



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

Client Report For: Exxon Oil Spill 2013 1039-1048, 1065
Attention:
Client Address:

,

Report Date: April 11, 2013
LAB ID: AR13APR10-01
Comment:

Approved By: _____

Date: April 11, 2013

Client: Special Samples

Client Sample ID: WS-003

Lab ID: 2013-1039

Collection Date: 4/9/2013

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	99.4	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	94.1	70-130			%
<i>Toluene-d8 (% Recovery)</i>	91.0	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	1.04	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 2:49 PM			

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1040

Collection Date: 4/9/2013

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	95.3	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	88.3	70-130			%
<i>Toluene-d8 (% Recovery)</i>	88.0	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	97.8	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	0.599	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	0.523	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	1.06	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 3:14 PM			

Client: Special Samples **Client Sample ID:** WS-BKG-001
Lab ID: 2013-1041 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	100	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	92.9	70-130			%
Toluene-d8 (% Recovery)	93.4	70-130			%
4-Bromofluorobenzene (% Recovery)	105	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	1.08	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 3:40 PM			

Client: Special Samples **Client Sample ID:** WS-005
Lab ID: 2013-1042 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	95.2	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	90.9	70-130			%
<i>Toluene-d8 (% Recovery)</i>	90.4	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	99.2	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	1.05	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 4:05 PM			

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1043

Collection Date: 4/9/2013

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	100	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	92.2	70-130			%
Toluene-d8 (% Recovery)	90.2	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	1.06	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 4:30 PM			

Client: Special Samples **Client Sample ID:** WS-007
Lab ID: 2013-1044 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	100	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	94.9	70-130			%
Toluene-d8 (% Recovery)	90.6	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	0.578	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 6:35 PM			

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1045

Collection Date: 4/9/2013

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	96.9	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	91.6	70-130			%
<i>Toluene-d8 (% Recovery)</i>	89.7	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	96.9	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	1.05	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 7:01 PM			

Client: Special Samples

Client Sample ID: WS-008

Lab ID: 2013-1046

Collection Date: 4/9/2013

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	101	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	96.3	70-130			%
<i>Toluene-d8 (% Recovery)</i>	92.2	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	99.7	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	1.11	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	1.80	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	0.659	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	1.84	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	0.879	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	2.60	1.2	1.2	ug/L
o-Xylene	2.12	0.5	0.5	ug/L
Styrene	1.09	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	0.38	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 20:42			

Client: Special Samples **Client Sample ID:** WS-004
Lab ID: 2013-1047 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	97.4	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	91.2	70-130			%
<i>Toluene-d8 (% Recovery)</i>	87.9	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	96.6	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	0.501	0.5	0.5	ug/L
Styrene	1.05	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 19:26			

Client: Special Samples **Client Sample ID:** Volatile Trip Blank
Lab ID: 2013-1065 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13041109 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	104	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	94.8	70-130			%
Toluene-d8 (% Recovery)	91.3	70-130			%
4-Bromofluorobenzene (% Recovery)	94.3	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	1.07	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	Jeff Ruehr			
Analysis Date/Time	4/10/2013 10:38			

Client: Special Samples **Client Sample ID:** WS-003
Lab ID: 2013-1039 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	38.5	50-110			%
Nitrobenzene-d5 (% Recovery)	80.5	50-110			%
2-Fluorobiphenyl (% Recovery)	74.2	50-110			%
2,4,6-Tribromophenol (% Recovery)	70.9	40-110			%
Terphenyl-d14 (% Recovery)	78.1	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	4/10/2013 3:59 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1040

Collection Date: 4/9/2013

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	3.3	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	41.1	50-110			%
Nitrobenzene-d5 (% Recovery)	84.2	50-110			%
2-Fluorobiphenyl (% Recovery)	73.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	72.4	40-110			%
Terphenyl-d14 (% Recovery)	73.0	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	4/10/2013 4:28 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples	Client Sample ID: WS-BKG-001
Lab ID: 2013-1041	Collection Date: 4/9/2013
Matrix: Water	

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	3.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	43.1	50-110			%
Nitrobenzene-d5 (% Recovery)	83.1	50-110			%
2-Fluorobiphenyl (% Recovery)	70.8	50-110			%
2,4,6-Tribromophenol (% Recovery)	71.0	40-110			%
Terphenyl-d14 (% Recovery)	77.6	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	4/10/2013 4:58 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples

Client Sample ID: WS-005

Lab ID: 2013-1042

Collection Date: 4/9/2013

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	3.4	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	44.7	50-110			%
Nitrobenzene-d5 (% Recovery)	82.1	50-110			%
2-Fluorobiphenyl (% Recovery)	75.9	50-110			%
2,4,6-Tribromophenol (% Recovery)	68.7	40-110			%
Terphenyl-d14 (% Recovery)	71.1	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	4/10/2013 3:30 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1043

Collection Date: 4/9/2013

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	3.1	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	44.0	50-110			%
Nitrobenzene-d5 (% Recovery)	77.3	50-110			%
2-Fluorobiphenyl (% Recovery)	72.1	50-110			%
2,4,6-Tribromophenol (% Recovery)	71.6	40-110			%
Terphenyl-d14 (% Recovery)	74.5	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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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	4/10/2013 3:01 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples

Client Sample ID: WS-007

Lab ID: 2013-1044

Collection Date: 4/9/2013

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	46.5	50-110			%
Nitrobenzene-d5 (% Recovery)	75.6	50-110			%
2-Fluorobiphenyl (% Recovery)	71.0	50-110			%
2,4,6-Tribromophenol (% Recovery)	71.1	40-110			%
Terphenyl-d14 (% Recovery)	70.4	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	0.113	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	0.224	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	4/10/2013 5:56 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1045

Collection Date: 4/9/2013

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	2.7	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	45.5	50-110			%
Nitrobenzene-d5 (% Recovery)	81.0	50-110			%
2-Fluorobiphenyl (% Recovery)	74.8	50-110			%
2,4,6-Tribromophenol (% Recovery)	74.6	40-110			%
Terphenyl-d14 (% Recovery)	77.2	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	4/10/2013 5:27 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples

Client Sample ID: WS-008

Lab ID: 2013-1046

Collection Date: 4/9/2013

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	10	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	5.1	50-110			%
Nitrobenzene-d5 (% Recovery)	6.7	50-110			%
2-Fluorobiphenyl (% Recovery)	6.9	50-110			%
2,4,6-Tribromophenol (% Recovery)	6.1	40-110			%
Terphenyl-d14 (% Recovery)	7.8	50-110			%
Methyl Methanesulfonate	<2	2	100		ug/L
Ethyl methanesulfonate	<2	2	100		ug/L
Phenol	<2	2	100		ug/L
Aniline	<2	2	100		ug/L
Bis(2-chloroethyl)ether	<2	2	100		ug/L
2-Chlorophenol	<2	2	100		ug/L
1,3-Dichlorobenzene	<1.2	1.2	60		ug/L
1,4-Dichlorobenzene	<1.2	1.2	60		ug/L
Benzyl alcohol	<1.6	1.6	80		ug/L
1,2-Dichlorobenzene	<1.2	1.2	60		ug/L
2-Methylphenol	<1	1	50		ug/L
Acetophenone	<1	1	50		ug/L
4-Methylphenol	<1	1	50		ug/L
N-Nitrosodi-n-propylamine	<2	2	100		ug/L
Hexachloroethane	<2	2	100		ug/L
Nitrobenzene	<2	2	100		ug/L
N-Nitrosopiperidine	<2	2	100		ug/L
Isophorone	<1	1	50		ug/L

2-Nitrophenol	<3	3	150	ug/L
2,4-Dimethylphenol	<1	1	50	ug/L
Bis(2-chloroethoxy)methane	<2	2	100	ug/L
2,4-Dichlorophenol	<2	2	100	ug/L
1,2,4-Trichlorobenzene	<1.2	1.2	60	ug/L
Naphthalene	<0.8	0.8	40	ug/L
4-Chloroaniline	<1	1	50	ug/L
2,6-Dichlorophenol	<2	2	100	ug/L
Hexachlorobutadiene	<2	2	100	ug/L
N-Nitrosodibutylamine	<2	2	100	ug/L
4-Chloro-3-methylphenol	<1.6	1.6	80	ug/L
2-Methylnaphthalene	<1	1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<1	1	50	ug/L
Hexachlorocyclopentadiene	<1.6	1.6	80	ug/L
2,4,6-Trichlorophenol	<2	2	100	ug/L
2,4,5-Trichlorophenol	<2	2	100	ug/L
2-Chloronaphthalene	<1	1	50	ug/L
1-Chloronaphthalene	<1	1	50	ug/L
2-Nitroaniline	<2	2	100	ug/L
Dimethyl phthalate	<2	2	100	ug/L
2,6-Dinitrotoluene	<2	2	100	ug/L
Acenaphthylene	<0.8	0.8	40	ug/L
3-Nitroaniline	<2	2	100	ug/L
Acenaphthene	<1	1	50	ug/L
2,4-Dinitrophenol	<40	40	2000	ug/L
Pentachlorobenzene	<1.2	1.2	60	ug/L
4-Nitrophenol	<20	20	1000	ug/L
Dibenzofuran	<1	1	50	ug/L
2,4-Dinitrotoluene	<2	2	100	ug/L
2,3,4,6-Tetrachlorophenol	<6	6	300	ug/L
Diethyl phthalate	<2	2	100	ug/L
Fluorene	<1	1	50	ug/L
4-Chlorophenyl phenyl ether	<1	1	50	ug/L
4-Nitroaniline	<2	2	100	ug/L
4,6-Dinitro-2-methylphenol	<60	60	3000	ug/L
Diphenylamine	<1	1	50	ug/L
Azobenzene	<0.8	0.8	40	ug/L
4-Bromophenyl phenyl ether	<2	2	100	ug/L
Hexachlorobenzene	<1.6	1.6	80	ug/L
Pentachlorophenol	<10	10	500	ug/L

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Pentachloronitrobenzene	<2	2	100	ug/L
Pronamide	<2	2	100	ug/L
Phenanthrene	<0.8	0.8	40	ug/L
Anthracene	<0.8	0.8	40	ug/L
Carbazole	<1	1	50	ug/L
Di-n-butyl phthalate	<2	2	100	ug/L
Fluoranthene	<0.8	0.8	40	ug/L
Pyrene	<0.8	0.8	40	ug/L
Dimethylaminoazobenzene	<2	2	100	ug/L
Butyl benzyl phthalate	<3	3	150	ug/L
Benzo (a) anthracene	<1	1	50	ug/L
Chrysene	<1	1	50	ug/L
Bis(2-ethylhexyl)phthalate	<3	3	150	ug/L
Di-n-octyl phthalate	<3	3	150	ug/L
Benzo (b) fluoranthene	<1.6	1.6	80	ug/L
7,12-Dimethylbenz (a) anthracene	<2	2	100	ug/L
Benzo (k) fluoranthene	<1.6	1.6	80	ug/L
Benzo (a) pyrene	<1.6	1.6	80	ug/L
3-Methylcholanthrene	<2	2	100	ug/L
Indeno (1,2,3-cd) pyrene	<2	2	100	ug/L
Dibenzo (a,h) anthracene	<1.6	1.6	80	ug/L
Benzo (g,h,i) perylene	<1.6	1.6	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	10			
Analyzed By	Ed Harris			
Analysis Date/Time	4/10/2013 8:52 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1047

Collection Date: 4/9/2013

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13041110 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Oil and Grease	2.7	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13041106 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	54.1	50-110			%
Nitrobenzene-d5 (% Recovery)	75.8	50-110			%
2-Fluorobiphenyl (% Recovery)	63.4	50-110			%
2,4,6-Tribromophenol (% Recovery)	78.1	40-110			%
Terphenyl-d14 (% Recovery)	63.6	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	0.175	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	0.120	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	0.519	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	4/10/2013 6:25 PM			
Prep By	Ed Harris			
Prep Date/Time	4/10/2013 0800			

Client: Special Samples

Client Sample ID: WS-003

Lab ID: 2013-1039

Collection Date: 4/9/2013

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13041111 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	41.1	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	<0.5	0.5	0.2		ug/L
Barium	14.1	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	12.3	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	2.86	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	0.62	0.5	0.2		ug/L
Iron	152	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.38	0.02	0.01		mg/L
Manganese	82.8	0.3	0.07		ug/L
Nickel	0.67	0.5	0.15		ug/L
Potassium	1.65	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	2.06	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.11	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	1.77	1	0.3		ug/L
Hardness	12.8	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 11 2013 9:32AM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13041105 Run: 1

Result Reporting MDL Qual Unit

		<u>Limit</u>		
Aluminum	304	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	18.0	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	10.4	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	628	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.45	0.1	0.1	mg/L
Manganese	144	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.76	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	5.19	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	Apr 10 2013 8:05PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1040

Collection Date: 4/9/2013

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13041111 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	42.4	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	<0.5	0.5	0.2		ug/L
Barium	12.6	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	10.3	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	11.1	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	0.55	0.5	0.2		ug/L
Iron	155	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.30	0.02	0.01		mg/L
Manganese	54.3	0.3	0.07		ug/L
Nickel	0.64	0.5	0.15		ug/L
Potassium	1.50	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	2.57	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	4.39	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	2.10	1	0.3		ug/L
Hardness	33.0	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 10 2013 1:56PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13041105 Run: 1

Result Reporting MDL Qual Unit

Arkansas Department of Environmental Quality
 5301 Northshore Drive
 North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
 Ruehr@adeq.state.ar.us
 501-682-0955

		<u>Limit</u>		
Aluminum	209	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	16.2	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	9.16	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	539	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.37	0.1	0.1	mg/L
Manganese	118	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.60	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	4.48	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	Apr 10 2013 8:11PM			
Prep By				
Prep Date/Time				

Client: Special Samples	Client Sample ID: WS-BKG-001
Lab ID: 2013-1041	Collection Date: 4/9/2013
Matrix: Water	

Analyses

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13041111 Run: 1</i>			
	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	<0.5	0.5	0.2		ug/L
Barium	34.3	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	8.35	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.17	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	1.01	0.5	0.05		ug/L
Copper	0.68	0.5	0.2		ug/L
Iron	76.4	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.84	0.02	0.01		mg/L
Manganese	222	0.3	0.07		ug/L
Nickel	2.15	0.5	0.15		ug/L
Potassium	0.730	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	7.49	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.51	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	57.8	1	0.3		ug/L
Hardness	23.0	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 10 2013 2:03PM				

<i>Total Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13041105 Run: 1</i>			
	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>

		<u>Limit</u>		
Aluminum	361	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	43.5	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	8.40	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	1.2	1	0.5	ug/L
Copper	1.79	1	0.5	ug/L
Iron	380	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.96	0.1	0.1	mg/L
Manganese	239	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	<1	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	5.74	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	58.6	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Apr 10 2013 8:17PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-005

Lab ID: 2013-1042

Collection Date: 4/9/2013

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13041111 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	71.0	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.57	0.5	0.2		ug/L
Barium	10.5	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	11.6	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.25	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	0.73	0.5	0.2		ug/L
Iron	258	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.42	0.02	0.01		mg/L
Manganese	10.4	0.3	0.07		ug/L
Nickel	0.68	0.5	0.15		ug/L
Potassium	1.64	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.39	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.04	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	4.01	1	0.3		ug/L
Hardness	13.9	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 11 2013 9:39AM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13041105 Run: 1

Result Reporting MDL Qual Unit

		<u>Limit</u>		
Aluminum	211	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	17.1	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	4.84	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.25	1	0.5	ug/L
Iron	897	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.48	0.1	0.1	mg/L
Manganese	163	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.78	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	5.13	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	Apr 10 2013 8:36PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1043

Collection Date: 4/9/2013

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13041111 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	108	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.66	0.5	0.2		ug/L
Barium	12.7	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	11.3	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.50	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	0.96	0.5	0.2		ug/L
Iron	340	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.43	0.02	0.01		mg/L
Manganese	113	0.3	0.07		ug/L
Nickel	1.16	0.5	0.15		ug/L
Potassium	1.56	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	2.85	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	4.72	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	5.73	1	0.3		ug/L
Hardness	14.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 11 2013 9:45AM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13041105 Run: 1

Result Reporting MDL Qual Unit

Arkansas Department of Environmental Quality
 5301 Northshore Drive
 North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
 Ruehr@adeq.state.ar.us
 501-682-0955

		<u>Limit</u>		
Aluminum	854	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.20	1	0.5	ug/L
Barium	19.3	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	4.85	0.04	0.04	mg/L
Chromium	1.62	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.72	1	0.5	ug/L
Iron	1250	20	10.0	ug/L
Lead	1.42	1	0.1	ug/L
Magnesium	1.55	0.1	0.1	mg/L
Manganese	156	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.96	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	4.89	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	9.04	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Apr 10 2013 8:43PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-007

Lab ID: 2013-1044

Collection Date: 4/9/2013

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13041111 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	162	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.98	0.5	0.2		ug/L
Barium	14.6	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	9.56	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	11.2	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	1.40	0.5	0.2		ug/L
Iron	520	20	5.0		ug/L
Lead	0.36	0.3	0.02		ug/L
Magnesium	1.38	0.02	0.01		mg/L
Manganese	75.2	0.3	0.07		ug/L
Nickel	1.48	0.5	0.15		ug/L
Potassium	1.38	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	4.17	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	3.62	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	0.65	0.5	0.3		ug/L
Zinc	22.8	1	0.3		ug/L
Hardness	33.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 10 2013 2:53PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13041105 Run: 1

Result Reporting MDL Qual Unit

		<u>Limit</u>		
Aluminum	1400	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.40	1	0.5	ug/L
Barium	23.4	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	5.72	0.04	0.04	mg/L
Chromium	1.40	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	2.07	1	0.5	ug/L
Iron	1820	20	10.0	ug/L
Lead	1.82	1	0.1	ug/L
Magnesium	1.54	0.1	0.1	mg/L
Manganese	95.6	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.60	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	3.68	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	8.58	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Apr 10 2013 9:08PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1045

Collection Date: 4/9/2013

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13041111 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	41.7	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.98	0.5	0.2		ug/L
Barium	12.0	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	12.8	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	4.63	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	0.69	0.5	0.2		ug/L
Iron	307	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.5	0.02	0.01		mg/L
Manganese	138	0.3	0.07		ug/L
Nickel	0.71	0.5	0.15		ug/L
Potassium	1.53	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.92	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.93	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	4.92	1	0.3		ug/L
Hardness	17.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 11 2013 9:58AM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13041105 Run: 1

Result Reporting MDL Qual Unit

		<u>Limit</u>		
Aluminum	293	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.52	1	0.5	ug/L
Barium	16.2	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	5.89	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.05	1	0.5	ug/L
Iron	1170	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.58	0.1	0.1	mg/L
Manganese	242	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.72	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	5.94	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	3.04	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Apr 10 2013 9:14PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-008

Lab ID: 2013-1046

Collection Date: 4/9/2013

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13041111 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	91.4	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.63	0.5	0.2		ug/L
Barium	17.5	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	9.58	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	11.4	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	0.69	0.5	0.2		ug/L
Iron	272	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.96	0.02	0.01		mg/L
Manganese	313	0.3	0.07		ug/L
Nickel	2.25	0.5	0.15		ug/L
Potassium	1.08	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.46	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	4.14	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	10.7	1	0.3		ug/L
Hardness	36.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 10 2013 3:06PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13041105 Run: 1

Result Reporting MDL Qual Unit

		<u>Limit</u>		
Aluminum	1950	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.12	1	0.5	ug/L
Barium	37.1	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	6.06	0.04	0.04	mg/L
Chromium	2.94	1	0.3	ug/L
Cobalt	1.96	1	0.5	ug/L
Copper	1.98	1	0.5	ug/L
Iron	1850	20	10.0	ug/L
Lead	2.62	1	0.1	ug/L
Magnesium	2.20	0.1	0.1	mg/L
Manganese	316	1	0.2	ug/L
Nickel	3.50	2.5	0.5	ug/L
Potassium	1.59	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	4.13	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	2.95	2.5	1.0	ug/L
Zinc	14.0	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Apr 10 2013 9:21PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1047

Collection Date: 4/9/2013

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13041111 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	160	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.95	0.5	0.2		ug/L
Barium	14.0	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	8.44	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	10.4	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	1.44	0.5	0.2		ug/L
Iron	516	20	5.0		ug/L
Lead	0.37	0.3	0.02		ug/L
Magnesium	1.36	0.02	0.01		mg/L
Manganese	81.5	0.3	0.07		ug/L
Nickel	1.46	0.5	0.15		ug/L
Potassium	1.43	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	4.22	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	3.63	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	0.57	0.5	0.3		ug/L
Zinc	8.1	1	0.3		ug/L
Hardness	31.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 10 2013 3:13PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13041105 Run: 1

Result Reporting MDL Qual Unit

Arkansas Department of Environmental Quality
 5301 Northshore Drive
 North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
 Ruehr@adeq.state.ar.us
 501-682-0955

		<u>Limit</u>		
Aluminum	691	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.83	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	4.28	0.04	0.04	mg/L
Chromium	1.02	1	0.3	ug/L
Cobalt	1.22	1	0.5	ug/L
Copper	3.69	1	0.5	ug/L
Iron	2040	20	10.0	ug/L
Lead	6.94	1	0.1	ug/L
Magnesium	1.71	0.1	0.1	mg/L
Manganese	284	1	0.2	ug/L
Nickel	2.79	2.5	0.5	ug/L
Potassium	2.11	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	3.82	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	43	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Apr 10 2013 9:27PM			
Prep By				
Prep Date/Time				

Client: Special Samples	Client Sample ID: Metals Field Blank
Lab ID: 2013-1048	Collection Date: 4/9/2013
Matrix: Water	

Analyses

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13041111 Run: 1</i>			
	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
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	2.38	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	<0.3	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	<0.02	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	<0.02	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	<1	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Apr 10 2013 3:19PM				

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Laboratory Contact: Jeff Ruehr
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Client: Special Samples **Client Sample ID:** WS-003
Lab ID: 2013-1039 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Turbidity	EPA 180.1	Batch: 13041104	Run: 1		
	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
		<u>Limit</u>			
Turbidity	7.77	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 13:45				

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

Client: Special Samples **Client Sample ID:** WS-002
Lab ID: 2013-1040 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13041104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	5.98	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 13:46				

Arkansas Department of Environmental Quality
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501-682-0955

Client: Special Samples

Client Sample ID: WS-BKG-001

Lab ID: 2013-1041

Collection Date: 4/9/2013

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13041104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	3.46	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 13:48				

Arkansas Department of Environmental Quality
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North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
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Client: Special Samples **Client Sample ID:** WS-005
Lab ID: 2013-1042 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Turbidity	EPA 180.1	Batch: 13041104	Run: 1		
	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
		<u>Limit</u>			
Turbidity	12.5	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 13:51				

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

Client: Special Samples **Client Sample ID:** WS-001
Lab ID: 2013-1043 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Turbidity	EPA 180.1	Batch: 13041104	Run: 1		
	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
		<u>Limit</u>			
Turbidity	40.6	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 13:53				

Arkansas Department of Environmental Quality
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North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

Client: Special Samples **Client Sample ID:** WS-007
Lab ID: 2013-1044 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13041104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	35.5	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 13:56				

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
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501-682-0955

Client: Special Samples **Client Sample ID:** WS-006
Lab ID: 2013-1045 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Turbidity	EPA 180.1	Batch: 13041104	Run: 1		
	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
		<u>Limit</u>			
Turbidity	8.11	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 13:59				

Arkansas Department of Environmental Quality
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North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

Client: Special Samples **Client Sample ID:** WS-008
Lab ID: 2013-1046 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13041104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	96.7	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 14:01				

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

Client: Special Samples **Client Sample ID:** WS-004
Lab ID: 2013-1047 **Collection Date:** 4/9/2013
Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13041104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	75.2	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	4/10/2013 14:03				

Analytical Quality Control Results Report

Batch: 13041106	Semi-VOA water (Prep)
WS-001	LIMS ID: 2013-1043

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	4/10/2013 0800				
2-Fluorophenol (% Recovery)	47.9 %			75 - 125	
Nitrobenzene-d5 (% Recovery)	82.8 %			75 - 125	
2-Fluorobiphenyl (% Recovery)	70.4 %			50 - 110	
2,4,6-Tribromophenol (% Recovery)	70.3 %			40 - 110	
Terphenyl-d14 (% Recovery)	77.8 %			75 - 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 (RPD)	10.1 %				0 - 40
Phenol	<0.2 ug/L	0.2	0.2		
Aniline	<0.2 ug/L	0.2	0.2		
Aniline (RPD)	0 %				0 - 40
Bis(2-chloroethyl)ether (RPD)	0 %				0 - 40
Bis(2-chloroethyl)ether	<0.24 ug/L	0.2	0.24		
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
2-Chlorophenol (RPD)	0 %				0 - 40
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
Benzyl alcohol (RPD)	200 %				0 - 40
Benzyl alcohol	<0.16 ug/L	0.16	0.16		
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,2-Dichlorobenzene (RPD)	0 %				0 - 40
2-Methylphenol (RPD)	0 %				0 - 40
2-Methylphenol	<0.1 ug/L	0.1	0.1		

Acetophenone	<0.1 ug/L	0.1	0.1	
Acetophenone (RPD)	0 %			0 - 40
4-Methylphenol (RPD)	28.5 %			0 - 40
4-Methylphenol	<0.1 ug/L	0.1	0.1	
N-Nitrosodi-n-propylamine	<0.2 ug/L	0.2	0.2	
N-Nitrosodi-n-propylamine (RPD)	0 %			0 - 40
Hexachloroethane (RPD)	0 %			0 - 40
Hexachloroethane	<0.2 ug/L	0.2	0.2	
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	<0.2 ug/L	0.2	0.2	
Hexachlorobutadiene (RPD)	0 %			0 - 40
N-Nitrosodibutylamine	<0.24 ug/L	0.2	0.24	
N-Nitrosodibutylamine (RPD)	0 %			0 - 40
4-Chloro-3-methylphenol (RPD)	40.5 %			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 (RPD)	0 %			0 - 40
1,2,4,5-Tetrachlorobenzene	<0.1 ug/L	0.1	0.1	

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)	0 %			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)	0 %			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 (RPD)	0 %			0 - 40
Diphenylamine	<0.1 ug/L	0.1	0.1	
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	<0.16 ug/L	0.16	0.16	
Hexachlorobenzene (RPD)	0 %			0 - 40
Pentachlorophenol (RPD)	0 %			0 - 40
Pentachlorophenol	<1 ug/L	1	1	
Pentachloronitrobenzene	<0.2 ug/L	0.2	0.2	
Pentachloronitrobenzene (RPD)	0 %			0 - 40
Pronamide (RPD)	0 %			0 - 40
Pronamide	<0.2 ug/L	0.2	0.2	
Phenanthrene	<0.08 ug/L	0.08	0.08	
Phenanthrene (RPD)	0 %			0 - 40
Anthracene (RPD)	0 %			0 - 40
Anthracene	<0.08 ug/L	0.08	0.08	
Carbazole	<0.1 ug/L	0.1	0.1	
Carbazole (RPD)	0 %			0 - 40
Di-n-butyl phthalate (RPD)	21.2 %			0 - 40
Di-n-butyl phthalate	<0.2 ug/L	0.2	0.2	
Fluoranthene	<0.08 ug/L	0.08	0.08	
Fluoranthene (RPD)	0 %			0 - 40
Pyrene (RPD)	0 %			0 - 40
Pyrene	<0.08 ug/L	0.08	0.08	
Dimethylaminoazobenzene (RPD)	0 %			0 - 40
Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2	
Butyl benzyl phthalate (RPD)	0 %			0 - 40
Butyl benzyl phthalate	<0.4 ug/L	0.4	0.4	
Benzo (a) anthracene	<0.1 ug/L	0.1	0.1	
Benzo (a) anthracene (RPD)	0 %			0 - 40
Chrysene (RPD)	0 %			0 - 40
Chrysene	<0.1 ug/L	0.1	0.1	
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3	
Bis(2-ethylhexyl)phthalate (RPD)	1.5 %			0 - 40

Di-n-octyl phthalate (RPD)	1.3 %			0 - 40
Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3	
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16	
Benzo (b) fluoranthene (RPD)	0 %			0 - 40
7,12-Dimethylbenz (a) anthracene (RPD)	0 %			0 - 40
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 (k) fluoranthene (RPD)	0 %			0 - 40
Benzo (a) pyrene (RPD)	0 %			0 - 40
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16	
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2	
3-Methylcholanthrene (RPD)	0 %			0 - 40
Indeno (1,2,3-cd) pyrene (RPD)	200 %			0 - 40
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2	
Dibenzo (a,h) anthracene (RPD)	200 %			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	4/10/2013 6:55 PM			

WS-001 **LIMS ID: 2013-1043**

Semi Volatiles - water MS

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	4/10/2013 0800				
2-Fluorophenol (% Recovery)	45.2 %			50 - 125	
Nitrobenzene-d5 (% Recovery)	76.4 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	67.5 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	74.4 %			40 - 125	
Terphenyl-d14 (% Recovery)	72.0 %			50 - 125	
Phenol (% Recovery)	22.4 %			25 - 125	
2-Chlorophenol (% Recovery)	46.5 %			25 - 125	
1,4-Dichlorobenzene (% Recovery)	65.2 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	81.4 %			25 - 125	
1,2,4-Trichlorobenzene (% Recovery)	67.3 %			25 - 125	

4-Chloro-3-methylphenol (% Recovery)	48.1 %	25 - 125
Acenaphthene (% Recovery)	85.3 %	25 - 125
4-Nitrophenol (% Recovery)	30.8 %	25 - 125
2,4-Dinitrotoluene (% Recovery)	74.1 %	25 - 125
Pentachlorophenol (% Recovery)	68.6 %	25 - 125
Pyrene (% Recovery)	70.7 %	25 - 125
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	4/10/2013 7:24 PM	

MB	LIMS ID: 13041106-MB-01
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Semi Volatiles - water MB

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	4/10/2013 0800				
2-Fluorophenol (% Recovery)	37.8 %			75 - 125	
Nitrobenzene-d5 (% Recovery)	80.9 %			75 - 125	
2-Fluorobiphenyl (% Recovery)	71.7 %			75 - 125	
2,4,6-Tribromophenol (% Recovery)	73.2 %			75 - 125	
Terphenyl-d14 (% Recovery)	73.1 %			75 - 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	<0.16 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	0.442 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	4/10/2013 19:53		

LCS **LIMS ID: 13041106-LCS-01**

Semi Volatiles - water LCS

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	4/10/2013 0800				
2-Fluorophenol (% Recovery)	44.4 %			50 - 125	
Nitrobenzene-d5 (% Recovery)	79.3 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	66.0 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	76.2 %			40 - 125	
Terphenyl-d14 (% Recovery)	80.1 %			50 - 125	

Methyl Methanesulfonate (% Recovery)	62.0 %	50 - 150
Ethyl methanesulfonate (% Recovery)	80.1 %	50 - 150
Phenol (% Recovery)	35.3 %	50 - 150
Aniline (% Recovery)	56.5 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	97.6 %	50 - 150
2-Chlorophenol (% Recovery)	85.6 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	83.5 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	64.0 %	50 - 150
Benzyl alcohol (% Recovery)	85.2 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	71.4 %	50 - 150
2-Methylphenol (% Recovery)	70.5 %	50 - 150
Acetophenone (% Recovery)	96.6 %	50 - 150
4-Methylphenol (% Recovery)	62.2 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	90.5 %	50 - 150
Hexachloroethane (% Recovery)	53.7 %	50 - 150
Nitrobenzene (% Recovery)	91.6 %	50 - 150
N-Nitrosopiperidine (% Recovery)	97.4 %	50 - 150
Isophorone (% Recovery)	95.8 %	50 - 150
2-Nitrophenol (% Recovery)	97.4 %	50 - 150
2,4-Dimethylphenol (% Recovery)	4.4 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	79.6 %	50 - 150
2,4-Dichlorophenol (% Recovery)	90.7 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	71.7 %	50 - 150
Naphthalene (% Recovery)	83.9 %	50 - 150
4-Chloroaniline (% Recovery)	80.2 %	50 - 150
2,6-Dichlorophenol (% Recovery)	90.0 %	50 - 150
Hexachlorobutadiene (% Recovery)	57.3 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	97.5 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	88.9 %	50 - 150
2-Methylnaphthalene (% Recovery)	83.1 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	70.6 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	47.4 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	94.0 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	97.1 %	50 - 150
2-Chloronaphthalene (% Recovery)	79.0 %	50 - 150
1-Chloronaphthalene (% Recovery)	80.3 %	50 - 150
2-Nitroaniline (% Recovery)	99.9 %	50 - 150
Dimethyl phthalate (% Recovery)	64.4 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	90.7 %	50 - 150
Acenaphthylene (% Recovery)	87.8 %	50 - 150

3-Nitroaniline (% Recovery)	92.6 %	50 - 150
Acenaphthene (% Recovery)	80.8 %	50 - 150
2,4-Dinitrophenol (% Recovery)	135 %	50 - 150
Pentachlorobenzene (% Recovery)	75.8 %	50 - 150
4-Nitrophenol (% Recovery)	38.3 %	50 - 150
Dibenzofuran (% Recovery)	84.9 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	93.5 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	93.8 %	50 - 150
Diethyl phthalate (% Recovery)	84.1 %	50 - 150
Fluorene (% Recovery)	80.9 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	82.7 %	50 - 150
4-Nitroaniline (% Recovery)	91.5 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	120 %	50 - 150
Diphenylamine (% Recovery)	88.9 %	50 - 150
Azobenzene (% Recovery)	89.2 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	84.3 %	50 - 150
Hexachlorobenzene (% Recovery)	76.8 %	50 - 150
Pentachlorophenol (% Recovery)	111 %	50 - 150
Pentachloronitrobenzene (% Recovery)	92.0 %	50 - 150
Pronamide (% Recovery)	104 %	50 - 150
Phenanthrene (% Recovery)	90.3 %	50 - 150
Anthracene (% Recovery)	86.4 %	50 - 150
Carbazole (% Recovery)	101 %	50 - 150
Di-n-butyl phthalate (% Recovery)	114 %	50 - 150
Fluoranthene (% Recovery)	97.1 %	50 - 150
Pyrene (% Recovery)	90.3 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	97.8 %	50 - 150
Butyl benzyl phthalate (% Recovery)	83.6 %	50 - 150
Benzo (a) anthracene (% Recovery)	102 %	50 - 150
Chrysene (% Recovery)	103 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	116 %	50 - 150
Di-n-octyl phthalate (% Recovery)	121 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	99.7 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	75.2 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	91.6 %	50 - 150
Benzo (a) pyrene (% Recovery)	90.6 %	50 - 150
3-Methylcholanthrene (% Recovery)	89.6 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	89.8 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	92.3 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	82.3 %	50 - 150

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

Dilution Factor	1
Analyzed By	Ed Harris
Analysis Date/Time	4/10/2013 20:22

Analytical Quality Control Results Report

Batch: 13041109	VOA - water
WS-001	LIMS ID: 2013-1043

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)	102 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	95.0 %			70 - 130	
Toluene-d8 (% Recovery)	90.7 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	103 %			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	<2.68 ug/L	2.68	2.68		
Chloroethane (RPD)	0 %				0 - 20
Trichlorofluoromethane	<0.51 ug/L	0.51	0.51		
Trichlorofluoromethane (RPD)	0 %				0 - 20
1,1-Dichloroethene	<0.43 ug/L	0.43	0.43		
1,1-Dichloroethene (RPD)	0 %				0 - 20
Acetone	<10.5 ug/L	10.5	10.5		
Acetone (RPD)	1.5 %				0 - 20
Methylene chloride (RPD)	2.5 %				0 - 20
Methylene chloride	<2.5 ug/L	2.5	2.5		
Methyl tert-butyl ether	<0.83 ug/L	0.83	0.83		
Methyl tert-butyl ether (RPD)	0 %				0 - 20
trans-1,2-Dichloroethene (RPD)	0 %				0 - 20
trans-1,2-Dichloroethene	<0.59 ug/L	0.59	0.59		
1,1-Dichloroethane (RPD)	0 %				0 - 20
1,1-Dichloroethane	<0.42 ug/L	0.42	0.42		
Methyl ethyl ketone (RPD)	0 %				0 - 20
Methyl ethyl ketone	<12.8 ug/L	12.8	12.8		
cis-1,2-Dichloroethene	<1.15 ug/L	1.15	1.15		
cis-1,2-Dichloroethene (RPD)	0 %				0 - 20
2,2-Dichloropropane (RPD)	0 %				0 - 20

2,2-Dichloropropane	<0.81 ug/L	0.81	0.81	
Bromochloromethane	<0.66 ug/L	0.66	0.66	
Bromochloromethane (RPD)	0 %			0 - 20
Chloroform (RPD)	0 %			0 - 20
Chloroform	<0.27 ug/L	0.27	0.27	
1,1,1-Trichloroethane	<0.46 ug/L	0.46	0.46	
1,1,1-Trichloroethane (RPD)	0 %			0 - 20
1,1-Dichloropropene	<0.59 ug/L	0.59	0.59	
1,1-Dichloropropene (RPD)	0 %			0 - 20
Carbon tetrachloride	<0.6 ug/L	0.6	0.6	
Carbon tetrachloride (RPD)	0 %			0 - 20
Benzene (RPD)	0 %			0 - 20
Benzene	<0.66 ug/L	0.66	0.66	
1,2-Dichloroethane	<1.15 ug/L	1.15	1.15	
1,2-Dichloroethane (RPD)	0 %			0 - 20
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 %			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 (RPD)	0 %			0 - 20
m,p-Xylene	<1.2 ug/L	1.2	1.2	
o-Xylene	<0.5 ug/L	0.5	0.5	
o-Xylene (RPD)	0 %			0 - 20
Styrene (RPD)	0.8 %			0 - 20
Styrene	1.05 ug/L	0.53	0.53	
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 (RPD)	0 %			0 - 20
n-Propylbenzene	<0.49 ug/L	0.49	0.49	
Bromobenzene	<0.5 ug/L	0.5	0.5	
Bromobenzene (RPD)	0 %			0 - 20
1,3,5-Trimethylbenzene	<0.3 ug/L	0.3	0.3	
1,3,5-Trimethylbenzene (RPD)	0 %			0 - 20
2-Chlorotoluene (RPD)	0 %			0 - 20
2-Chlorotoluene	<0.66 ug/L	0.66	0.66	
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	<1.3 ug/L	1.3	1.3	
1,2,3-Trichlorobenzene (RPD)	0 %			0 - 20
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	4/10/2013 4:55 PM			

WS-001 **LIMS ID: 2013-1043**

Volatiles - water MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	94.3 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	91.1 %			70 - 130	
Toluene-d8 (% Recovery)	89.3 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	96.8 %			70 - 130	
1,1-Dichloroethene (% Recovery)	80.6 %			70 - 130	
Benzene (% Recovery)	80.5 %			70 - 130	
Trichloroethene (% Recovery)	77.6 %			70 - 130	
Toluene (% Recovery)	73.5 %			70 - 130	
Chlorobenzene (% Recovery)	76.8 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	4/10/2013 5:20 PM				

WS-001 **LIMS ID: 2013-1043**

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)	98.3 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	95.3 %			70 - 130	
Toluene-d8 (% Recovery)	90.6 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	102 %			70 - 130	
1,1-Dichloroethene (% Recovery)	101 %			70 - 130	
1,1-Dichloroethene (RPD)	22.1 %				0 - 20
Benzene (RPD)	22.4 %				0 - 20
Benzene (% Recovery)	101 %			70 - 130	
Trichloroethene (% Recovery)	98.0 %			70 - 130	
Trichloroethene (RPD)	23.2 %				0 - 20
Toluene (% Recovery)	89.4 %			70 - 130	
Toluene (RPD)	19.6 %				0 - 20
Chlorobenzene (% Recovery)	95.3 %			70 - 130	
Chlorobenzene (RPD)	21.4 %				0 - 20
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	4/10/2013 5:45 PM				

LCS	LIMS ID: 13041109-LCS-01
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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)	105 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	104 %			70 - 130	
Toluene-d8 (% Recovery)	102 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	104 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	97.1 %			60 - 130	
Chloromethane (% Recovery)	97.1 %			60 - 130	
Vinyl chloride (% Recovery)	102 %			60 - 130	
Bromomethane (% Recovery)	118 %			60 - 130	
Chloroethane (% Recovery)	115 %			60 - 130	
Trichlorofluoromethane (% Recovery)	104 %			60 - 130	
1,1-Dichloroethene (% Recovery)	102 %			60 - 130	
Acetone (% Recovery)	103 %			60 - 130	
Methylene chloride (% Recovery)	103 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	105 %			60 - 130	
trans-1,2-Dichloroethene (% Recovery)	106 %			60 - 130	
1,1-Dichloroethane (% Recovery)	106 %			60 - 130	

Methyl ethyl ketone (% Recovery)	103 %	60 - 130
cis-1,2-Dichloroethene (% Recovery)	102 %	60 - 130
2,2-Dichloropropane (% Recovery)	104 %	60 - 130
Bromochloromethane (% Recovery)	106 %	60 - 130
Chloroform (% Recovery)	104 %	60 - 130
1,1,1-Trichloroethane (% Recovery)	105 %	60 - 130
1,1-Dichloropropene (% Recovery)	102 %	60 - 130
Carbon tetrachloride (% Recovery)	103 %	60 - 130
Benzene (% Recovery)	103 %	60 - 130
1,2-Dichloroethane (% Recovery)	104 %	60 - 130
Trichloroethene (% Recovery)	103 %	60 - 130
1,2-Dichloropropane (% Recovery)	99.6 %	60 - 130
Dibromomethane (% Recovery)	99.3 %	60 - 130
Bromodichloromethane (% Recovery)	98.7 %	60 - 130
cis-1,3-Dichloropropene (% Recovery)	97.6 %	60 - 130
Methyl isobutyl ketone (% Recovery)	101 %	60 - 130
Toluene (% Recovery)	100 %	60 - 130
trans-1,3-Dichloropropene (% Recovery)	97.6 %	60 - 130
1,1,2-Trichloroethane (% Recovery)	97.8 %	60 - 130
2-Hexanone (% Recovery)	95.4 %	60 - 130
Tetrachloroethene (% Recovery)	101 %	60 - 130
1,3-Dichloropropane (% Recovery)	97.5 %	60 - 130
Dibromochloromethane (% Recovery)	98.1 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	99.2 %	60 - 130
Chlorobenzene (% Recovery)	100 %	60 - 130
Ethylbenzene (% Recovery)	98.6 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	99.1 %	60 - 130
m,p-Xylene (% Recovery)	99.6 %	60 - 130
o-Xylene (% Recovery)	98.5 %	60 - 130
Styrene (% Recovery)	98.5 %	60 - 130
Bromoform (% Recovery)	99.7 %	60 - 130
Isopropylbenzene (% Recovery)	101 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	102 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	91.5 %	60 - 130
n-Propylbenzene (% Recovery)	96.1 %	60 - 130
Bromobenzene (% Recovery)	103 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	102 %	60 - 130
2-Chlorotoluene (% Recovery)	105 %	60 - 130
4-Chlorotoluene (% Recovery)	103 %	60 - 130
tert-Butylbenzene (% Recovery)	104 %	60 - 130

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1,2,4-Trimethylbenzene (% Recovery)	102 %	60 - 130
sec-Butylbenzene (% Recovery)	101 %	60 - 130
p-Isopropyltoluene (% Recovery)	103 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	101 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	101 %	60 - 130
n-Butylbenzene (% Recovery)	102 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	102 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	103 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	100 %	60 - 130
Naphthalene (% Recovery)	100 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	102 %	60 - 130
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	4/10/2013 8:09	

Analytical Quality Control Results Report

Batch: 13041110	Oil and Grease - water
WS-001	LIMS ID: 2013-1043

Oil and Grease - water DUP

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (RPD)	3.2 %				0 - 20
Oil and Grease	3.2 mg/L	1.4	1.4		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

WS-001	LIMS ID: 2013-1043
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Oil and Grease - water MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	82.0 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

WS-001	LIMS ID: 2013-1043
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Oil and Grease - water MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	84.0 %			70 - 130	
Oil and Grease (RPD)	2.2 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

MB	LIMS ID: 13041110-MB-01
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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	1.4	1.4		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

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LCS **LIMS ID: 13041110-LCS-01**

Oil and Grease - water LCS

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Oil and Grease (% Recovery)	85.0 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	4/10/2013 1530				

Analytical Quality Control Results Report

Batch: 13041105	ICP Metals - water (total)
<i>WS-001</i>	<i>LIMS ID: 2013-1043</i>

ICP Metals - water (Total) DUP

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Aluminum	919 ug/L	20	20		
Aluminum (RPD)	7.3 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<10 ug/L	5	10		
Arsenic	1.17 ug/L	0.5	1		
Arsenic (RPD)	1.9 %				0 - 20
Barium (RPD)	1.4 %				0 - 20
Barium	19.6 ug/L	2	10		
Beryllium (RPD)	4.0 %				0 - 20
Beryllium	<0.5 ug/L	0.1	0.5		
Boron	<25 ug/L	5	25		
Boron (RPD)	0.5 %				0 - 20
Cadmium (RPD)	30.8 %				0 - 20
Cadmium	<1 ug/L	0.3	1		
Calcium	3.39 mg/L	0.04	0.04		
Calcium (RPD)	35.4 %				0 - 20
Chromium	1.72 ug/L	0.3	1		
Chromium (RPD)	6.5 %				0 - 20
Cobalt (RPD)	9.4 %				0 - 20
Cobalt	<1 ug/L	0.5	1		
Copper	1.68 ug/L	0.5	1		
Copper (RPD)	2.1 %				0 - 20
Iron (RPD)	4.8 %				0 - 20
Iron	1310 ug/L	10	20		
Lead	1.42 ug/L	0.1	1		
Lead (RPD)	0.1 %				0 - 20
Magnesium (RPD)	2.9 %				0 - 20
Magnesium	1.51 mg/L	0.1	0.1		
Manganese	150 ug/L	0.2	1		
Manganese (RPD)	1.8 %				0 - 20
Nickel (RPD)	2.0 %				0 - 20
Nickel	<2.5 ug/L	0.5	2.5		
Potassium	1.91 mg/L	0.05	1		

Potassium (RPD)	2.8 %			0 - 20
Selenium (RPD)	14.7 %			0 - 20
Selenium	<2 ug/L	0.5	2	
Silver	<5 ug/L	1	5	
Silver (RPD)	0 %			0 - 20
Sodium (RPD)	2.2 %			0 - 20
Sodium	4.78 mg/L	0.02	0.04	
Thallium	<2.5 ug/L	0.05	2.5	
Thallium (RPD)	20.0 %			0 - 20
Vanadium (RPD)	10.2 %			0 - 20
Vanadium	<2.5 ug/L	1	2.5	
Zinc (RPD)	18.9 %			0 - 20
Zinc	7.48 ug/L	2	3	
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Apr 10 2013 8:49PM			

WS-001	LIMS ID: 2013-1043
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ICP Metals - water (Total) MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	141 %			70 - 130	
Antimony (% Recovery)	91.1 %			70 - 130	
Arsenic (% Recovery)	98.2 %			70 - 130	
Barium (% Recovery)	98.2 %			70 - 130	
Beryllium (% Recovery)	102 %			70 - 130	
Boron (% Recovery)	80.9 %			70 - 130	
Cadmium (% Recovery)	99.9 %			70 - 130	
Calcium (% Recovery)	84.4 %			70 - 130	
Chromium (% Recovery)	98.1 %			70 - 130	
Cobalt (% Recovery)	96.5 %			70 - 130	
Copper (% Recovery)	97.9 %			70 - 130	
Iron (% Recovery)	157 %			70 - 130	
Lead (% Recovery)	100 %			70 - 130	
Magnesium (% Recovery)	97.8 %			70 - 130	
Manganese (% Recovery)	89 %			70 - 130	
Nickel (% Recovery)	96 %			70 - 130	
Potassium (% Recovery)	98.1 %			70 - 130	
Selenium (% Recovery)	94.8 %			70 - 130	
Silver (% Recovery)	94.0 %			70 - 130	

Sodium (% Recovery)	101 %	70 - 130
Thallium (% Recovery)	99.9 %	70 - 130
Vanadium (% Recovery)	96.6 %	70 - 130
Zinc (% Recovery)	96.4 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	Apr 10 2013 8:55PM	

WS-001	LIMS ID: 2013-1043
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ICP Metals - water (Total) MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	137 %			70 - 130	
Aluminum (RPD)	1.1 %				0 - 20
Antimony (% Recovery)	91.5 %			70 - 130	
Antimony (RPD)	0.4 %				0 - 20
Arsenic (% Recovery)	92.4 %			70 - 130	
Arsenic (RPD)	5.7 %				0 - 20
Barium (% Recovery)	98.8 %			70 - 130	
Barium (RPD)	0.6 %				0 - 20
Beryllium (% Recovery)	103 %			70 - 130	
Beryllium (RPD)	0.2 %				0 - 20
Boron (% Recovery)	81.3 %			70 - 130	
Boron (RPD)	0.5 %				0 - 20
Cadmium (% Recovery)	99.0 %			70 - 130	
Cadmium (RPD)	0.9 %				0 - 20
Calcium (% Recovery)	83.7 %			70 - 130	
Calcium (RPD)	0.5 %				0 - 20
Chromium (% Recovery)	97.2 %			70 - 130	
Chromium (RPD)	0.9 %				0 - 20
Cobalt (% Recovery)	94.3 %			70 - 130	
Cobalt (RPD)	2.4 %				0 - 20
Copper (% Recovery)	93.8 %			70 - 130	
Copper (RPD)	4.1 %				0 - 20
Iron (% Recovery)	133 %			70 - 130	
Iron (RPD)	3.1 %				0 - 20
Lead (% Recovery)	100 %			70 - 130	
Lead (RPD)	0.1 %				0 - 20
Magnesium (% Recovery)	99.2 %			70 - 130	
Magnesium (RPD)	1.2 %				0 - 20

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Manganese (% Recovery)	80 %	70 - 130	
Manganese (RPD)	1.4 %		0 - 20
Nickel (% Recovery)	93 %	70 - 130	
Nickel (RPD)	2.9 %		0 - 20
Potassium (% Recovery)	98.1 %	70 - 130	
Potassium (RPD)	0 %		0 - 20
Selenium (% Recovery)	90.2 %	70 - 130	
Selenium (RPD)	5.0 %		0 - 20
Silver (% Recovery)	92.4 %	70 - 130	
Silver (RPD)	1.7 %		0 - 20
Sodium (% Recovery)	103 %	70 - 130	
Sodium (RPD)	1.6 %		0 - 20
Thallium (% Recovery)	99.7 %	70 - 130	
Thallium (RPD)	0.3 %		0 - 20
Vanadium (% Recovery)	95.8 %	70 - 130	
Vanadium (RPD)	0.8 %		0 - 20
Zinc (% Recovery)	91.5 %	70 - 130	
Zinc (RPD)	4.1 %		0 - 20
Dilution Factor	1		
Analysis Date/Time	Apr 10 2013 9:02PM		
Analyzed By	Robert Graddy		

Analytical Quality Control Results Report

Batch: 13041111	ICP Metals - water (Diss.)
WS-001	LIMS ID: 2013-1043

ICP Metals - water (Dissolved) DUP

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	67.9 ug/L	20	20		
Aluminum (RPD)	45.7 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<5 ug/L	1	5		
Arsenic (RPD)	2.6 %				0 - 20
Arsenic	0.64 ug/L	0.2	0.5		
Barium	12.3 ug/L	0.4	2		
Barium (RPD)	3.3 %				0 - 20
Beryllium (RPD)	28.6 %				0 - 20
Beryllium	<0.1 ug/L	0.04	0.1		
Boron	11.0 ug/L	2	5		
Boron (RPD)	2.3 %				0 - 20
Cadmium (RPD)	0 %				0 - 20
Cadmium	<0.1 ug/L	0.05	0.1		
Calcium	3.10 mg/L	0.03	0.03		
Calcium (RPD)	12.1 %				0 - 20
Chromium (RPD)	77.2 %				0 - 20
Chromium	<0.5 ug/L	0.05	0.5		
Cobalt	<0.5 ug/L	0.05	0.5		
Cobalt (RPD)	0.6 %				0 - 20
Copper (RPD)	4.0 %				0 - 20
Copper	0.92 ug/L	0.2	0.5		
Iron	279 ug/L	5	20		
Iron (RPD)	19.6 %				0 - 20
Lead (RPD)	11.7 %				0 - 20
Lead	<0.3 ug/L	0.02	0.3		
Magnesium	1.42 mg/L	0.01	0.02		
Magnesium (RPD)	0.7 %				0 - 20
Manganese (RPD)	6.3 %				0 - 20
Manganese	100 ug/L	0.07	0.3		
Nickel	1.1 ug/L	0.15	0.5		
Nickel (RPD)	5.4 %				0 - 20
Potassium	1.60 mg/L	0.01	0.02		

Potassium (RPD)	2.7 %			0 - 20
Selenium (RPD)	3.7 %			0 - 20
Selenium	<1 ug/L	0.2	1	
Silicon Dioxide	2.72 mg/L	0.01	0.05	
Silicon Dioxide (RPD)	4.5 %			0 - 20
Silver (RPD)	0 %			0 - 20
Silver	<0.5 ug/L	0.02	0.5	
Sodium	4.75 mg/L	0.01	0.02	
Sodium (RPD)	0.7 %			0 - 20
Thallium	<0.5 ug/L	0	0.5	
Thallium (RPD)	0 %			0 - 20
Vanadium (RPD)	8.8 %			0 - 20
Vanadium	<0.5 ug/L	0.3	0.5	
Zinc	8.91 ug/L	0.3	1	
Zinc (RPD)	43.5 %			0 - 20
Hardness (RPD)	7 %			0 - 20
Hardness	14 mg/L	1	1	
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Apr 11 2013 9:51AM			

WS-001 **LIMS ID: 2013-1043**

ICP Metals - water (Dissolved) MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	84.8 %			70 - 130	
Antimony (% Recovery)	85.2 %			70 - 130	
Arsenic (% Recovery)	92.9 %			70 - 130	
Barium (% Recovery)	86.6 %			70 - 130	
Beryllium (% Recovery)	91.7 %			70 - 130	
Boron (% Recovery)	98.2 %			70 - 130	
Cadmium (% Recovery)	90.5 %			70 - 130	
Calcium (% Recovery)	79.6 %			70 - 130	
Chromium (% Recovery)	89.4 %			70 - 130	
Cobalt (% Recovery)	88.3 %			70 - 130	
Copper (% Recovery)	89.4 %			70 - 130	
Iron (% Recovery)	86.8 %			70 - 130	
Lead (% Recovery)	86.6 %			70 - 130	
Magnesium (% Recovery)	89.4 %			70 - 130	
Manganese (% Recovery)	86 %			70 - 130	

Nickel (% Recovery)	88 %	70 - 130
Potassium (% Recovery)	83.0 %	70 - 130
Selenium (% Recovery)	99.8 %	70 - 130
Silver (% Recovery)	77.5 %	70 - 130
Sodium (% Recovery)	93.4 %	70 - 130
Thallium (% Recovery)	88.7 %	70 - 130
Vanadium (% Recovery)	89.9 %	70 - 130
Zinc (% Recovery)	95.2 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	Apr 11 2013 10:04AM	

WS-001	LIMS ID: 2013-1043
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ICP Metals - water (Dissolved) MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	84.8 %			70 - 130	
Aluminum (RPD)	0.1 %				0 - 20
Antimony (% Recovery)	85.9 %			70 - 130	
Antimony (RPD)	0.9 %				0 - 20
Arsenic (% Recovery)	92.8 %			70 - 130	
Arsenic (RPD)	0.1 %				0 - 20
Barium (% Recovery)	86.4 %			70 - 130	
Barium (RPD)	0.3 %				0 - 20
Beryllium (% Recovery)	92.9 %			70 - 130	
Beryllium (RPD)	1.2 %				0 - 20
Boron (% Recovery)	98.5 %			70 - 130	
Boron (RPD)	0.3 %				0 - 20
Cadmium (% Recovery)	89.7 %			70 - 130	
Cadmium (RPD)	0.8 %				0 - 20
Calcium (% Recovery)	79.6 %			70 - 130	
Calcium (RPD)	0 %				0 - 20
Chromium (% Recovery)	89.2 %			70 - 130	
Chromium (RPD)	0.3 %				0 - 20
Cobalt (% Recovery)	88.0 %			70 - 130	
Cobalt (RPD)	0.3 %				0 - 20
Copper (% Recovery)	88.7 %			70 - 130	
Copper (RPD)	0.7 %				0 - 20
Iron (% Recovery)	86.5 %			70 - 130	
Iron (RPD)	0.1 %				0 - 20

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501-682-0955

Lead (% Recovery)	87.4 %	70 - 130
Lead (RPD)	0.9 %	0 - 20
Magnesium (% Recovery)	89.8 %	70 - 130
Magnesium (RPD)	0.4 %	0 - 20
Manganese (% Recovery)	85 %	70 - 130
Manganese (RPD)	0.3 %	0 - 20
Nickel (% Recovery)	88 %	70 - 130
Nickel (RPD)	0.2 %	0 - 20
Potassium (% Recovery)	83.9 %	70 - 130
Potassium (RPD)	0.9 %	0 - 20
Selenium (% Recovery)	98.8 %	70 - 130
Selenium (RPD)	1.0 %	0 - 20
Silver (% Recovery)	77.5 %	70 - 130
Silver (RPD)	0.1 %	0 - 20
Sodium (% Recovery)	94.0 %	70 - 130
Sodium (RPD)	0.4 %	0 - 20
Thallium (% Recovery)	89.0 %	70 - 130
Thallium (RPD)	0.3 %	0 - 20
Vanadium (% Recovery)	89.7 %	70 - 130
Vanadium (RPD)	0.2 %	0 - 20
Zinc (% Recovery)	94.7 %	70 - 130
Zinc (RPD)	0.5 %	0 - 20
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	Apr 11 2013 10:10AM	