



5301 Northshore Drive  
North Little Rock, AR 72118  
Telephone: 501-682-0744

**Client Report For:** Exxon Oil Spill 2013 2562-2569  
**Attention:**  
**Client Address:**

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**Report Date:** August 02, 2013  
**LAB ID:** AR13JUL18-04  
**Comment:**

Approved By: \_\_\_\_\_

Date: August 02, 2013

**Client:** Special Samples

**Client Sample ID:** WS-001

**Lab ID:** 2013-2562

**Collection Date:** 7/18/2013 10:43:00 AM

**Matrix:** Water

**Analyses**

**Volatile Organics by GCMS**

**EPA 8260C**

**Batch: 13072201 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Dibromofluoromethane (% Recovery)	107	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	106	70-130			%
Toluene-d8 (% Recovery)	94.3	70-130			%
4-Bromofluorobenzene (% Recovery)	103	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L

Methyl isobutyl ketone	<8.1	8.1	8.10	ug/L
Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Chad Carrington			
Analysis Date/Time	7/19/2013 2:13			

**Client:** Special Samples

**Client Sample ID:** WS-002

**Lab ID:** 2013-2563

**Collection Date:** 7/18/2013 10:08:00 AM

**Matrix:** Water

**Analyses**

**Volatile Organics by GCMS**

**EPA 8260C**

**Batch: 13072201 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
<i>Dibromofluoromethane (% Recovery)</i>	104	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	104	70-130			%
<i>Toluene-d8 (% Recovery)</i>	92.5	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	103	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Chad Carrington			
Analysis Date/Time	7/19/2013 2:39			

**Client:** Special Samples

**Client Sample ID:** WS-003

**Lab ID:** 2013-2564

**Collection Date:** 7/18/2013 9:20:00 AM

**Matrix:** Water

**Analyses**

**Volatile Organics by GCMS**

**EPA 8260C**

**Batch: 13072201 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Dibromofluoromethane (% Recovery)	100	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	100	70-130			%
Toluene-d8 (% Recovery)	89.5	70-130			%
4-Bromofluorobenzene (% Recovery)	98.2	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Chad Carrington			
Analysis Date/Time	7/19/2013 3:04			

**Client:** Special Samples

**Client Sample ID:** WS-005

**Lab ID:** 2013-2565

**Collection Date:** 7/18/2013 12:18:00 PM

**Matrix:** Water

**Analyses**

**Volatile Organics by GCMS**

**EPA 8260C**

**Batch: 13072201 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Dibromofluoromethane (% Recovery)	106	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	104	70-130			%
Toluene-d8 (% Recovery)	92.5	70-130			%
4-Bromofluorobenzene (% Recovery)	101	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L



Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Chad Carrington			
Analysis Date/Time	7/19/2013 3:54			

**Client:** Special Samples

**Client Sample ID:** WS-006

**Lab ID:** 2013-2566

**Collection Date:** 7/18/2013 11:46:00 AM

**Matrix:** Water

**Analyses**

**Volatile Organics by GCMS**

**EPA 8260C**

**Batch: 13072201 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
<i>Dibromofluoromethane (% Recovery)</i>	106	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	107	70-130			%
<i>Toluene-d8 (% Recovery)</i>	96.7	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	110	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Chad Carrington			
Analysis Date/Time	7/19/2013 4:19			

**Client:** Special Samples

**Client Sample ID:** WS-007

**Lab ID:** 2013-2567

**Collection Date:** 7/18/2013 11:17:00 AM

**Matrix:** Water

**Analyses**

**Volatile Organics by GCMS**

**EPA 8260C**

**Batch: 13072201 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
<i>Dibromofluoromethane (% Recovery)</i>	102	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	104	70-130			%
<i>Toluene-d8 (% Recovery)</i>	91.8	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	100	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Chad Carrington			
Analysis Date/Time	7/19/2013 4:45			

**Client:** Special Samples

**Client Sample ID:** Volatiles Trip Blank

**Lab ID:** 2013-2569

**Collection Date:** 7/11/2013 3:08:00 PM

**Matrix:** Water

**Analyses**

**Volatile Organics by GCMS**

**EPA 8260C**

**Batch: 13072201 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Dibromofluoromethane (% Recovery)	107	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	107	70-130			%
Toluene-d8 (% Recovery)	96.2	70-130			%
4-Bromofluorobenzene (% Recovery)	104	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Chad Carrington			
Analysis Date/Time	7/19/2013 1:48			

**Client:** Special Samples

**Client Sample ID:** WS-001

**Lab ID:** 2013-2562

**Collection Date:** 7/18/2013 10:43:00 AM

**Matrix:** Water

**Analyses**

**Oil and Grease**

**EPA1664**

**Batch: 13072301 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

**Semi-Volatiles by GC/MS**

**EPA 3510C/EPA 8270D**

**Batch: 13072302 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
2-Fluorophenol (% Recovery)	36.4	40-110			%
Nitrobenzene-d5 (% Recovery)	73.6	50-110			%
2-Fluorobiphenyl (% Recovery)	68.9	50-110			%
2,4,6-Tribromophenol (% Recovery)	63.7	40-110			%
Terphenyl-d14 (% Recovery)	68.8	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L



2-Nitrophenol	<0.3	0.3	150	ug/L
2,4-Dimethylphenol	<0.1	0.1	50	ug/L
Bis(2-chloroethoxy)methane	<0.2	0.2	100	ug/L
2,4-Dichlorophenol	<0.2	0.2	100	ug/L
1,2,4-Trichlorobenzene	<0.12	0.12	60	ug/L
Naphthalene	<0.08	0.08	40	ug/L
4-Chloroaniline	<0.1	0.1	50	ug/L
2,6-Dichlorophenol	<0.2	0.2	100	ug/L
Hexachlorobutadiene	<0.2	0.2	100	ug/L
N-Nitrosodibutylamine	<0.2	0.2	100	ug/L
4-Chloro-3-methylphenol	<0.16	0.16	80	ug/L
2-Methylnaphthalene	<0.1	0.1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<0.1	0.1	50	ug/L
Hexachlorocyclopentadiene	<0.16	0.16	80	ug/L
2,4,6-Trichlorophenol	<0.2	0.2	100	ug/L
2,4,5-Trichlorophenol	<0.2	0.2	100	ug/L
2-Chloronaphthalene	<0.1	0.1	50	ug/L
1-Chloronaphthalene	<0.1	0.1	50	ug/L
2-Nitroaniline	<0.2	0.2	100	ug/L
Dimethyl phthalate	<0.2	0.2	100	ug/L
2,6-Dinitrotoluene	<0.2	0.2	100	ug/L
Acenaphthylene	<0.08	0.08	40	ug/L
3-Nitroaniline	<0.2	0.2	100	ug/L
Acenaphthene	<0.1	0.1	50	ug/L
2,4-Dinitrophenol	<4	4	2000	ug/L
Pentachlorobenzene	<0.12	0.12	60	ug/L
4-Nitrophenol	<2	2	1000	ug/L
Dibenzofuran	<0.1	0.1	50	ug/L
2,4-Dinitrotoluene	<0.2	0.2	100	ug/L
2,3,4,6-Tetrachlorophenol	<0.6	0.6	300	ug/L
Diethyl phthalate	<0.2	0.2	100	ug/L
Fluorene	<0.1	0.1	50	ug/L
4-Chlorophenyl phenyl ether	<0.1	0.1	50	ug/L
4-Nitroaniline	<0.2	0.2	100	ug/L
4,6-Dinitro-2-methylphenol	<6	6	3000	ug/L
Diphenylamine	<0.1	0.1	50	ug/L
Azobenzene	<0.08	0.08	40	ug/L
4-Bromophenyl phenyl ether	<0.2	0.2	100	ug/L
Hexachlorobenzene	<0.16	0.16	80	ug/L
Pentachlorophenol	<1	1	500	ug/L

Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	7/22/2013 6:27 PM			
Prep By	Ed Harris			
Prep Date/Time	7/22/2013 08:00			

**Client:** Special Samples

**Client Sample ID:** WS-002

**Lab ID:** 2013-2563

**Collection Date:** 7/18/2013 10:08:00 AM

**Matrix:** Water

**Analyses**

**Oil and Grease**

**EPA1664**

**Batch: 13072301 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

**Semi-Volatiles by GC/MS**

**EPA 3510C/EPA 8270D**

**Batch: 13072302 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
2-Fluorophenol (% Recovery)	39.8	40-110			%
Nitrobenzene-d5 (% Recovery)	76.0	50-110			%
2-Fluorobiphenyl (% Recovery)	68.7	50-110			%
2,4,6-Tribromophenol (% Recovery)	68.5	40-110			%
Terphenyl-d14 (% Recovery)	67.5	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

2-Nitrophenol	<0.3	0.3	150	ug/L
2,4-Dimethylphenol	<0.1	0.1	50	ug/L
Bis(2-chloroethoxy)methane	<0.2	0.2	100	ug/L
2,4-Dichlorophenol	<0.2	0.2	100	ug/L
1,2,4-Trichlorobenzene	<0.12	0.12	60	ug/L
Naphthalene	<0.08	0.08	40	ug/L
4-Chloroaniline	<0.1	0.1	50	ug/L
2,6-Dichlorophenol	<0.2	0.2	100	ug/L
Hexachlorobutadiene	<0.2	0.2	100	ug/L
N-Nitrosodibutylamine	<0.2	0.2	100	ug/L
4-Chloro-3-methylphenol	<0.16	0.16	80	ug/L
2-Methylnaphthalene	<0.1	0.1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<0.1	0.1	50	ug/L
Hexachlorocyclopentadiene	<0.16	0.16	80	ug/L
2,4,6-Trichlorophenol	<0.2	0.2	100	ug/L
2,4,5-Trichlorophenol	<0.2	0.2	100	ug/L
2-Chloronaphthalene	<0.1	0.1	50	ug/L
1-Chloronaphthalene	<0.1	0.1	50	ug/L
2-Nitroaniline	<0.2	0.2	100	ug/L
Dimethyl phthalate	<0.2	0.2	100	ug/L
2,6-Dinitrotoluene	<0.2	0.2	100	ug/L
Acenaphthylene	<0.08	0.08	40	ug/L
3-Nitroaniline	<0.2	0.2	100	ug/L
Acenaphthene	<0.1	0.1	50	ug/L
2,4-Dinitrophenol	<4	4	2000	ug/L
Pentachlorobenzene	<0.12	0.12	60	ug/L
4-Nitrophenol	<2	2	1000	ug/L
Dibenzofuran	<0.1	0.1	50	ug/L
2,4-Dinitrotoluene	<0.2	0.2	100	ug/L
2,3,4,6-Tetrachlorophenol	<0.6	0.6	300	ug/L
Diethyl phthalate	<0.2	0.2	100	ug/L
Fluorene	<0.1	0.1	50	ug/L
4-Chlorophenyl phenyl ether	<0.1	0.1	50	ug/L
4-Nitroaniline	<0.2	0.2	100	ug/L
4,6-Dinitro-2-methylphenol	<6	6	3000	ug/L
Diphenylamine	<0.1	0.1	50	ug/L
Azobenzene	<0.08	0.08	40	ug/L
4-Bromophenyl phenyl ether	<0.2	0.2	100	ug/L
Hexachlorobenzene	<0.16	0.16	80	ug/L
Pentachlorophenol	<1	1	500	ug/L

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Laboratory Contact: Jeff Ruehr  
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Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	7/22/2013 6:56 PM			
Prep By	Ed Harris			
Prep Date/Time	7/22/2013 08:00			

**Client:** Special Samples

**Client Sample ID:** WS-003

**Lab ID:** 2013-2564

**Collection Date:** 7/18/2013 9:20:00 AM

**Matrix:** Water

**Analyses**

**Oil and Grease**

**EPA1664**

**Batch: 13072301 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

**Semi-Volatiles by GC/MS**

**EPA 3510C/EPA 8270D**

**Batch: 13072302 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
2-Fluorophenol (% Recovery)	42.7	40-110			%
Nitrobenzene-d5 (% Recovery)	77.0	50-110			%
2-Fluorobiphenyl (% Recovery)	71.4	50-110			%
2,4,6-Tribromophenol (% Recovery)	69.3	40-110			%
Terphenyl-d14 (% Recovery)	69.4	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

2-Nitrophenol	<0.3	0.3	150	ug/L
2,4-Dimethylphenol	<0.1	0.1	50	ug/L
Bis(2-chloroethoxy)methane	<0.2	0.2	100	ug/L
2,4-Dichlorophenol	<0.2	0.2	100	ug/L
1,2,4-Trichlorobenzene	<0.12	0.12	60	ug/L
Naphthalene	<0.08	0.08	40	ug/L
4-Chloroaniline	<0.1	0.1	50	ug/L
2,6-Dichlorophenol	<0.2	0.2	100	ug/L
Hexachlorobutadiene	<0.2	0.2	100	ug/L
N-Nitrosodibutylamine	<0.2	0.2	100	ug/L
4-Chloro-3-methylphenol	<0.16	0.16	80	ug/L
2-Methylnaphthalene	<0.1	0.1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<0.1	0.1	50	ug/L
Hexachlorocyclopentadiene	<0.16	0.16	80	ug/L
2,4,6-Trichlorophenol	<0.2	0.2	100	ug/L
2,4,5-Trichlorophenol	<0.2	0.2	100	ug/L
2-Chloronaphthalene	<0.1	0.1	50	ug/L
1-Chloronaphthalene	<0.1	0.1	50	ug/L
2-Nitroaniline	<0.2	0.2	100	ug/L
Dimethyl phthalate	<0.2	0.2	100	ug/L
2,6-Dinitrotoluene	<0.2	0.2	100	ug/L
Acenaphthylene	<0.08	0.08	40	ug/L
3-Nitroaniline	<0.2	0.2	100	ug/L
Acenaphthene	<0.1	0.1	50	ug/L
2,4-Dinitrophenol	<4	4	2000	ug/L
Pentachlorobenzene	<0.12	0.12	60	ug/L
4-Nitrophenol	<2	2	1000	ug/L
Dibenzofuran	<0.1	0.1	50	ug/L
2,4-Dinitrotoluene	<0.2	0.2	100	ug/L
2,3,4,6-Tetrachlorophenol	<0.6	0.6	300	ug/L
Diethyl phthalate	<0.2	0.2	100	ug/L
Fluorene	<0.1	0.1	50	ug/L
4-Chlorophenyl phenyl ether	<0.1	0.1	50	ug/L
4-Nitroaniline	<0.2	0.2	100	ug/L
4,6-Dinitro-2-methylphenol	<6	6	3000	ug/L
Diphenylamine	<0.1	0.1	50	ug/L
Azobenzene	<0.08	0.08	40	ug/L
4-Bromophenyl phenyl ether	<0.2	0.2	100	ug/L
Hexachlorobenzene	<0.16	0.16	80	ug/L
Pentachlorophenol	<1	1	500	ug/L

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Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	7/22/2013 3:32 PM			
Prep By	Ed Harris			
Prep Date/Time	7/22/2013 08:00			



**Client:** Special Samples

**Client Sample ID:** WS-005

**Lab ID:** 2013-2565

**Collection Date:** 7/18/2013 12:18:00 PM

**Matrix:** Water

**Analyses**

**Oil and Grease**

**EPA1664**

**Batch: 13072301 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

**Semi-Volatiles by GC/MS**

**EPA 3510C/EPA 8270D**

**Batch: 13072302 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
2-Fluorophenol (% Recovery)	32.1	40-110			%
Nitrobenzene-d5 (% Recovery)	71.9	50-110			%
2-Fluorobiphenyl (% Recovery)	71.6	50-110			%
2,4,6-Tribromophenol (% Recovery)	61.3	40-110			%
Terphenyl-d14 (% Recovery)	65.0	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	0.173	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

2-Nitrophenol	<0.3	0.3	150	ug/L
2,4-Dimethylphenol	<0.1	0.1	50	ug/L
Bis(2-chloroethoxy)methane	<0.2	0.2	100	ug/L
2,4-Dichlorophenol	<0.2	0.2	100	ug/L
1,2,4-Trichlorobenzene	<0.12	0.12	60	ug/L
Naphthalene	<0.08	0.08	40	ug/L
4-Chloroaniline	<0.1	0.1	50	ug/L
2,6-Dichlorophenol	<0.2	0.2	100	ug/L
Hexachlorobutadiene	<0.2	0.2	100	ug/L
N-Nitrosodibutylamine	<0.2	0.2	100	ug/L
4-Chloro-3-methylphenol	<0.16	0.16	80	ug/L
2-Methylnaphthalene	<0.1	0.1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<0.1	0.1	50	ug/L
Hexachlorocyclopentadiene	<0.16	0.16	80	ug/L
2,4,6-Trichlorophenol	<0.2	0.2	100	ug/L
2,4,5-Trichlorophenol	<0.2	0.2	100	ug/L
2-Chloronaphthalene	<0.1	0.1	50	ug/L
1-Chloronaphthalene	<0.1	0.1	50	ug/L
2-Nitroaniline	<0.2	0.2	100	ug/L
Dimethyl phthalate	<0.2	0.2	100	ug/L
2,6-Dinitrotoluene	<0.2	0.2	100	ug/L
Acenaphthylene	<0.08	0.08	40	ug/L
3-Nitroaniline	<0.2	0.2	100	ug/L
Acenaphthene	<0.1	0.1	50	ug/L
2,4-Dinitrophenol	<4	4	2000	ug/L
Pentachlorobenzene	<0.12	0.12	60	ug/L
4-Nitrophenol	<2	2	1000	ug/L
Dibenzofuran	<0.1	0.1	50	ug/L
2,4-Dinitrotoluene	<0.2	0.2	100	ug/L
2,3,4,6-Tetrachlorophenol	<0.6	0.6	300	ug/L
Diethyl phthalate	<0.2	0.2	100	ug/L
Fluorene	<0.1	0.1	50	ug/L
4-Chlorophenyl phenyl ether	<0.1	0.1	50	ug/L
4-Nitroaniline	<0.2	0.2	100	ug/L
4,6-Dinitro-2-methylphenol	<6	6	3000	ug/L
Diphenylamine	<0.1	0.1	50	ug/L
Azobenzene	<0.08	0.08	40	ug/L
4-Bromophenyl phenyl ether	<0.2	0.2	100	ug/L
Hexachlorobenzene	<0.16	0.16	80	ug/L
Pentachlorophenol	<1	1	500	ug/L

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Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	7/22/2013 7:25 PM			
Prep By	Ed Harris			
Prep Date/Time	7/22/2013 08:00			

**Client:** Special Samples

**Client Sample ID:** WS-006

**Lab ID:** 2013-2566

**Collection Date:** 7/18/2013 11:46:00 AM

**Matrix:** Water

**Analyses**

**Oil and Grease**

**EPA1664**

**Batch: 13072301 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

**Semi-Volatiles by GC/MS**

**EPA 3510C/EPA 8270D**

**Batch: 13072302 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
2-Fluorophenol (% Recovery)	32.3	40-110			%
Nitrobenzene-d5 (% Recovery)	72.3	50-110			%
2-Fluorobiphenyl (% Recovery)	66.1	50-110			%
2,4,6-Tribromophenol (% Recovery)	67.1	40-110			%
Terphenyl-d14 (% Recovery)	72.0	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

2-Nitrophenol	<0.3	0.3	150	ug/L
2,4-Dimethylphenol	<0.1	0.1	50	ug/L
Bis(2-chloroethoxy)methane	<0.2	0.2	100	ug/L
2,4-Dichlorophenol	<0.2	0.2	100	ug/L
1,2,4-Trichlorobenzene	<0.12	0.12	60	ug/L
Naphthalene	<0.08	0.08	40	ug/L
4-Chloroaniline	<0.1	0.1	50	ug/L
2,6-Dichlorophenol	<0.2	0.2	100	ug/L
Hexachlorobutadiene	<0.2	0.2	100	ug/L
N-Nitrosodibutylamine	<0.2	0.2	100	ug/L
4-Chloro-3-methylphenol	<0.16	0.16	80	ug/L
2-Methylnaphthalene	<0.1	0.1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<0.1	0.1	50	ug/L
Hexachlorocyclopentadiene	<0.16	0.16	80	ug/L
2,4,6-Trichlorophenol	<0.2	0.2	100	ug/L
2,4,5-Trichlorophenol	<0.2	0.2	100	ug/L
2-Chloronaphthalene	<0.1	0.1	50	ug/L
1-Chloronaphthalene	<0.1	0.1	50	ug/L
2-Nitroaniline	<0.2	0.2	100	ug/L
Dimethyl phthalate	<0.2	0.2	100	ug/L
2,6-Dinitrotoluene	<0.2	0.2	100	ug/L
Acenaphthylene	<0.08	0.08	40	ug/L
3-Nitroaniline	<0.2	0.2	100	ug/L
Acenaphthene	<0.1	0.1	50	ug/L
2,4-Dinitrophenol	<4	4	2000	ug/L
Pentachlorobenzene	<0.12	0.12	60	ug/L
4-Nitrophenol	<2	2	1000	ug/L
Dibenzofuran	<0.1	0.1	50	ug/L
2,4-Dinitrotoluene	<0.2	0.2	100	ug/L
2,3,4,6-Tetrachlorophenol	<0.6	0.6	300	ug/L
Diethyl phthalate	<0.2	0.2	100	ug/L
Fluorene	<0.1	0.1	50	ug/L
4-Chlorophenyl phenyl ether	<0.1	0.1	50	ug/L
4-Nitroaniline	<0.2	0.2	100	ug/L
4,6-Dinitro-2-methylphenol	<6	6	3000	ug/L
Diphenylamine	<0.1	0.1	50	ug/L
Azobenzene	<0.08	0.08	40	ug/L
4-Bromophenyl phenyl ether	<0.2	0.2	100	ug/L
Hexachlorobenzene	<0.16	0.16	80	ug/L
Pentachlorophenol	<1	1	500	ug/L

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Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	7/22/2013 7:54 PM			
Prep By	Ed Harris			
Prep Date/Time	7/22/2013 08:00			

**Client:** Special Samples

**Client Sample ID:** WS-007

**Lab ID:** 2013-2567

**Collection Date:** 7/18/2013 11:17:00 AM

**Matrix:** Water

**Analyses**

**Oil and Grease**

**EPA1664**

**Batch: 13072301 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

**Semi-Volatiles by GC/MS**

**EPA 3510C/EPA 8270D**

**Batch: 13072302 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
2-Fluorophenol (% Recovery)	27.2	40-110			%
Nitrobenzene-d5 (% Recovery)	74.8	50-110			%
2-Fluorobiphenyl (% Recovery)	65.8	50-110			%
2,4,6-Tribromophenol (% Recovery)	67.5	40-110			%
Terphenyl-d14 (% Recovery)	59.6	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

2-Nitrophenol	<0.3	0.3	150	ug/L
2,4-Dimethylphenol	<0.1	0.1	50	ug/L
Bis(2-chloroethoxy)methane	<0.2	0.2	100	ug/L
2,4-Dichlorophenol	<0.2	0.2	100	ug/L
1,2,4-Trichlorobenzene	<0.12	0.12	60	ug/L
Naphthalene	<0.08	0.08	40	ug/L
4-Chloroaniline	<0.1	0.1	50	ug/L
2,6-Dichlorophenol	<0.2	0.2	100	ug/L
Hexachlorobutadiene	<0.2	0.2	100	ug/L
N-Nitrosodibutylamine	<0.2	0.2	100	ug/L
4-Chloro-3-methylphenol	<0.16	0.16	80	ug/L
2-Methylnaphthalene	<0.1	0.1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<0.1	0.1	50	ug/L
Hexachlorocyclopentadiene	<0.16	0.16	80	ug/L
2,4,6-Trichlorophenol	<0.2	0.2	100	ug/L
2,4,5-Trichlorophenol	<0.2	0.2	100	ug/L
2-Chloronaphthalene	<0.1	0.1	50	ug/L
1-Chloronaphthalene	<0.1	0.1	50	ug/L
2-Nitroaniline	<0.2	0.2	100	ug/L
Dimethyl phthalate	<0.2	0.2	100	ug/L
2,6-Dinitrotoluene	<0.2	0.2	100	ug/L
Acenaphthylene	<0.08	0.08	40	ug/L
3-Nitroaniline	<0.2	0.2	100	ug/L
Acenaphthene	<0.1	0.1	50	ug/L
2,4-Dinitrophenol	<4	4	2000	ug/L
Pentachlorobenzene	<0.12	0.12	60	ug/L
4-Nitrophenol	<2	2	1000	ug/L
Dibenzofuran	<0.1	0.1	50	ug/L
2,4-Dinitrotoluene	<0.2	0.2	100	ug/L
2,3,4,6-Tetrachlorophenol	<0.6	0.6	300	ug/L
Diethyl phthalate	<0.2	0.2	100	ug/L
Fluorene	<0.1	0.1	50	ug/L
4-Chlorophenyl phenyl ether	<0.1	0.1	50	ug/L
4-Nitroaniline	<0.2	0.2	100	ug/L
4,6-Dinitro-2-methylphenol	<6	6	3000	ug/L
Diphenylamine	<0.1	0.1	50	ug/L
Azobenzene	<0.08	0.08	40	ug/L
4-Bromophenyl phenyl ether	<0.2	0.2	100	ug/L
Hexachlorobenzene	<0.16	0.16	80	ug/L
Pentachlorophenol	<1	1	500	ug/L



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Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	7/22/2013 8:24 PM			
Prep By	Ed Harris			
Prep Date/Time	7/22/2013 08:00			

**Client:** Special Samples

**Client Sample ID:** WS-001

**Lab ID:** 2013-2562

**Collection Date:** 7/18/2013 10:43:00 AM

**Matrix:** Water

**Analyses**

**Dissolved Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072401 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.30	0.5	0.2		ug/L
Barium	7.08	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.2	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.60	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	53.0	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.68	0.02	0.01		mg/L
Manganese	25.5	0.3	0.07		ug/L
Nickel	0.66	0.5	0.15		ug/L
Potassium	2.70	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	7.59	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	6.93	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	<1	1	0.3		ug/L
Hardness	25.0	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 1:06PM				

**Total Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072402 Run: 1**

**Result Reporting MDL Qual Unit**

		<b>Limit</b>		
Aluminum	151	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	3.46	1	0.5	ug/L
Barium	23.3	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.01	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	1050	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.68	0.1	0.1	mg/L
Manganese	586	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.78	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.08	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	6.78	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Jul 22 2013 5:24PM			
Prep By				
Prep Date/Time				

**Client:** Special Samples

**Client Sample ID:** WS-002

**Lab ID:** 2013-2563

**Collection Date:** 7/18/2013 10:08:00 AM

**Matrix:** Water

**Analyses**

**Dissolved Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072401 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Aluminum	37.1	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.76	0.5	0.2		ug/L
Barium	8.98	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.5	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.73	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	28.2	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.75	0.02	0.01		mg/L
Manganese	10.5	0.3	0.07		ug/L
Nickel	0.70	0.5	0.15		ug/L
Potassium	2.65	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	7.30	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	6.90	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	<1	1	0.3		ug/L
Hardness	25.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 1:12PM				

**Total Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072402 Run: 1**

**Result Reporting MDL Qual Unit**

Arkansas Department of Environmental Quality  
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 North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr  
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 501-682-0955

**Limit**

Aluminum	236	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	4.69	1	0.5	ug/L
Barium	45.8	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.61	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.15	1	0.5	ug/L
Lead	2.01	1	0.1	ug/L
Magnesium	3.00	0.1	0.1	mg/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.97	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.43	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	5.87	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Jul 22 2013 5:30PM			
Prep By				
Prep Date/Time				

**Total Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072402 Run: 2**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Iron	1850	200	10.0		ug/L
Manganese	1310	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 24 2013 6:13AM				
Prep By					
Prep Date/Time					

**Client:** Special Samples

**Client Sample ID:** WS-003

**Lab ID:** 2013-2564

**Collection Date:** 7/18/2013 9:20:00 AM

**Matrix:** Water

**Analyses**

**Dissolved Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072401 Run: 1**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.23	0.5	0.2		ug/L
Barium	14	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.1	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.91	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	25.1	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.90	0.02	0.01		mg/L
Manganese	156	0.3	0.07		ug/L
Nickel	0.74	0.5	0.15		ug/L
Potassium	2.70	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	7.70	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.24	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	2.98	1	0.3		ug/L
Hardness	26.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 1:19PM				

**Total Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072402 Run: 1**

**Result Reporting MDL Qual Unit**

		<b>Limit</b>		
Aluminum	160	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	3.98	1	0.5	ug/L
Barium	41.5	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.23	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	1040	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.99	0.1	0.1	mg/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.85	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.54	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	<3	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Jul 22 2013 5:37PM			
Prep By				
Prep Date/Time				

**Total Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072402 Run: 2**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Manganese	1020	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 24 2013 6:20AM				
Prep By					
Prep Date/Time					

**Client:** Special Samples

**Client Sample ID:** WS-005

**Lab ID:** 2013-2565

**Collection Date:** 7/18/2013 12:18:00 PM

**Matrix:** Water

**Analyses**

***Dissolved Metals by EPA 200.8***

***EPA 200.8***

***Batch: 13072401 Run: 1***

	<b><u>Result</u></b>	<b><u>Reporting Limit</u></b>	<b><u>MDL</u></b>	<b><u>Qual</u></b>	<b><u>Unit</u></b>
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.70	0.5	0.2		ug/L
Barium	6.12	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.7	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.51	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	140	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.66	0.02	0.01		mg/L
Manganese	30.4	0.3	0.07		ug/L
Nickel	0.85	0.5	0.15		ug/L
Potassium	2.79	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	7.43	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.25	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	<1	1	0.3		ug/L
Hardness	24.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 1:44PM				

***Total Metals by EPA 200.8***

***EPA 200.8***

***Batch: 13072402 Run: 1***

**Result**      **Reporting**      **MDL**      **Qual**      **Unit**



**Limit**

Aluminum	274	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	6.57	1	0.5	ug/L
Barium	64.6	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.87	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	2.40	1	0.5	ug/L
Lead	1.67	1	0.1	ug/L
Magnesium	2.82	0.1	0.1	mg/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	3.06	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.50	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	18.0	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Jul 22 2013 6:15PM			
Prep By				
Prep Date/Time				

**Total Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072402 Run: 2**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Iron	4000	200	10.0		ug/L
Manganese	2430	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 6:34PM				
Prep By					
Prep Date/Time					

<b>Client:</b> Special Samples	<b>Client Sample ID:</b> WS-006
<b>Lab ID:</b> 2013-2566	<b>Collection Date:</b> 7/18/2013 11:46:00 AM
<b>Matrix:</b> Water	

**Analyses**

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13072401 Run: 1</i>			
	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.20	0.5	0.2		ug/L
Barium	11.5	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.3	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.66	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	49.1	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.77	0.02	0.01		mg/L
Manganese	74.0	0.3	0.07		ug/L
Nickel	0.76	0.5	0.15		ug/L
Potassium	2.72	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	7.69	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.08	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	<1	1	0.3		ug/L
Hardness	25.5	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 2:03PM				

<i>Total Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13072402 Run: 1</i>			
	<b>Result</b>	<b>Reporting</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>

		<b>Limit</b>		
Aluminum	234	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	3.73	1	0.5	ug/L
Barium	33.0	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.22	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	1360	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.86	0.1	0.1	mg/L
Manganese	773	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.94	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.35	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	<3	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Jul 22 2013 6:21PM			
Prep By				
Prep Date/Time				

<b>Client:</b> Special Samples	<b>Client Sample ID:</b> WS-007
<b>Lab ID:</b> 2013-2567	<b>Collection Date:</b> 7/18/2013 11:17:00 AM
<b>Matrix:</b> Water	

**Analyses**

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13072401 Run: 1</i>			
	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Aluminum	240	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	4.06	0.5	0.2		ug/L
Barium	32.3	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	26.0	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	4.39	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	1.25	0.5	0.05		ug/L
Copper	0.76	0.5	0.2		ug/L
Iron	1950	20	5.0		ug/L
Lead	1.21	0.3	0.02		ug/L
Magnesium	2.01	0.02	0.01		mg/L
Manganese	599	0.3	0.07		ug/L
Nickel	1.86	0.5	0.15		ug/L
Potassium	5.20	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	5.16	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.00	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	1.4	0.5	0.3		ug/L
Zinc	13.8	1	0.3		ug/L
Hardness	19.2	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 2:10PM				

<i>Total Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13072402 Run: 1</i>			
	<b>Result</b>	<b>Reporting</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>

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		<b>Limit</b>		
Aluminum	1460	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	7.56	1	0.5	ug/L
Barium	104	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	26.5	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	5.02	0.04	0.04	mg/L
Chromium	1.38	1	0.3	ug/L
Cobalt	6.57	1	0.5	ug/L
Copper	3.28	1	0.5	ug/L
Lead	5.81	1	0.1	ug/L
Magnesium	2.32	0.1	0.1	mg/L
Nickel	3.73	2.5	0.5	ug/L
Potassium	5.69	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.57	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	4.42	2.5	1.0	ug/L
Zinc	24.2	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Jul 22 2013 6:27PM			
Prep By				
Prep Date/Time				

**Total Metals by EPA 200.8**

**EPA 200.8**

**Batch: 13072402 Run: 2**

	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Iron	8290	200	10.0		ug/L
Manganese	3720	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 6:47PM				
Prep By					
Prep Date/Time					

<b>Client:</b> Special Samples	<b>Client Sample ID:</b> Metals Field Blank
<b>Lab ID:</b> 2013-2568	<b>Collection Date:</b> 7/18/2013 9:45:00 AM
<b>Matrix:</b> Water	

**Analyses**

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13072401 Run: 1</i>			
	<b>Result</b>	<b>Reporting Limit</b>	<b>MDL</b>	<b>Qual</b>	<b>Unit</b>
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	<0.5	0.5	0.2		ug/L
Barium	<2	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	<5	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	<0.03	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	<20	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	<0.02	0.02	0.01		mg/L
Manganese	0.93	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	0.058	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	<0.05	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	0.058	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	3.25	1	0.3		ug/L
Hardness	<1	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 22 2013 2:16PM				

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**Client:** Special Samples

**Client Sample ID:** WS-001

**Lab ID:** 2013-2562

**Collection Date:** 7/18/2013 10:43:00 AM

**Matrix:** Water

**Analyses**

***Turbidity***

***EPA 180.1***

***Batch: 13072304 Run: 1***

	<b><u>Result</u></b>	<b><u>Reporting Limit</u></b>	<b><u>MDL</u></b>	<b><u>Qual</u></b>	<b><u>Unit</u></b>
Turbidity	32.7	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	7/18/2013 15:14				

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**Client:** Special Samples

**Client Sample ID:** WS-002

**Lab ID:** 2013-2563

**Collection Date:** 7/18/2013 10:08:00 AM

**Matrix:** Water

**Analyses**

***Turbidity***

***EPA 180.1***

***Batch: 13072304 Run: 1***

	<b><u>Result</u></b>	<b><u>Reporting Limit</u></b>	<b><u>MDL</u></b>	<b><u>Qual</u></b>	<b><u>Unit</u></b>
Turbidity	27.6	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	7/18/2013 15:18				



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**Client:** Special Samples

**Client Sample ID:** WS-003

**Lab ID:** 2013-2564

**Collection Date:** 7/18/2013 9:20:00 AM

**Matrix:** Water

**Analyses**

***Turbidity***

***EPA 180.1***

***Batch: 13072304 Run: 1***

	<b><u>Result</u></b>	<b><u>Reporting Limit</u></b>	<b><u>MDL</u></b>	<b><u>Qual</u></b>	<b><u>Unit</u></b>
Turbidity	31.4	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	7/18/2013 15:20				

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**Client:** Special Samples

**Client Sample ID:** WS-005

**Lab ID:** 2013-2565

**Collection Date:** 7/18/2013 12:18:00 PM

**Matrix:** Water

**Analyses**

***Turbidity***

***EPA 180.1***

***Batch: 13072304 Run: 1***

	<b><u>Result</u></b>	<b><u>Reporting Limit</u></b>	<b><u>MDL</u></b>	<b><u>Qual</u></b>	<b><u>Unit</u></b>
Turbidity	10.4	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	7/18/2013 15:33				

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**Client:** Special Samples

**Client Sample ID:** WS-006

**Lab ID:** 2013-2566

**Collection Date:** 7/18/2013 11:46:00 AM

**Matrix:** Water

**Analyses**

***Turbidity***

***EPA 180.1***

***Batch: 13072304 Run: 1***

	<b><u>Result</u></b>	<b><u>Reporting Limit</u></b>	<b><u>MDL</u></b>	<b><u>Qual</u></b>	<b><u>Unit</u></b>
Turbidity	31.2	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	7/18/2013 15:36				

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**Client:** Special Samples

**Client Sample ID:** WS-007

**Lab ID:** 2013-2567

**Collection Date:** 7/18/2013 11:17:00 AM

**Matrix:** Water

**Analyses**

***Turbidity***

***EPA 180.1***

***Batch: 13072304 Run: 1***

	<b><u>Result</u></b>	<b><u>Reporting Limit</u></b>	<b><u>MDL</u></b>	<b><u>Qual</u></b>	<b><u>Unit</u></b>
Turbidity	118	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	7/18/2013 15:38				

## Analytical Quality Control Results Report

<b>Batch: 13072302</b>	<b>Semi-VOA water (Prep)</b>
<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>

*Semi Volatiles - water DUP*

*Run: 1*

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	7/22/2013 08:00				
2-Fluorophenol (% Recovery)	45.4 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	74.1 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	75.1 %			40 - 110	
2,4,6-Tribromophenol (% Recovery)	61.9 %			40 - 110	
Terphenyl-d14 (% Recovery)	67.2 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Methyl Methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Phenol (RPD)	21.7 %				0 - 40
Aniline (RPD)	7.5 %				0 - 40
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.24 ug/L	0.2	0.24		
Bis(2-chloroethyl)ether (RPD)	200 %				0 - 40
2-Chlorophenol (RPD)	0 %				0 - 40
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	0.179 ug/L	0.16	0.16		
Benzyl alcohol (RPD)	23.0 %				0 - 40
1,2-Dichlorobenzene (RPD)	0 %				0 - 40
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
2-Methylphenol (RPD)	0 %				0 - 40

Acetophenone (RPD)	17.7 %			0 - 40
Acetophenone	<0.1 ug/L	0.1	0.1	
4-Methylphenol	<0.1 ug/L	0.1	0.1	
4-Methylphenol (RPD)	0 %			0 - 40
N-Nitrosodi-n-propylamine (RPD)	0 %			0 - 40
N-Nitrosodi-n-propylamine	<0.2 ug/L	0.2	0.2	
Hexachloroethane	<0.2 ug/L	0.2	0.2	
Hexachloroethane (RPD)	0 %			0 - 40
Nitrobenzene (RPD)	0 %			0 - 40
Nitrobenzene	<0.2 ug/L	0.2	0.2	
N-Nitrosopiperidine	<0.2 ug/L	0.2	0.2	
N-Nitrosopiperidine (RPD)	0 %			0 - 40
Isophorone (RPD)	0 %			0 - 40
Isophorone	<0.1 ug/L	0.1	0.1	
2-Nitrophenol	<0.3 ug/L	0.3	0.3	
2-Nitrophenol (RPD)	0 %			0 - 40
2,4-Dimethylphenol (RPD)	0 %			0 - 40
2,4-Dimethylphenol	<0.1 ug/L	0.1	0.1	
Bis(2-chloroethoxy)methane	<0.2 ug/L	0.2	0.2	
Bis(2-chloroethoxy)methane (RPD)	0 %			0 - 40
2,4-Dichlorophenol (RPD)	0 %			0 - 40
2,4-Dichlorophenol	<0.2 ug/L	0.2	0.2	
1,2,4-Trichlorobenzene	<0.12 ug/L	0.12	0.12	
1,2,4-Trichlorobenzene (RPD)	0 %			0 - 40
Naphthalene (RPD)	0 %			0 - 40
Naphthalene	<0.08 ug/L	0.08	0.08	
4-Chloroaniline	<0.1 ug/L	0.1	0.1	
4-Chloroaniline (RPD)	0 %			0 - 40
2,6-Dichlorophenol (RPD)	0 %			0 - 40
2,6-Dichlorophenol	<0.2 ug/L	0.2	0.2	
Hexachlorobutadiene (RPD)	0 %			0 - 40
Hexachlorobutadiene	<0.2 ug/L	0.2	0.2	
N-Nitrosodibutylamine	<0.24 ug/L	0.2	0.24	
N-Nitrosodibutylamine (RPD)	0 %			0 - 40
4-Chloro-3-methylphenol (RPD)	0 %			0 - 40
4-Chloro-3-methylphenol	<0.16 ug/L	0.16	0.16	
2-Methylnaphthalene	<0.1 ug/L	0.1	0.1	
2-Methylnaphthalene (RPD)	0 %			0 - 40
1,2,4,5-Tetrachlorobenzene	<0.1 ug/L	0.1	0.1	
1,2,4,5-Tetrachlorobenzene (RPD)	0 %			0 - 40

Hexachlorocyclopentadiene (RPD)	0 %			0 - 40
Hexachlorocyclopentadiene	<0.16 ug/L	0.16	0.16	
2,4,6-Trichlorophenol (RPD)	0 %			0 - 40
2,4,6-Trichlorophenol	<0.4 ug/L	0.2	0.4	
2,4,5-Trichlorophenol	<0.2 ug/L	0.2	0.2	
2,4,5-Trichlorophenol (RPD)	0 %			0 - 40
2-Chloronaphthalene (RPD)	200 %			0 - 40
2-Chloronaphthalene	<0.1 ug/L	0.1	0.1	
1-Chloronaphthalene	<0.1 ug/L	0.1	0.1	
1-Chloronaphthalene (RPD)	0 %			0 - 40
2-Nitroaniline (RPD)	0 %			0 - 40
2-Nitroaniline	<0.2 ug/L	0.2	0.2	
Dimethyl phthalate	<0.2 ug/L	0.2	0.2	
Dimethyl phthalate (RPD)	0 %			0 - 40
2,6-Dinitrotoluene (RPD)	0 %			0 - 40
2,6-Dinitrotoluene	<0.2 ug/L	0.2	0.2	
Acenaphthylene	<0.08 ug/L	0.08	0.08	
Acenaphthylene (RPD)	0 %			0 - 40
3-Nitroaniline (RPD)	0 %			0 - 40
3-Nitroaniline	<0.2 ug/L	0.2	0.2	
Acenaphthene	<0.1 ug/L	0.1	0.1	
Acenaphthene (RPD)	0 %			0 - 40
2,4-Dinitrophenol (RPD)	0 %			0 - 40
2,4-Dinitrophenol	<4 ug/L	4	4	
Pentachlorobenzene	<0.12 ug/L	0.12	0.12	
Pentachlorobenzene (RPD)	0 %			0 - 40
4-Nitrophenol (RPD)	0 %			0 - 40
4-Nitrophenol	<2 ug/L	2	2	
Dibenzofuran	<0.1 ug/L	0.1	0.1	
Dibenzofuran (RPD)	0 %			0 - 40
2,4-Dinitrotoluene (RPD)	0 %			0 - 40
2,4-Dinitrotoluene	<0.2 ug/L	0.2	0.2	
2,3,4,6-Tetrachlorophenol	<0.6 ug/L	0.6	0.6	
2,3,4,6-Tetrachlorophenol (RPD)	0 %			0 - 40
Diethyl phthalate (RPD)	181 %			0 - 40
Diethyl phthalate	<0.4 ug/L	0.2	0.4	
Fluorene	<0.1 ug/L	0.1	0.1	
Fluorene (RPD)	0 %			0 - 40
4-Chlorophenyl phenyl ether (RPD)	0 %			0 - 40
4-Chlorophenyl phenyl ether	<0.1 ug/L	0.1	0.1	

4-Nitroaniline	<0.3 ug/L	0.2	0.3	
4-Nitroaniline (RPD)	0 %			0 - 40
4,6-Dinitro-2-methylphenol (RPD)	0 %			0 - 40
4,6-Dinitro-2-methylphenol	<6 ug/L	6	6	
Diphenylamine	<0.1 ug/L	0.1	0.1	
Diphenylamine (RPD)	0 %			0 - 40
Azobenzene (RPD)	0 %			0 - 40
Azobenzene	<0.08 ug/L	0.08	0.08	
4-Bromophenyl phenyl ether	<0.2 ug/L	0.2	0.2	
4-Bromophenyl phenyl ether (RPD)	0 %			0 - 40
Hexachlorobenzene (RPD)	0 %			0 - 40
Hexachlorobenzene	<0.16 ug/L	0.16	0.16	
Pentachlorophenol	<1 ug/L	1	1	
Pentachlorophenol (RPD)	0 %			0 - 40
Pentachloronitrobenzene (RPD)	0 %			0 - 40
Pentachloronitrobenzene	<0.2 ug/L	0.2	0.2	
Pronamide	<0.2 ug/L	0.2	0.2	
Pronamide (RPD)	0 %			0 - 40
Phenanthrene (RPD)	0 %			0 - 40
Phenanthrene	<0.08 ug/L	0.08	0.08	
Anthracene	<0.08 ug/L	0.08	0.08	
Anthracene (RPD)	0 %			0 - 40
Carbazole (RPD)	0 %			0 - 40
Carbazole	<0.1 ug/L	0.1	0.1	
Di-n-butyl phthalate	<0.2 ug/L	0.2	0.2	
Di-n-butyl phthalate (RPD)	86.4 %			0 - 40
Fluoranthene (RPD)	0 %			0 - 40
Fluoranthene	<0.08 ug/L	0.08	0.08	
Pyrene	<0.08 ug/L	0.08	0.08	
Pyrene (RPD)	0 %			0 - 40
Dimethylaminoazobenzene (RPD)	0 %			0 - 40
Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2	
Butyl benzyl phthalate	<0.4 ug/L	0.4	0.4	
Butyl benzyl phthalate (RPD)	0 %			0 - 40
Benzo (a) anthracene (RPD)	0 %			0 - 40
Benzo (a) anthracene	<0.1 ug/L	0.1	0.1	
Chrysene	<0.1 ug/L	0.1	0.1	
Chrysene (RPD)	0 %			0 - 40
Bis(2-ethylhexyl)phthalate (RPD)	55.1 %			0 - 40
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3	



Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3	
Di-n-octyl phthalate (RPD)	9.7 %			0 - 40
Benzo (b) fluoranthene (RPD)	0 %			0 - 40
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16	
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2	
7,12-Dimethylbenz (a) anthracene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene (RPD)	200 %			0 - 40
3-Methylcholanthrene (RPD)	0 %			0 - 40
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene (RPD)	0 %			0 - 40
Dibenzo (a,h) anthracene (RPD)	0 %			0 - 40
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene (RPD)	0 %			0 - 40
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	7/22/2013 3:03 PM			

<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>
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**Semi Volatiles - water MS**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	7/22/2013 08:00				
2-Fluorophenol (% Recovery)	38.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	74.6 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	66.5 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	60.5 %			40 - 125	
Terphenyl-d14 (% Recovery)	69.1 %			40 - 125	
Phenol (% Recovery)	24.0 %			25 - 125	
2-Chlorophenol (% Recovery)	45.2 %			25 - 125	
1,4-Dichlorobenzene (% Recovery)	57.8 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	77.1 %			25 - 125	
1,2,4-Trichlorobenzene (% Recovery)	59.1 %			25 - 125	

4-Chloro-3-methylphenol (% Recovery)	36.8 %	25 - 125
Acenaphthene (% Recovery)	75.9 %	25 - 125
4-Nitrophenol (% Recovery)	29.7 %	25 - 125
2,4-Dinitrotoluene (% Recovery)	67.8 %	25 - 125
Pentachlorophenol (% Recovery)	63.0 %	25 - 125
Pyrene (% Recovery)	72.0 %	25 - 125
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	7/22/2013 4:30 PM	

**WS-003** **LIMS ID: 2013-2564**

**Semi Volatiles - water MSD**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	7/22/2013 08:00				
2-Fluorophenol (% Recovery)	31.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	69.4 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	63.0 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	58.6 %			40 - 125	
Terphenyl-d14 (% Recovery)	63.0 %			40 - 125	
Phenol (% Recovery)	18.4 %			25 - 125	
Phenol (RPD)	26.4 %				0 - 40
2-Chlorophenol (% Recovery)	38.4 %			25 - 125	
2-Chlorophenol (RPD)	16.2 %				0 - 40
1,4-Dichlorobenzene (RPD)	11.5 %				0 - 40
1,4-Dichlorobenzene (% Recovery)	51.5 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	72.9 %			25 - 125	
N-Nitrosodi-n-propylamine (RPD)	5.6 %				0 - 40
1,2,4-Trichlorobenzene (RPD)	4.4 %				0 - 40
1,2,4-Trichlorobenzene (% Recovery)	56.5 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	35.1 %			25 - 125	
4-Chloro-3-methylphenol (RPD)	4.8 %				0 - 40
Acenaphthene (% Recovery)	71.1 %			25 - 125	
Acenaphthene (RPD)	6.5 %				0 - 40
4-Nitrophenol (% Recovery)	28.9 %			25 - 125	
4-Nitrophenol (RPD)	2.5 %				0 - 40
2,4-Dinitrotoluene (% Recovery)	63.1 %			25 - 125	

2,4-Dinitrotoluene (RPD)	7.2 %		0 - 40
Pentachlorophenol (% Recovery)	57.4 %	25 - 125	
Pentachlorophenol (RPD)	9.2 %		0 - 40
Pyrene (% Recovery)	73.6 %	25 - 125	
Pyrene (RPD)	2.2 %		0 - 40
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	7/22/2013 4:01 PM		

**MB** **LIMS ID: 13072302-MB-01**

**Semi Volatiles - water MB**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	7/22/2013 08:00				
2-Fluorophenol (% Recovery)	43.4 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	76.2 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	64.0 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	60.6 %			40 - 125	
Terphenyl-d14 (% Recovery)	75.1 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.2 ug/L	0.2	0.2		
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	0.176 ug/L	0.16	0.16		
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
Acetophenone	<0.1 ug/L	0.1	0.1		
4-Methylphenol	<0.1 ug/L	0.1	0.1		
N-Nitrosodi-n-propylamine	<0.2 ug/L	0.2	0.2		
Hexachloroethane	<0.2 ug/L	0.2	0.2		
Nitrobenzene	<0.2 ug/L	0.2	0.2		
N-Nitrosopiperidine	<0.2 ug/L	0.2	0.2		
Isophorone	<0.1 ug/L	0.1	0.1		

2-Nitrophenol	<0.3 ug/L	0.3	0.3
2,4-Dimethylphenol	<0.1 ug/L	0.1	0.1
Bis(2-chloroethoxy)methane	<0.2 ug/L	0.2	0.2
2,4-Dichlorophenol	<0.2 ug/L	0.2	0.2
1,2,4-Trichlorobenzene	<0.12 ug/L	0.12	0.12
Naphthalene	<0.08 ug/L	0.08	0.08
4-Chloroaniline	<0.1 ug/L	0.1	0.1
2,6-Dichlorophenol	<0.2 ug/L	0.2	0.2
Hexachlorobutadiene	<0.2 ug/L	0.2	0.2
N-Nitrosodibutylamine	<0.2 ug/L	0.2	0.2
4-Chloro-3-methylphenol	<0.16 ug/L	0.16	0.16
2-Methylnaphthalene	<0.12 ug/L	0.12	0.12
1,2,4,5-Tetrachlorobenzene	<0.1 ug/L	0.1	0.1
Hexachlorocyclopentadiene	<0.16 ug/L	0.16	0.16
2,4,6-Trichlorophenol	<0.2 ug/L	0.2	0.2
2,4,5-Trichlorophenol	<0.2 ug/L	0.2	0.2
2-Chloronaphthalene	<0.1 ug/L	0.1	0.1
1-Chloronaphthalene	<0.1 ug/L	0.1	0.1
2-Nitroaniline	<0.2 ug/L	0.2	0.2
Dimethyl phthalate	<0.2 ug/L	0.2	0.2
2,6-Dinitrotoluene	<0.2 ug/L	0.2	0.2
Acenaphthylene	<0.08 ug/L	0.08	0.08
3-Nitroaniline	<0.2 ug/L	0.2	0.2
Acenaphthene	<0.1 ug/L	0.1	0.1
2,4-Dinitrophenol	<4 ug/L	4	4
Pentachlorobenzene	<0.12 ug/L	0.12	0.12
4-Nitrophenol	<2 ug/L	2	2
Dibenzofuran	<0.1 ug/L	0.1	0.1
2,4-Dinitrotoluene	<0.2 ug/L	0.2	0.2
2,3,4,6-Tetrachlorophenol	<0.6 ug/L	0.6	0.6
Diethyl phthalate	<0.2 ug/L	0.2	0.2
Fluorene	<0.1 ug/L	0.1	0.1
4-Chlorophenyl phenyl ether	<0.1 ug/L	0.1	0.1
4-Nitroaniline	<0.2 ug/L	0.2	0.2
4,6-Dinitro-2-methylphenol	<6 ug/L	6	6
Diphenylamine	<0.1 ug/L	0.1	0.1
Azobenzene	<0.08 ug/L	0.08	0.08
4-Bromophenyl phenyl ether	<0.2 ug/L	0.2	0.2
Hexachlorobenzene	<0.16 ug/L	0.16	0.16
Pentachlorophenol	<1 ug/L	1	1

Pentachloronitrobenzene	<0.2 ug/L	0.2	0.2
Pronamide	<0.2 ug/L	0.2	0.2
Phenanthrene	<0.08 ug/L	0.08	0.08
Anthracene	<0.08 ug/L	0.08	0.08
Carbazole	<0.1 ug/L	0.1	0.1
Di-n-butyl phthalate	1.19 ug/L	0.2	0.2
Fluoranthene	<0.08 ug/L	0.08	0.08
Pyrene	<0.08 ug/L	0.08	0.08
Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2
Butyl benzyl phthalate	<0.3 ug/L	0.3	0.3
Benzo (a) anthracene	<0.2 ug/L	0.2	0.2
Chrysene	<0.1 ug/L	0.1	0.1
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3
Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	7/22/2013 17:28		

**LCS** **LIMS ID: 13072302-LCS-01**

**Semi Volatiles - water LCS**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	7/22/2013 08:00				
2-Fluorophenol (% Recovery)	47.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	81.9 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	69.2 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	78.8 %			40 - 125	
Terphenyl-d14 (% Recovery)	76.0 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	67.6 %			50 - 150	

Ethyl methanesulfonate (% Recovery)	75.6 %	50 - 150
Phenol (% Recovery)	50.0 %	50 - 150
Aniline (% Recovery)	50.4 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	79.8 %	50 - 150
2-Chlorophenol (% Recovery)	83.4 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	38.0 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	37.2 %	50 - 150
Benzyl alcohol (% Recovery)	99.1 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	43.4 %	50 - 150
2-Methylphenol (% Recovery)	80.7 %	50 - 150
Acetophenone (% Recovery)	93.0 %	50 - 150
4-Methylphenol (% Recovery)	71.6 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	93.1 %	50 - 150
Hexachloroethane (% Recovery)	28.5 %	50 - 150
Nitrobenzene (% Recovery)	80.6 %	50 - 150
N-Nitrosopiperidine (% Recovery)	106 %	50 - 150
Isophorone (% Recovery)	90.2 %	50 - 150
2-Nitrophenol (% Recovery)	87.6 %	50 - 150
2,4-Dimethylphenol (% Recovery)	8.3 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	79.2 %	50 - 150
2,4-Dichlorophenol (% Recovery)	80.5 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	42.7 %	50 - 150
Naphthalene (% Recovery)	59.5 %	50 - 150
4-Chloroaniline (% Recovery)	69.6 %	50 - 150
2,6-Dichlorophenol (% Recovery)	86.4 %	50 - 150
Hexachlorobutadiene (% Recovery)	30.4 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	107 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	83.3 %	50 - 150
2-Methylnaphthalene (% Recovery)	58.9 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	45.6 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	34.1 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	85.6 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	82.0 %	50 - 150
2-Chloronaphthalene (% Recovery)	62.5 %	50 - 150
1-Chloronaphthalene (% Recovery)	57.0 %	50 - 150
2-Nitroaniline (% Recovery)	96.9 %	50 - 150
Dimethyl phthalate (% Recovery)	88.9 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	89.7 %	50 - 150
Acenaphthylene (% Recovery)	74.0 %	50 - 150
3-Nitroaniline (% Recovery)	88.8 %	50 - 150

Acenaphthene (% Recovery)	65.7 %	50 - 150
2,4-Dinitrophenol (% Recovery)	99.9 %	50 - 150
Pentachlorobenzene (% Recovery)	52.2 %	50 - 150
4-Nitrophenol (% Recovery)	49.4 %	50 - 150
Dibenzofuran (% Recovery)	73.4 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	89.2 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	87.7 %	50 - 150
Diethyl phthalate (% Recovery)	95.0 %	50 - 150
Fluorene (% Recovery)	73.7 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	69.1 %	50 - 150
4-Nitroaniline (% Recovery)	89.7 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	94.3 %	50 - 150
Diphenylamine (% Recovery)	82.4 %	50 - 150
Azobenzene (% Recovery)	75.6 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	62.6 %	50 - 150
Hexachlorobenzene (% Recovery)	59.4 %	50 - 150
Pentachlorophenol (% Recovery)	79.2 %	50 - 150
Pentachloronitrobenzene (% Recovery)	76.0 %	50 - 150
Pronamide (% Recovery)	89.4 %	50 - 150
Phenanthrene (% Recovery)	76.7 %	50 - 150
Anthracene (% Recovery)	74.5 %	50 - 150
Carbazole (% Recovery)	89.4 %	50 - 150
Di-n-butyl phthalate (% Recovery)	140 %	50 - 150
Fluoranthene (% Recovery)	88.2 %	50 - 150
Pyrene (% Recovery)	77.5 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	83.5 %	50 - 150
Butyl benzyl phthalate (% Recovery)	97.0 %	50 - 150
Benzo (a) anthracene (% Recovery)	84.8 %	50 - 150
Chrysene (% Recovery)	81.8 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	99.5 %	50 - 150
Di-n-octyl phthalate (% Recovery)	108 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	80.5 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	80.3 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	83.8 %	50 - 150
Benzo (a) pyrene (% Recovery)	81.1 %	50 - 150
3-Methylcholanthrene (% Recovery)	78.8 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	63.4 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	65.1 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	58.9 %	50 - 150
Dilution Factor	1	

Arkansas Department of Environmental Quality  
5301 Northshore Drive  
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Laboratory Contact: Jeff Ruehr  
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501-682-0955

Analyzed By	Ed Harris
Analysis Date/Time	7/22/2013 17:57



## Analytical Quality Control Results Report

<b>Batch: 13072201</b>	<b>VOA - water</b>
<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>

*Volatiles - water DUP*

*Run: 1*

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Dibromofluoromethane (% Recovery)	101 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	102 %			70 - 130	
Toluene-d8 (% Recovery)	91.7 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	102 %			70 - 130	
Dichlorodifluoromethane	<1.12 ug/L	1.12	1.12		
Dichlorodifluoromethane (RPD)	0 %				0 - 20
Chloromethane (RPD)	0 %				0 - 20
Chloromethane	<0.58 ug/L	0.58	0.58		
Vinyl chloride	<0.82 ug/L	0.82	0.82		
Vinyl chloride (RPD)	0 %				0 - 20
Bromomethane (RPD)	0 %				0 - 20
Bromomethane	<3.9 ug/L	3.9	3.9		
Chloroethane (RPD)	0 %				0 - 20
Chloroethane	<2.68 ug/L	2.68	2.68		
Trichlorofluoromethane	<0.51 ug/L	0.51	0.51		
Trichlorofluoromethane (RPD)	0 %				0 - 20
1,1-Dichloroethene (RPD)	0 %				0 - 20
1,1-Dichloroethene	<0.43 ug/L	0.43	0.43		
Acetone	<10.5 ug/L	10.5	10.5		
Acetone (RPD)	0 %				0 - 20
Methylene chloride	<2.5 ug/L	2.5	2.5		
Methylene chloride (RPD)	1.7 %				0 - 20
Methyl tert-butyl ether (RPD)	0 %				0 - 20
Methyl tert-butyl ether	<0.83 ug/L	0.83	0.83		
trans-1,2-Dichloroethene	<0.59 ug/L	0.59	0.59		
trans-1,2-Dichloroethene (RPD)	0 %				0 - 20
1,1-Dichloroethane (RPD)	0 %				0 - 20
1,1-Dichloroethane	<0.42 ug/L	0.42	0.42		
Methyl ethyl ketone	<12.8 ug/L	12.8	12.8		
Methyl ethyl ketone (RPD)	0 %				0 - 20
cis-1,2-Dichloroethene (RPD)	0 %				0 - 20
cis-1,2-Dichloroethene	<1.15 ug/L	1.15	1.15		
2,2-Dichloropropane (RPD)	0 %				0 - 20

2,2-Dichloropropane	<0.81 ug/L	0.81	0.81	
Bromochloromethane (RPD)	0 %			0 - 20
Bromochloromethane	<0.66 ug/L	0.66	0.66	
Chloroform	<0.27 ug/L	0.27	0.27	
Chloroform (RPD)	0 %			0 - 20
1,1,1-Trichloroethane	<0.46 ug/L	0.46	0.46	
1,1,1-Trichloroethane (RPD)	0 %			0 - 20
1,1-Dichloropropene (RPD)	0 %			0 - 20
1,1-Dichloropropene	<0.59 ug/L	0.59	0.59	
Carbon tetrachloride	<0.6 ug/L	0.6	0.6	
Carbon tetrachloride (RPD)	0 %			0 - 20
Benzene	<0.66 ug/L	0.66	0.66	
Benzene (RPD)	0 %			0 - 20
1,2-Dichloroethane (RPD)	0 %			0 - 20
1,2-Dichloroethane	<1.15 ug/L	1.15	1.15	
Trichloroethene	<0.6 ug/L	0.6	0.6	
Trichloroethene (RPD)	0 %			0 - 20
1,2-Dichloropropane (RPD)	0 %			0 - 20
1,2-Dichloropropane	<0.98 ug/L	0.98	0.98	
Dibromomethane	<1.78 ug/L	1.78	1.78	
Dibromomethane (RPD)	0 %			0 - 20
Bromodichloromethane (RPD)	0 %			0 - 20
Bromodichloromethane	<0.65 ug/L	0.65	0.65	
cis-1,3-Dichloropropene	<0.86 ug/L	0.86	0.86	
cis-1,3-Dichloropropene (RPD)	0 %			0 - 20
Methyl isobutyl ketone (RPD)	0 %			0 - 20
Methyl isobutyl ketone	<8.1 ug/L	8.1	8.1	
Toluene	<0.57 ug/L	0.57	0.57	
Toluene (RPD)	0.2 %			0 - 20
trans-1,3-Dichloropropene (RPD)	0 %			0 - 20
trans-1,3-Dichloropropene	<0.84 ug/L	0.84	0.84	
1,1,2-Trichloroethane	<0.78 ug/L	0.78	0.78	
1,1,2-Trichloroethane (RPD)	0 %			0 - 20
2-Hexanone (RPD)	0 %			0 - 20
2-Hexanone	<9.5 ug/L	9.5	9.5	
Tetrachloroethene	<0.96 ug/L	0.96	0.96	
Tetrachloroethene (RPD)	0 %			0 - 20
1,3-Dichloropropane (RPD)	0 %			0 - 20
1,3-Dichloropropane	<0.94 ug/L	0.94	0.94	
Dibromochloromethane	<1.25 ug/L	1.25	1.25	

Dibromochloromethane (RPD)	0 %			0 - 20
1,2-Dibromoethane (EDB) (RPD)	0 %			0 - 20
1,2-Dibromoethane (EDB)	<0.68 ug/L	0.68	0.68	
Chlorobenzene	<0.62 ug/L	0.62	0.62	
Chlorobenzene (RPD)	0 %			0 - 20
Ethylbenzene (RPD)	0 %			0 - 20
Ethylbenzene	<0.51 ug/L	0.51	0.51	
1,1,1,2-Tetrachloroethane (RPD)	0 %			0 - 20
1,1,1,2-Tetrachloroethane	<0.57 ug/L	0.57	0.57	
m,p-Xylene	<1.2 ug/L	1.2	1.2	
m,p-Xylene (RPD)	0 %			0 - 20
o-Xylene (RPD)	0 %			0 - 20
o-Xylene	<0.5 ug/L	0.5	0.5	
Styrene	<0.53 ug/L	0.53	0.53	
Styrene (RPD)	0 %			0 - 20
Bromoform (RPD)	0 %			0 - 20
Bromoform	<1.56 ug/L	1.56	1.56	
Isopropylbenzene	<0.59 ug/L	0.59	0.59	
Isopropylbenzene (RPD)	0 %			0 - 20
1,1,1,2,2-Tetrachloroethane (RPD)	0 %			0 - 20
1,1,1,2,2-Tetrachloroethane	<0.39 ug/L	0.39	0.39	
1,2,3-Trichloropropane (RPD)	0 %			0 - 20
1,2,3-Trichloropropane	<1.83 ug/L	1.83	1.83	
n-Propylbenzene	<0.49 ug/L	0.49	0.49	
n-Propylbenzene (RPD)	0 %			0 - 20
Bromobenzene	<0.5 ug/L	0.5	0.5	
Bromobenzene (RPD)	0 %			0 - 20
1,3,5-Trimethylbenzene (RPD)	0 %			0 - 20
1,3,5-Trimethylbenzene	<0.3 ug/L	0.3	0.3	
2-Chlorotoluene	<0.66 ug/L	0.66	0.66	
2-Chlorotoluene (RPD)	0 %			0 - 20
4-Chlorotoluene (RPD)	0 %			0 - 20
4-Chlorotoluene	<0.8 ug/L	0.8	0.8	
tert-Butylbenzene	<0.85 ug/L	0.85	0.85	
tert-Butylbenzene (RPD)	0 %			0 - 20
1,2,4-Trimethylbenzene (RPD)	0 %			0 - 20
1,2,4-Trimethylbenzene	<0.46 ug/L	0.46	0.46	
sec-Butylbenzene	<0.63 ug/L	0.63	0.63	
sec-Butylbenzene (RPD)	0 %			0 - 20
p-Isopropyltoluene (RPD)	0 %			0 - 20

p-Isopropyltoluene	<0.59 ug/L	0.59	0.59	
1,3-Dichlorobenzene (RPD)	0 %			0 - 20
1,3-Dichlorobenzene	<0.7 ug/L	0.7	0.7	
1,4-Dichlorobenzene	<0.53 ug/L	0.53	0.53	
1,4-Dichlorobenzene (RPD)	0 %			0 - 20
n-Butylbenzene	<0.72 ug/L	0.72	0.72	
n-Butylbenzene (RPD)	0 %			0 - 20
1,2-Dichlorobenzene (RPD)	0 %			0 - 20
1,2-Dichlorobenzene	<0.7 ug/L	0.7	0.7	
1,2-Dibromo-3-chloropropane	<0.86 ug/L	0.86	0.86	
1,2-Dibromo-3-chloropropane (RPD)	0 %			0 - 20
1,2,4-Trichlorobenzene (RPD)	0 %			0 - 20
1,2,4-Trichlorobenzene	<1.14 ug/L	1.14	1.14	
Naphthalene	<1.53 ug/L	1.53	1.53	
Naphthalene (RPD)	0 %			0 - 20
1,2,3-Trichlorobenzene (RPD)	0 %			0 - 20
1,2,3-Trichlorobenzene	<1.3 ug/L	1.3	1.3	
Dilution Factor	1			
Analyzed By	Chad Carrington			
Analysis Date/Time	7/19/2013 3:29			

**WS-003** **LIMS ID: 2013-2564**

**Volatiles - water MS**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Dibromofluoromethane (% Recovery)	104 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	108 %			70 - 130	
Toluene-d8 (% Recovery)	90.8 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	99.3 %			70 - 130	
1,1-Dichloroethene (% Recovery)	103 %			70 - 130	
Benzene (% Recovery)	104 %			70 - 130	
Trichloroethene (% Recovery)	103 %			70 - 130	
Toluene (% Recovery)	86.6 %			70 - 130	
Chlorobenzene (% Recovery)	90.8 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	7/19/2013 5:10				

**WS-003** **LIMS ID: 2013-2564**

**Volatiles - water MSD**

**Run: 1**

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Dibromofluoromethane (% Recovery)	101 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	104 %			70 - 130	
Toluene-d8 (% Recovery)	91.4 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	104 %			70 - 130	
1,1-Dichloroethene (RPD)	3.0 %				0 - 20
1,1-Dichloroethene (% Recovery)	100 %			70 - 130	
Benzene (RPD)	2.5 %				0 - 20
Benzene (% Recovery)	102 %			70 - 130	
Trichloroethene (RPD)	4.8 %				0 - 20
Trichloroethene (% Recovery)	98.4 %			70 - 130	
Toluene (RPD)	0.6 %				0 - 20
Toluene (% Recovery)	87.2 %			70 - 130	
Chlorobenzene (% Recovery)	91.4 %			70 - 130	
Chlorobenzene (RPD)	0.7 %				0 - 20
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	7/19/2013 5:35				

<b>LCS</b>	<b>LIMS ID: 13072201-LCS-01</b>
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**Volatiles - water LCS**

**Run: 1**

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Dibromofluoromethane (% Recovery)	96.2 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	106 %			70 - 130	
Toluene-d8 (% Recovery)	89.1 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	97.0 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	73.2 %			60 - 130	
Chloromethane (% Recovery)	74.4 %			60 - 130	
Vinyl chloride (% Recovery)	90.6 %			60 - 130	
Bromomethane (% Recovery)	77.1 %			60 - 130	
Chloroethane (% Recovery)	80.3 %			60 - 130	
Trichlorofluoromethane (% Recovery)	88.9 %			60 - 130	
1,1-Dichloroethene (% Recovery)	92.8 %			60 - 130	
Acetone (% Recovery)	122 %			60 - 130	
Methylene chloride (% Recovery)	106 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	95.7 %			60 - 130	
trans-1,2-Dichloroethene (% Recovery)	93.6 %			60 - 130	
1,1-Dichloroethane (% Recovery)	106 %			60 - 130	

Methyl ethyl ketone (% Recovery)	112 %	60 - 130
cis-1,2-Dichloroethene (% Recovery)	97.6 %	60 - 130
2,2-Dichloropropane (% Recovery)	98.7 %	60 - 130
Bromochloromethane (% Recovery)	108 %	60 - 130
Chloroform (% Recovery)	96.4 %	60 - 130
1,1,1-Trichloroethane (% Recovery)	95.1 %	60 - 130
1,1-Dichloropropene (% Recovery)	98.2 %	60 - 130
Carbon tetrachloride (% Recovery)	91.9 %	60 - 130
Benzene (% Recovery)	99.6 %	60 - 130
1,2-Dichloroethane (% Recovery)	108 %	60 - 130
Trichloroethene (% Recovery)	95.6 %	60 - 130
1,2-Dichloropropane (% Recovery)	99.6 %	60 - 130
Dibromomethane (% Recovery)	102 %	60 - 130
Bromodichloromethane (% Recovery)	93.8 %	60 - 130
cis-1,3-Dichloropropene (% Recovery)	102 %	60 - 130
Methyl isobutyl ketone (% Recovery)	101 %	60 - 130
Toluene (% Recovery)	92.3 %	60 - 130
trans-1,3-Dichloropropene (% Recovery)	103 %	60 - 130
1,1,2-Trichloroethane (% Recovery)	92.2 %	60 - 130
2-Hexanone (% Recovery)	106 %	60 - 130
Tetrachloroethene (% Recovery)	101 %	60 - 130
1,3-Dichloropropane (% Recovery)	97.7 %	60 - 130
Dibromochloromethane (% Recovery)	93.3 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	94.3 %	60 - 130
Chlorobenzene (% Recovery)	95.5 %	60 - 130
Ethylbenzene (% Recovery)	88.2 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	93.9 %	60 - 130
m,p-Xylene (% Recovery)	93.9 %	60 - 130
o-Xylene (% Recovery)	96.3 %	60 - 130
Styrene (% Recovery)	92.3 %	60 - 130
Bromoform (% Recovery)	105 %	60 - 130
Isopropylbenzene (% Recovery)	109 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	100 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	102 %	60 - 130
n-Propylbenzene (% Recovery)	91.7 %	60 - 130
Bromobenzene (% Recovery)	105 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	96.0 %	60 - 130
2-Chlorotoluene (% Recovery)	101 %	60 - 130
4-Chlorotoluene (% Recovery)	97.1 %	60 - 130
tert-Butylbenzene (% Recovery)	96.0 %	60 - 130

1,2,4-Trimethylbenzene (% Recovery)	97.4 %	60 - 130
sec-Butylbenzene (% Recovery)	98.2 %	60 - 130
p-Isopropyltoluene (% Recovery)	87.8 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	95.7 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	88.3 %	60 - 130
n-Butylbenzene (% Recovery)	91.2 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	97.4 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	103 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	99.4 %	60 - 130
Naphthalene (% Recovery)	93.6 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	98.9 %	60 - 130
Dilution Factor	1	
Analyzed By	Chad Carrington	
Analysis Date/Time	7/18/2013 16:34	

**LCS** **LIMS ID: 13072201-LCS-02**

**Volatiles - water LCS**

**Run: 1**

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Dibromofluoromethane (% Recovery)	98.0 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	106 %			70 - 130	
Toluene-d8 (% Recovery)	92.3 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	100 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	74.1 %			60 - 130	
Chloromethane (% Recovery)	70.2 %			60 - 130	
Vinyl chloride (% Recovery)	89.5 %			60 - 130	
Bromomethane (% Recovery)	75.0 %			60 - 130	
Chloroethane (% Recovery)	87.0 %			60 - 130	
Trichlorofluoromethane (% Recovery)	88.0 %			60 - 130	
1,1-Dichloroethene (% Recovery)	93.3 %			60 - 130	
Acetone (% Recovery)	132 %			60 - 130	
Methylene chloride (% Recovery)	109 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	99.5 %			60 - 130	
trans-1,2-Dichloroethene (% Recovery)	96.3 %			60 - 130	
1,1-Dichloroethane (% Recovery)	107 %			60 - 130	
Methyl ethyl ketone (% Recovery)	122 %			60 - 130	
cis-1,2-Dichloroethene (% Recovery)	99.3 %			60 - 130	
2,2-Dichloropropane (% Recovery)	75.8 %			60 - 130	
Bromochloromethane (% Recovery)	110 %			60 - 130	
Chloroform (% Recovery)	99.8 %			60 - 130	

1,1,1-Trichloroethane (% Recovery)	98.6 %	60 - 130
1,1-Dichloropropene (% Recovery)	101 %	60 - 130
Carbon tetrachloride (% Recovery)	95.2 %	60 - 130
Benzene (% Recovery)	99.5 %	60 - 130
1,2-Dichloroethane (% Recovery)	109 %	60 - 130
Trichloroethene (% Recovery)	99.5 %	60 - 130
1,2-Dichloropropane (% Recovery)	104 %	60 - 130
Dibromomethane (% Recovery)	104 %	60 - 130
Bromodichloromethane (% Recovery)	98.9 %	60 - 130
cis-1,3-Dichloropropene (% Recovery)	102 %	60 - 130
Methyl isobutyl ketone (% Recovery)	112 %	60 - 130
Toluene (% Recovery)	95.4 %	60 - 130
trans-1,3-Dichloropropene (% Recovery)	102 %	60 - 130
1,1,2-Trichloroethane (% Recovery)	98.0 %	60 - 130
2-Hexanone (% Recovery)	118 %	60 - 130
Tetrachloroethene (% Recovery)	99.7 %	60 - 130
1,3-Dichloropropane (% Recovery)	102 %	60 - 130
Dibromochloromethane (% Recovery)	97.4 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	99.6 %	60 - 130
Chlorobenzene (% Recovery)	98.6 %	60 - 130
Ethylbenzene (% Recovery)	92.0 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	95.1 %	60 - 130
m,p-Xylene (% Recovery)	94.9 %	60 - 130
o-Xylene (% Recovery)	99.7 %	60 - 130
Styrene (% Recovery)	92.8 %	60 - 130
Bromoform (% Recovery)	110 %	60 - 130
Isopropylbenzene (% Recovery)	110 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	99.6 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	111 %	60 - 130
n-Propylbenzene (% Recovery)	89.9 %	60 - 130
Bromobenzene (% Recovery)	108 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	96.5 %	60 - 130
2-Chlorotoluene (% Recovery)	96.9 %	60 - 130
4-Chlorotoluene (% Recovery)	99.5 %	60 - 130
tert-Butylbenzene (% Recovery)	94.1 %	60 - 130
1,2,4-Trimethylbenzene (% Recovery)	96.3 %	60 - 130
sec-Butylbenzene (% Recovery)	95.3 %	60 - 130
p-Isopropyltoluene (% Recovery)	87.6 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	94.2 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	91.7 %	60 - 130



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n-Butylbenzene (% Recovery)	89.0 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	99.8 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	109 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	99.3 %	60 - 130
Naphthalene (% Recovery)	97.3 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	102 %	60 - 130
Dilution Factor	1	
Analyzed By	Chad Carrington	
Analysis Date/Time	7/19/2013 0:07	

## Analytical Quality Control Results Report

<b>Batch: 13072301</b>	<b>Oil and Grease - water</b>
<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>

*Oil and Grease - water DUP*

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease	<2.5 mg/L	2.5	2.5		
Oil and Grease (RPD)	0 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>
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*Oil and Grease - water MS*

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	106 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>
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*Oil and Grease - water MSD*

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	110 %			70 - 130	
Oil and Grease (RPD)	3.2 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

<b>MB</b>	<b>LIMS ID: 13072301-MB-01</b>
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*Oil and Grease - water MB*

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

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**LCS** **LIMS ID: 13072301-LCS-01**

**Oil and Grease - water LCS**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Oil and Grease (% Recovery)	98.8 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	07/22/2013 1400				

## Analytical Quality Control Results Report

<b>Batch: 13072401</b>	<b>ICP Metals - water (Diss.)</b>
<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>

*ICP Metals - water (Dissolved) DUP*

*Run: 1*

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Aluminum	<20 ug/L	20	20		
Aluminum (RPD)	16.0 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<5 ug/L	1	5		
Arsenic	2.18 ug/L	0.2	0.5		
Arsenic (RPD)	2.2 %				0 - 20
Barium (RPD)	4.7 %				0 - 20
Barium	14.7 ug/L	0.4	2		
Beryllium (RPD)	40.0 %				0 - 20
Beryllium	<0.1 ug/L	0.04	0.1		
Boron	19.6 ug/L	2	5		
Boron (RPD)	2.7 %				0 - 20
Cadmium (RPD)	200 %				0 - 20
Cadmium	<0.1 ug/L	0.05	0.1		
Calcium	5.90 mg/L	0.03	0.03		
Calcium (RPD)	0.1 %				0 - 20
Chromium (RPD)	0 %				0 - 20
Chromium	<0.5 ug/L	0.05	0.5		
Cobalt	<0.5 ug/L	0.05	0.5		
Cobalt (RPD)	15.6 %				0 - 20
Copper (RPD)	29.1 %				0 - 20
Copper	<0.5 ug/L	0.2	0.5		
Iron	27.7 ug/L	5	20		
Iron (RPD)	9.9 %				0 - 20
Lead (RPD)	15.4 %				0 - 20
Lead	<0.3 ug/L	0.02	0.3		
Magnesium	2.89 mg/L	0.01	0.02		
Magnesium (RPD)	0.4 %				0 - 20
Manganese	210 ug/L	0.07	0.3		
Manganese (RPD)	28 %				0 - 20
Nickel (RPD)	2.4 %				0 - 20
Nickel	0.76 ug/L	0.15	0.5		
Potassium	2.71 mg/L	0.01	0.02		

Potassium (RPD)	0.1 %			0 - 20
Selenium (RPD)	22.4 %			0 - 20
Selenium	<1 ug/L	0.2	1	
Silicon Dioxide	7.64 mg/L	0.01	0.05	
Silicon Dioxide (RPD)	0.9 %			0 - 20
Silver	<0.5 ug/L	0.02	0.5	
Silver (RPD)	0 %			0 - 20
Sodium	7.21 mg/L	0.01	0.02	
Sodium (RPD)	0.3 %			0 - 20
Thallium	<0.5 ug/L	0	0.5	
Thallium (RPD)	0 %			0 - 20
Vanadium (RPD)	2.8 %			0 - 20
Vanadium	<0.5 ug/L	0.3	0.5	
Zinc	3.56 ug/L	0.3	1	
Zinc (RPD)	17.6 %			0 - 20
Hardness	27 mg/L	1	1	
Hardness (RPD)	0 %			0 - 20
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Jul 22 2013 1:25PM			

<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>
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**ICP Metals - water (Dissolved) MS**

**Run: 1**

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	109 %			70 - 130	
Antimony (% Recovery)	98.4 %			70 - 130	
Arsenic (% Recovery)	104 %			70 - 130	
Barium (% Recovery)	96.6 %			70 - 130	
Beryllium (% Recovery)	103 %			70 - 130	
Boron (% Recovery)	104 %			70 - 130	
Cadmium (% Recovery)	99.8 %			70 - 130	
Calcium (% Recovery)	96.4 %			70 - 130	
Chromium (% Recovery)	95.8 %			70 - 130	
Cobalt (% Recovery)	96.7 %			70 - 130	
Copper (% Recovery)	98.6 %			70 - 130	
Iron (% Recovery)	94.7 %			70 - 130	
Lead (% Recovery)	97.4 %			70 - 130	
Magnesium (% Recovery)	97.1 %			70 - 130	
Manganese (% Recovery)	84 %			70 - 130	

Nickel (% Recovery)	96 %	70 - 130
Potassium (% Recovery)	97.7 %	70 - 130
Selenium (% Recovery)	107 %	70 - 130
Silver (% Recovery)	83.6 %	70 - 130
Sodium (% Recovery)	85.3 %	70 - 130
Thallium (% Recovery)	98.2 %	70 - 130
Vanadium (% Recovery)	95.7 %	70 - 130
Zinc (% Recovery)	103 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	Jul 22 2013 1:31PM	

<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>
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**ICP Metals - water (Dissolved) MSD**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Aluminum (% Recovery)	108 %			70 - 130	
Aluminum (RPD)	1.0 %				0 - 20
Antimony (% Recovery)	101 %			70 - 130	
Antimony (RPD)	2.2 %				0 - 20
Arsenic (% Recovery)	103 %			70 - 130	
Arsenic (RPD)	0.4 %				0 - 20
Barium (% Recovery)	96.8 %			70 - 130	
Barium (RPD)	0.2 %				0 - 20
Beryllium (% Recovery)	101 %			70 - 130	
Beryllium (RPD)	1.6 %				0 - 20
Boron (% Recovery)	105 %			70 - 130	
Boron (RPD)	0.6 %				0 - 20
Cadmium (% Recovery)	101 %			70 - 130	
Cadmium (RPD)	1.6 %				0 - 20
Calcium (% Recovery)	93.0 %			70 - 130	
Calcium (RPD)	2.2 %				0 - 20
Chromium (% Recovery)	98.7 %			70 - 130	
Chromium (RPD)	3.0 %				0 - 20
Cobalt (% Recovery)	98.1 %			70 - 130	
Cobalt (RPD)	1.4 %				0 - 20
Copper (% Recovery)	99.7 %			70 - 130	
Copper (RPD)	1.1 %				0 - 20
Iron (% Recovery)	96.3 %			70 - 130	
Iron (RPD)	1.5 %				0 - 20

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Lead (% Recovery)	97.6 %	70 - 130
Lead (RPD)	0.1 %	0 - 20
Magnesium (% Recovery)	100 %	70 - 130
Magnesium (RPD)	2.6 %	0 - 20
Manganese (% Recovery)	96 %	70 - 130
Manganese (RPD)	2.1 %	0 - 20
Nickel (% Recovery)	98 %	70 - 130
Nickel (RPD)	1.8 %	0 - 20
Potassium (% Recovery)	95.1 %	70 - 130
Potassium (RPD)	2.1 %	0 - 20
Selenium (% Recovery)	108 %	70 - 130
Selenium (RPD)	0.6 %	0 - 20
Silver (% Recovery)	84.4 %	70 - 130
Silver (RPD)	1.0 %	0 - 20
Sodium (% Recovery)	89.7 %	70 - 130
Sodium (RPD)	2.8 %	0 - 20
Thallium (% Recovery)	97.4 %	70 - 130
Thallium (RPD)	0.9 %	0 - 20
Vanadium (% Recovery)	97.7 %	70 - 130
Vanadium (RPD)	2.1 %	0 - 20
Zinc (% Recovery)	105 %	70 - 130
Zinc (RPD)	1.4 %	0 - 20
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	Jul 22 2013 1:38PM	

## Analytical Quality Control Results Report

<b>Batch: 13072402</b>	<b>ICP Metals - water (total)</b>
<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>

*ICP Metals - water (Total) DUP*

*Run: 1*

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	168 ug/L	20	20		
Aluminum (RPD)	4.8 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<10 ug/L	5	10		
Arsenic (RPD)	3.4 %				0 - 20
Arsenic	3.84 ug/L	0.5	1		
Barium	42.7 ug/L	2	10		
Barium (RPD)	3.0 %				0 - 20
Beryllium (RPD)	54.5 %				0 - 20
Beryllium	<0.5 ug/L	0.1	0.5		
Boron	<25 ug/L	5	25		
Boron (RPD)	2.0 %				0 - 20
Cadmium (RPD)	50.0 %				0 - 20
Cadmium	<1 ug/L	0.3	1		
Calcium	6.19 mg/L	0.04	0.04		
Calcium (RPD)	0.6 %				0 - 20
Chromium (RPD)	31.6 %				0 - 20
Chromium	<1 ug/L	0.3	1		
Cobalt	<1 ug/L	0.5	1		
Cobalt (RPD)	21.5 %				0 - 20
Copper (RPD)	5.5 %				0 - 20
Copper	<1 ug/L	0.5	1		
Iron	1080 ug/L	10	20		
Iron (RPD)	2.9 %				0 - 20
Lead (RPD)	6.0 %				0 - 20
Lead	<1 ug/L	0.1	1		
Magnesium	2.97 mg/L	0.1	0.1		
Magnesium (RPD)	0.5 %				0 - 20
Nickel	<2.5 ug/L	0.5	2.5		
Nickel (RPD)	3.1 %				0 - 20
Potassium	2.85 mg/L	0.05	1		
Potassium (RPD)	0.2 %				0 - 20
Selenium (RPD)	0.9 %				0 - 20



Selenium	<2 ug/L	0.5	2	
Silver	<5 ug/L	1	5	
Silver (RPD)	0 %			0 - 20
Sodium (RPD)	0.3 %			0 - 20
Sodium	7.56 mg/L	0.02	0.04	
Thallium (RPD)	0 %			0 - 20
Thallium	<2.5 ug/L	0.05	2.5	
Vanadium (RPD)	0.3 %			0 - 20
Vanadium	<2.5 ug/L	1	2.5	
Zinc	3.04 ug/L	2	3	
Zinc (RPD)	17.0 %			0 - 20
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Jul 22 2013 5:43PM			

<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>
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**ICP Metals - water (Total) MS**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Aluminum (% Recovery)	120 %			70 - 130	
Antimony (% Recovery)	96.3 %			70 - 130	
Arsenic (% Recovery)	97.9 %			70 - 130	
Barium (% Recovery)	101 %			70 - 130	
Beryllium (% Recovery)	96.5 %			70 - 130	
Boron (% Recovery)	98.4 %			70 - 130	
Cadmium (% Recovery)	98.2 %			70 - 130	
Calcium (% Recovery)	102 %			70 - 130	
Chromium (% Recovery)	99.1 %			70 - 130	
Cobalt (% Recovery)	99.7 %			70 - 130	
Copper (% Recovery)	99.1 %			70 - 130	
Iron (% Recovery)	96.5 %			70 - 130	
Lead (% Recovery)	102 %			70 - 130	
Magnesium (% Recovery)	102 %			70 - 130	
Manganese (% Recovery)	23 %			70 - 130	
Nickel (% Recovery)	98 %			70 - 130	
Potassium (% Recovery)	103 %			70 - 130	
Selenium (% Recovery)	97.4 %			70 - 130	
Silver (% Recovery)	96.8 %			70 - 130	
Sodium (% Recovery)	98.6 %			70 - 130	
Thallium (% Recovery)	103 %			70 - 130	

Vanadium (% Recovery)	99.2 %	70 - 130
Zinc (% Recovery)	97.6 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	Jul 22 2013 5:49PM	

<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>
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**ICP Metals - water (Total) MSD**

**Run: 1**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Aluminum (% Recovery)	118 %			70 - 130	
Aluminum (RPD)	0.9 %				0 - 20
Antimony (% Recovery)	96.7 %			70 - 130	
Antimony (RPD)	0.3 %				0 - 20
Arsenic (% Recovery)	97.1 %			70 - 130	
Arsenic (RPD)	0.7 %				0 - 20
Barium (% Recovery)	100 %			70 - 130	
Barium (RPD)	0.6 %				0 - 20
Beryllium (% Recovery)	96.8 %			70 - 130	
Beryllium (RPD)	0.3 %				0 - 20
Boron (% Recovery)	98.9 %			70 - 130	
Boron (RPD)	0.5 %				0 - 20
Cadmium (% Recovery)	99.1 %			70 - 130	
Cadmium (RPD)	0.9 %				0 - 20
Calcium (% Recovery)	98.9 %			70 - 130	
Calcium (RPD)	2.0 %				0 - 20
Chromium (% Recovery)	99.3 %			70 - 130	
Chromium (RPD)	0.2 %				0 - 20
Cobalt (% Recovery)	100 %			70 - 130	
Cobalt (RPD)	0.8 %				0 - 20
Copper (% Recovery)	99.8 %			70 - 130	
Copper (RPD)	0.7 %				0 - 20
Iron (% Recovery)	106 %			70 - 130	
Iron (RPD)	1.4 %				0 - 20
Lead (% Recovery)	102 %			70 - 130	
Lead (RPD)	0.1 %				0 - 20
Magnesium (% Recovery)	102 %			70 - 130	
Magnesium (RPD)	0.5 %				0 - 20
Manganese (% Recovery)	57 %			70 - 130	
Manganese (RPD)	0.9 %				0 - 20

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Nickel (% Recovery)	98 %	70 - 130
Nickel (RPD)	0.2 %	0 - 20
Potassium (% Recovery)	100 %	70 - 130
Potassium (RPD)	2.3 %	0 - 20
Selenium (% Recovery)	97.2 %	70 - 130
Selenium (RPD)	0.2 %	0 - 20
Silver (% Recovery)	96.6 %	70 - 130
Silver (RPD)	0.2 %	0 - 20
Sodium (% Recovery)	100 %	70 - 130
Sodium (RPD)	0.8 %	0 - 20
Thallium (% Recovery)	103 %	70 - 130
Thallium (RPD)	0.3 %	0 - 20
Vanadium (% Recovery)	100 %	70 - 130
Vanadium (RPD)	1.1 %	0 - 20
Zinc (% Recovery)	97.5 %	70 - 130
Zinc (RPD)	0.1 %	0 - 20
Dilution Factor	1	
Analysis Date/Time	Jul 22 2013 5:56PM	
Analyzed By	Robert Graddy	

<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>
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**ICP Metals - water (Total) DUP**

**Run: 2**

<b>Parameter</b>	<b>Result</b>	<b>DL</b>	<b>RL</b>	<b>Accuracy Control</b>	<b>Precision Control</b>
Arsenic	<10 ug/L	5	10		
Manganese	1000 ug/L	2	10		
Manganese (RPD)	2.5 %				0 - 20
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Jul 24 2013 6:26AM				

## Analytical Quality Control Results Report

<b>Batch: 13072304</b>	<b>Turbidity - water</b>
<b>WS-003</b>	<b>LIMS ID: 2013-2564</b>

*Turbidity - water DUP*

*Run: 1*

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Turbidity (RPD)	17.2 %				0 - 20
Turbidity	26.4 NTU	0.02	0.02		
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	7/18/2013 15:32				