



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

Client Report For: Exxon Oil Spill 2013 1414-1424
Attention:
Client Address:

,

Report Date: May 09, 2013
LAB ID: AR13APR29-03
Comment:

Approved By: _____

Date: May 09, 2013

Client: Special Samples	Client Sample ID: WS-BGG-001
Lab ID: 2013-1414	Collection Date: 4/29/2013 10:52:00 AM
	Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 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>	92.7	70-130			%
<i>Toluene-d8 (% Recovery)</i>	95.6	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	102	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-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	4/30/2013 10:40 AM			

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1415

Collection Date: 4/29/2013 12:04:00 PM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	97.3	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	92.0	70-130			%
<i>Toluene-d8 (% Recovery)</i>	91.5	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	101	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	4/30/2013 11:05 AM			

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1416

Collection Date: 4/29/2013 11:21:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	102	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	95.4	70-130			%
<i>Toluene-d8 (% Recovery)</i>	92.6	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	99.5	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	4/30/2013 11:31 AM			

Client: Special Samples

Client Sample ID: WS-003

Lab ID: 2013-1417

Collection Date: 4/29/2013 9:10:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	101	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	93.7	70-130			%
Toluene-d8 (% Recovery)	95.9	70-130			%
4-Bromofluorobenzene (% Recovery)	108	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	0.517	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	4/30/2013 11:56 AM			

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1418

Collection Date: 4/29/2013 1:53:00 PM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	98.5	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	92.7	70-130			%
Toluene-d8 (% Recovery)	95.0	70-130			%
4-Bromofluorobenzene (% Recovery)	102	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	4/30/2013 2:30 PM			

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1419

Collection Date: 4/29/2013 3:10:00 PM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	102	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	93.5	70-130			%
Toluene-d8 (% Recovery)	94.3	70-130			%
4-Bromofluorobenzene (% Recovery)	101	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	4/30/2013 2:55 PM			

Client: Special Samples

Client Sample ID: WS-007

Lab ID: 2013-1420

Collection Date: 4/29/2013 2:37:00 PM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	99.3	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	92.5	70-130			%
<i>Toluene-d8 (% Recovery)</i>	92.6	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	100	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	4/30/2013 3:21 PM			

Client: Special Samples

Client Sample ID: WS-008

Lab ID: 2013-1421

Collection Date: 4/29/2013 11:14:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	106	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	97.0	70-130			%
Toluene-d8 (% Recovery)	96.2	70-130			%
4-Bromofluorobenzene (% Recovery)	107	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	0.89	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	0.547	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	0.51	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	4/30/2013 3:46 PM			

Client: Special Samples

Client Sample ID: WS-019

Lab ID: 2013-1422

Collection Date: 4/29/2013 9:35:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13050107 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
<i>Dibromofluoromethane (% Recovery)</i>	102	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	95.2	70-130			%
<i>Toluene-d8 (% Recovery)</i>	95.4	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	98.6	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	0.75	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	4/30/2013 4:12 PM			

Client: Special Samples	Client Sample ID: Volatiles Trip Blank
Lab ID: 2013-1424	Collection Date: 4/29/2013 1:30:00 PM
Matrix: Water	

Analyses

Volatile Organics by GCMS	EPA 8260C	Batch: 13050107 Run: 1			
	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Dibromofluoromethane (% Recovery)	99.5	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	92.5	70-130			%
Toluene-d8 (% Recovery)	93.8	70-130			%
4-Bromofluorobenzene (% Recovery)	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	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	4/30/2013 10:14 AM			

Client: Special Samples	Client Sample ID: WS-BGG-001
Lab ID: 2013-1414	Collection Date: 4/29/2013 10:52:00 AM
Matrix: Water	

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	15.9	40-110			%
Nitrobenzene-d5 (% Recovery)	66.7	50-110			%
2-Fluorobiphenyl (% Recovery)	56.4	50-110			%
2,4,6-Tribromophenol (% Recovery)	31.7	40-110			%
Terphenyl-d14 (% Recovery)	71.4	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

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

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	5/6/2013 7:45 PM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1415

Collection Date: 4/29/2013 12:04:00 PM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	17.3	40-110			%
Nitrobenzene-d5 (% Recovery)	69.4	50-110			%
2-Fluorobiphenyl (% Recovery)	56.2	50-110			%
2,4,6-Tribromophenol (% Recovery)	45.1	40-110			%
Terphenyl-d14 (% Recovery)	44.9	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

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

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	0.705	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	5/6/2013 8:14 PM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1416

Collection Date: 4/29/2013 11:21:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	17.0	40-110			%
Nitrobenzene-d5 (% Recovery)	62.5	50-110			%
2-Fluorobiphenyl (% Recovery)	57.6	50-110			%
2,4,6-Tribromophenol (% Recovery)	62.5	40-110			%
Terphenyl-d14 (% Recovery)	59.6	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

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

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	5/6/2013 8:44 PM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-003

Lab ID: 2013-1417

Collection Date: 4/29/2013 9:10:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	19.8	40-110			%
Nitrobenzene-d5 (% Recovery)	63.4	50-110			%
2-Fluorobiphenyl (% Recovery)	54.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	58.3	40-110			%
Terphenyl-d14 (% Recovery)	49.3	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

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

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	5/6/2013 9:14 PM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1418

Collection Date: 4/29/2013 1:53:00 PM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	12.4	40-110			%
Nitrobenzene-d5 (% Recovery)	70.5	50-110			%
2-Fluorobiphenyl (% Recovery)	63.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	23.2	40-110			%
Terphenyl-d14 (% Recovery)	50.5	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

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

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	5/6/2013 11:12 PM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1419

Collection Date: 4/29/2013 3:10:00 PM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	21.1	40-110			%
Nitrobenzene-d5 (% Recovery)	79.5	50-110			%
2-Fluorobiphenyl (% Recovery)	75.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	69.1	40-110			%
Terphenyl-d14 (% Recovery)	94.2	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

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

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	5/6/2013 11:41 PM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-007

Lab ID: 2013-1420

Collection Date: 4/29/2013 2:37:00 PM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	13.0	40-110			%
Nitrobenzene-d5 (% Recovery)	70.8	50-110			%
2-Fluorobiphenyl (% Recovery)	60.7	50-110			%
2,4,6-Tribromophenol (% Recovery)	32.5	40-110			%
Terphenyl-d14 (% Recovery)	38.3	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

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

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	5/7/2013 12:10 AM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-008

Lab ID: 2013-1421

Collection Date: 4/29/2013 11:14:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	24.4	40-110			%
Nitrobenzene-d5 (% Recovery)	79.9	50-110			%
2-Fluorobiphenyl (% Recovery)	77.1	50-110			%
2,4,6-Tribromophenol (% Recovery)	70.0	40-110			%
Terphenyl-d14 (% Recovery)	99.3	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	0.347	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

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

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	5/7/2013 12:40 AM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-019

Lab ID: 2013-1422

Collection Date: 4/29/2013 9:35:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13043002 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	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13050701 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	17.0	40-110			%
Nitrobenzene-d5 (% Recovery)	78.1	50-110			%
2-Fluorobiphenyl (% Recovery)	69.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	31.2	40-110			%
Terphenyl-d14 (% Recovery)	47.9	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	0.265	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

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

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	5/7/2013 1:10 AM			
Prep By	Ed Harris			
Prep Date/Time	4/30/2013 13:00			

Client: Special Samples

Client Sample ID: WS-BGG-001

Lab ID: 2013-1414

Collection Date: 4/29/2013 10:52:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13050801 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	20.0	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	<0.5	0.5	0.2		ug/L
Barium	37.7	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	12.1	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	7.01	0.03	0.03		mg/L
Chromium	12.6	0.5	0.05		ug/L
Cobalt	0.84	0.5	0.05		ug/L
Copper	0.66	0.5	0.2		ug/L
Iron	319	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.00	0.02	0.01		mg/L
Manganese	187	0.3	0.07		ug/L
Nickel	2.57	0.5	0.15		ug/L
Potassium	0.871	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	9.64	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	8.56	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	1.86	0.5	0.3		ug/L
Zinc	67.9	1	0.3		ug/L
Hardness	25.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 1:12PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 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	262	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	55.9	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	7.49	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	2.65	1	0.5	ug/L
Copper	1.48	1	0.5	ug/L
Iron	381	20	10.0	ug/L
Lead	1.04	1	0.1	ug/L
Magnesium	2.32	0.1	0.1	mg/L
Manganese	755	1	0.2	ug/L
Nickel	3.27	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	7.34	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	84.1	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 7:20PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1415

Collection Date: 4/29/2013 12:04:00 PM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13050801 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	121	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.86	0.5	0.2		ug/L
Barium	5.18	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	14.7	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.13	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	1.08	0.5	0.2		ug/L
Iron	304	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.45	0.02	0.01		mg/L
Manganese	94.7	0.3	0.07		ug/L
Nickel	1.00	0.5	0.15		ug/L
Potassium	2.03	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.80	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	6.91	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	6.58	1	0.3		ug/L
Hardness	13.8	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 1:18PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 1

Result Reporting MDL Qual Unit

		<u>Limit</u>		
Aluminum	1850	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	3.17	1	0.5	ug/L
Barium	36.2	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	4.40	0.04	0.04	mg/L
Chromium	1.94	1	0.3	ug/L
Cobalt	2.05	1	0.5	ug/L
Copper	4.32	1	0.5	ug/L
Lead	6.20	1	0.1	ug/L
Magnesium	1.94	0.1	0.1	mg/L
Manganese	663	1	0.2	ug/L
Nickel	3.28	2.5	0.5	ug/L
Potassium	2.13	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.03	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	4.69	2.5	1.0	ug/L
Zinc	26.6	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 7:26PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 2

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Iron	7140	200	10.0		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 9:52PM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1416

Collection Date: 4/29/2013 11:21:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13050801 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	104	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.60	0.5	0.2		ug/L
Barium	10.7	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	14.4	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.23	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	1.28	0.5	0.2		ug/L
Iron	273	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.58	0.02	0.01		mg/L
Manganese	47.2	0.3	0.07		ug/L
Nickel	1.06	0.5	0.15		ug/L
Potassium	2.08	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.60	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.16	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	2.68	1	0.3		ug/L
Hardness	14.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 1:25PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 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	235	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	17.7	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	3.32	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	943	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.72	0.1	0.1	mg/L
Manganese	238	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.98	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.21	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	May 7 2013 7:33PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-003

Lab ID: 2013-1417

Collection Date: 4/29/2013 9:10:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13050801 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	49.2	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.58	0.5	0.2		ug/L
Barium	13.2	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	14.6	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.30	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	1.67	0.5	0.2		ug/L
Iron	229	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.57	0.02	0.01		mg/L
Manganese	63.4	0.3	0.07		ug/L
Nickel	0.97	0.5	0.15		ug/L
Potassium	2.07	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.48	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	6.96	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	2.57	1	0.3		ug/L
Hardness	14.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 1:31PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 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	238	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	22.8	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.55	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.80	1	0.5	ug/L
Iron	963	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.89	0.1	0.1	mg/L
Manganese	344	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.43	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.4	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	5.77	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 7:39PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1418

Collection Date: 4/29/2013 1:53:00 PM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13050801 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	283	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.29	0.5	0.2		ug/L
Barium	43.1	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	14.2	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	4.53	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	3.50	0.5	0.05		ug/L
Copper	1.99	0.5	0.2		ug/L
Iron	241	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.79	0.02	0.01		mg/L
Manganese	779	0.3	0.07		ug/L
Nickel	2.74	0.5	0.15		ug/L
Potassium	2.67	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	6.22	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.50	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	1.07	0.5	0.3		ug/L
Zinc	29.2	1	0.3		ug/L
Hardness	18.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 2:09PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 2

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	22700	200	20	ug/L
Iron	16500	200	10.0	ug/L
Manganese	1760	10	0.2	ug/L
Dilution Factor	10			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 9:59PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Antimony	<10	10	5		ug/L
Arsenic	4.55	1	0.5		ug/L
Barium	181	10	2.0		ug/L
Beryllium	1.52	0.5	0.1		ug/L
Boron	<25	25	5.0		ug/L
Cadmium	<1	1	0.3		ug/L
Calcium	6.49	0.04	0.04		mg/L
Chromium	11.7	1	0.3		ug/L
Cobalt	12.7	1	0.5		ug/L
Copper	8.96	1	0.5		ug/L
Lead	24.7	1	0.1		ug/L
Magnesium	4.14	0.1	0.1		mg/L
Nickel	14.2	2.5	0.5		ug/L
Potassium	3.12	1	0.05		mg/L
Selenium	<2	2	0.5		ug/L
Silver	<5	5	1.0		ug/L
Sodium	5.63	0.04	0.02		mg/L
Thallium	<2.5	2.5	0.05		ug/L
Vanadium	16.8	2.5	1.0		ug/L
Zinc	51.6	3	2.0		ug/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 8:17PM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1419

Collection Date: 4/29/2013 3:10:00 PM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13050801 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	136	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.98	0.5	0.2		ug/L
Barium	8.83	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	15.6	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.22	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	0.95	0.5	0.2		ug/L
Iron	350	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.54	0.02	0.01		mg/L
Manganese	199	0.3	0.07		ug/L
Nickel	1.09	0.5	0.15		ug/L
Potassium	2.11	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	2.04	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.11	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	0.50	0.5	0.3		ug/L
Zinc	3.19	1	0.3		ug/L
Hardness	14.4	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 2:16PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 1

Result Reporting MDL Qual Unit

		<u>Limit</u>		
Aluminum	1140	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.08	1	0.5	ug/L
Barium	23.8	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.35	0.04	0.04	mg/L
Chromium	1.12	1	0.3	ug/L
Cobalt	1.21	1	0.5	ug/L
Copper	1.78	1	0.5	ug/L
Lead	1.87	1	0.1	ug/L
Magnesium	1.94	0.1	0.1	mg/L
Manganese	531	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.95	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.02	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	6.10	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 8:23PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 2

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Iron	2090	200	10.0		ug/L
Lead	<10	10	0.1		ug/L
Manganese	437	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 10:05PM				
Prep By					
Prep Date/Time					

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-007

Lab ID: 2013-1420

Collection Date: 4/29/2013 2:37:00 PM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13050801 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	259	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.57	0.5	0.2		ug/L
Barium	22.7	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	13.8	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.60	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	1.07	0.5	0.05		ug/L
Copper	1.62	0.5	0.2		ug/L
Iron	264	20	5.0		ug/L
Lead	0.35	0.3	0.02		ug/L
Magnesium	1.50	0.02	0.01		mg/L
Manganese	706	0.3	0.07		ug/L
Nickel	2.62	0.5	0.15		ug/L
Potassium	2.68	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	5.95	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.54	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	1.20	0.5	0.3		ug/L
Zinc	5.07	1	0.3		ug/L
Hardness	15.2	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 2:22PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 2

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	22400	200	20	ug/L
Iron	17400	200	10.0	ug/L
Manganese	1720	10	0.2	ug/L
Dilution Factor	10			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 10:12PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Antimony	<10	10	5		ug/L
Arsenic	4.47	1	0.5		ug/L
Barium	213	10	2.0		ug/L
Beryllium	1.78	0.5	0.1		ug/L
Boron	<25	25	5.0		ug/L
Cadmium	<1	1	0.3		ug/L
Calcium	5.95	0.04	0.04		mg/L
Chromium	13.7	1	0.3		ug/L
Cobalt	13.6	1	0.5		ug/L
Copper	9.91	1	0.5		ug/L
Lead	30.2	1	0.1		ug/L
Magnesium	4.16	0.1	0.1		mg/L
Nickel	15.8	2.5	0.5		ug/L
Potassium	3.27	1	0.05		mg/L
Selenium	<2	2	0.5		ug/L
Silver	<5	5	1.0		ug/L
Sodium	5.44	0.04	0.02		mg/L
Thallium	<2.5	2.5	0.05		ug/L
Vanadium	19.6	2.5	1.0		ug/L
Zinc	52.5	3	2.0		ug/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 8:30PM				
Prep By					
Prep Date/Time					

Client: Special Samples	Client Sample ID: WS-008
Lab ID: 2013-1421	Collection Date: 4/29/2013 11:14:00 AM
Matrix: Water	

Analyses

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13050801 Run: 1</i>			
	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	43.4	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.18	0.5	0.2		ug/L
Barium	24.3	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	16.4	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	9.01	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	2.35	0.5	0.05		ug/L
Copper	0.81	0.5	0.2		ug/L
Iron	524	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	4.09	0.02	0.01		mg/L
Manganese	762	0.3	0.07		ug/L
Nickel	2.84	0.5	0.15		ug/L
Potassium	2.22	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	7.93	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	10.1	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	7.73	1	0.3		ug/L
Hardness	39.3	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 2:28PM				

<i>Total Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13050802 Run: 1</i>			
	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>

		<u>Limit</u>		
Aluminum	312	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.44	1	0.5	ug/L
Barium	29.1	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	8.50	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	2.14	1	0.5	ug/L
Copper	1.54	1	0.5	ug/L
Iron	1590	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	4.64	0.1	0.1	mg/L
Manganese	694	1	0.2	ug/L
Nickel	3.83	2.5	0.5	ug/L
Potassium	1.98	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	10.7	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	7.14	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 8:36PM			
Prep By				
Prep Date/Time				

Client: Special Samples	Client Sample ID: WS-019
Lab ID: 2013-1422	Collection Date: 4/29/2013 9:35:00 AM
Matrix: Water	

Analyses

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13050801 Run: 1</i>			
	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	905	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	3.08	0.5	0.2		ug/L
Barium	40.1	2	0.4		ug/L
Beryllium	0.12	0.1	0.04		ug/L
Boron	13.7	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.42	0.03	0.03		mg/L
Chromium	1.01	0.5	0.05		ug/L
Cobalt	4.67	0.5	0.05		ug/L
Copper	9.03	0.5	0.2		ug/L
Iron	843	20	5.0		ug/L
Lead	1.16	0.3	0.02		ug/L
Magnesium	1.97	0.02	0.01		mg/L
Manganese	1120	0.3	0.07		ug/L
Nickel	3.33	0.5	0.15		ug/L
Potassium	3.04	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.03	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.66	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	1.92	0.5	0.3		ug/L
Zinc	10.4	1	0.3		ug/L
Hardness	21.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 2:35PM				

<i>Total Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13050802 Run: 2</i>			
	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>

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	24400	200	20	ug/L
Iron	18500	200	10.0	ug/L
Manganese	2370	10	0.2	ug/L
Dilution Factor	10			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 10:18PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13050802 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Antimony	<10	10	5		ug/L
Arsenic	4.83	1	0.5		ug/L
Barium	228	10	2.0		ug/L
Beryllium	1.61	0.5	0.1		ug/L
Boron	<25	25	5.0		ug/L
Cadmium	<1	1	0.3		ug/L
Calcium	8.18	0.04	0.04		mg/L
Chromium	13.0	1	0.3		ug/L
Cobalt	13.9	1	0.5		ug/L
Copper	9.84	1	0.5		ug/L
Lead	27.8	1	0.1		ug/L
Magnesium	4.28	0.1	0.1		mg/L
Nickel	15.4	2.5	0.5		ug/L
Potassium	3.65	1	0.05		mg/L
Selenium	<2	2	0.5		ug/L
Silver	<5	5	1.0		ug/L
Sodium	5.56	0.04	0.02		mg/L
Thallium	<2.5	2.5	0.05		ug/L
Vanadium	18.3	2.5	1.0		ug/L
Zinc	54.2	3	2.0		ug/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 7 2013 8:43PM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: Metals Field Blank

Lab ID: 2013-1423

Collection Date: 4/29/2013 9:18:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13050801 Run: 1

	<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	1.10	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	0.46	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	May 7 2013 2:41PM				

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-BGG-001

Lab ID: 2013-1414

Collection Date: 4/29/2013 10:52:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	2.60	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 8:57				

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: 2013-1415

Collection Date: 4/29/2013 12:04:00 PM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	90.7	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 9:00				

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-002

Lab ID: 2013-1416

Collection Date: 4/29/2013 11:21:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	17.0	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 9:02				

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-003

Lab ID: 2013-1417

Collection Date: 4/29/2013 9:10:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	16.8	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 9:06				

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-004

Lab ID: 2013-1418

Collection Date: 4/29/2013 1:53:00 PM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	849	0.06	0.02		NTU
Dilution Factor	3				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 9:37				

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-006

Lab ID: 2013-1419

Collection Date: 4/29/2013 3:10:00 PM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	77.2	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 9:42				

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-007

Lab ID: 2013-1420

Collection Date: 4/29/2013 2:37:00 PM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	1010	0.06	0.02		NTU
Dilution Factor	3				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 9:46				

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-008

Lab ID: 2013-1421

Collection Date: 4/29/2013 11:14:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	22.2	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 9:49				

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-019

Lab ID: 2013-1422

Collection Date: 4/29/2013 9:35:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13050104 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	998	0.06	0.02		NTU
Dilution Factor	3				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 14:56				

Analytical Quality Control Results Report

Batch: 13050107	VOA - water
WS-003	LIMS ID: 2013-1417

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)	99.7 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	91.7 %			70 - 130	
Toluene-d8 (% Recovery)	92.1 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	102 %			70 - 130	
Dichlorodifluoromethane	<1.12 ug/L	1.12	1.12		
Dichlorodifluoromethane (RPD)	0 %				0 - 20
Chloromethane (RPD)	0 %				0 - 20
Chloromethane	<0.58 ug/L	0.58	0.58		
Vinyl chloride	<0.82 ug/L	0.82	0.82		
Vinyl chloride (RPD)	0 %				0 - 20
Bromomethane (RPD)	0 %				0 - 20
Bromomethane	<3.9 ug/L	3.9	3.9		
Chloroethane	<2.68 ug/L	2.68	2.68		
Chloroethane (RPD)	0 %				0 - 20
Trichlorofluoromethane (RPD)	0 %				0 - 20
Trichlorofluoromethane	<0.51 ug/L	0.51	0.51		
1,1-Dichloroethene (RPD)	0 %				0 - 20
1,1-Dichloroethene	<0.43 ug/L	0.43	0.43		
Acetone	<10.5 ug/L	10.5	10.5		
Acetone (RPD)	54.5 %				0 - 20
Methylene chloride (RPD)	0 %				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	<0.42 ug/L	0.42	0.42		
1,1-Dichloroethane (RPD)	0 %				0 - 20
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 (RPD)	0 %			0 - 20
1,1-Dichloropropene	<0.59 ug/L	0.59	0.59	
Carbon tetrachloride	<0.6 ug/L	0.6	0.6	
Carbon tetrachloride (RPD)	0 %			0 - 20
Benzene (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 (RPD)	0 %			0 - 20
Trichloroethene	<0.6 ug/L	0.6	0.6	
1,2-Dichloropropane	<0.98 ug/L	0.98	0.98	
1,2-Dichloropropane (RPD)	0 %			0 - 20
Dibromomethane (RPD)	0 %			0 - 20
Dibromomethane	<1.78 ug/L	1.78	1.78	
Bromodichloromethane	<0.65 ug/L	0.65	0.65	
Bromodichloromethane (RPD)	0 %			0 - 20
cis-1,3-Dichloropropene (RPD)	0 %			0 - 20
cis-1,3-Dichloropropene	<0.86 ug/L	0.86	0.86	
Methyl isobutyl ketone	<8.1 ug/L	8.1	8.1	
Methyl isobutyl ketone (RPD)	0 %			0 - 20
Toluene (RPD)	200 %			0 - 20
Toluene	<0.57 ug/L	0.57	0.57	
trans-1,3-Dichloropropene	<0.84 ug/L	0.84	0.84	
trans-1,3-Dichloropropene (RPD)	0 %			0 - 20
1,1,2-Trichloroethane (RPD)	0 %			0 - 20
1,1,2-Trichloroethane	<0.78 ug/L	0.78	0.78	
2-Hexanone	<9.5 ug/L	9.5	9.5	
2-Hexanone (RPD)	0 %			0 - 20
Tetrachloroethene (RPD)	0 %			0 - 20
Tetrachloroethene	<0.96 ug/L	0.96	0.96	
1,3-Dichloropropane	<0.94 ug/L	0.94	0.94	

1,3-Dichloropropane (RPD)	0 %			0 - 20
Dibromochloromethane (RPD)	0 %			0 - 20
Dibromochloromethane	<1.25 ug/L	1.25	1.25	
1,2-Dibromoethane (EDB)	<0.68 ug/L	0.68	0.68	
1,2-Dibromoethane (EDB) (RPD)	0 %			0 - 20
Chlorobenzene (RPD)	0 %			0 - 20
Chlorobenzene	<0.62 ug/L	0.62	0.62	
Ethylbenzene	<0.51 ug/L	0.51	0.51	
Ethylbenzene (RPD)	200 %			0 - 20
1,1,1,2-Tetrachloroethane (RPD)	0 %			0 - 20
1,1,1,2-Tetrachloroethane	<0.57 ug/L	0.57	0.57	
m,p-Xylene	<1.2 ug/L	1.2	1.2	
m,p-Xylene (RPD)	0.1 %			0 - 20
o-Xylene (RPD)	0.7 %			0 - 20
o-Xylene	<0.5 ug/L	0.5	0.5	
Styrene	<0.53 ug/L	0.53	0.53	
Styrene (RPD)	0 %			0 - 20
Bromoform (RPD)	0 %			0 - 20
Bromoform	<1.56 ug/L	1.56	1.56	
Isopropylbenzene	<0.59 ug/L	0.59	0.59	
Isopropylbenzene (RPD)	0 %			0 - 20
1,1,1,2-Tetrachloroethane (RPD)	0 %			0 - 20
1,1,1,2-Tetrachloroethane	<0.39 ug/L	0.39	0.39	
1,2,3-Trichloropropane	<1.83 ug/L	1.83	1.83	
1,2,3-Trichloropropane (RPD)	0 %			0 - 20
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 (RPD)	0 %			0 - 20
1,3,5-Trimethylbenzene	<0.3 ug/L	0.3	0.3	
2-Chlorotoluene	<0.66 ug/L	0.66	0.66	
2-Chlorotoluene (RPD)	0 %			0 - 20
4-Chlorotoluene (RPD)	0 %			0 - 20
4-Chlorotoluene	<0.8 ug/L	0.8	0.8	
tert-Butylbenzene	<0.85 ug/L	0.85	0.85	
tert-Butylbenzene (RPD)	0 %			0 - 20
1,2,4-Trimethylbenzene (RPD)	0 %			0 - 20
1,2,4-Trimethylbenzene	<0.46 ug/L	0.46	0.46	
sec-Butylbenzene	<0.63 ug/L	0.63	0.63	

sec-Butylbenzene (RPD)	0 %			0 - 20
p-Isopropyltoluene (RPD)	0 %			0 - 20
p-Isopropyltoluene	<0.59 ug/L	0.59	0.59	
1,3-Dichlorobenzene	<0.7 ug/L	0.7	0.7	
1,3-Dichlorobenzene (RPD)	0 %			0 - 20
1,4-Dichlorobenzene (RPD)	0 %			0 - 20
1,4-Dichlorobenzene	<0.53 ug/L	0.53	0.53	
n-Butylbenzene	<0.72 ug/L	0.72	0.72	
n-Butylbenzene (RPD)	0 %			0 - 20
1,2-Dichlorobenzene (RPD)	0 %			0 - 20
1,2-Dichlorobenzene	<0.7 ug/L	0.7	0.7	
1,2-Dibromo-3-chloropropane	<0.86 ug/L	0.86	0.86	
1,2-Dibromo-3-chloropropane (RPD)	0 %			0 - 20
1,2,4-Trichlorobenzene (RPD)	0 %			0 - 20
1,2,4-Trichlorobenzene	<1.14 ug/L	1.14	1.14	
Naphthalene	<1.53 ug/L	1.53	1.53	
Naphthalene (RPD)	0 %			0 - 20
1,2,3-Trichlorobenzene (RPD)	0 %			0 - 20
1,2,3-Trichlorobenzene	<1.3 ug/L	1.3	1.3	
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	4/30/2013 12:22 PM			

WS-003 **LIMS ID: 2013-1417**

Volatiles - water MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	96.8 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	93.0 %			70 - 130	
Toluene-d8 (% Recovery)	91.9 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	102 %			70 - 130	
1,1-Dichloroethene (% Recovery)	91.9 %			70 - 130	
Benzene (% Recovery)	92.4 %			70 - 130	
Trichloroethene (% Recovery)	91.2 %			70 - 130	
Toluene (% Recovery)	84.8 %			70 - 130	
Chlorobenzene (% Recovery)	87.8 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	4/30/2013 12:48 PM				

WS-003	LIMS ID: 2013-1417
---------------	---------------------------

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)	102 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	94.8 %			70 - 130	
Toluene-d8 (% Recovery)	94.8 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	101 %			70 - 130	
1,1-Dichloroethene (% Recovery)	102 %			70 - 130	
1,1-Dichloroethene (RPD)	10.1 %				0 - 20
Benzene (RPD)	9.1 %				0 - 20
Benzene (% Recovery)	101 %			70 - 130	
Trichloroethene (RPD)	8.0 %				0 - 20
Trichloroethene (% Recovery)	98.9 %			70 - 130	
Toluene (% Recovery)	91.6 %			70 - 130	
Toluene (RPD)	7.5 %				0 - 20
Chlorobenzene (RPD)	9.8 %				0 - 20
Chlorobenzene (% Recovery)	96.9 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	4/30/2013 1:13 PM				

LCS	LIMS ID: 13050107-LCS-01
------------	---------------------------------

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)	91.9 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	93.7 %			70 - 130	
Toluene-d8 (% Recovery)	93.4 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	98.5 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	73.9 %			60 - 130	
Chloromethane (% Recovery)	71.8 %			60 - 130	
Vinyl chloride (% Recovery)	81.6 %			60 - 130	
Bromomethane (% Recovery)	61.2 %			60 - 130	
Chloroethane (% Recovery)	75.6 %			60 - 130	
Trichlorofluoromethane (% Recovery)	85.4 %			60 - 130	
1,1-Dichloroethene (% Recovery)	90.5 %			60 - 130	
Acetone (% Recovery)	110 %			60 - 130	
Methylene chloride (% Recovery)	94.5 %			60 - 130	

Methyl tert-butyl ether (% Recovery)	93.1 %	60 - 130
trans-1,2-Dichloroethene (% Recovery)	89.2 %	60 - 130
1,1-Dichloroethane (% Recovery)	92.0 %	60 - 130
Methyl ethyl ketone (% Recovery)	105 %	60 - 130
cis-1,2-Dichloroethene (% Recovery)	91.4 %	60 - 130
2,2-Dichloropropane (% Recovery)	90.2 %	60 - 130
Bromochloromethane (% Recovery)	92.9 %	60 - 130
Chloroform (% Recovery)	92.8 %	60 - 130
1,1,1-Trichloroethane (% Recovery)	90.0 %	60 - 130
1,1-Dichloropropene (% Recovery)	90.7 %	60 - 130
Carbon tetrachloride (% Recovery)	90.0 %	60 - 130
Benzene (% Recovery)	91.6 %	60 - 130
1,2-Dichloroethane (% Recovery)	91.5 %	60 - 130
Trichloroethene (% Recovery)	91.5 %	60 - 130
1,2-Dichloropropane (% Recovery)	91.2 %	60 - 130
Dibromomethane (% Recovery)	89.9 %	60 - 130
Bromodichloromethane (% Recovery)	92.4 %	60 - 130
cis-1,3-Dichloropropene (% Recovery)	89.8 %	60 - 130
Methyl isobutyl ketone (% Recovery)	100 %	60 - 130
Toluene (% Recovery)	91.1 %	60 - 130
trans-1,3-Dichloropropene (% Recovery)	92.7 %	60 - 130
1,1,2-Trichloroethane (% Recovery)	89.9 %	60 - 130
2-Hexanone (% Recovery)	96.0 %	60 - 130
Tetrachloroethene (% Recovery)	87.3 %	60 - 130
1,3-Dichloropropane (% Recovery)	93.3 %	60 - 130
Dibromochloromethane (% Recovery)	91.7 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	94.1 %	60 - 130
Chlorobenzene (% Recovery)	92.2 %	60 - 130
Ethylbenzene (% Recovery)	87.2 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	91.9 %	60 - 130
m,p-Xylene (% Recovery)	93.5 %	60 - 130
o-Xylene (% Recovery)	92.3 %	60 - 130
Styrene (% Recovery)	86.0 %	60 - 130
Bromoform (% Recovery)	90.9 %	60 - 130
Isopropylbenzene (% Recovery)	90.3 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	95.2 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	97.3 %	60 - 130
n-Propylbenzene (% Recovery)	88.4 %	60 - 130
Bromobenzene (% Recovery)	92.6 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	95.7 %	60 - 130

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

2-Chlorotoluene (% Recovery)	93.4 %	60 - 130
4-Chlorotoluene (% Recovery)	92.6 %	60 - 130
tert-Butylbenzene (% Recovery)	89.7 %	60 - 130
1,2,4-Trimethylbenzene (% Recovery)	94.1 %	60 - 130
sec-Butylbenzene (% Recovery)	87.5 %	60 - 130
p-Isopropyltoluene (% Recovery)	88.7 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	91.7 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	91.2 %	60 - 130
n-Butylbenzene (% Recovery)	86.9 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	91.1 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	96.5 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	91.1 %	60 - 130
Naphthalene (% Recovery)	95.9 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	94.0 %	60 - 130
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	4/30/2013 8:32	

Analytical Quality Control Results Report

Batch: 13050104	Turbidity - water
WS-003	LIMS ID: 2013-1417

Turbidity - water DUP

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Turbidity	17.1 NTU	0.02	0.02		
Turbidity (RPD)	1.9 %				0 - 20
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	4/30/2013 9:32				

Analytical Quality Control Results Report

Batch: 13050701	Semi-VOA water (Prep)
WS-003	LIMS ID: 2013-1417

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	4/30/2013 13:00				
2-Fluorophenol (% Recovery)	21.4 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	65.5 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	55.5 %			40 - 110	
2,4,6-Tribromophenol (% Recovery)	54.3 %			40 - 110	
Terphenyl-d14 (% Recovery)	56.5 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Methyl Methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Phenol (RPD)	0 %				0 - 40
Aniline (RPD)	0 %				0 - 40
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether (RPD)	0 %				0 - 40
Bis(2-chloroethyl)ether	<0.24 ug/L	0.2	0.24		
2-Chlorophenol (RPD)	0 %				0 - 40
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 ug/L	0.16	0.16		
Benzyl alcohol (RPD)	0 %				0 - 40
1,2-Dichlorobenzene (RPD)	0 %				0 - 40
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
2-Methylphenol (RPD)	0 %				0 - 40
Acetophenone (RPD)	0 %				0 - 40
Acetophenone	<0.1 ug/L	0.1	0.1		

4-Methylphenol	<0.1 ug/L	0.1	0.1	
4-Methylphenol (RPD)	0 %			0 - 40
N-Nitrosodi-n-propylamine	<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	<0.2 ug/L	0.2	0.2	
Nitrobenzene (RPD)	0 %			0 - 40
N-Nitrosopiperidine (RPD)	0 %			0 - 40
N-Nitrosopiperidine	<0.2 ug/L	0.2	0.2	
Isophorone	<0.1 ug/L	0.1	0.1	
Isophorone (RPD)	0 %			0 - 40
2-Nitrophenol (RPD)	0 %			0 - 40
2-Nitrophenol	<0.3 ug/L	0.3	0.3	
2,4-Dimethylphenol	<0.1 ug/L	0.1	0.1	
2,4-Dimethylphenol (RPD)	0 %			0 - 40
Bis(2-chloroethoxy)methane (RPD)	0 %			0 - 40
Bis(2-chloroethoxy)methane	<0.2 ug/L	0.2	0.2	
2,4-Dichlorophenol	<0.2 ug/L	0.2	0.2	
2,4-Dichlorophenol (RPD)	0 %			0 - 40
1,2,4-Trichlorobenzene (RPD)	0 %			0 - 40
1,2,4-Trichlorobenzene	<0.12 ug/L	0.12	0.12	
Naphthalene (RPD)	0 %			0 - 40
Naphthalene	<0.08 ug/L	0.08	0.08	
4-Chloroaniline (RPD)	0 %			0 - 40
4-Chloroaniline	<0.1 ug/L	0.1	0.1	
2,6-Dichlorophenol	<0.2 ug/L	0.2	0.2	
2,6-Dichlorophenol (RPD)	0 %			0 - 40
Hexachlorobutadiene (RPD)	0 %			0 - 40
Hexachlorobutadiene	<0.2 ug/L	0.2	0.2	
N-Nitrosodibutylamine (RPD)	0 %			0 - 40
N-Nitrosodibutylamine	<0.24 ug/L	0.2	0.24	
4-Chloro-3-methylphenol (RPD)	0 %			0 - 40
4-Chloro-3-methylphenol	<0.16 ug/L	0.16	0.16	
2-Methylnaphthalene	<0.1 ug/L	0.1	0.1	
2-Methylnaphthalene (RPD)	0 %			0 - 40
1,2,4,5-Tetrachlorobenzene (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 (RPD)	0 %			0 - 40
Dibenzofuran	<0.1 ug/L	0.1	0.1	
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)	70.1 %			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	<0.2 ug/L	0.2	0.2	
Dimethylaminoazobenzene (RPD)	0 %			0 - 40
Butyl benzyl phthalate (RPD)	0 %			0 - 40
Butyl benzyl phthalate	<0.4 ug/L	0.4	0.4	
Benzo (a) anthracene (RPD)	0 %			0 - 40
Benzo (a) anthracene	<0.1 ug/L	0.1	0.1	
Chrysene	<0.1 ug/L	0.1	0.1	
Chrysene (RPD)	0 %			0 - 40
Bis(2-ethylhexyl)phthalate (RPD)	37.4 %			0 - 40
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3	
Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3	
Di-n-octyl phthalate (RPD)	200 %			0 - 40

Benzo (b) fluoranthene (RPD)	0 %			0 - 40
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16	
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2	
7,12-Dimethylbenz (a) anthracene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene (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)	0 %			0 - 40
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	
Dibenzo (a,h) anthracene (RPD)	0 %			0 - 40
Benzo (g,h,i) perylene (RPD)	0 %			0 - 40
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16	
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/6/2013 9:43 PM			

WS-003	LIMS ID: 2013-1417
---------------	---------------------------

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	4/30/2013 13:00				
2-Fluorophenol (% Recovery)	24.9 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	65.6 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	59.2 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	64.0 %			40 - 125	
Terphenyl-d14 (% Recovery)	59.9 %			40 - 125	
Phenol (% Recovery)	8.5 %			25 - 125	
2-Chlorophenol (% Recovery)	30.8 %			25 - 125	
1,4-Dichlorobenzene (% Recovery)	61.2 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	72.0 %			25 - 125	
1,2,4-Trichlorobenzene (% Recovery)	63.4 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	29.0 %			25 - 125	
Acenaphthene (% Recovery)	62.9 %			25 - 125	

4-Nitrophenol (% Recovery)	12.9 %	25 - 125
2,4-Dinitrotoluene (% Recovery)	51.5 %	25 - 125
Pentachlorophenol (% Recovery)	47.9 %	25 - 125
Pyrene (% Recovery)	62.7 %	25 - 125
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	5/6/2013 10:13 PM	

WS-003	LIMS ID: 2013-1417
---------------	---------------------------

Semi 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>
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	4/30/2013 13:00				
2-Fluorophenol (% Recovery)	32.5 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	80.9 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	71.0 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	71.6 %			40 - 125	
Terphenyl-d14 (% Recovery)	75.0 %			40 - 125	
Phenol (% Recovery)	13.3 %			25 - 125	
Phenol (RPD)	43.4 %				0 - 40
2-Chlorophenol (% Recovery)	41.1 %			25 - 125	
2-Chlorophenol (RPD)	28.5 %				0 - 40
1,4-Dichlorobenzene (% Recovery)	72.2 %			25 - 125	
1,4-Dichlorobenzene (RPD)	16.6 %				0 - 40
N-Nitrosodi-n-propylamine (% Recovery)	84.9 %			25 - 125	
N-Nitrosodi-n-propylamine (RPD)	16.4 %				0 - 40
1,2,4-Trichlorobenzene (% Recovery)	75.3 %			25 - 125	
1,2,4-Trichlorobenzene (RPD)	17.1 %				0 - 40
4-Chloro-3-methylphenol (% Recovery)	38.8 %			25 - 125	
4-Chloro-3-methylphenol (RPD)	28.9 %				0 - 40
Acenaphthene (% Recovery)	73.5 %			25 - 125	
Acenaphthene (RPD)	15.5 %				0 - 40
4-Nitrophenol (% Recovery)	18.1 %			25 - 125	
4-Nitrophenol (RPD)	33.5 %				0 - 40
2,4-Dinitrotoluene (% Recovery)	67.3 %			25 - 125	
2,4-Dinitrotoluene (RPD)	26.6 %				0 - 40
Pentachlorophenol (% Recovery)	62.7 %			25 - 125	

Pentachlorophenol (RPD)	26.9 %	0 - 40
Pyrene (% Recovery)	78.5 %	25 - 125
Pyrene (RPD)	22.4 %	0 - 40
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	5/6/2013 10:42 PM	

MB **LIMS ID: 13050701-MB-01**

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	4/30/2013 08:00				
2-Fluorophenol (% Recovery)	32.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	75.2 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	66.1 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	58.9 %			40 - 125	
Terphenyl-d14 (% Recovery)	76.5 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.2 ug/L	0.2	0.2		
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 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	0.888 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	5/6/2013 10:28		

LCS **LIMS ID: 13050701-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	4/30/2013 08:00				
2-Fluorophenol (% Recovery)	30.0 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	76.3 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	70.0 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	69.8 %			40 - 125	
Terphenyl-d14 (% Recovery)	78.7 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	61.9 %			50 - 150	
Ethyl methanesulfonate (% Recovery)	63.8 %			50 - 150	
Phenol (% Recovery)	23.3 %			50 - 150	

Aniline (% Recovery)	43.6 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	77.6 %	50 - 150
2-Chlorophenol (% Recovery)	72.3 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	55.1 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	53.1 %	50 - 150
Benzyl alcohol (% Recovery)	70.3 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	55.7 %	50 - 150
2-Methylphenol (% Recovery)	50.5 %	50 - 150
Acetophenone (% Recovery)	82.8 %	50 - 150
4-Methylphenol (% Recovery)	43.7 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	80.9 %	50 - 150
Hexachloroethane (% Recovery)	48.2 %	50 - 150
Nitrobenzene (% Recovery)	78.7 %	50 - 150
N-Nitrosopiperidine (% Recovery)	80.6 %	50 - 150
Isophorone (% Recovery)	78.0 %	50 - 150
2-Nitrophenol (% Recovery)	80.3 %	50 - 150
2,4-Dimethylphenol (% Recovery)	1.8 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	69.0 %	50 - 150
2,4-Dichlorophenol (% Recovery)	72.5 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	59.2 %	50 - 150
Naphthalene (% Recovery)	71.7 %	50 - 150
4-Chloroaniline (% Recovery)	60.7 %	50 - 150
2,6-Dichlorophenol (% Recovery)	74.5 %	50 - 150
Hexachlorobutadiene (% Recovery)	47.5 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	78.3 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	70.4 %	50 - 150
2-Methylnaphthalene (% Recovery)	71.5 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	64.1 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	55.9 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	77.3 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	69.2 %	50 - 150
2-Chloronaphthalene (% Recovery)	71.8 %	50 - 150
1-Chloronaphthalene (% Recovery)	71.8 %	50 - 150
2-Nitroaniline (% Recovery)	78.9 %	50 - 150
Dimethyl phthalate (% Recovery)	72.0 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	85.8 %	50 - 150
Acenaphthylene (% Recovery)	77.7 %	50 - 150
3-Nitroaniline (% Recovery)	73.0 %	50 - 150
Acenaphthene (% Recovery)	73.2 %	50 - 150
2,4-Dinitrophenol (% Recovery)	72.1 %	50 - 150

Pentachlorobenzene (% Recovery)	77.3 %	50 - 150
4-Nitrophenol (% Recovery)	22.6 %	50 - 150
Dibenzofuran (% Recovery)	80.1 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	91.0 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	77.1 %	50 - 150
Diethyl phthalate (% Recovery)	78.2 %	50 - 150
Fluorene (% Recovery)	74.2 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	75.1 %	50 - 150
4-Nitroaniline (% Recovery)	72.8 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	69.8 %	50 - 150
Diphenylamine (% Recovery)	77.5 %	50 - 150
Azobenzene (% Recovery)	79.2 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	80.0 %	50 - 150
Hexachlorobenzene (% Recovery)	72.9 %	50 - 150
Pentachlorophenol (% Recovery)	71.9 %	50 - 150
Pentachloronitrobenzene (% Recovery)	86.0 %	50 - 150
Pronamide (% Recovery)	84.6 %	50 - 150
Phenanthrene (% Recovery)	81.5 %	50 - 150
Anthracene (% Recovery)	74.1 %	50 - 150
Carbazole (% Recovery)	81.8 %	50 - 150
Di-n-butyl phthalate (% Recovery)	129 %	50 - 150
Fluoranthene (% Recovery)	79.9 %	50 - 150
Pyrene (% Recovery)	83.3 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	75.7 %	50 - 150
Butyl benzyl phthalate (% Recovery)	73.5 %	50 - 150
Benzo (a) anthracene (% Recovery)	81.6 %	50 - 150
Chrysene (% Recovery)	85.1 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	78.0 %	50 - 150
Di-n-octyl phthalate (% Recovery)	72.5 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	72.1 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	65.4 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	79.8 %	50 - 150
Benzo (a) pyrene (% Recovery)	80.2 %	50 - 150
3-Methylcholanthrene (% Recovery)	75.2 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	81.5 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	83.4 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	82.5 %	50 - 150
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	5/6/2013 10:57	

MB	LIMS ID: 13050701-MB-02
-----------	--------------------------------

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	4/30/2013 13:00				
2-Fluorophenol (% Recovery)	31.5 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	67.0 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	60.0 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	75.1 %			40 - 125	
Terphenyl-d14 (% Recovery)	80.3 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.2 ug/L	0.2	0.2		
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 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	1.19 ug/L	0.2	0.2
Fluoranthene	<0.08 ug/L	0.08	0.08
Pyrene	<0.08 ug/L	0.08	0.08

Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2
Butyl benzyl phthalate	<0.3 ug/L	0.3	0.3
Benzo (a) anthracene	<0.2 ug/L	0.2	0.2
Chrysene	<0.1 ug/L	0.1	0.1
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3
Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	5/6/2013 18:46		

LCS	LIMS ID: 13050701-LCS-02
------------	---------------------------------

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	4/30/2013 13:00				
2-Fluorophenol (% Recovery)	30.0 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	77.9 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	60.4 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	66.5 %			40 - 125	
Terphenyl-d14 (% Recovery)	76.1 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	45.4 %			50 - 150	
Ethyl methanesulfonate (% Recovery)	61.4 %			50 - 150	
Phenol (% Recovery)	19.9 %			50 - 150	
Aniline (% Recovery)	37.5 %			50 - 150	
Bis(2-chloroethyl)ether (% Recovery)	72.8 %			50 - 150	
2-Chlorophenol (% Recovery)	63.3 %			50 - 150	
1,3-Dichlorobenzene (% Recovery)	53.4 %			50 - 150	
1,4-Dichlorobenzene (% Recovery)	51.9 %			50 - 150	
Benzyl alcohol (% Recovery)	51.6 %			50 - 150	

1,2-Dichlorobenzene (% Recovery)	52.2 %	50 - 150
2-Methylphenol (% Recovery)	42.6 %	50 - 150
Acetophenone (% Recovery)	78.6 %	50 - 150
4-Methylphenol (% Recovery)	33.5 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	78.1 %	50 - 150
Hexachloroethane (% Recovery)	50.2 %	50 - 150
Nitrobenzene (% Recovery)	76.0 %	50 - 150
N-Nitrosopiperidine (% Recovery)	77.1 %	50 - 150
Isophorone (% Recovery)	75.5 %	50 - 150
2-Nitrophenol (% Recovery)	78.8 %	50 - 150
2,4-Dimethylphenol (% Recovery)	1.2 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	65.3 %	50 - 150
2,4-Dichlorophenol (% Recovery)	69.9 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	60.3 %	50 - 150
Naphthalene (% Recovery)	66.5 %	50 - 150
4-Chloroaniline (% Recovery)	55.0 %	50 - 150
2,6-Dichlorophenol (% Recovery)	70.5 %	50 - 150
Hexachlorobutadiene (% Recovery)	50.1 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	80.6 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	64.4 %	50 - 150
2-Methylnaphthalene (% Recovery)	65.3 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	58.0 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	48.3 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	63.3 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	57.8 %	50 - 150
2-Chloronaphthalene (% Recovery)	58.2 %	50 - 150
1-Chloronaphthalene (% Recovery)	59.6 %	50 - 150
2-Nitroaniline (% Recovery)	66.2 %	50 - 150
Dimethyl phthalate (% Recovery)	64.6 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	73.1 %	50 - 150
Acenaphthylene (% Recovery)	66.1 %	50 - 150
3-Nitroaniline (% Recovery)	66.3 %	50 - 150
Acenaphthene (% Recovery)	63.8 %	50 - 150
2,4-Dinitrophenol (% Recovery)	62.5 %	50 - 150
Pentachlorobenzene (% Recovery)	64.8 %	50 - 150
4-Nitrophenol (% Recovery)	20.6 %	50 - 150
Dibenzofuran (% Recovery)	66.4 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	65.5 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	67.4 %	50 - 150
Diethyl phthalate (% Recovery)	69.5 %	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

Fluorene (% Recovery)	68.1 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	63.6 %	50 - 150
4-Nitroaniline (% Recovery)	77.8 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	56.7 %	50 - 150
Diphenylamine (% Recovery)	70.0 %	50 - 150
Azobenzene (% Recovery)	65.6 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	72.1 %	50 - 150
Hexachlorobenzene (% Recovery)	68.2 %	50 - 150
Pentachlorophenol (% Recovery)	60.7 %	50 - 150
Pentachloronitrobenzene (% Recovery)	78.4 %	50 - 150
Pronamide (% Recovery)	71.9 %	50 - 150
Phenanthrene (% Recovery)	66.9 %	50 - 150
Anthracene (% Recovery)	67.2 %	50 - 150
Carbazole (% Recovery)	70.0 %	50 - 150
Di-n-butyl phthalate (% Recovery)	115 %	50 - 150
Fluoranthene (% Recovery)	66.7 %	50 - 150
Pyrene (% Recovery)	73.8 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	73.5 %	50 - 150
Butyl benzyl phthalate (% Recovery)	71.6 %	50 - 150
Benzo (a) anthracene (% Recovery)	64.5 %	50 - 150
Chrysene (% Recovery)	69.1 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	71.8 %	50 - 150
Di-n-octyl phthalate (% Recovery)	65.5 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	70.9 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	52.6 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	65.7 %	50 - 150
Benzo (a) pyrene (% Recovery)	66.5 %	50 - 150
3-Methylcholanthrene (% Recovery)	61.2 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	66.4 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	65.2 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	63.5 %	50 - 150
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	5/6/2013 19:16	

Analytical Quality Control Results Report

Batch: 13043002	Oil and Grease - water
WS-003	LIMS ID: 2013-1417

Oil and Grease - water DUP

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	<2.5 mg/L	2.5	2.5		
Oil and Grease (RPD)	0 %				0 - 20
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

WS-003	LIMS ID: 2013-1417
---------------	---------------------------

Oil and Grease - water MS

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)	82.5 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

WS-003	LIMS ID: 2013-1417
---------------	---------------------------

Oil and Grease - water MSD

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)	83.0 %			70 - 130	
Oil and Grease (RPD)	0.6 %				0 - 20
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

MB	LIMS ID: 13043002-MB-01
-----------	--------------------------------

Oil and Grease - water MB

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	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	4/29/2013 15:00				

LCS	LIMS ID: 13043002-LCS-01
------------	---------------------------------

Oil and Grease - water LCS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	99.3 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	4/29/2013 15:00				

MB	LIMS ID: 13043002-MB-02
-----------	--------------------------------

Oil and Grease - water MB

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

LCS	LIMS ID: 13043002-LCS-02
------------	---------------------------------

Oil and Grease - water LCS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	84.3 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	4/30/2013 07:00				

Analytical Quality Control Results Report

Batch: 13050801	ICP Metals - water (Diss.)
WS-003	LIMS ID: 2013-1417

ICP Metals - water (Dissolved) DUP

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Aluminum	107 ug/L	20	20		
Aluminum (RPD)	73.8 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<5 ug/L	1	5		
Arsenic	0.67 ug/L	0.2	0.5		
Arsenic (RPD)	14.6 %				0 - 20
Barium (RPD)	3.2 %				0 - 20
Barium	12.8 ug/L	0.4	2		
Beryllium	<0.1 ug/L	0.04	0.1		
Beryllium (RPD)	18.2 %				0 - 20
Boron (RPD)	2.1 %				0 - 20
Boron	14.3 ug/L	2	5		
Cadmium	<0.1 ug/L	0.05	0.1		
Cadmium (RPD)	66.7 %				0 - 20
Calcium (RPD)	0.9 %				0 - 20
Calcium	3.27 mg/L	0.03	0.03		
Chromium	<0.5 ug/L	0.05	0.5		
Chromium (RPD)	39.6 %				0 - 20
Cobalt (RPD)	13.9 %				0 - 20
Cobalt	<0.5 ug/L	0.05	0.5		
Copper	1.74 ug/L	0.2	0.5		
Copper (RPD)	4.3 %				0 - 20
Iron (RPD)	8.7 %				0 - 20
Iron	250 ug/L	5	20		
Lead	<0.3 ug/L	0.02	0.3		
Lead (RPD)	6.6 %				0 - 20
Magnesium (RPD)	1.4 %				0 - 20
Magnesium	1.55 mg/L	0.01	0.02		
Manganese	62 ug/L	0.07	0.3		
Manganese (RPD)	2.5 %				0 - 20
Nickel (RPD)	5.9 %				0 - 20
Nickel	1.0 ug/L	0.15	0.5		
Potassium	2.05 mg/L	0.01	0.02		

Potassium (RPD)	0.9 %			0 - 20
Selenium (RPD)	2.8 %			0 - 20
Selenium	<1 ug/L	0.2	1	
Silicon Dioxide	1.70 mg/L	0.01	0.05	
Silicon Dioxide (RPD)	13.7 %			0 - 20
Silver	<0.5 ug/L	0.02	0.5	
Silver (RPD)	0 %			0 - 20
Sodium	6.88 mg/L	0.01	0.02	
Sodium (RPD)	1.2 %			0 - 20
Thallium (RPD)	0 %			0 - 20
Thallium	<0.5 ug/L	0	0.5	
Vanadium (RPD)	24.8 %			0 - 20
Vanadium	<0.5 ug/L	0.3	0.5	
Zinc	1.77 ug/L	0.3	1	
Zinc (RPD)	36.9 %			0 - 20
Hardness	14 mg/L	1	1	
Hardness (RPD)	1 %			0 - 20
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 1:37PM			

WS-003	LIMS ID: 2013-1417
---------------	---------------------------

ICP Metals - water (Dissolved) MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	122 %			70 - 130	
Antimony (% Recovery)	98.5 %			70 - 130	
Arsenic (% Recovery)	105 %			70 - 130	
Barium (% Recovery)	98.7 %			70 - 130	
Beryllium (% Recovery)	107 %			70 - 130	
Boron (% Recovery)	107 %			70 - 130	
Cadmium (% Recovery)	103 %			70 - 130	
Calcium (% Recovery)	103 %			70 - 130	
Chromium (% Recovery)	101 %			70 - 130	
Cobalt (% Recovery)	102 %			70 - 130	
Copper (% Recovery)	104 %			70 - 130	
Iron (% Recovery)	112 %			70 - 130	
Lead (% Recovery)	98.8 %			70 - 130	
Magnesium (% Recovery)	101 %			70 - 130	
Manganese (% Recovery)	92 %			70 - 130	

Nickel (% Recovery)	100 %	70 - 130
Potassium (% Recovery)	112 %	70 - 130
Selenium (% Recovery)	111 %	70 - 130
Silver (% Recovery)	85.8 %	70 - 130
Sodium (% Recovery)	89.5 %	70 - 130
Thallium (% Recovery)	99.1 %	70 - 130
Vanadium (% Recovery)	100 %	70 - 130
Zinc (% Recovery)	110 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	May 7 2013 1:57PM	

WS-003	LIMS ID: 2013-1417
---------------	---------------------------

ICP Metals - water (Dissolved) MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	127 %			70 - 130	
Aluminum (RPD)	4.0 %				0 - 20
Antimony (% Recovery)	97.8 %			70 - 130	
Antimony (RPD)	0.7 %				0 - 20
Arsenic (% Recovery)	104 %			70 - 130	
Arsenic (RPD)	0.9 %				0 - 20
Barium (% Recovery)	96.6 %			70 - 130	
Barium (RPD)	2.0 %				0 - 20
Beryllium (% Recovery)	104 %			70 - 130	
Beryllium (RPD)	2.6 %				0 - 20
Boron (% Recovery)	104 %			70 - 130	
Boron (RPD)	2.6 %				0 - 20
Cadmium (% Recovery)	101 %			70 - 130	
Cadmium (RPD)	1.8 %				0 - 20
Calcium (% Recovery)	100 %			70 - 130	
Calcium (RPD)	1.9 %				0 - 20
Chromium (% Recovery)	100 %			70 - 130	
Chromium (RPD)	0.8 %				0 - 20
Cobalt (% Recovery)	101 %			70 - 130	
Cobalt (RPD)	1.2 %				0 - 20
Copper (% Recovery)	103 %			70 - 130	
Copper (RPD)	1.5 %				0 - 20
Iron (% Recovery)	118 %			70 - 130	
Iron (RPD)	2.7 %				0 - 20

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

Lead (% Recovery)	96.7 %	70 - 130	
Lead (RPD)	2.2 %		0 - 20
Magnesium (% Recovery)	99.1 %	70 - 130	
Magnesium (RPD)	1.6 %		0 - 20
Manganese (% Recovery)	91 %	70 - 130	
Manganese (RPD)	0.3 %		0 - 20
Nickel (% Recovery)	100 %	70 - 130	
Nickel (RPD)	1.5 %		0 - 20
Potassium (% Recovery)	109 %	70 - 130	
Potassium (RPD)	2.5 %		0 - 20
Selenium (% Recovery)	110 %	70 - 130	
Selenium (RPD)	1.1 %		0 - 20
Silver (% Recovery)	89.8 %	70 - 130	
Silver (RPD)	4.5 %		0 - 20
Sodium (% Recovery)	88.8 %	70 - 130	
Sodium (RPD)	0.4 %		0 - 20
Thallium (% Recovery)	97.3 %	70 - 130	
Thallium (RPD)	1.8 %		0 - 20
Vanadium (% Recovery)	99.7 %	70 - 130	
Vanadium (RPD)	0.8 %		0 - 20
Zinc (% Recovery)	108 %	70 - 130	
Zinc (RPD)	1.6 %		0 - 20
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	May 7 2013 2:03PM		

Analytical Quality Control Results Report

Batch: 13050802	ICP Metals - water (total)
WS-003	LIMS ID: 2013-1417

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	248 ug/L	20	20		
Aluminum (RPD)	4.1 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<10 ug/L	5	10		
Arsenic	<1 ug/L	0.5	1		
Arsenic (RPD)	3.3 %				0 - 20
Barium (RPD)	2.0 %				0 - 20
Barium	23.3 ug/L	2	10		
Beryllium	<0.5 ug/L	0.1	0.5		
Beryllium (RPD)	8.0 %				0 - 20
Boron (RPD)	0.2 %				0 - 20
Boron	<25 ug/L	5	25		
Cadmium	<1 ug/L	0.3	1		
Cadmium (RPD)	48.0 %				0 - 20
Calcium (RPD)	3.0 %				0 - 20
Calcium	3.66 mg/L	0.04	0.04		
Chromium	<1 ug/L	0.3	1		
Chromium (RPD)	2.9 %				0 - 20
Cobalt (RPD)	3.3 %				0 - 20
Cobalt	<1 ug/L	0.5	1		
Copper	1.79 ug/L	0.5	1		
Copper (RPD)	0.3 %				0 - 20
Iron (RPD)	0 %				0 - 20
Iron	963 ug/L	10	20		
Lead	<1 ug/L	0.1	1		
Lead (RPD)	5.9 %				0 - 20
Magnesium (RPD)	0.4 %				0 - 20
Magnesium	1.90 mg/L	0.1	0.1		
Manganese	350 ug/L	0.2	1		
Manganese (RPD)	2.7 %				0 - 20
Nickel (RPD)	3.2 %				0 - 20
Nickel	<2.5 ug/L	0.5	2.5		
Potassium	2.63 mg/L	0.05	1		

Potassium (RPD)	7.8 %			0 - 20
Selenium (RPD)	2.8 %			0 - 20
Selenium	<2 ug/L	0.5	2	
Silver	<5 ug/L	1	5	
Silver (RPD)	80.0 %			0 - 20
Sodium	7.33 mg/L	0.02	0.04	
Sodium (RPD)	1.0 %			0 - 20
Thallium	<2.5 ug/L	0.05	2.5	
Thallium (RPD)	0 %			0 - 20
Vanadium (RPD)	0.8 %			0 - 20
Vanadium	<2.5 ug/L	1	2.5	
Zinc	6.58 ug/L	2	3	
Zinc (RPD)	13.0 %			0 - 20
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 7 2013 7:45PM			

WS-003	LIMS ID: 2013-1417
---------------	---------------------------

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)	111 %			70 - 130	
Barium (% Recovery)	105 %			70 - 130	
Beryllium (% Recovery)	112 %			70 - 130	
Boron (% Recovery)	111 %			70 - 130	
Cadmium (% Recovery)	110 %			70 - 130	
Calcium (% Recovery)	105 %			70 - 130	
Chromium (% Recovery)	108 %			70 - 130	
Cobalt (% Recovery)	108 %			70 - 130	
Copper (% Recovery)	109 %			70 - 130	
Iron (% Recovery)	74.8 %			70 - 130	
Lead (% Recovery)	103 %			70 - 130	
Magnesium (% Recovery)	110 %			70 - 130	
Manganese (% Recovery)	64 %			70 - 130	
Nickel (% Recovery)	110 %			70 - 130	
Potassium (% Recovery)	104 %			70 - 130	
Selenium (% Recovery)	115 %			70 - 130	
Silver (% Recovery)	94.1 %			70 - 130	

Sodium (% Recovery)	91.5 %	70 - 130
Thallium (% Recovery)	106 %	70 - 130
Vanadium (% Recovery)	109 %	70 - 130
Zinc (% Recovery)	132 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	May 7 2013 8:04PM	

WS-003 **LIMS ID: 2013-1417**

ICP Metals - water (Total) MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	134 %			70 - 130	
Aluminum (RPD)	3.5 %				0 - 20
Antimony (% Recovery)	91.6 %			70 - 130	
Antimony (RPD)	0.6 %				0 - 20
Arsenic (% Recovery)	112 %			70 - 130	
Arsenic (RPD)	0.3 %				0 - 20
Barium (% Recovery)	106 %			70 - 130	
Barium (RPD)	0.5 %				0 - 20
Beryllium (% Recovery)	113 %			70 - 130	
Beryllium (RPD)	1.3 %				0 - 20
Boron (% Recovery)	112 %			70 - 130	
Boron (RPD)	0.6 %				0 - 20
Cadmium (% Recovery)	111 %			70 - 130	
Cadmium (RPD)	0.9 %				0 - 20
Calcium (% Recovery)	101 %			70 - 130	
Calcium (RPD)	2.5 %				0 - 20
Chromium (% Recovery)	111 %			70 - 130	
Chromium (RPD)	2.2 %				0 - 20
Cobalt (% Recovery)	111 %			70 - 130	
Cobalt (RPD)	2.5 %				0 - 20
Copper (% Recovery)	111 %			70 - 130	
Copper (RPD)	1.7 %				0 - 20
Iron (% Recovery)	85.8 %			70 - 130	
Iron (RPD)	2.0 %				0 - 20
Lead (% Recovery)	103 %			70 - 130	
Lead (RPD)	0.1 %				0 - 20
Magnesium (% Recovery)	112 %			70 - 130	
Magnesium (RPD)	1.6 %				0 - 20

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

Manganese (% Recovery)	94 %	70 - 130	
Manganese (RPD)	2.5 %		0 - 20
Nickel (% Recovery)	110 %	70 - 130	
Nickel (RPD)	2.8 %		0 - 20
Potassium (% Recovery)	99.9 %	70 - 130	
Potassium (RPD)	3.0 %		0 - 20
Selenium (% Recovery)	117 %	70 - 130	
Selenium (RPD)	1.7 %		0 - 20
Silver (% Recovery)	93.9 %	70 - 130	
Silver (RPD)	0.2 %		0 - 20
Sodium (% Recovery)	94.8 %	70 - 130	
Sodium (RPD)	2.0 %		0 - 20
Thallium (% Recovery)	108 %	70 - 130	
Thallium (RPD)	1.8 %		0 - 20
Vanadium (% Recovery)	112 %	70 - 130	
Vanadium (RPD)	2.5 %		0 - 20
Zinc (% Recovery)	132 %	70 - 130	
Zinc (RPD)	0.7 %		0 - 20
Dilution Factor	1		
Analysis Date/Time	May 7 2013 8:11PM		
Analyzed By	Robert Graddy		