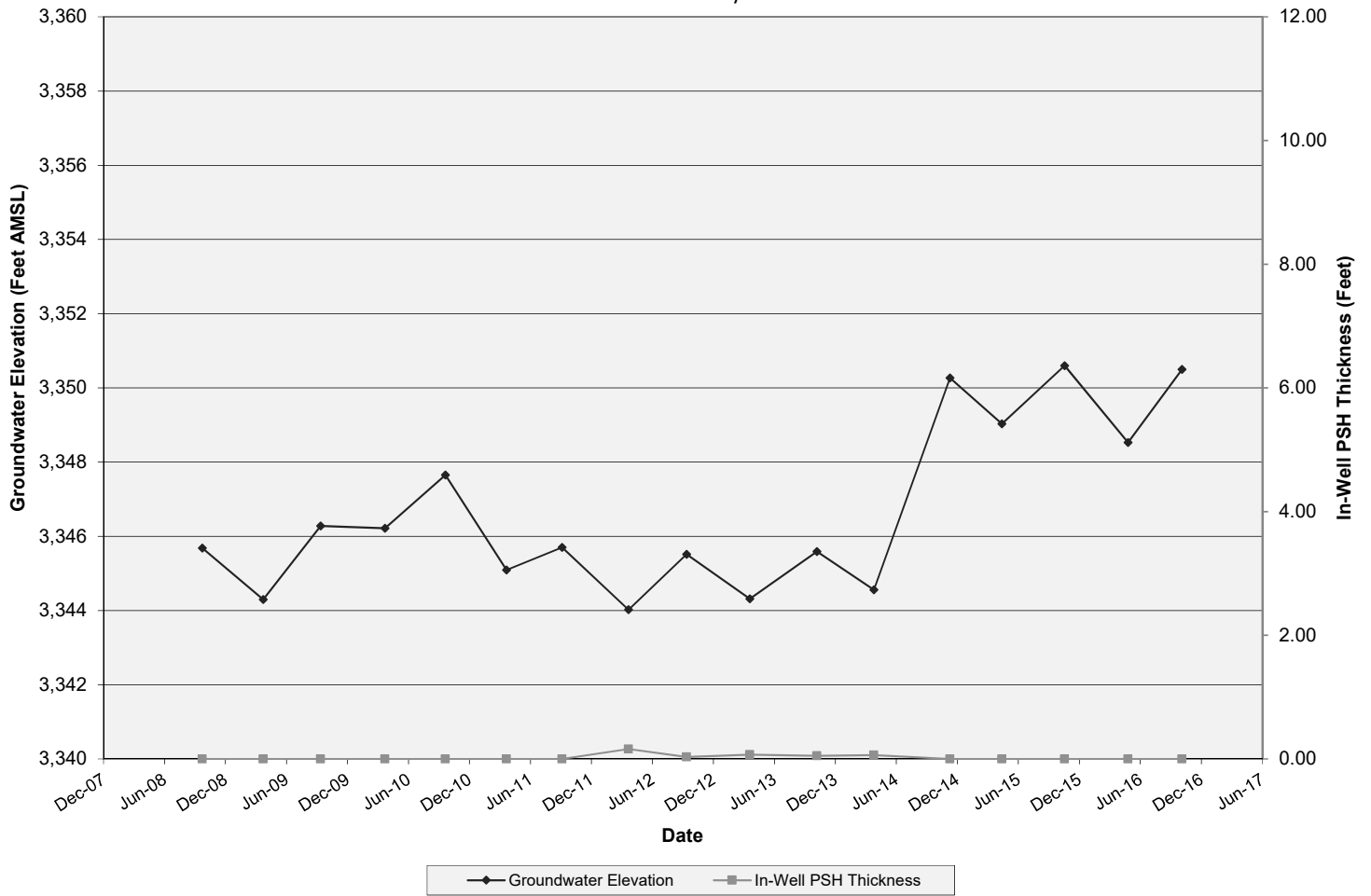
MW-65: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



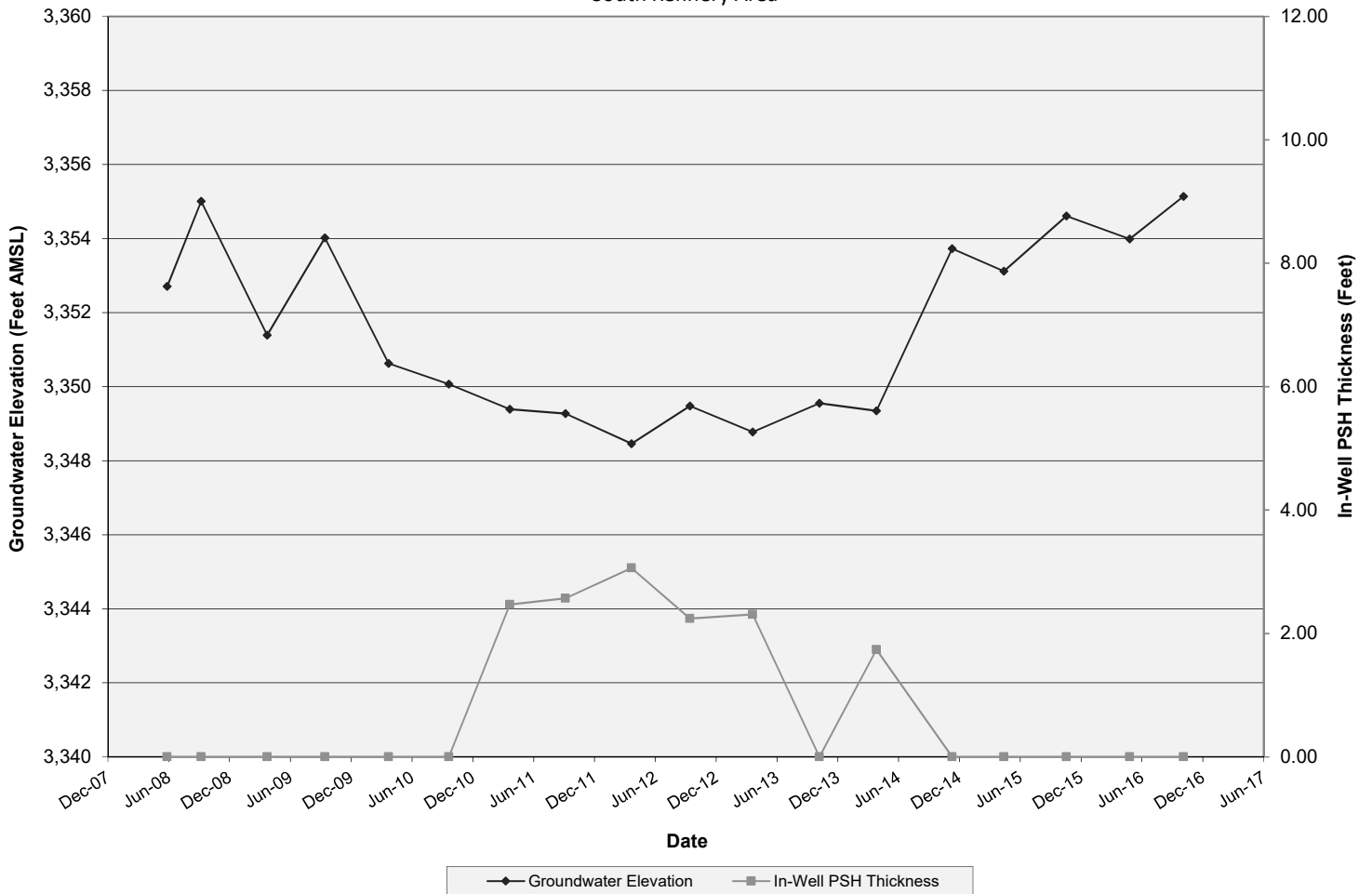
## MW-99: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



## MW-102: Groundwater Elevations and In-Well PSH Thicknesses

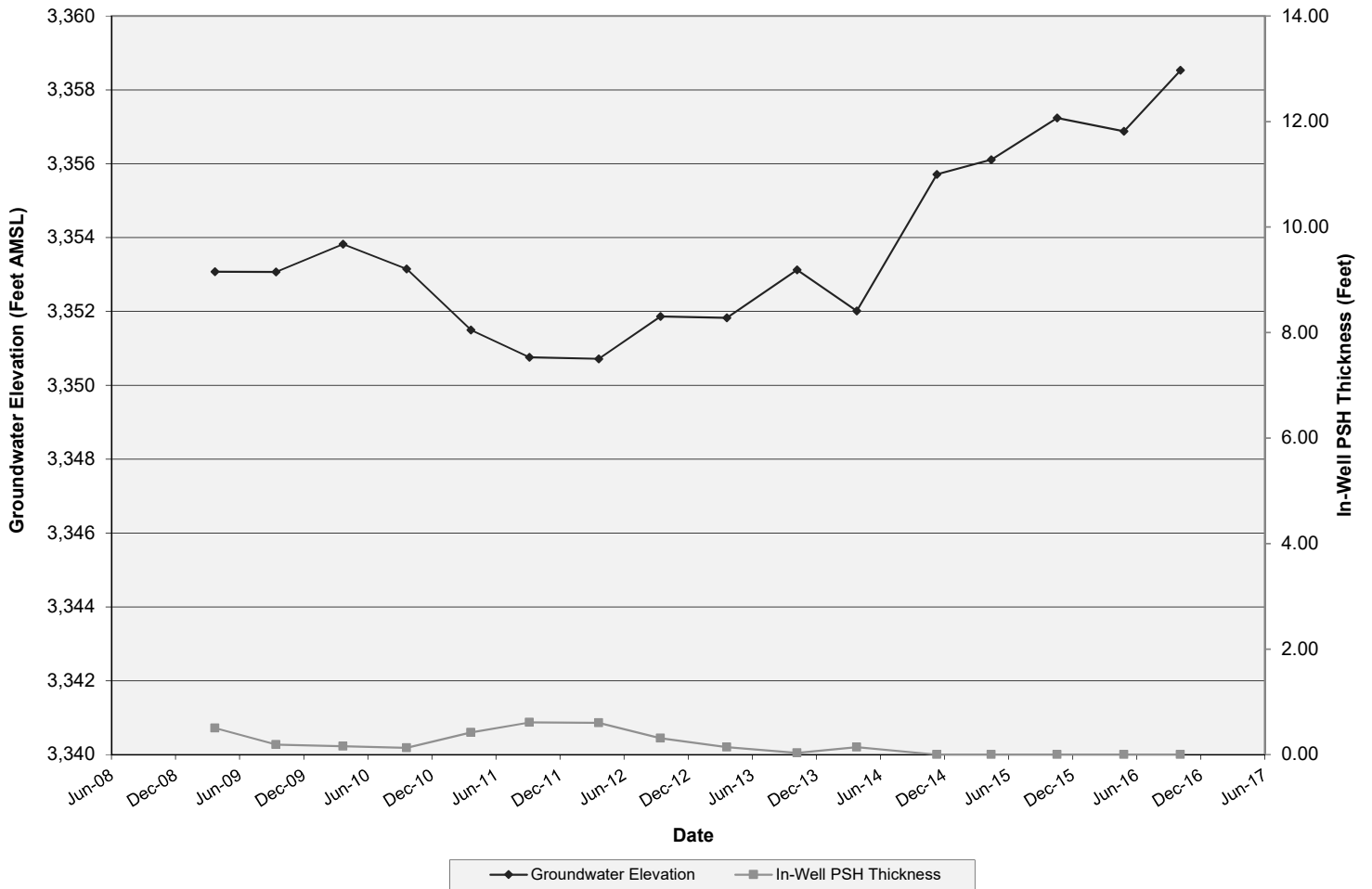
HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area





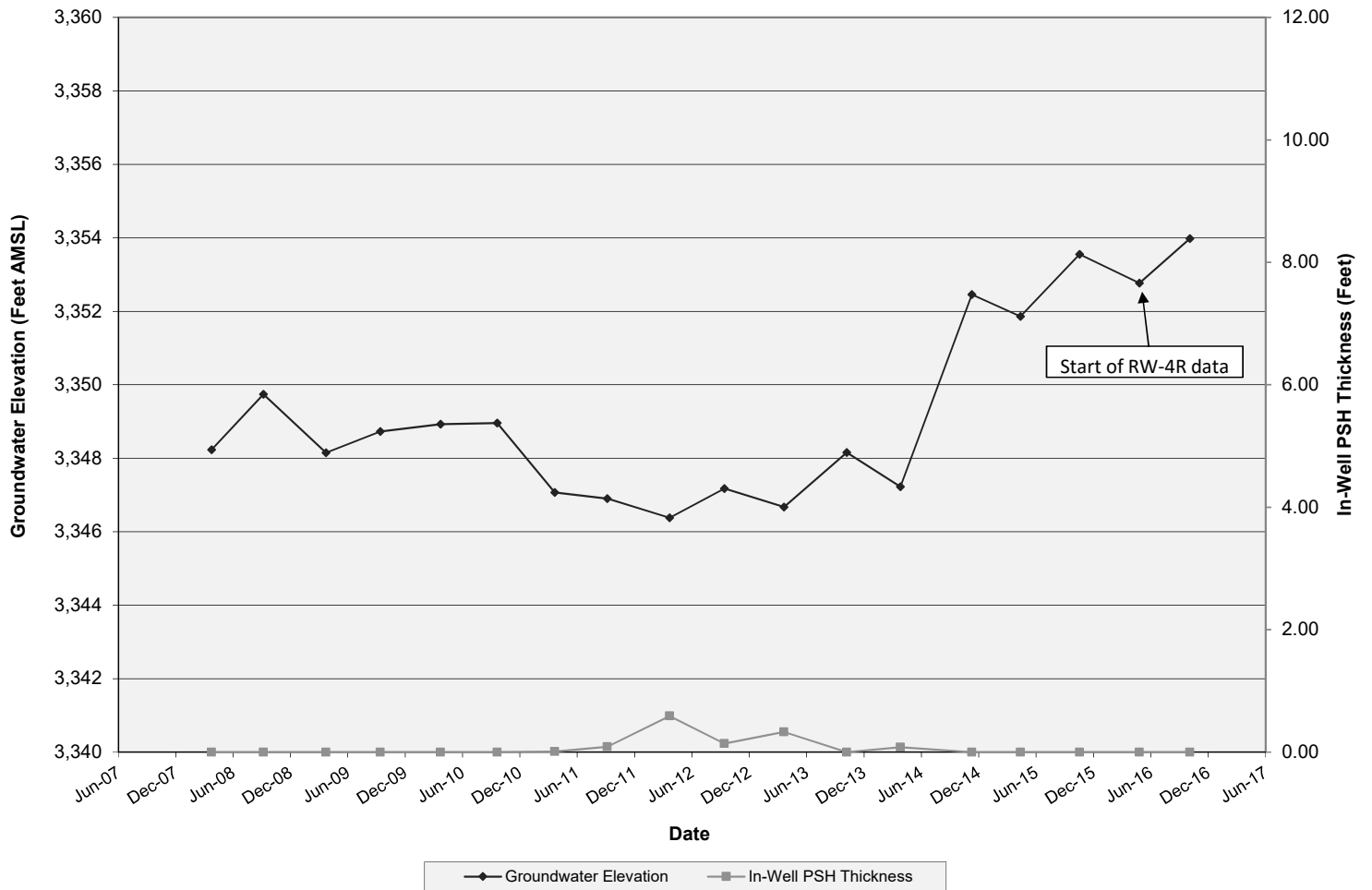
## MW-105: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



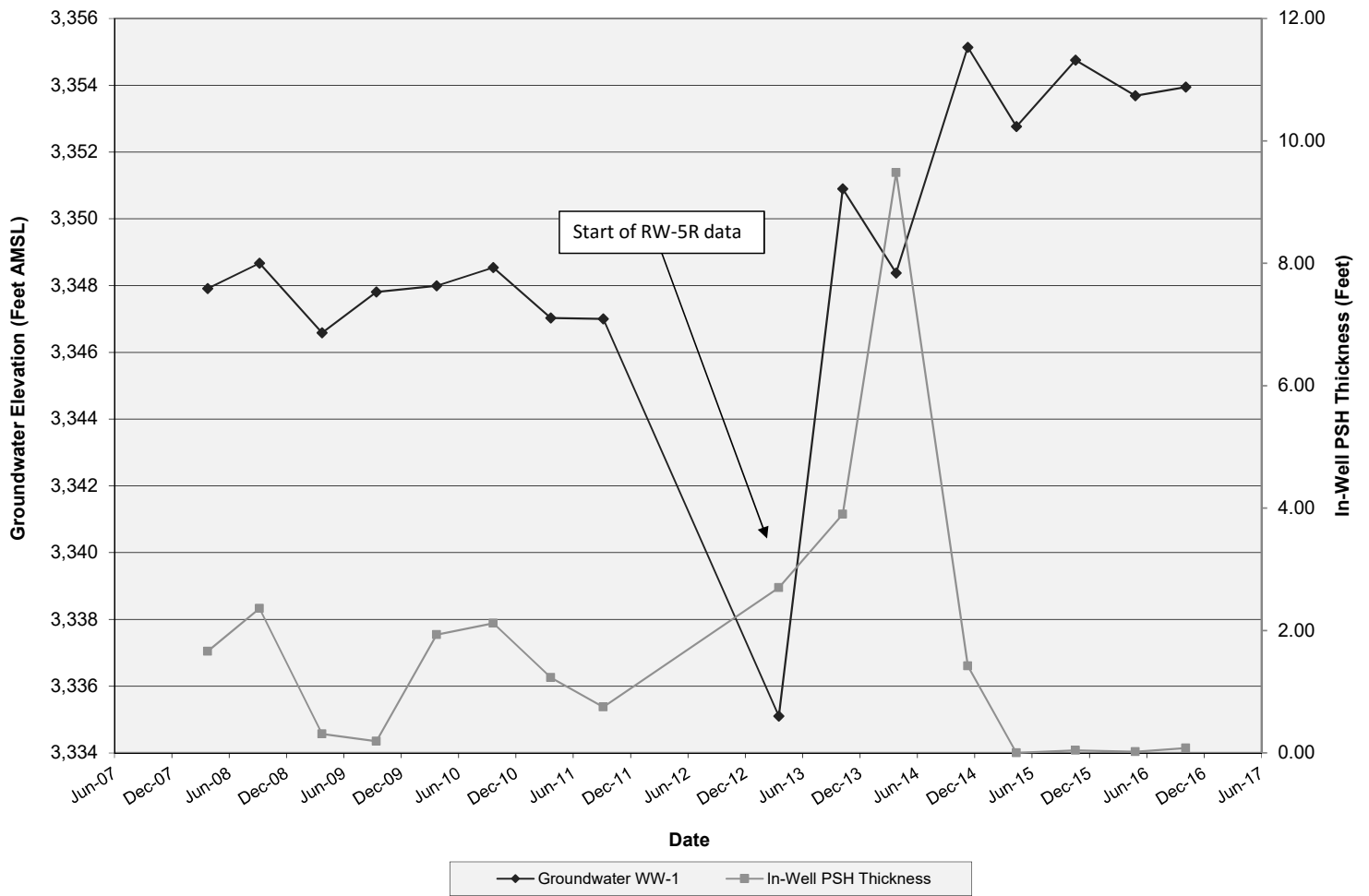
## RW-4 and RW-4R: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



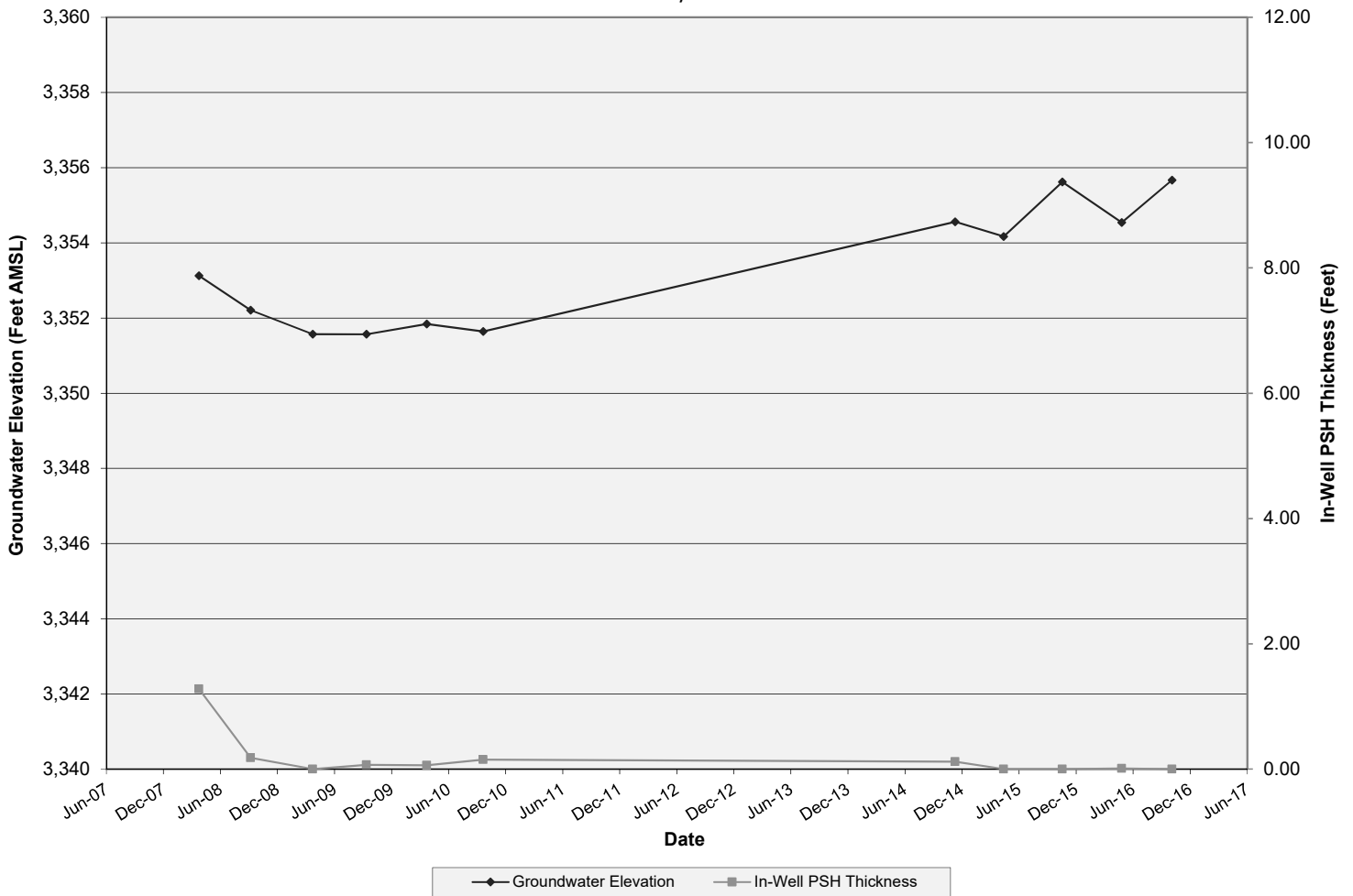
## RW-5 & RW-5R: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



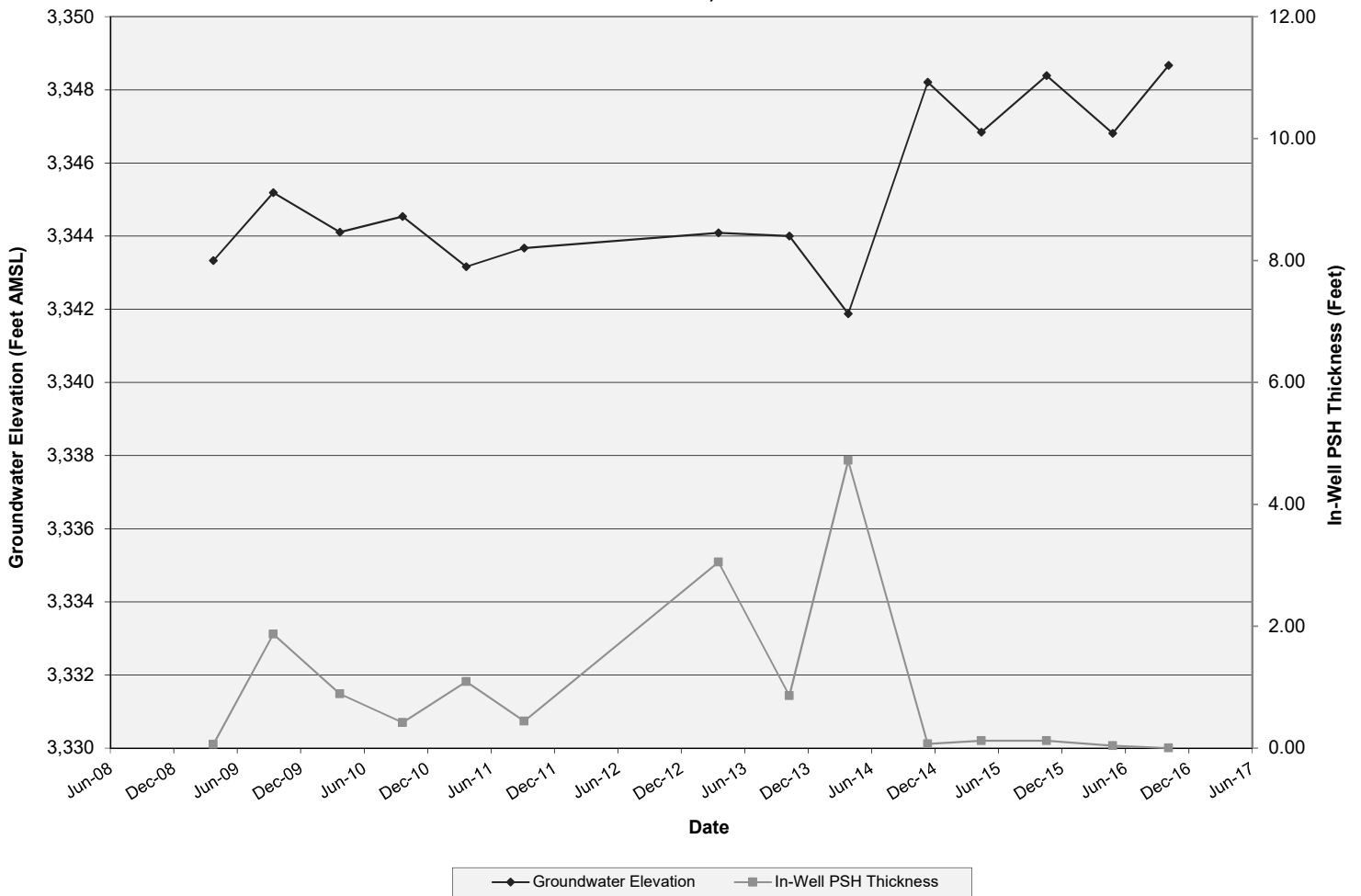
## RW-6: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area



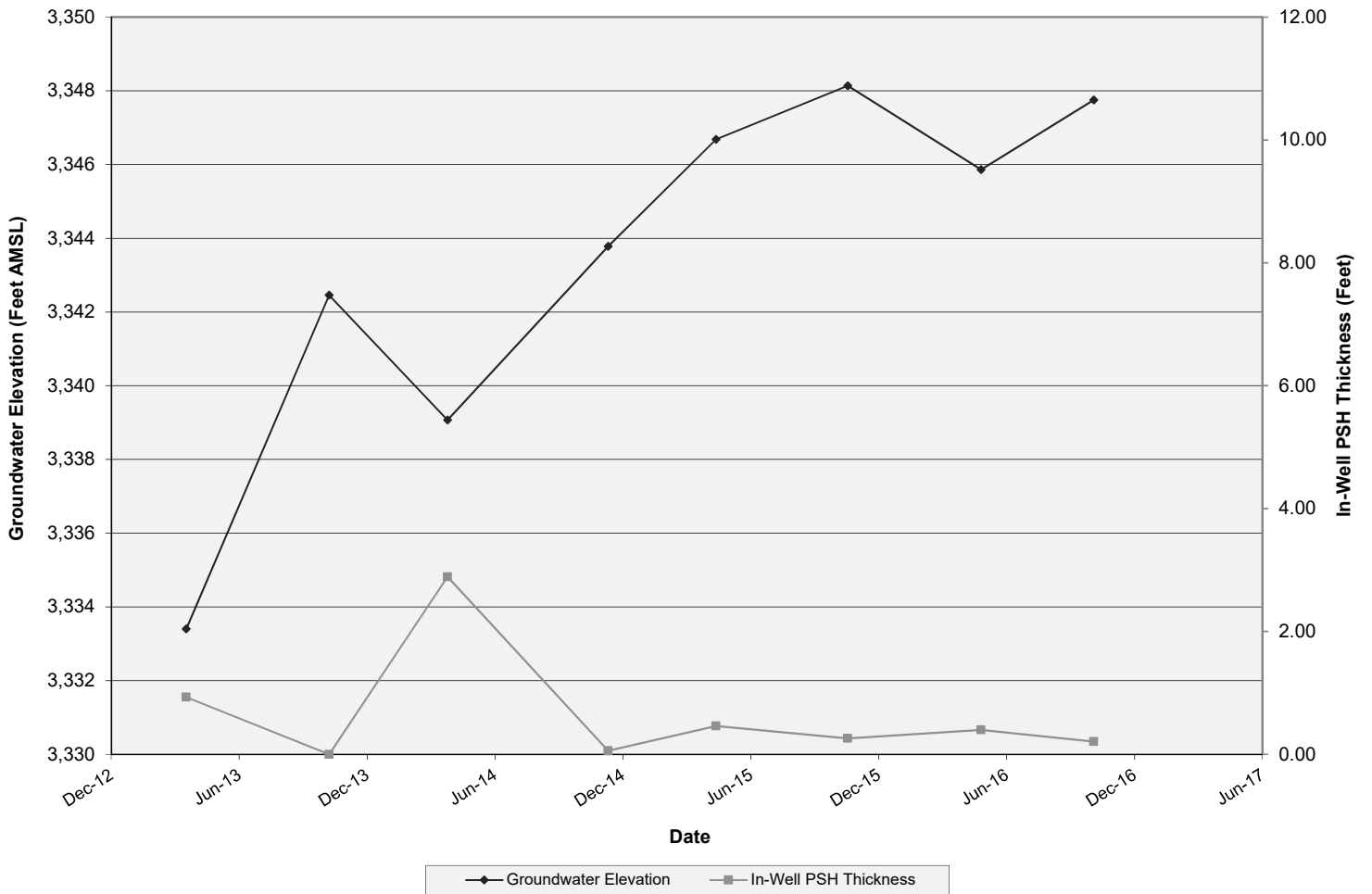
## RW-15C: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area

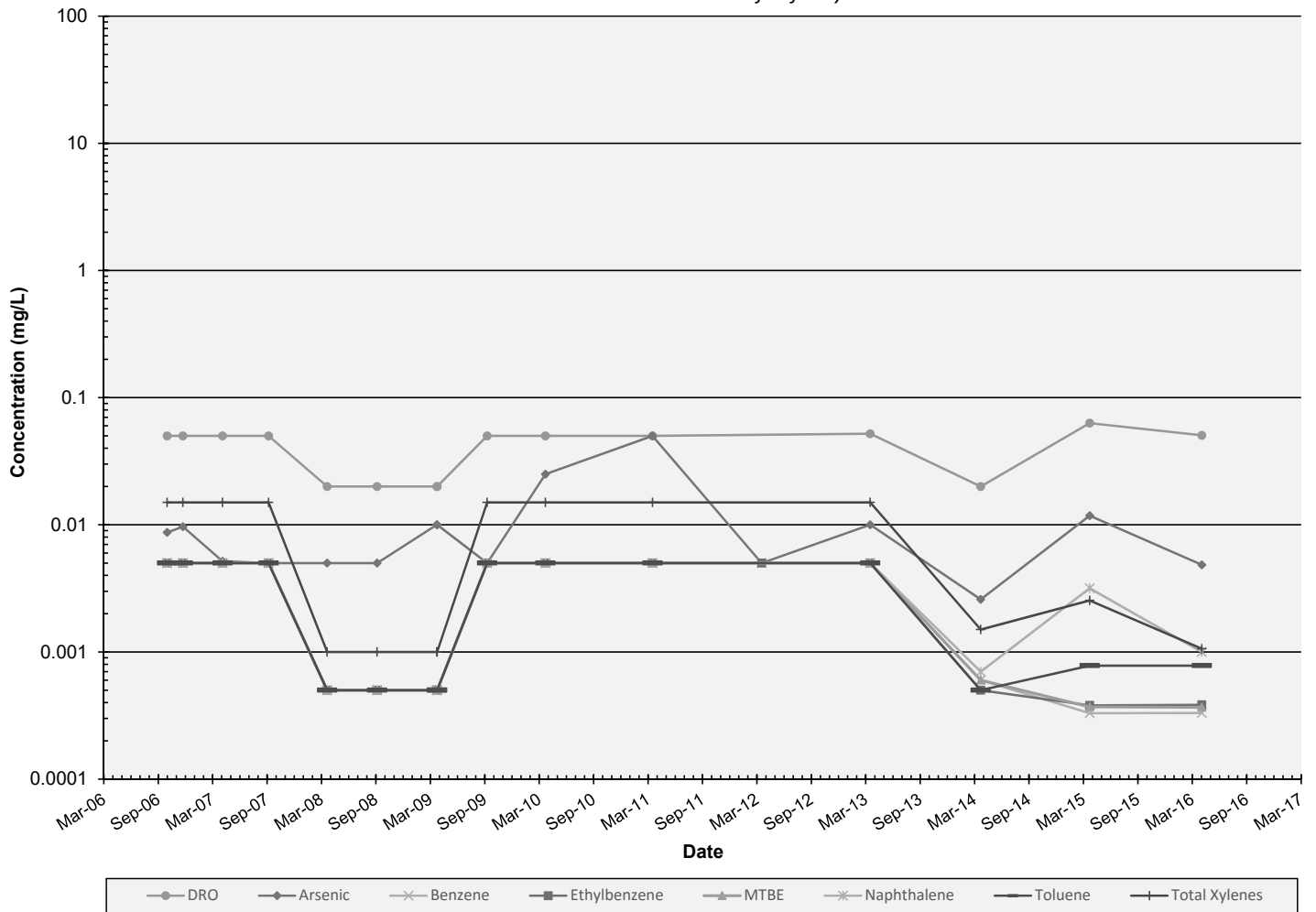


## RW-19: Groundwater Elevations and In-Well PSH Thicknesses

HollyFrontier Navajo Refining LLC - Artesia Refinery  
South Refinery Area

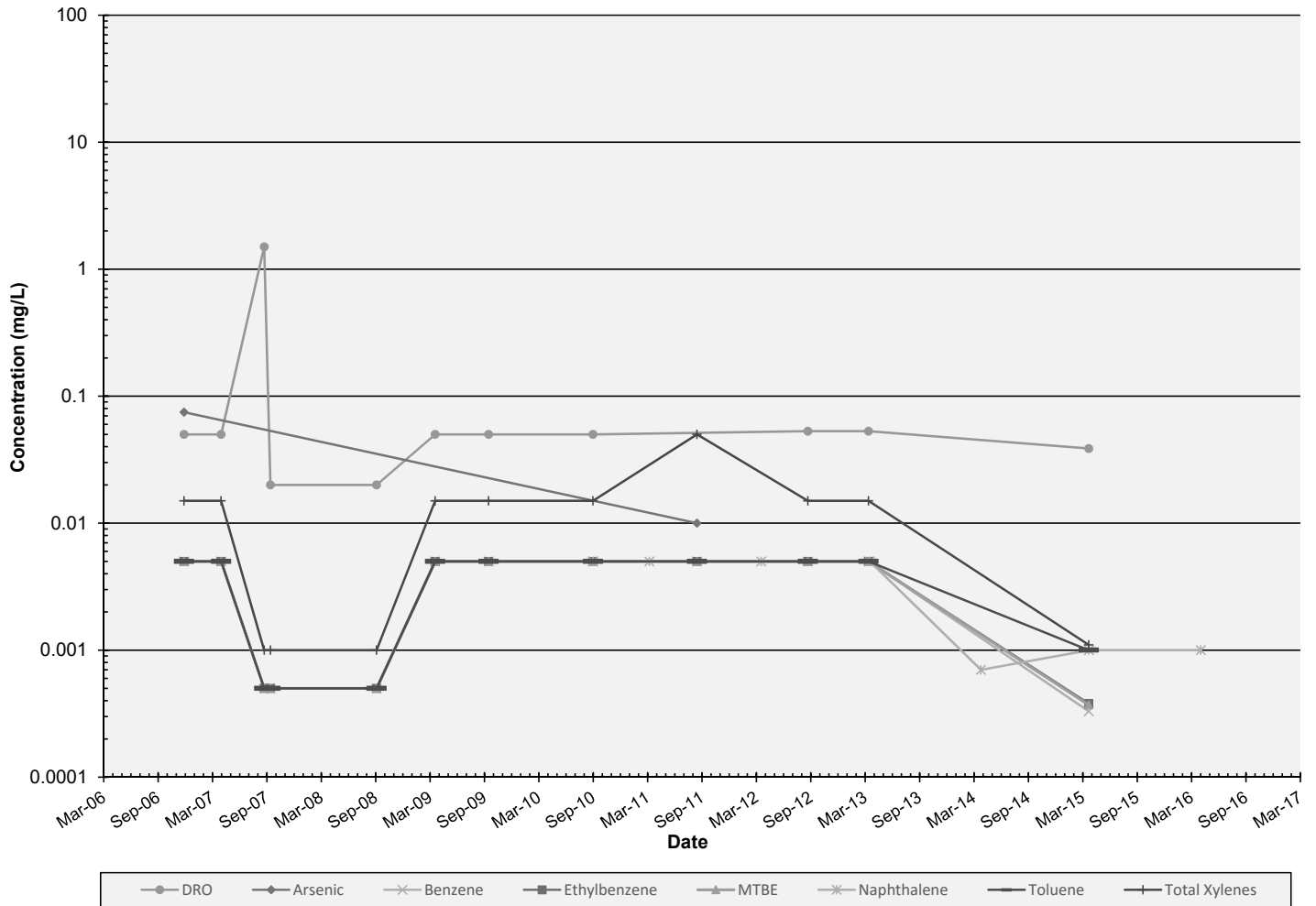


**KWB-13R: COC Concentrations**  
HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Cross-Gradient of Refinery*



## NP-5: COC Concentrations

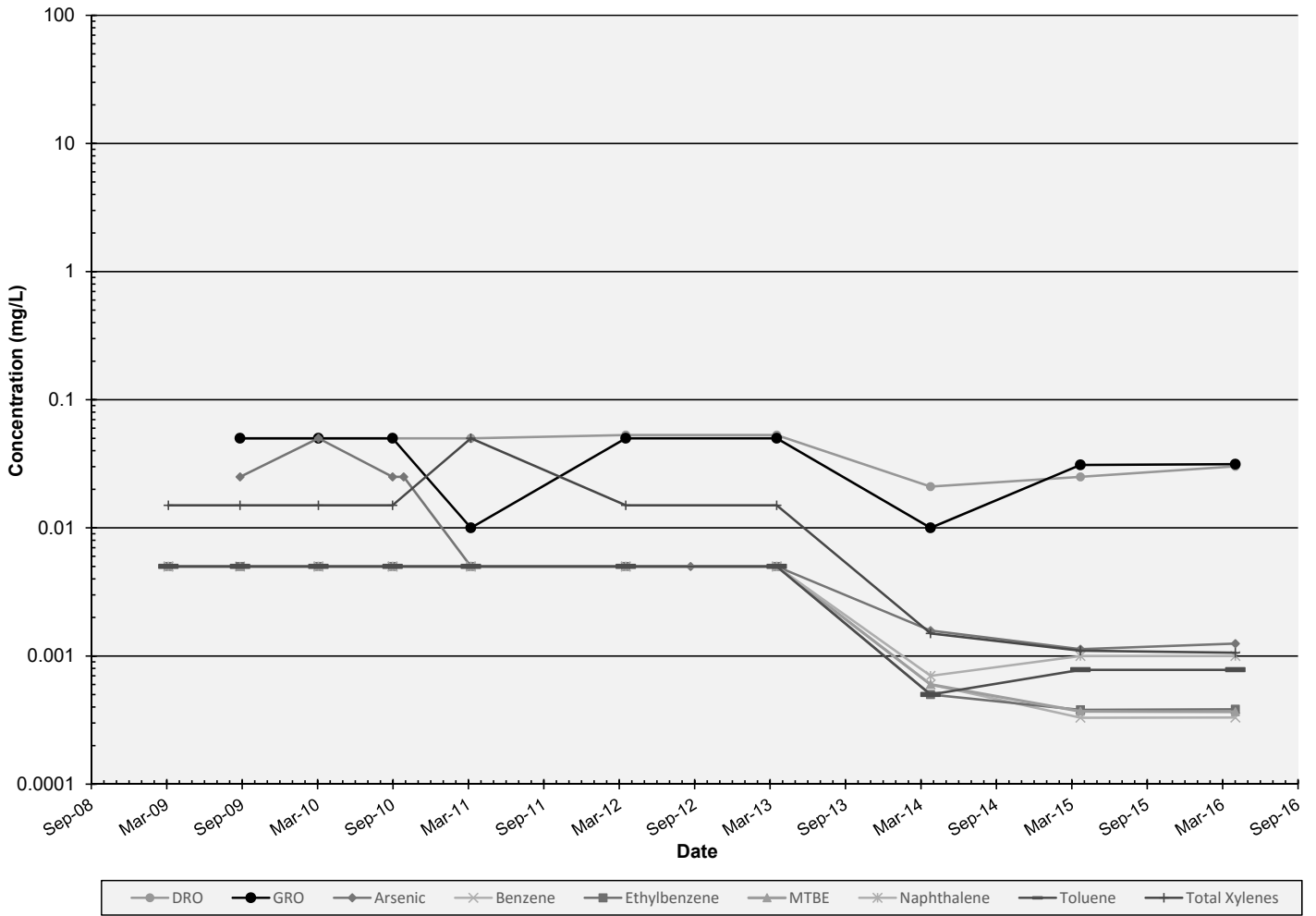
HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Cross-Gradient of Refinery*





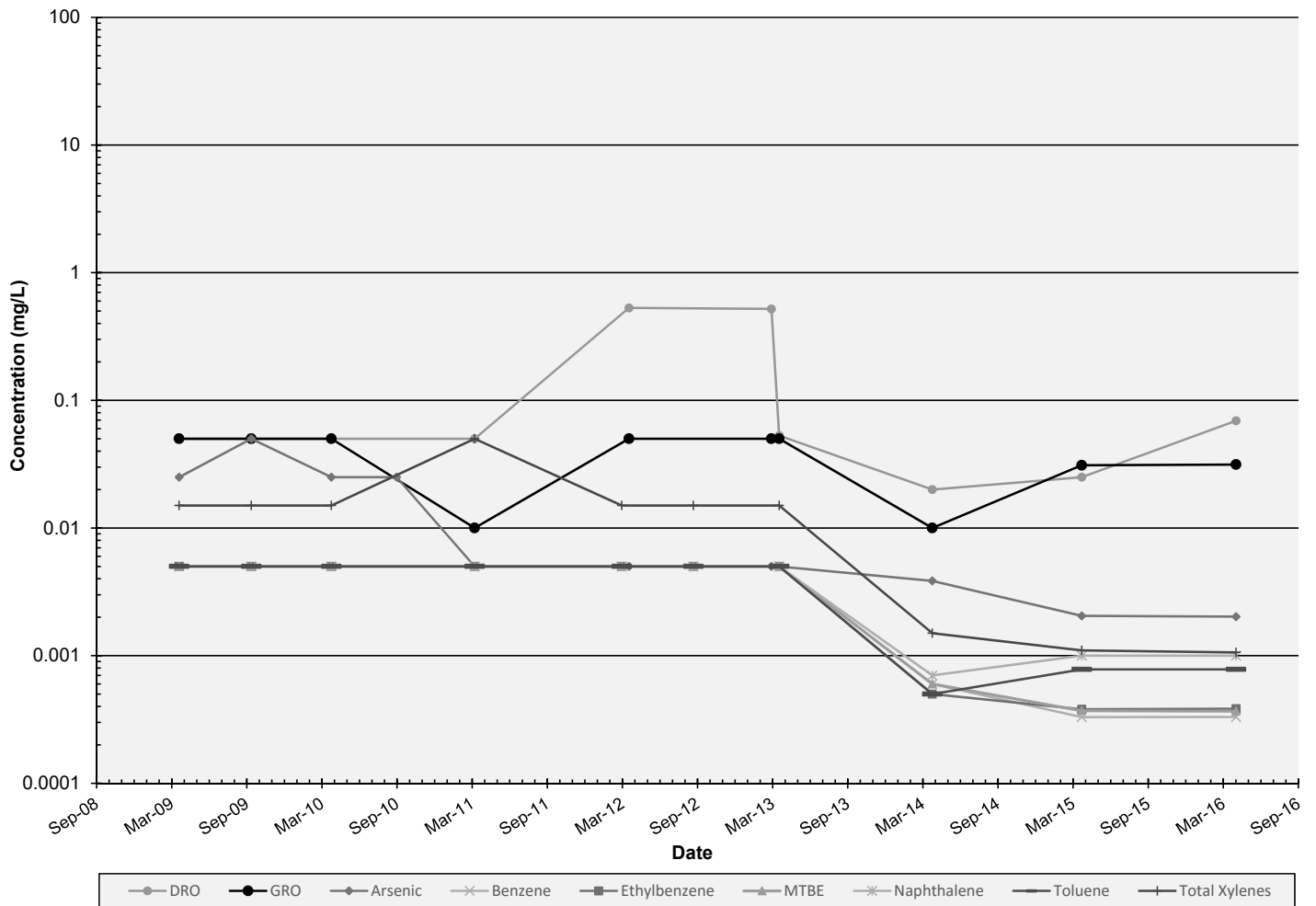
## UG-1: COC Concentrations

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Up-Gradient of Refinery

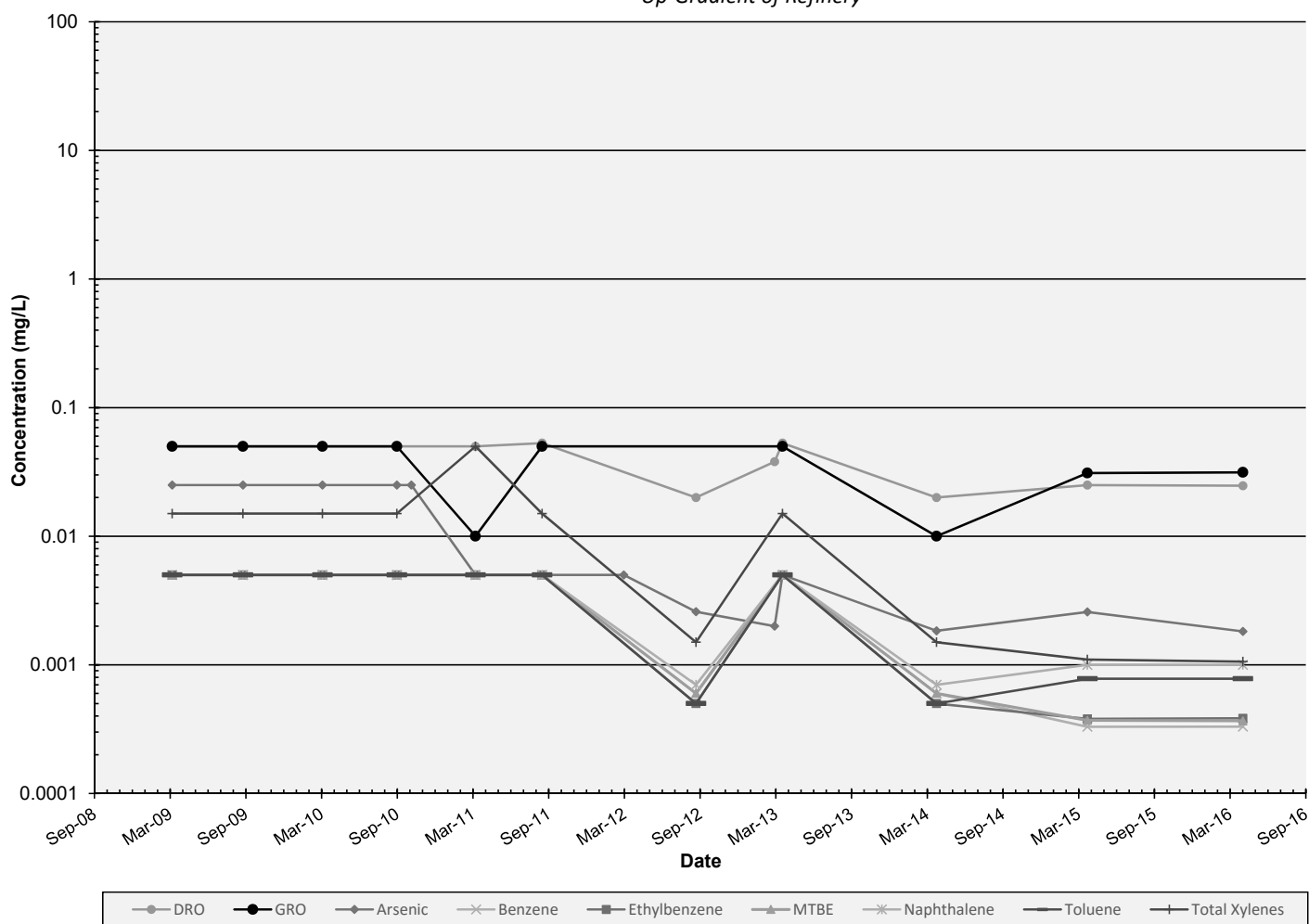


## UG-2: COC Concentrations

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Up-Gradient of Refinery

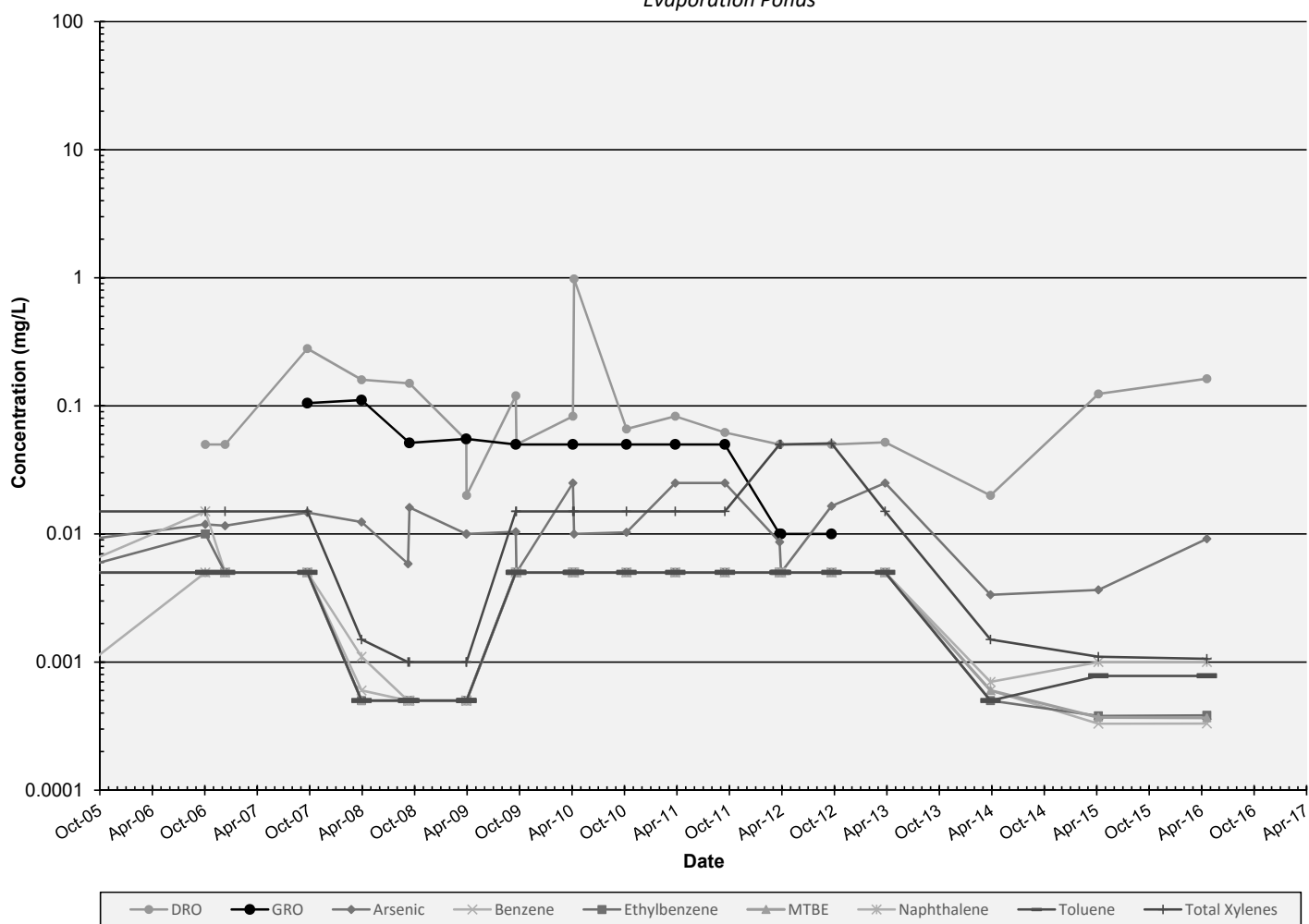


# **UG-3R: COC Concentrations** HollyFrontier Navajo Refining LLC - Artesia Refinery *Up-Gradient of Refinery*

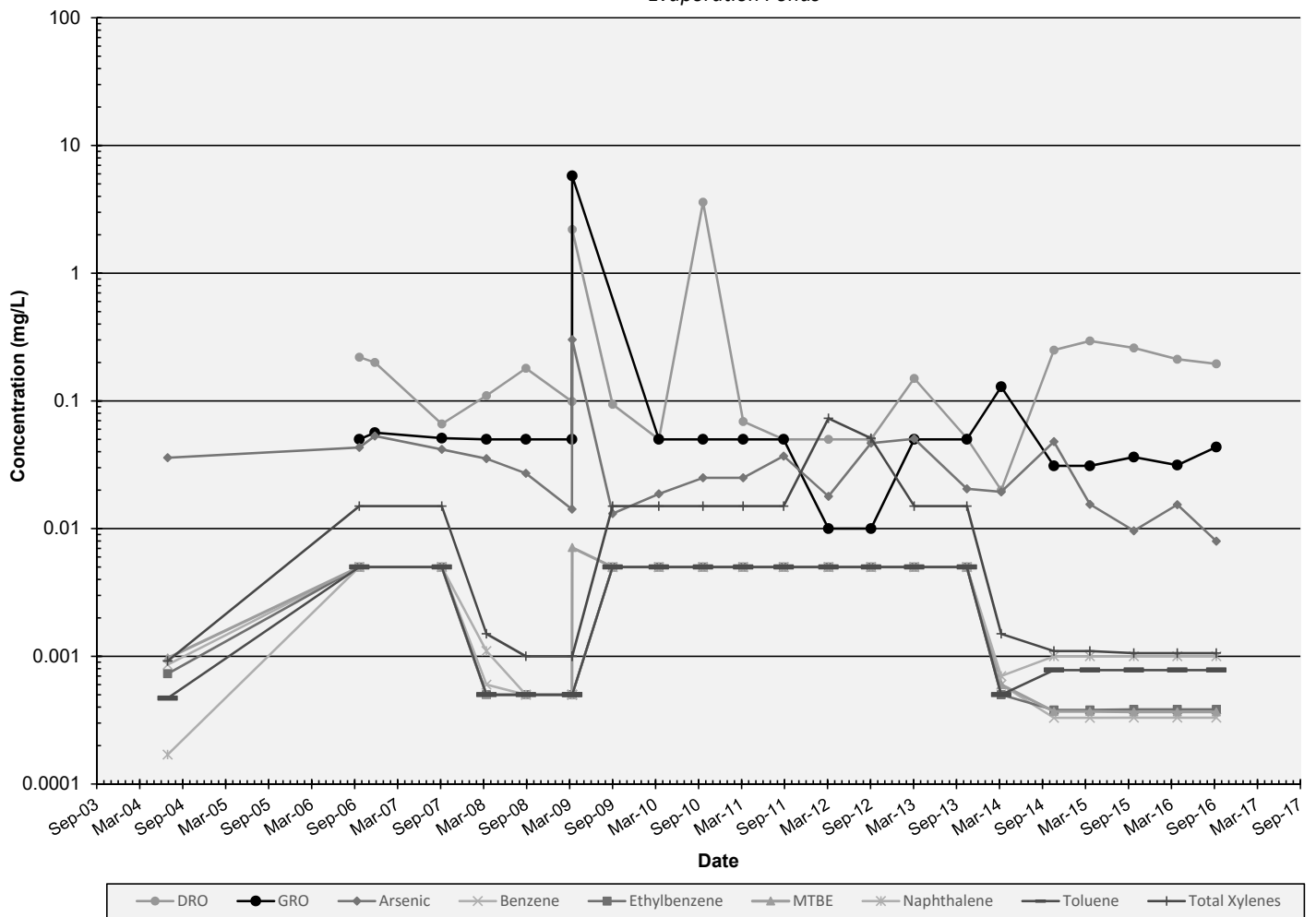


# MW-1R: COC Concentrations

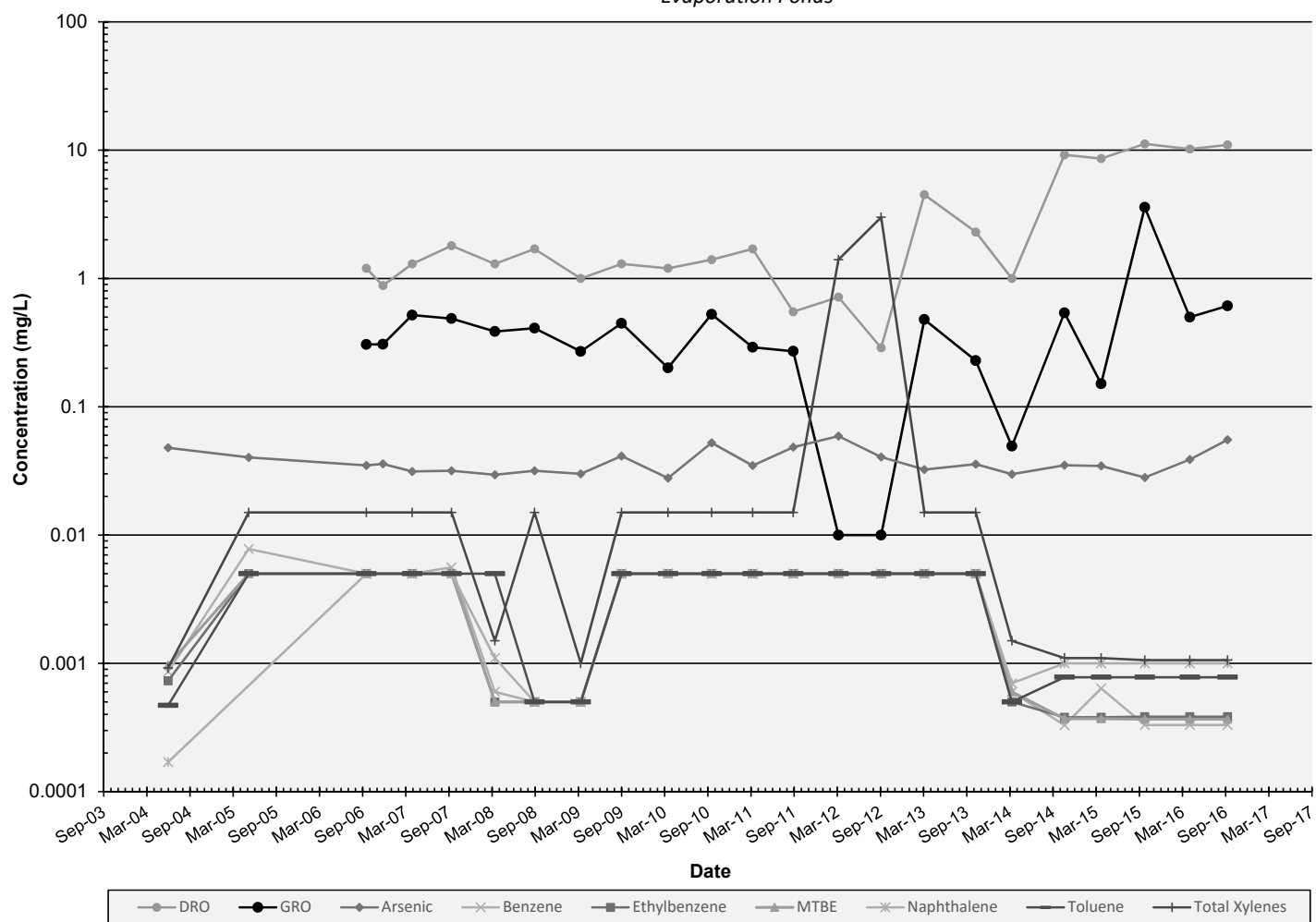
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



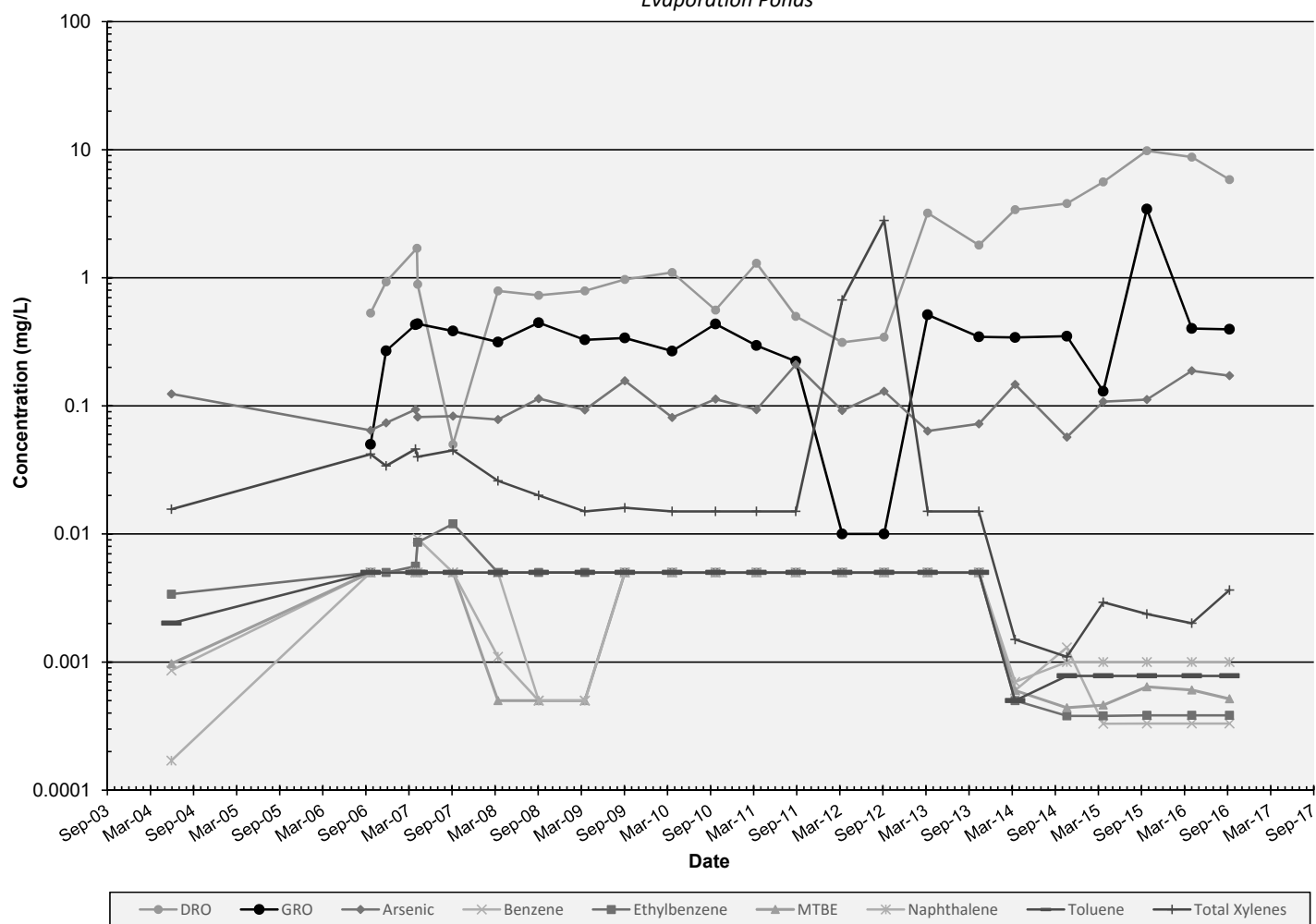
HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Evaporation Ponds*



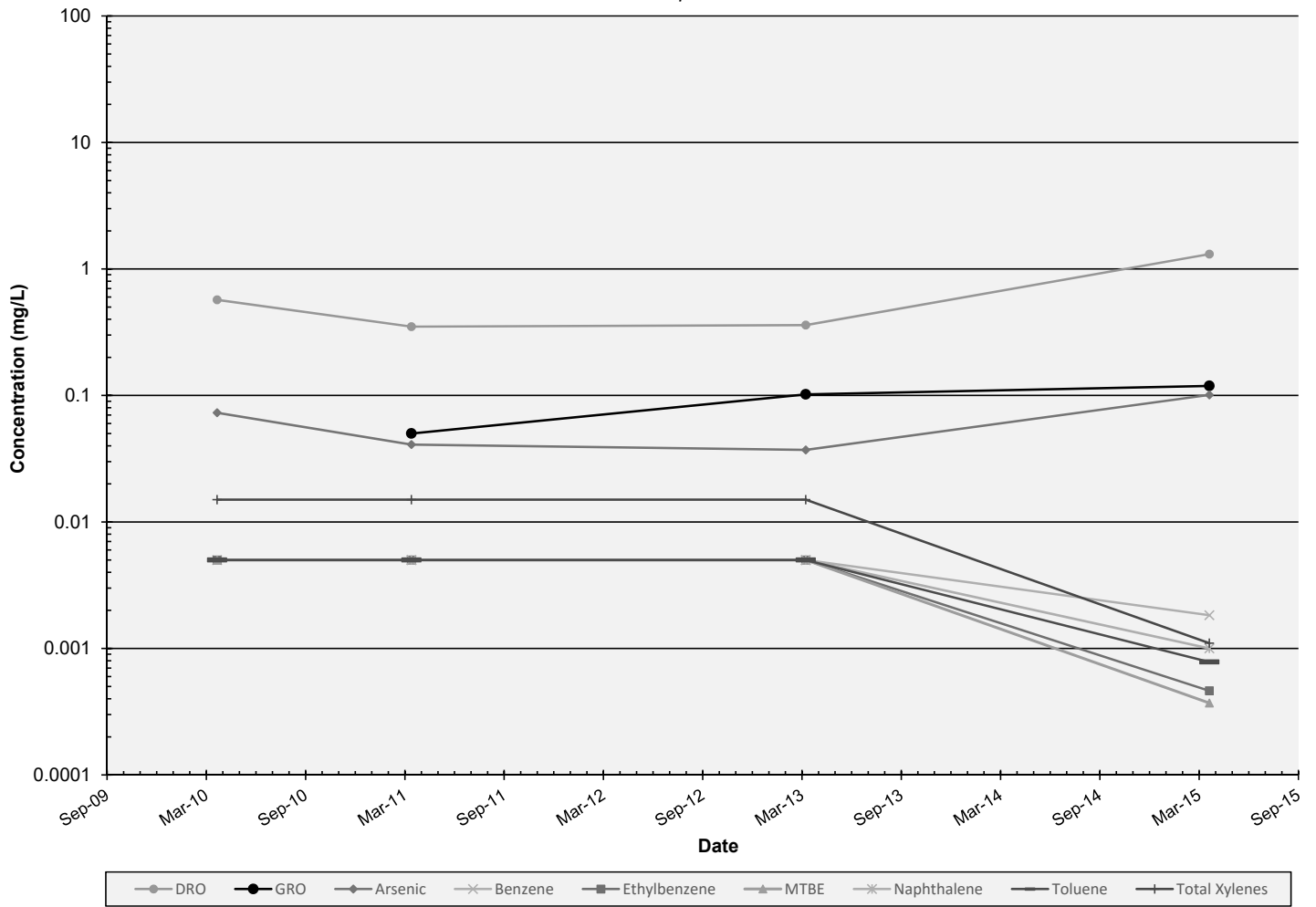
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Evaporation Ponds*

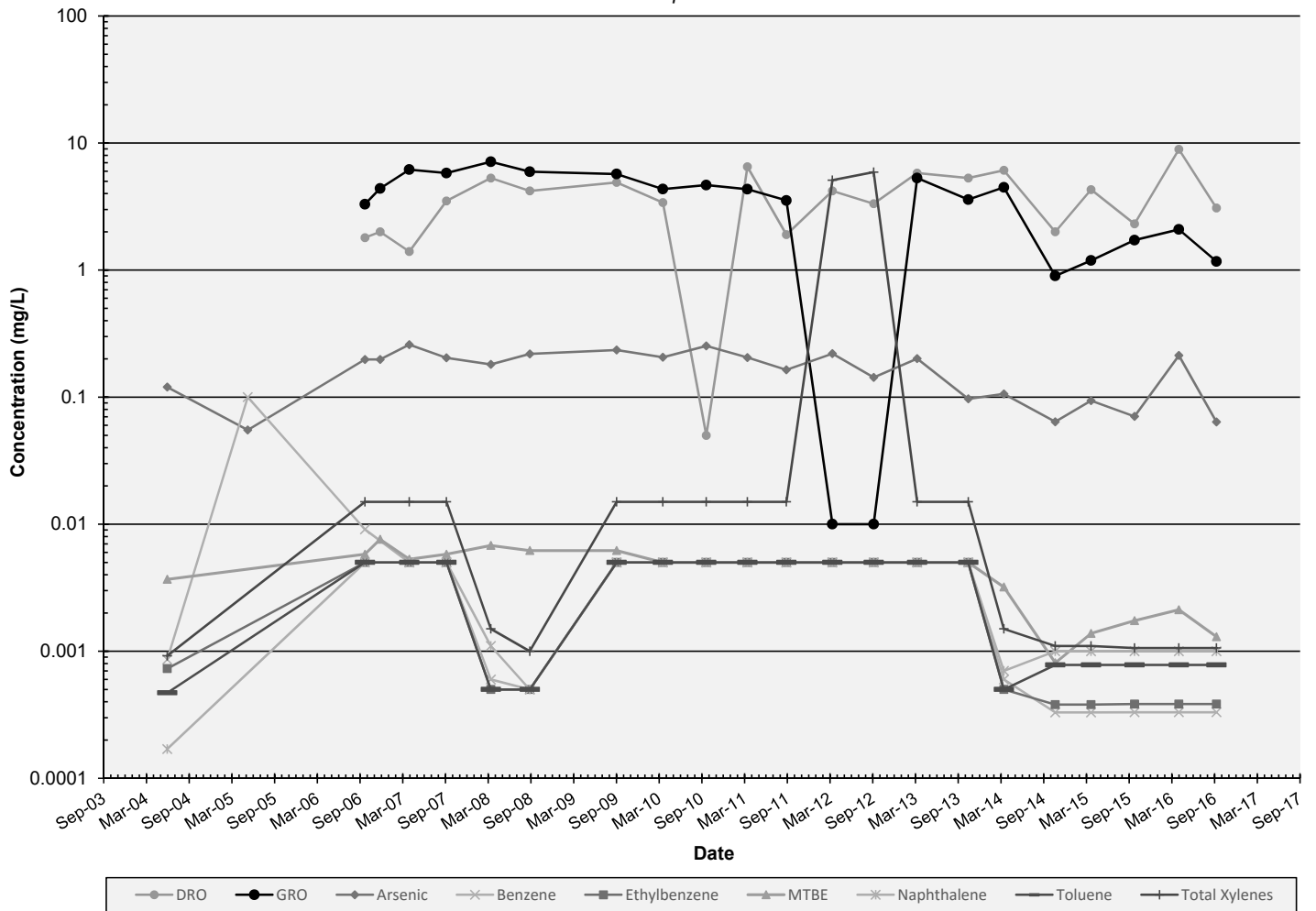


**MW-4B: COC Concentrations**  
HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Evaporation Ponds*



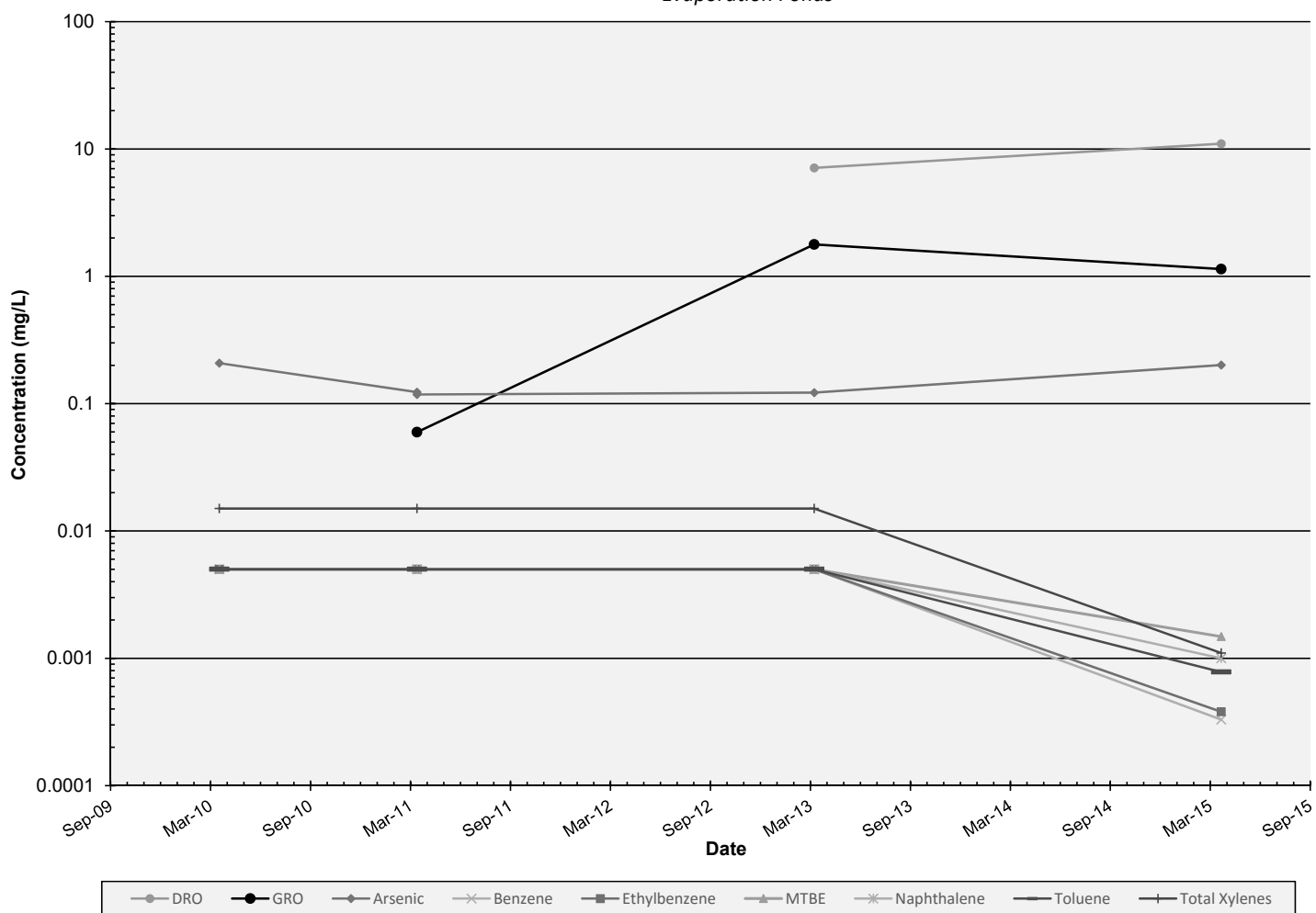


# **MW-5A: COC Concentrations** HollyFrontier Navajo Refining LLC - Artesia Refinery Evaporation Ponds

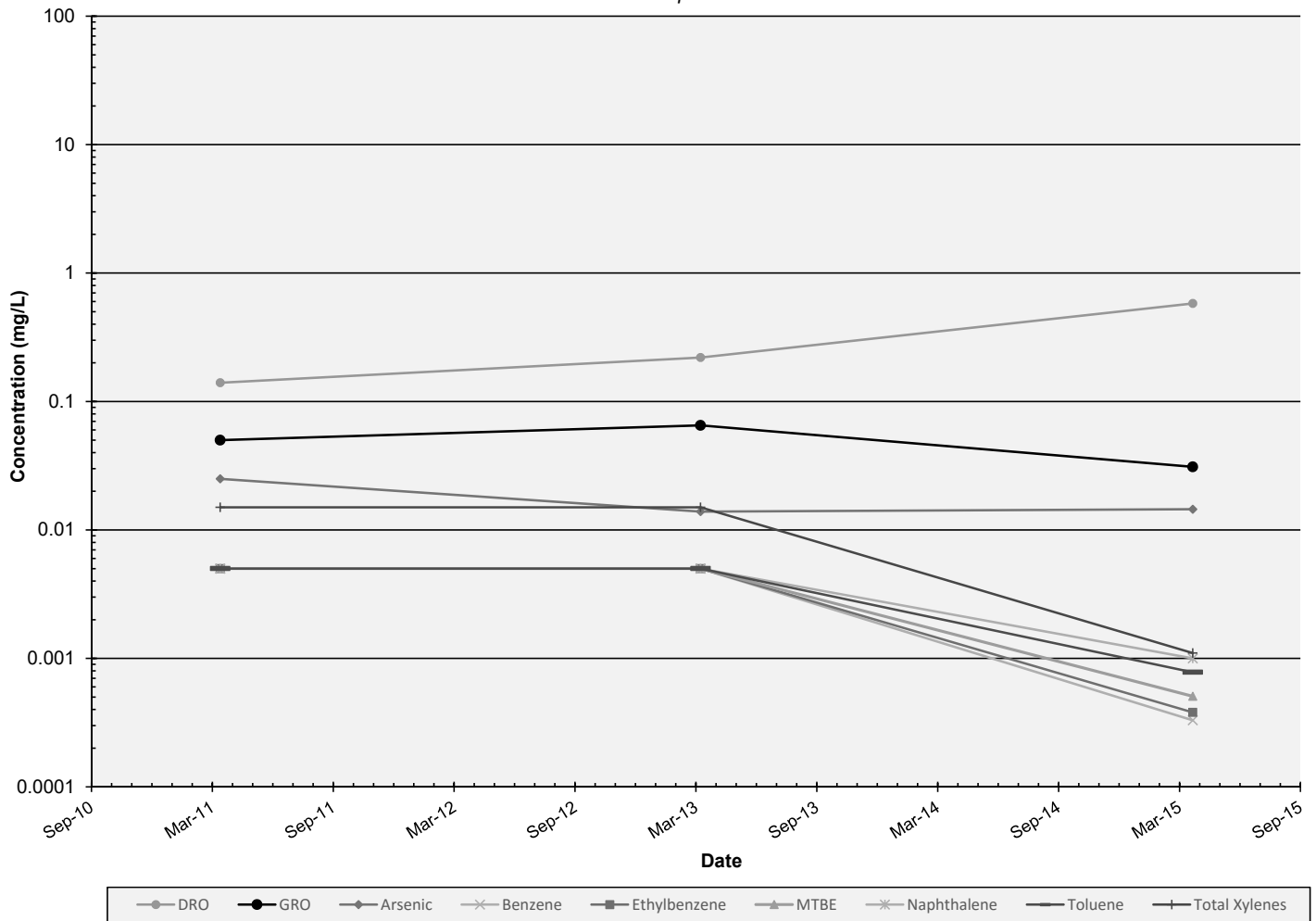


# MW-5B: COC Concentrations

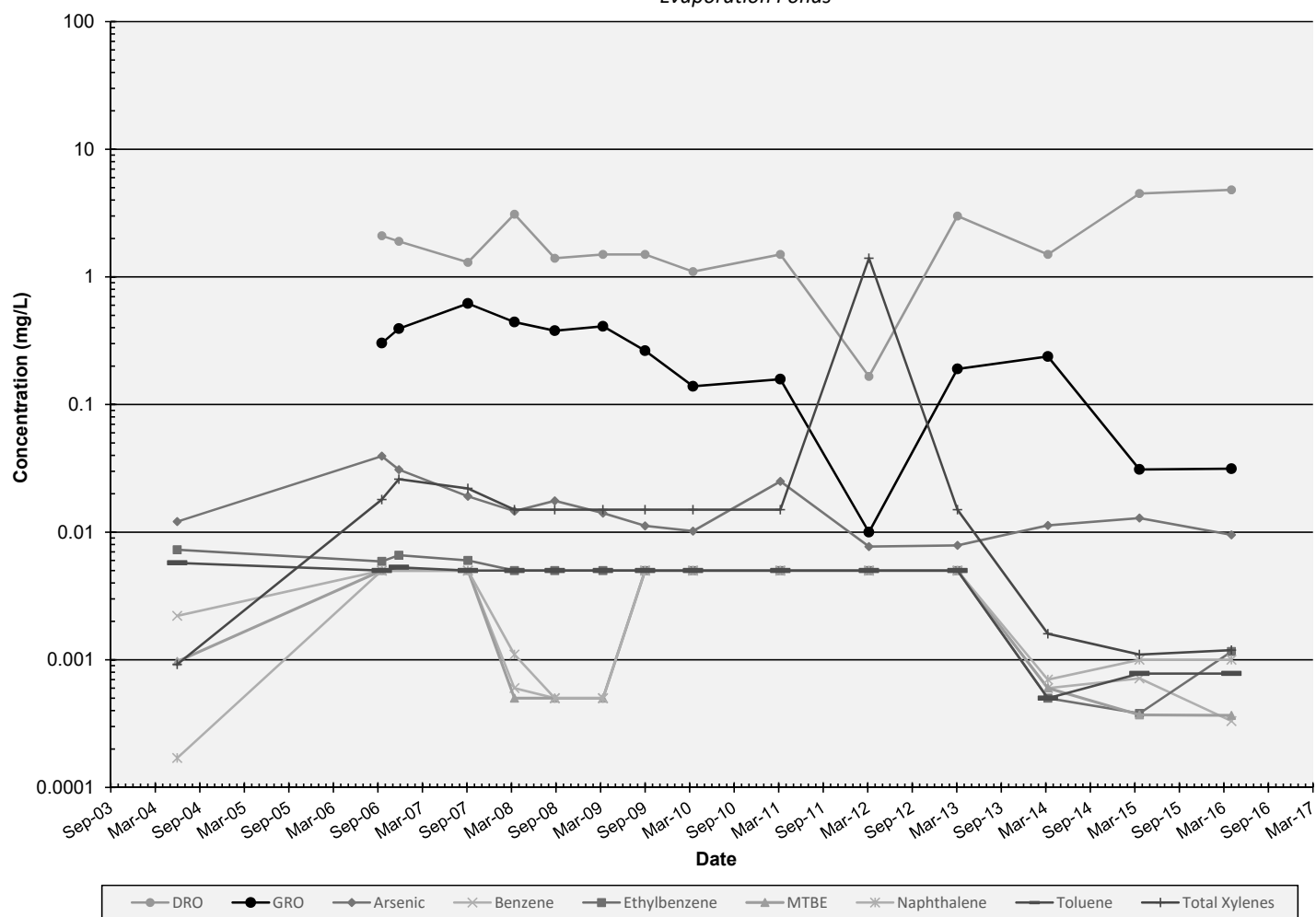
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



**MW-5C: COC Concentrations**  
HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Evaporation Ponds*

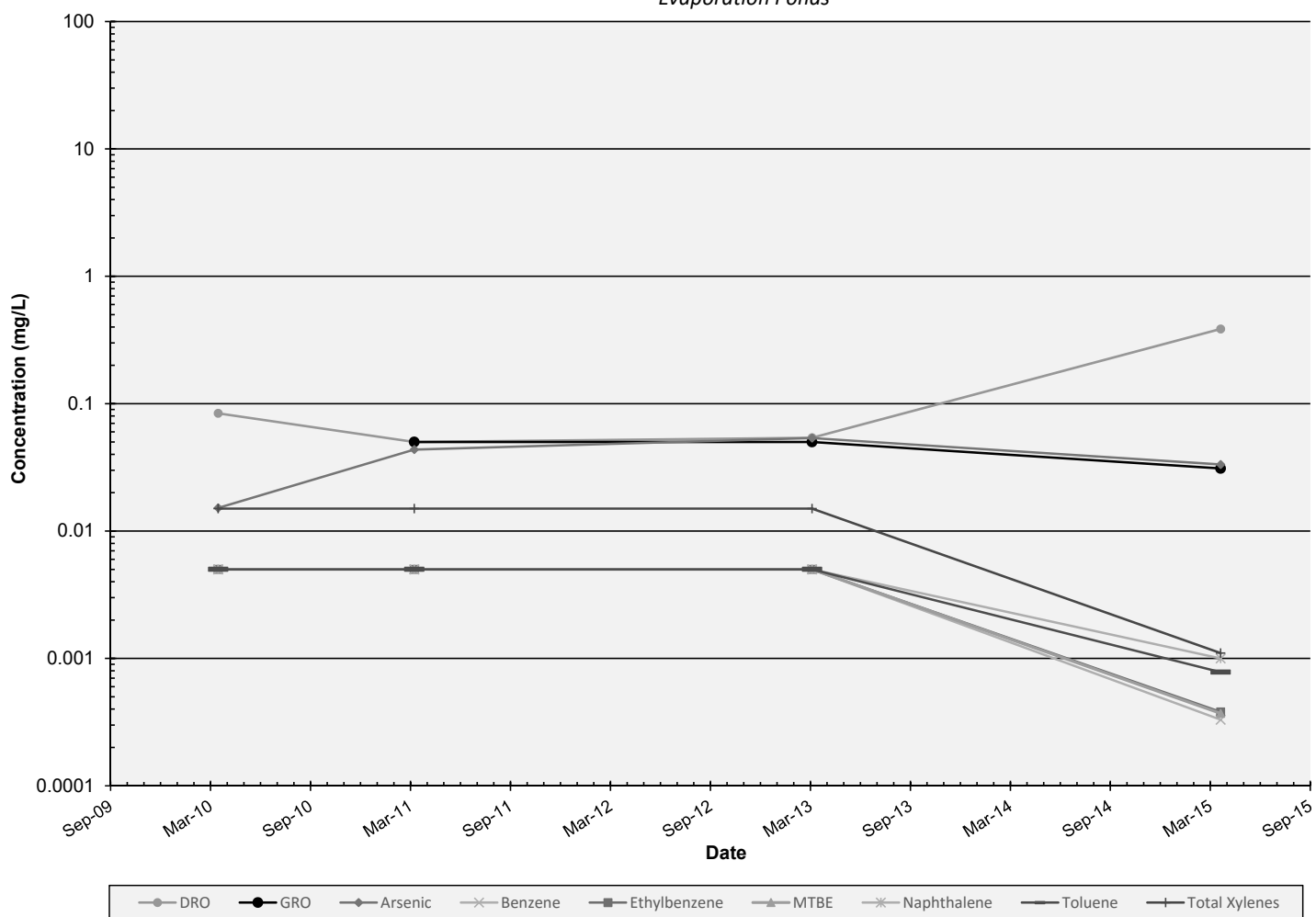


HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Evaporation Ponds*

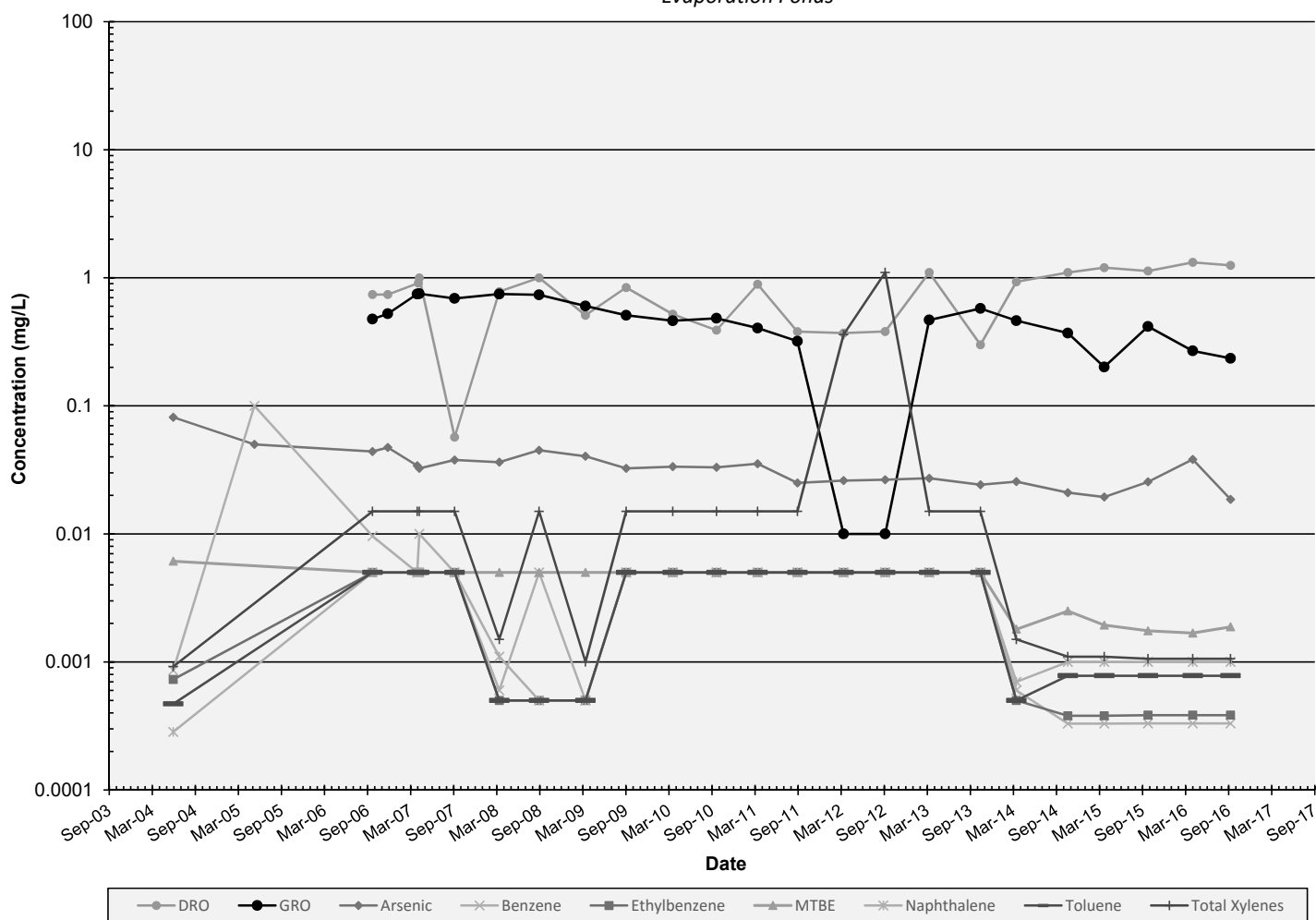


# MW-6B: COC Concentrations

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds

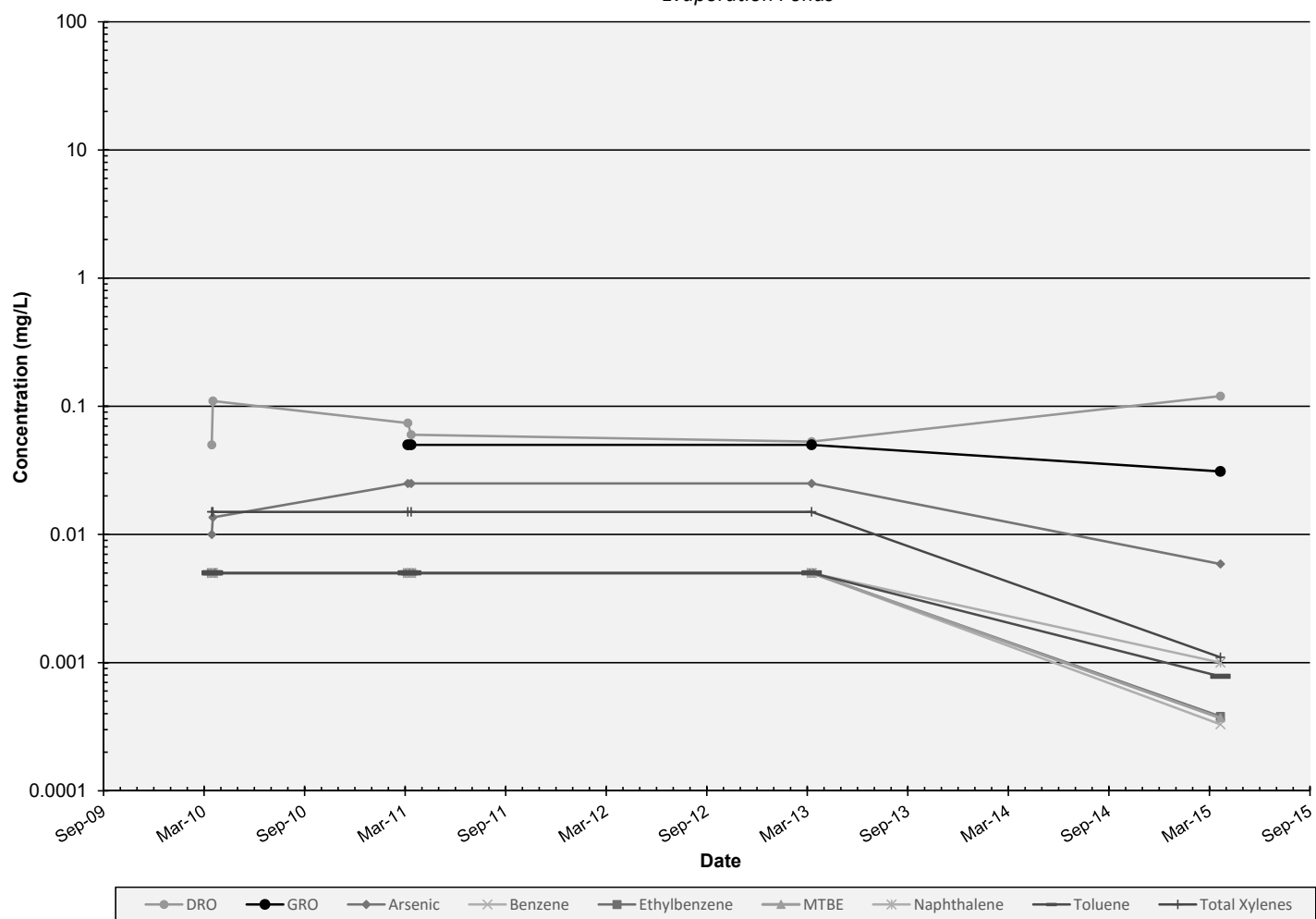


# **MW-7A: COC Concentrations** HollyFrontier Navajo Refining LLC - Artesia Refinery Evaporation Ponds



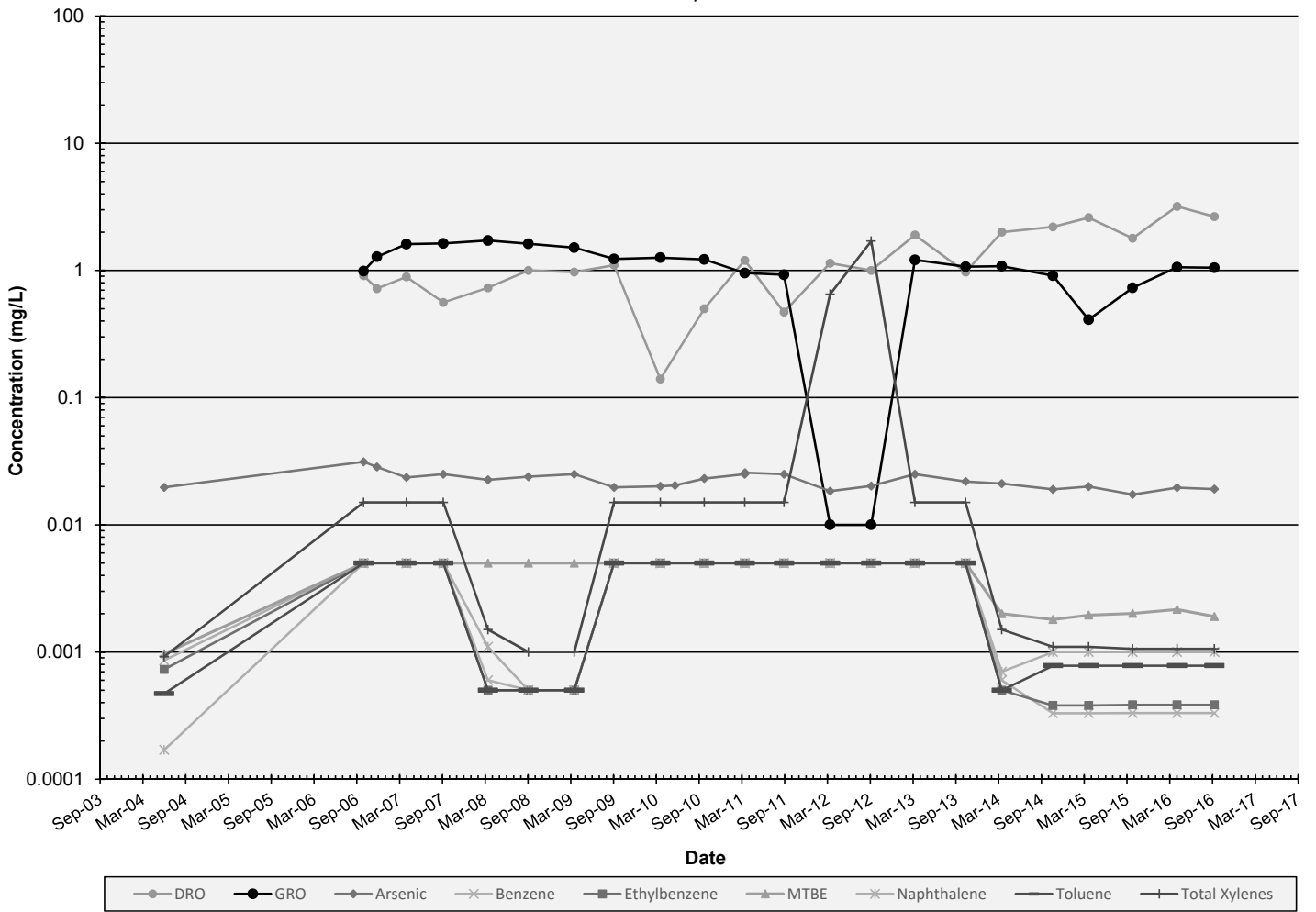
# MW-7B: COC Concentrations

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



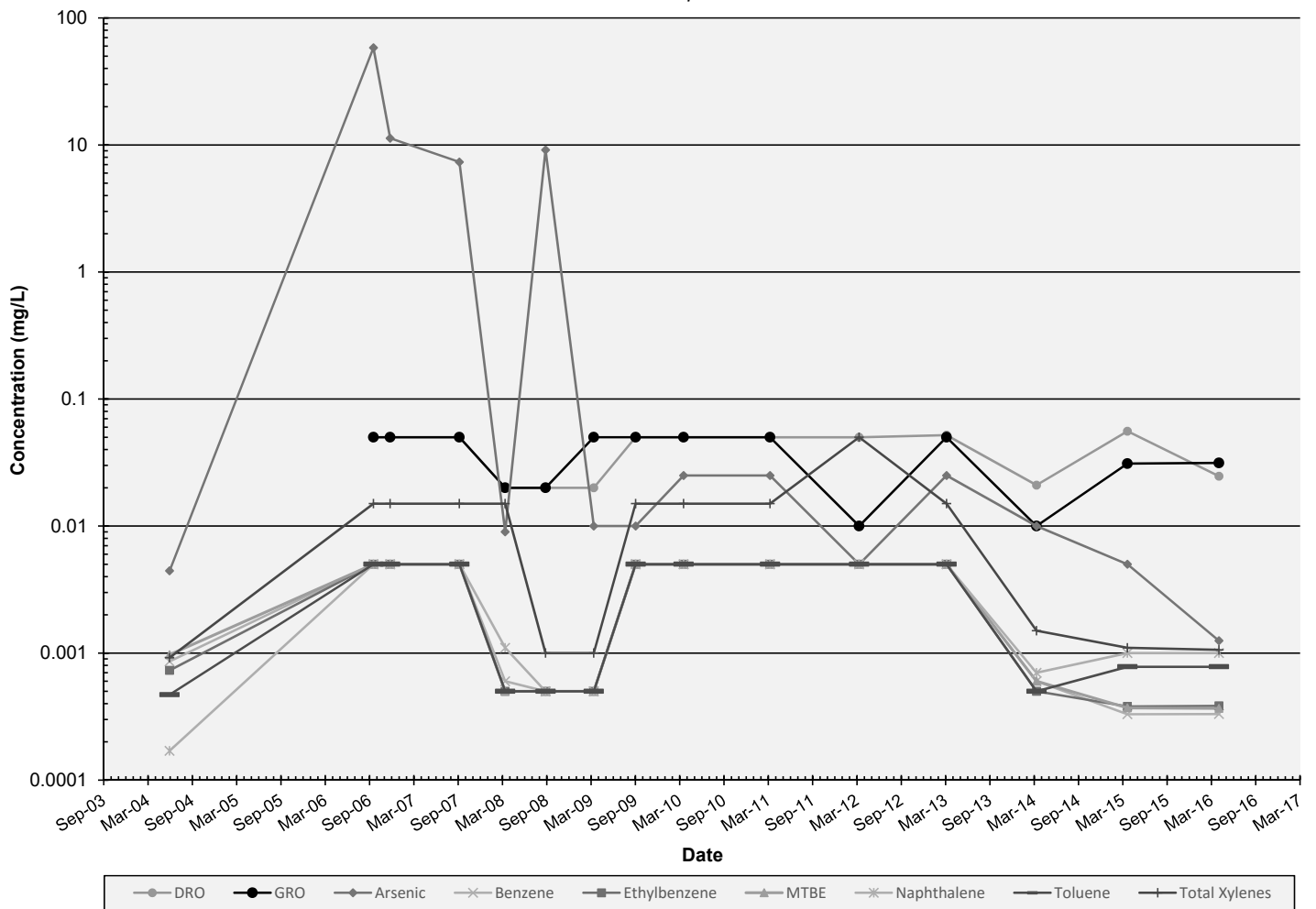
# MW-10: COC Concentrations

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



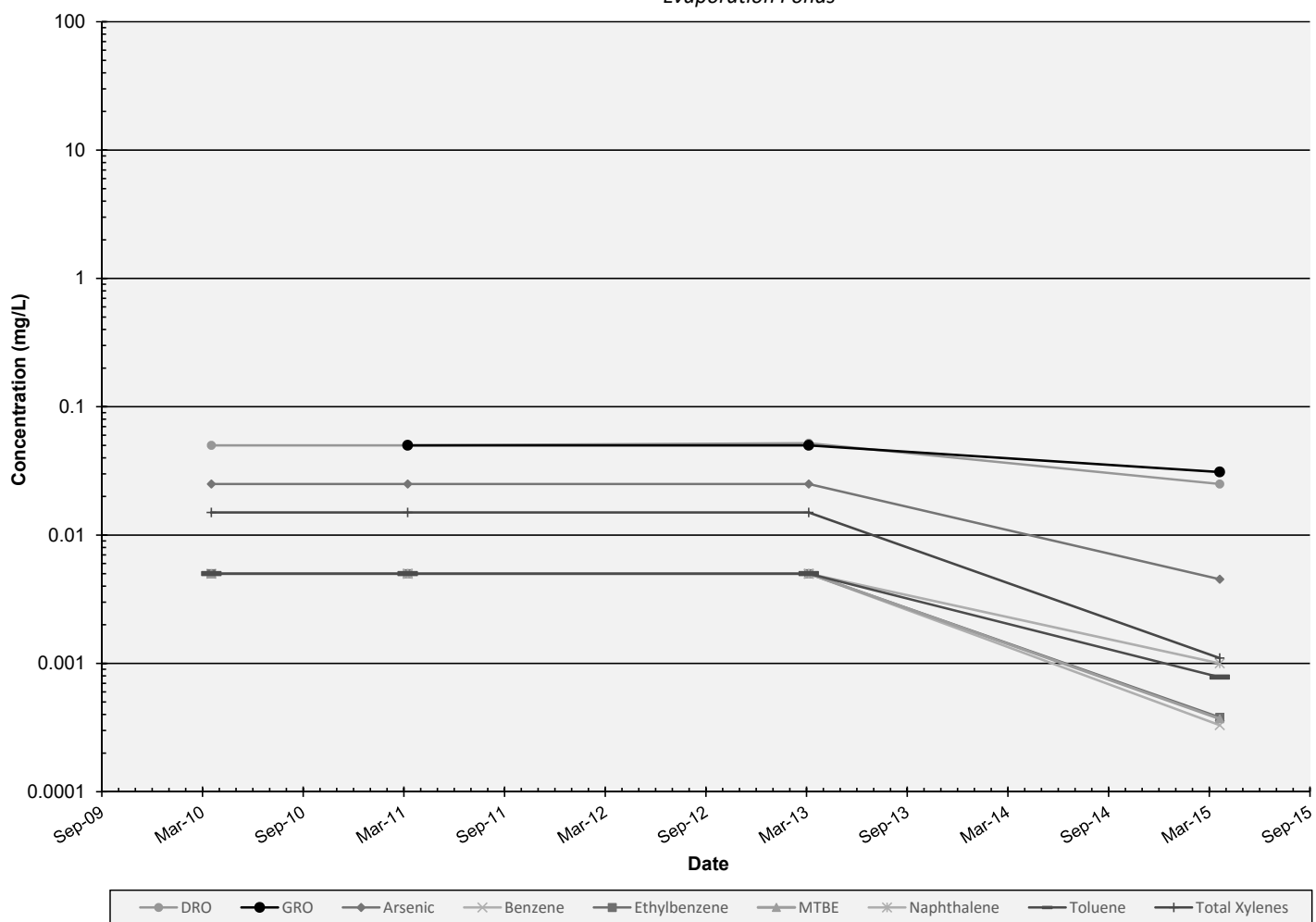


HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds

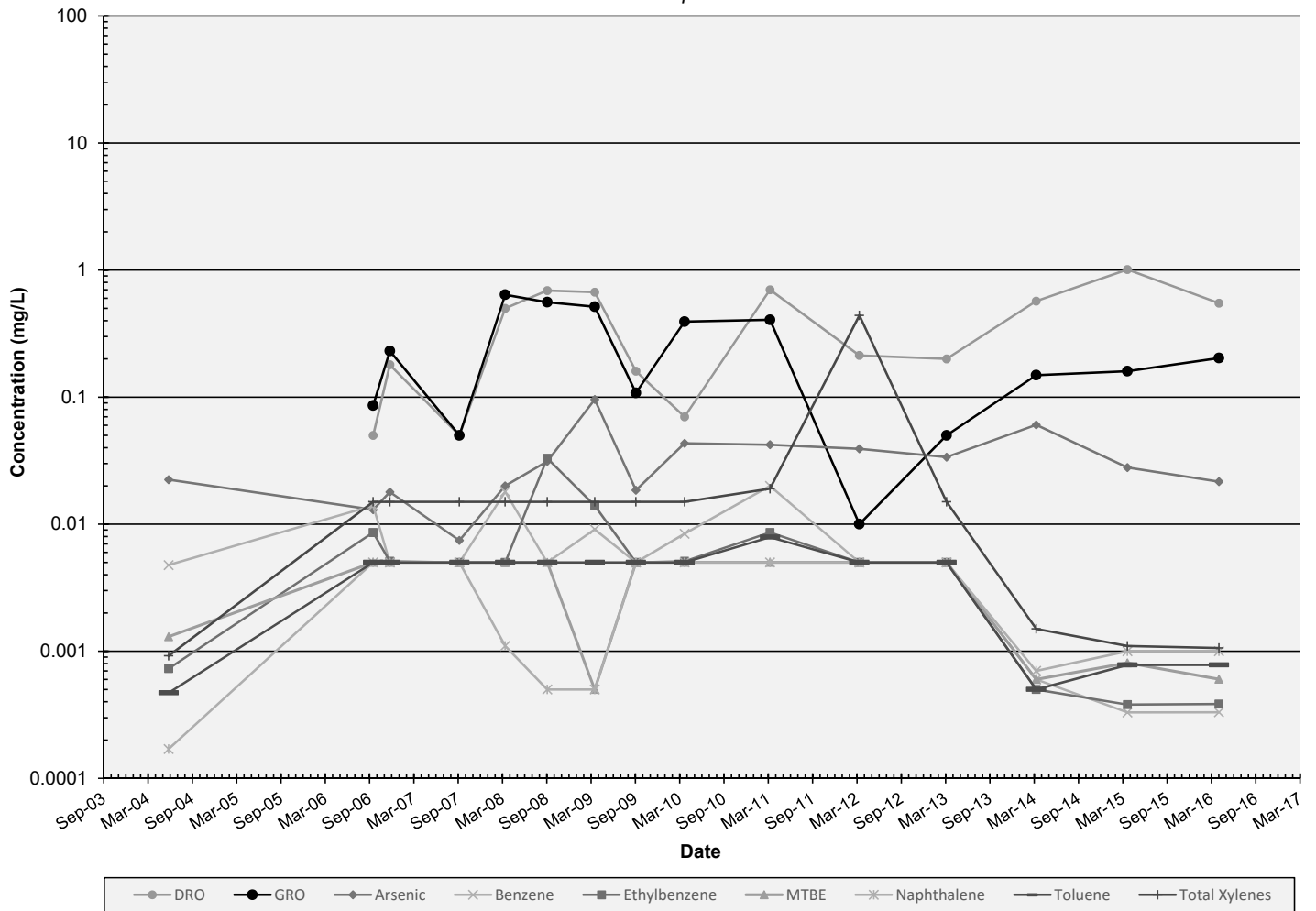


# MW-11B: COC Concentrations

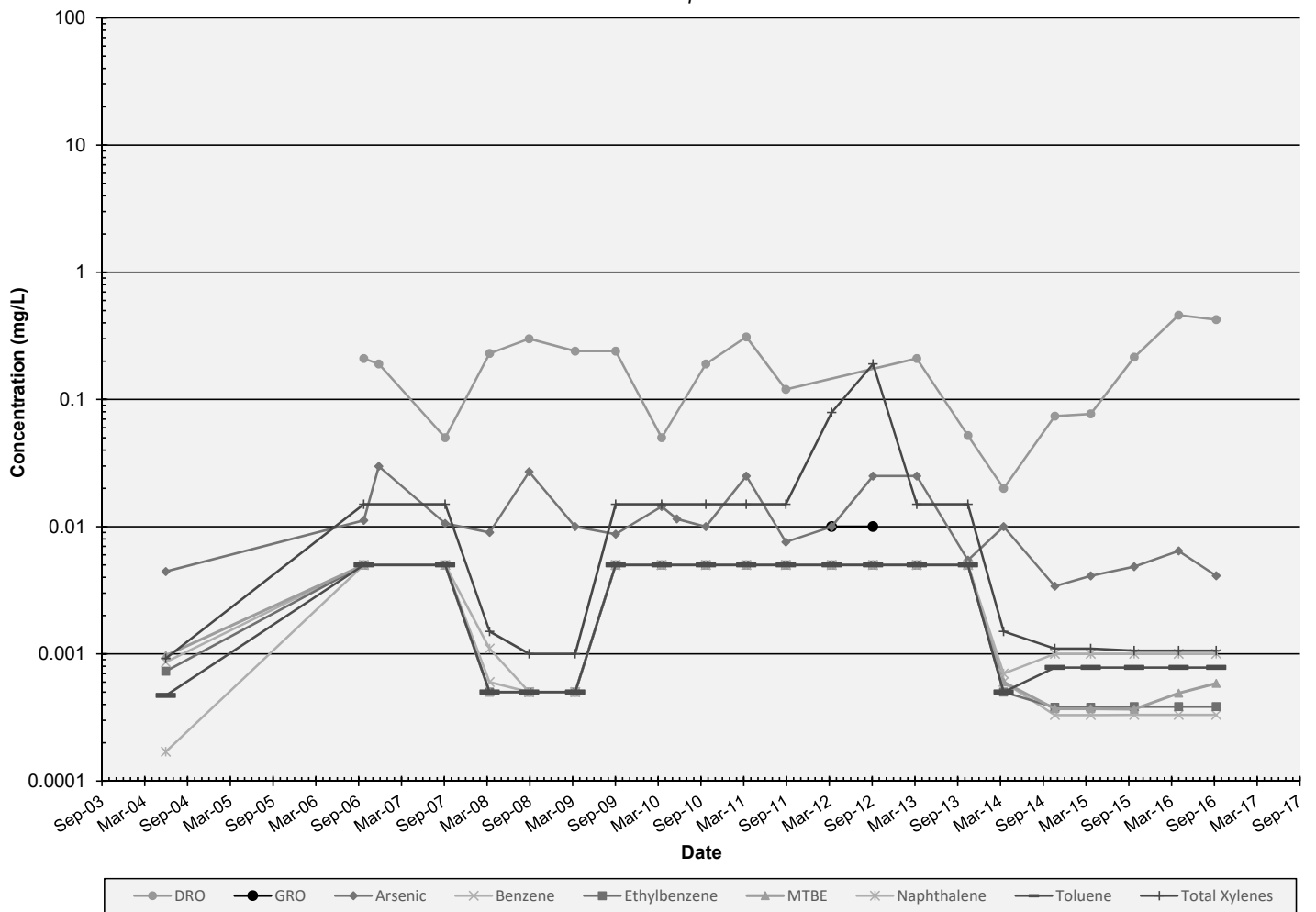
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



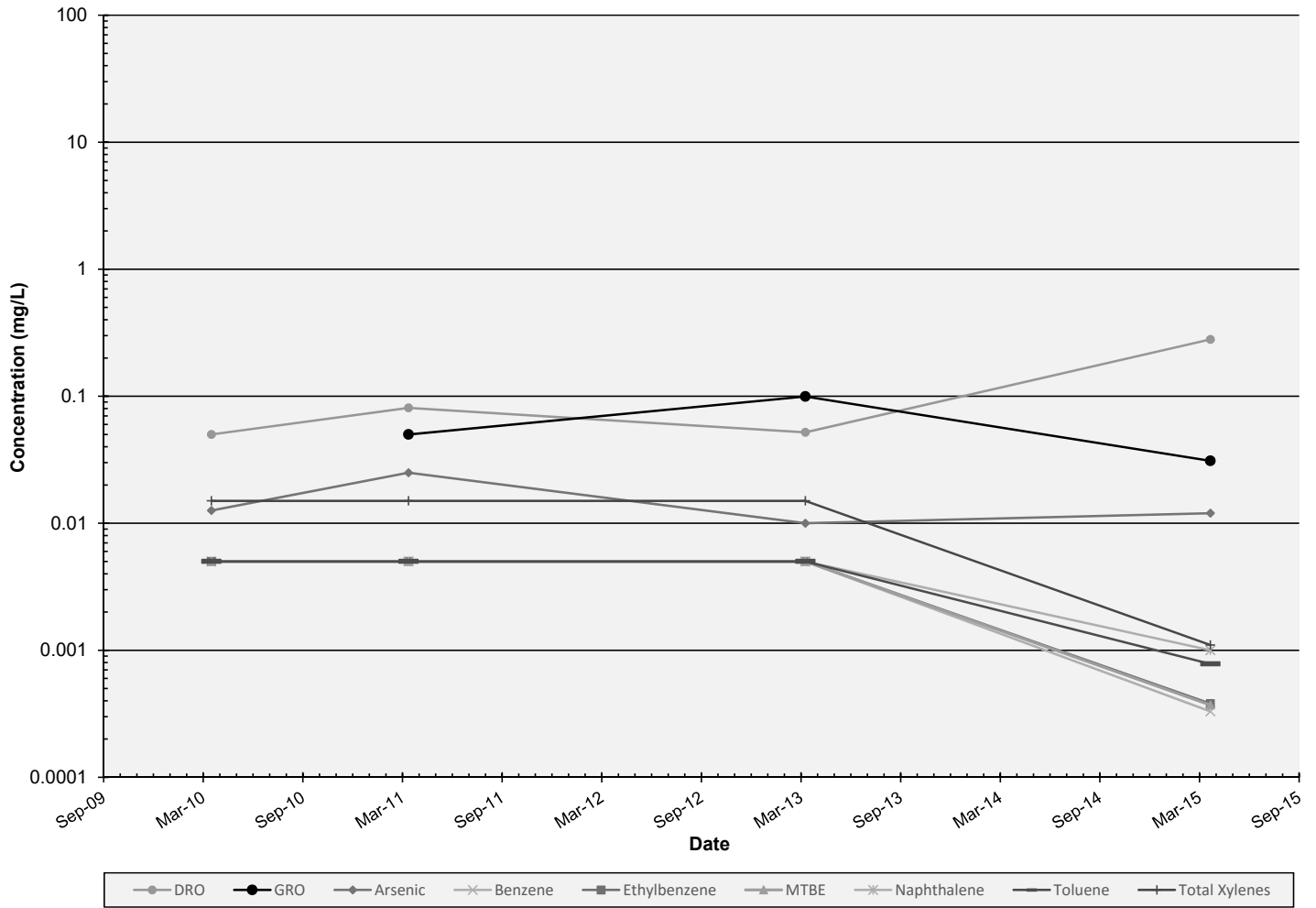
**MW-15: COC Concentrations**  
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



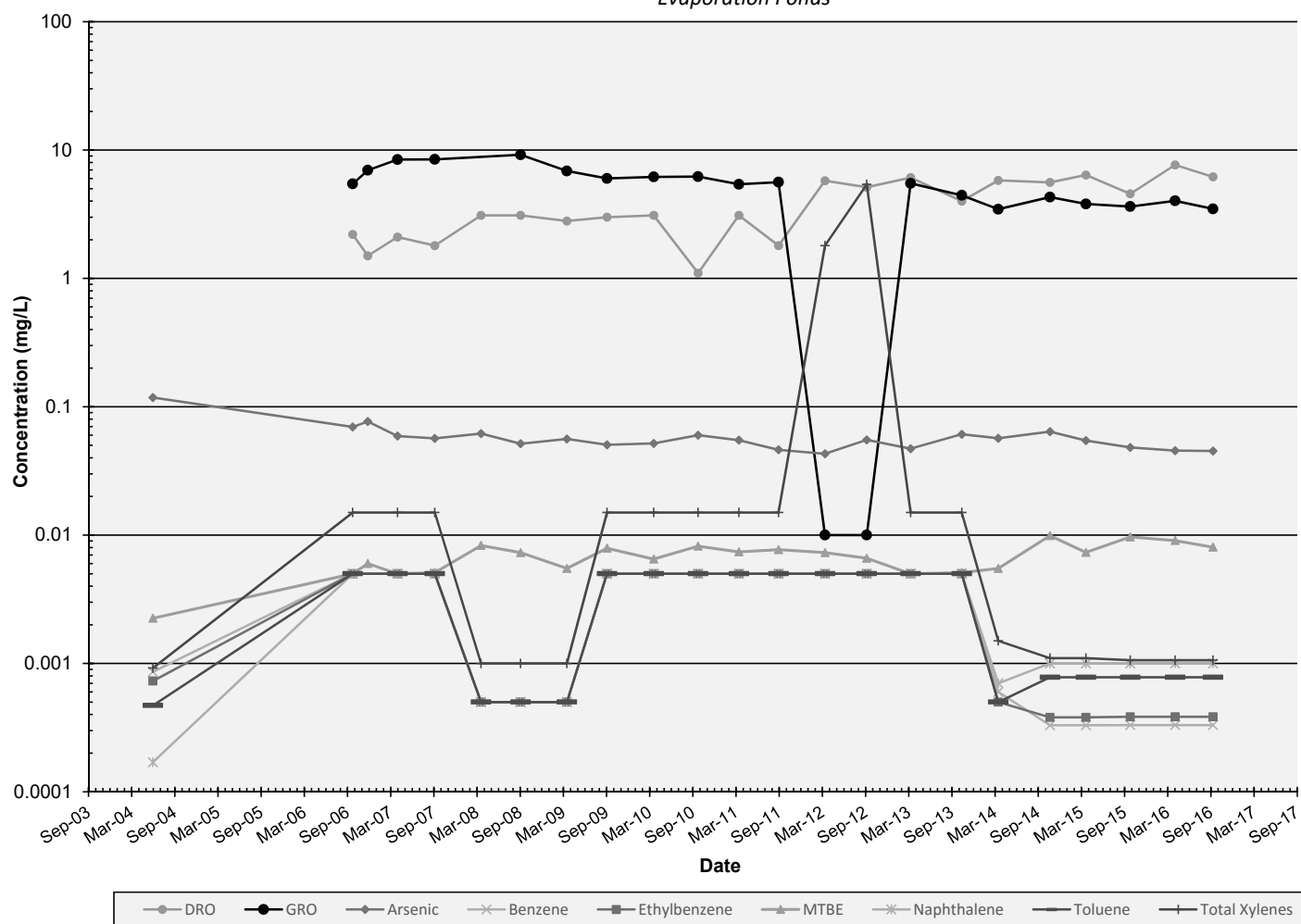
HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Evaporation Ponds*



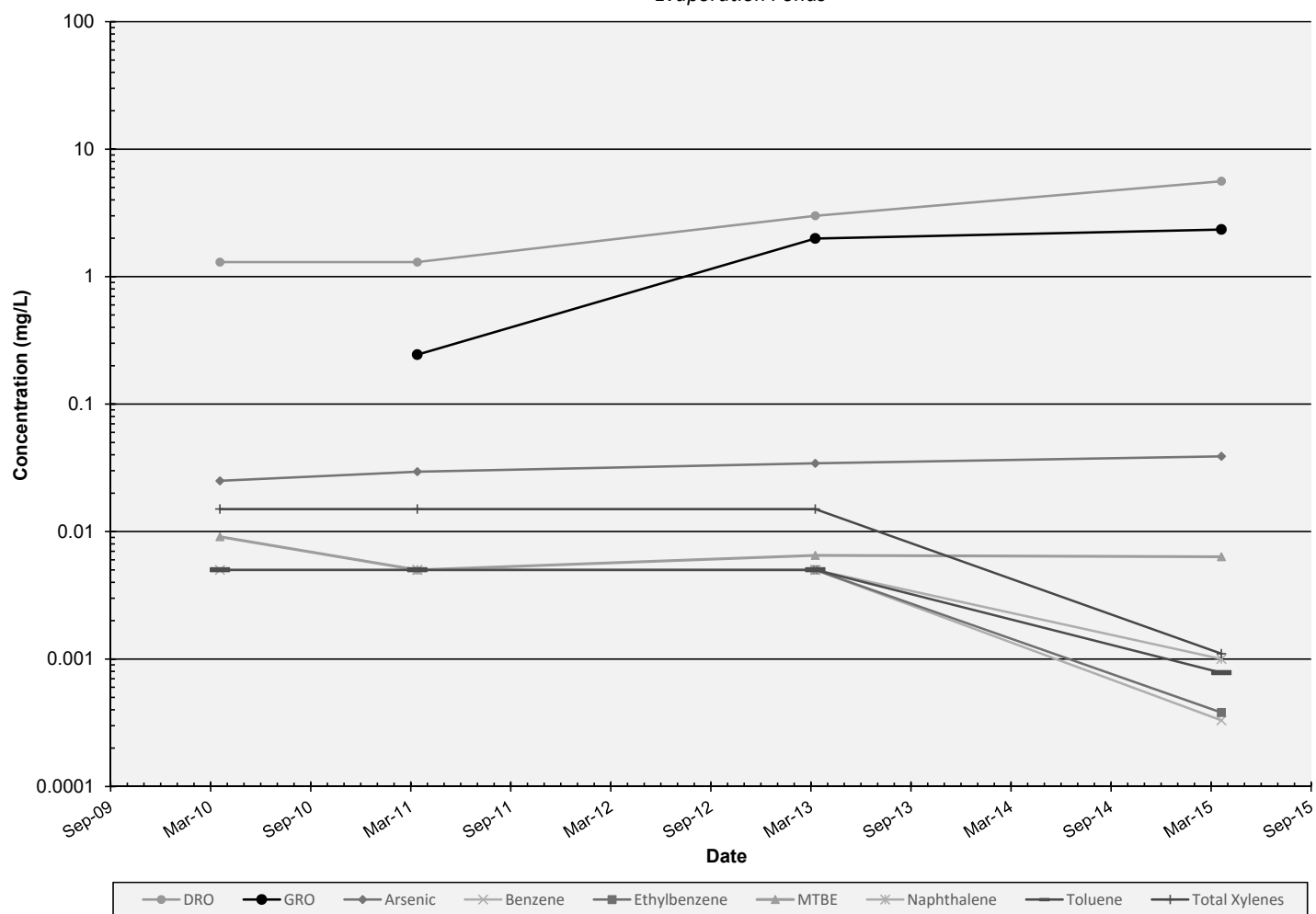
**MW-18B: COC Concentrations**  
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



HollyFrontier Navajo Refining LLC - Artesia Refinery  
*Evaporation Ponds*

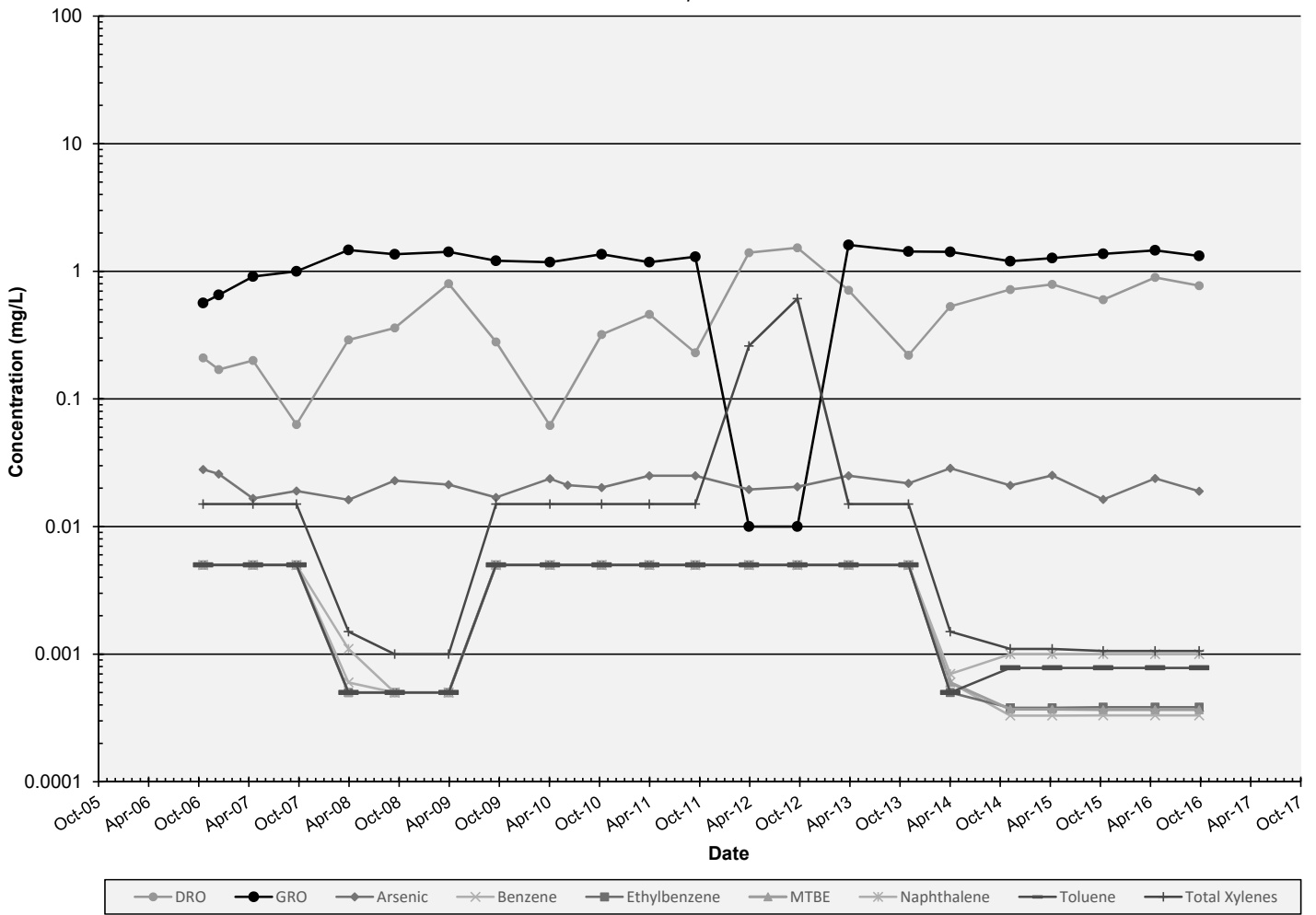


HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



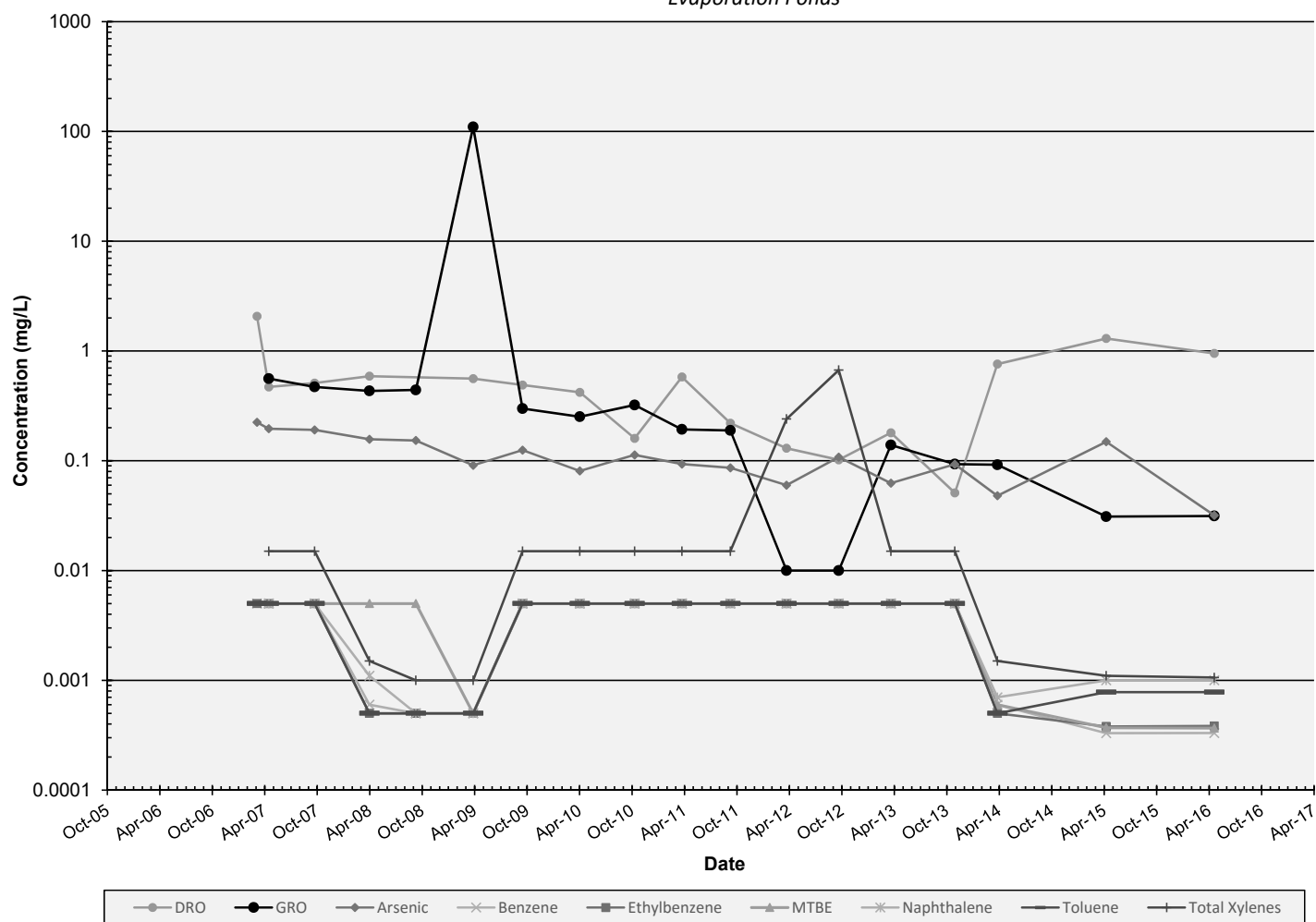
# MW-70: COC Concentrations

HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds

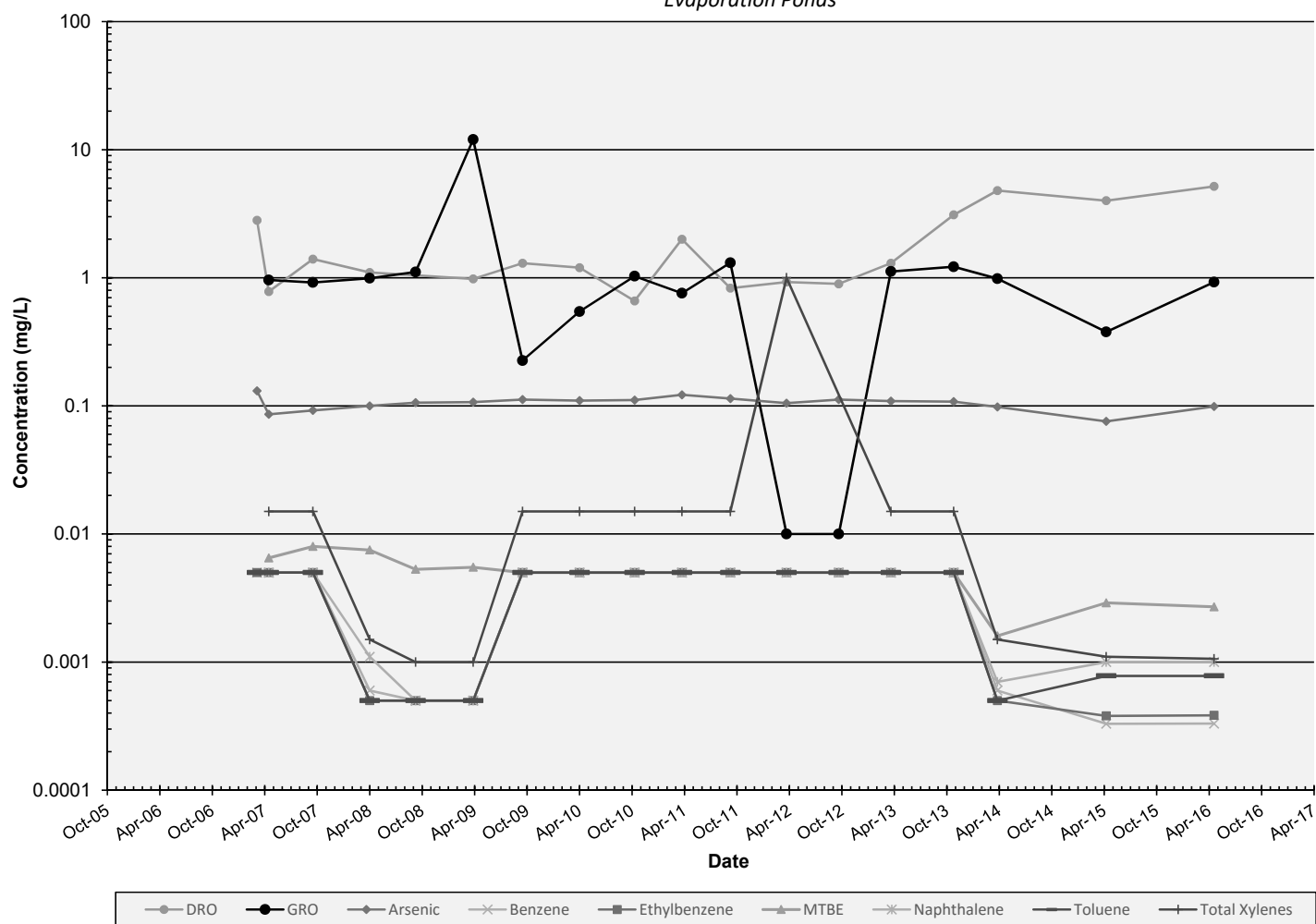




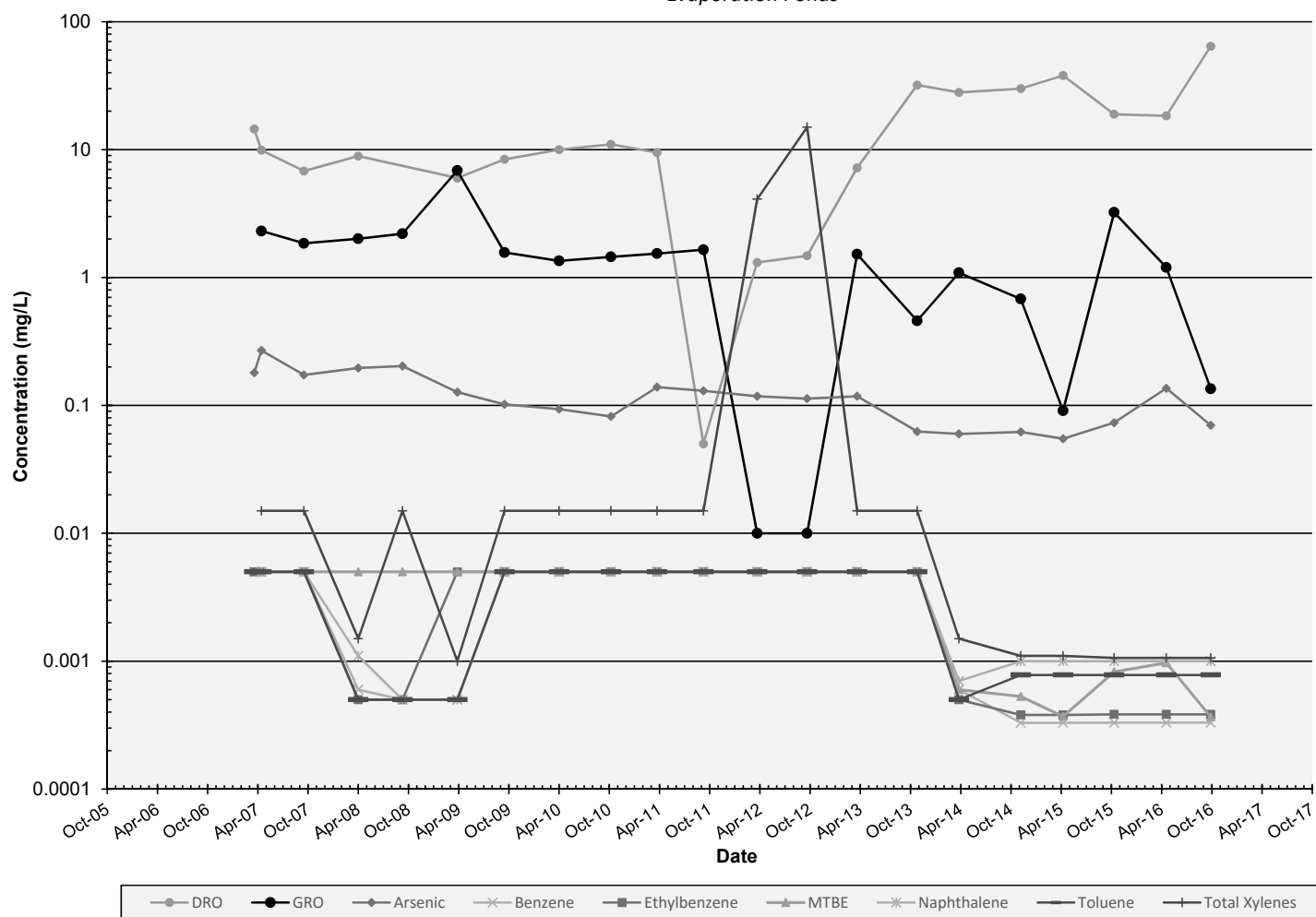
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



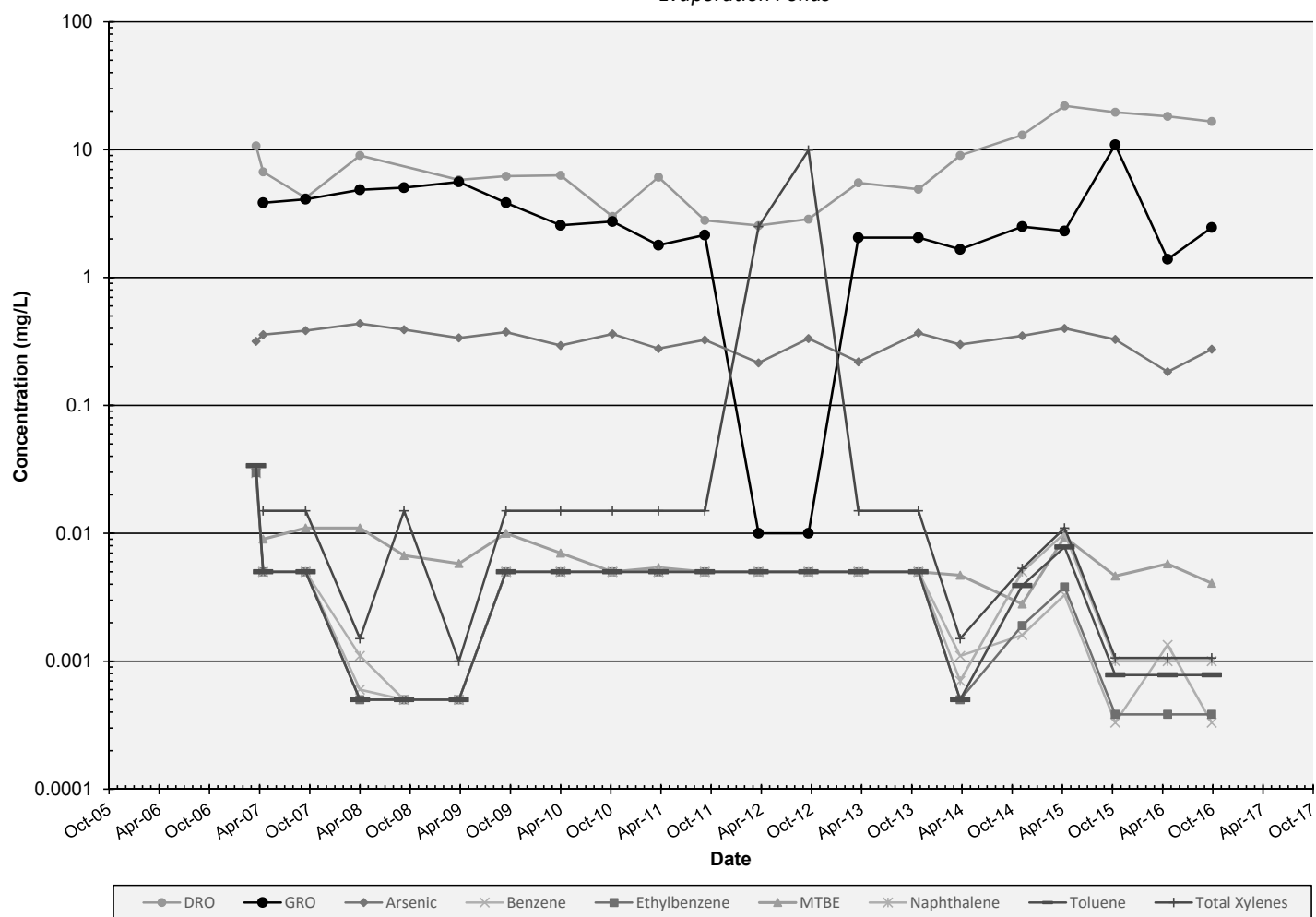
HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds



HollyFrontier Navajo Refining LLC - Artesia Refinery  
Evaporation Ponds

