



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

Client Report For: Exxon Oil Spill 2013 3112-3118
Attention:
Client Address:

Report Date: September 17, 2013
LAB ID: AR13SEP04-04
Comment:

Approved By: _____

Date: September 17, 2013

Client: Special Samples

Client Sample ID: WS-011S

Lab ID: 2013-3112

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13090505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
<i>Dibromofluoromethane (% Recovery)</i>	109	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	102	70-130			%
<i>Toluene-d8 (% Recovery)</i>	102	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	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	<0.51	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	9/4/2013 4:38 PM			

Client: Special Samples

Client Sample ID: WS-014S

Lab ID: 2013-3113

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13090505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
<i>Dibromofluoromethane (% Recovery)</i>	109	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	104	70-130			%
<i>Toluene-d8 (% Recovery)</i>	102	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	111	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	9/4/2013 5:03 PM			

Client: Special Samples

Client Sample ID: WS-012S

Lab ID: 2013-3114

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13090505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
<i>Dibromofluoromethane (% Recovery)</i>	105	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	101	70-130			%
<i>Toluene-d8 (% Recovery)</i>	98.9	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	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	<0.51	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	9/4/2013 6:19 PM			

Client: Special Samples

Client Sample ID: WS-010S

Lab ID: 2013-3115

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13090505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
<i>Dibromofluoromethane (% Recovery)</i>	108	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	102	70-130			%
<i>Toluene-d8 (% Recovery)</i>	101	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	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	<0.51	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	9/4/2013 5:28 PM			

Client: Special Samples

Client Sample ID: WS-018S

Lab ID: 2013-3116

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13090505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
<i>Dibromofluoromethane (% Recovery)</i>	107	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	102	70-130			%
<i>Toluene-d8 (% Recovery)</i>	99.6	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	103	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	9/4/2013 5:54 PM			

Client: Special Samples

Client Sample ID: Volatiles Field Blank

Lab ID: 2013-3118

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13090505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
<i>Dibromofluoromethane (% Recovery)</i>	110	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	104	70-130			%
<i>Toluene-d8 (% Recovery)</i>	104	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	111	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	9/4/2013 4:13 PM			

Client: Special Samples

Client Sample ID: WS-011S

Lab ID: 2013-3112

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13090601 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13090901 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	13.9	40-110			%
Nitrobenzene-d5 (% Recovery)	61.7	50-110			%
2-Fluorobiphenyl (% Recovery)	54.8	50-110			%
2,4,6-Tribromophenol (% Recovery)	17.8	40-110			%
Terphenyl-d14 (% Recovery)	41.7	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	9/9/2013 10:34 AM			
Prep By	Ed Harris			
Prep Date/Time	9/5/2013 08:00			

Client: Special Samples

Client Sample ID: WS-014S

Lab ID: 2013-3113

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13090601 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13090901 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	15.1	40-110			%
Nitrobenzene-d5 (% Recovery)	71.7	50-110			%
2-Fluorobiphenyl (% Recovery)	62.7	50-110			%
2,4,6-Tribromophenol (% Recovery)	18.4	40-110			%
Terphenyl-d14 (% Recovery)	49.7	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	9/9/2013 11:03 AM			
Prep By	Ed Harris			
Prep Date/Time	9/5/2013 08:00			

Client: Special Samples

Client Sample ID: WS-012S

Lab ID: 2013-3114

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13090601 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13090901 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	16.0	40-110			%
Nitrobenzene-d5 (% Recovery)	64.0	50-110			%
2-Fluorobiphenyl (% Recovery)	58.9	50-110			%
2,4,6-Tribromophenol (% Recovery)	29.4	40-110			%
Terphenyl-d14 (% Recovery)	38.8	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	9/9/2013 11:33 AM			
Prep By	Ed Harris			
Prep Date/Time	9/5/2013 08:00			

Client: Special Samples

Client Sample ID: WS-010S

Lab ID: 2013-3115

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13090601 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13090901 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	15.0	40-110			%
Nitrobenzene-d5 (% Recovery)	65.9	50-110			%
2-Fluorobiphenyl (% Recovery)	54.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	28.7	40-110			%
Terphenyl-d14 (% Recovery)	40.2	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	9/9/2013 12:02 PM			
Prep By	Ed Harris			
Prep Date/Time	9/5/2013 08:00			

Client: Special Samples

Client Sample ID: WS-018S

Lab ID: 2013-3116

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13090601 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13090901 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	9.1	40-110			%
Nitrobenzene-d5 (% Recovery)	62.0	50-110			%
2-Fluorobiphenyl (% Recovery)	57.0	50-110			%
2,4,6-Tribromophenol (% Recovery)	15.6	40-110			%
Terphenyl-d14 (% Recovery)	44.7	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	9/9/2013 12:31 PM			
Prep By	Ed Harris			
Prep Date/Time	9/5/2013 08:00			

Client: Special Samples

Client Sample ID: WS-011S

Lab ID: 2013-3112

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13091001 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	2.42	0.5	0.2		ug/L
Barium	5.14	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.1	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.92	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	21.0	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	3.22	0.02	0.01		mg/L
Manganese	323	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	3.01	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.45	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.39	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	1.19	1	0.3		ug/L
Hardness	30.5	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 9 2013 5:19PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 1

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

		Limit		
Aluminum	21.4	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	4.73	1	0.5	ug/L
Barium	92.5	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.63	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	733	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	3.57	0.1	0.1	mg/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.99	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	8.28	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	Sep 10 2013 5:53PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 2

	Result	Reporting Limit	MDL	Qual	Unit
Manganese	890	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 10 2013 11:51AM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-014S

Lab ID: 2013-3113

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13091001 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	2.24	0.5	0.2		ug/L
Barium	4.27	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.8	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.68	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	26.0	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	3.14	0.02	0.01		mg/L
Manganese	230	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	3.00	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.33	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.64	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	4.06	1	0.3		ug/L
Hardness	29.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 9 2013 5:25PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 1

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

		Limit		
Aluminum	<20	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	3.73	1	0.5	ug/L
Barium	51.3	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.58	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	746	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	3.42	0.1	0.1	mg/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	3.06	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	8.37	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	Sep 10 2013 5:59PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 2

	Result	Reporting Limit	MDL	Qual	Unit
Manganese	720	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 10 2013 11:58AM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-012S

Lab ID: 2013-3114

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13091001 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	2.36	0.5	0.2		ug/L
Barium	7.59	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.8	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.64	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	34.5	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	3.14	0.02	0.01		mg/L
Manganese	24.8	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	3.02	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.33	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.77	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	29.5	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 9 2013 5:32PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 1

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

Limit

Aluminum	24.5	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	3.95	1	0.5	ug/L
Barium	43.5	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.56	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	765	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	3.56	0.1	0.1	mg/L
Manganese	1040	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	3.08	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	8.71	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	Sep 10 2013 6:05PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-010S

Lab ID: 2013-3115

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13091001 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	2.58	0.5	0.2		ug/L
Barium	7.58	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.6	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.61	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	47.6	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	3.13	0.02	0.01		mg/L
Manganese	74.6	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	2.94	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.25	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.47	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	1.38	1	0.3		ug/L
Hardness	29.4	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 9 2013 6:35PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 1

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

		Limit		
Aluminum	31.3	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	4.30	1	0.5	ug/L
Barium	61.6	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.63	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	838	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	3.45	0.1	0.1	mg/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	3.11	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	8.38	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	Sep 10 2013 6:44PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 2

	Result	Reporting Limit	MDL	Qual	Unit
Manganese	694	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 10 2013 12:04PM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-018S

Lab ID: 2013-3116

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13091001 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	2.93	0.5	0.2		ug/L
Barium	53.3	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.2	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.64	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	34.7	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	3.27	0.02	0.01		mg/L
Manganese	438	0.3	0.07		ug/L
Nickel	0.51	0.5	0.15		ug/L
Potassium	2.91	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.44	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.35	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	5.46	1	0.3		ug/L
Hardness	30.1	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 9 2013 6:42PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 1

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

		Limit		
Aluminum	37.9	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	4.72	1	0.5	ug/L
Barium	89.7	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	6.65	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	631	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	3.61	0.1	0.1	mg/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	3.04	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	8.38	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	5.06	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Sep 10 2013 6:50PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13091101 Run: 2

	Result	Reporting Limit	MDL	Qual	Unit
Manganese	860	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 10 2013 12:10PM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: Metals Field Blank

Lab ID: 2013-3117

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13091001 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	<0.5	0.5	0.2		ug/L
Iron	<20	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	<0.02	0.02	0.01		mg/L
Manganese	<0.3	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	<0.02	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	<0.05	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	<0.02	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	<1	1	0.3		ug/L
Hardness	<1	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Sep 9 2013 6:48PM				

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-011S

Lab ID: 2013-3112

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13090514 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	11.2	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	9/4/2013 15:14				

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-014S

Lab ID: 2013-3113

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13090514 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	9.48	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	9/4/2013 15:18				

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-012S

Lab ID: 2013-3114

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13090514 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	11.0	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	9/4/2013 15:20				

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

Client: Special Samples

Client Sample ID: WS-010S

Lab ID: 2013-3115

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13090514 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	12.5	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	9/4/2013 15:22				

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-018S

Lab ID: 2013-3116

Collection Date: 9/4/2013 9:50:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13090514 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	5.39	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	9/4/2013 15:24				

Analytical Quality Control Results Report

Batch: 13090505	VOA - water
WS-012S	LIMS ID: 2013-3114

Volatiles - water DUP

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	105 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	102 %			70 - 130	
Toluene-d8 (% Recovery)	104 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	112 %			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)	0 %				0 - 20
Methylene chloride (RPD)	200 %				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)	0 %			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)	0 %			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 %			0 - 20
o-Xylene (RPD)	0 %			0 - 20
o-Xylene	<0.5 ug/L	0.5	0.5	
Styrene	<0.53 ug/L	0.53	0.53	
Styrene (RPD)	0 %			0 - 20
Bromoform (RPD)	0 %			0 - 20
Bromoform	<1.56 ug/L	1.56	1.56	
Isopropylbenzene	<0.59 ug/L	0.59	0.59	
Isopropylbenzene (RPD)	0 %			0 - 20
1,1,1,2-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	9/4/2013 6:44 PM			

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

Volatiles - water MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	106 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	103 %			70 - 130	
Toluene-d8 (% Recovery)	97.9 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	106 %			70 - 130	
1,1-Dichloroethene (% Recovery)	98.5 %			70 - 130	
Benzene (% Recovery)	100 %			70 - 130	
Trichloroethene (% Recovery)	103 %			70 - 130	
Toluene (% Recovery)	95.3 %			70 - 130	
Chlorobenzene (% Recovery)	93.4 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	9/4/2013 7:09 PM				

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

Volatiles - water MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	108 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	105 %			70 - 130	
Toluene-d8 (% Recovery)	102 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	106 %			70 - 130	
1,1-Dichloroethene (% Recovery)	102 %			70 - 130	
1,1-Dichloroethene (RPD)	3.6 %				0 - 20
Benzene (RPD)	1.6 %				0 - 20
Benzene (% Recovery)	102 %			70 - 130	
Trichloroethene (RPD)	3.7 %				0 - 20
Trichloroethene (% Recovery)	107 %			70 - 130	
Toluene (% Recovery)	96.8 %			70 - 130	
Toluene (RPD)	1.6 %				0 - 20
Chlorobenzene (RPD)	0.5 %				0 - 20
Chlorobenzene (% Recovery)	93.9 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	9/4/2013 7:34 PM				

LCS	LIMS ID: 13090505-LCS-01
------------	---------------------------------

Volatiles - water LCS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	94.3 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	94.6 %			70 - 130	
Toluene-d8 (% Recovery)	95.8 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	103 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	95.7 %			60 - 130	
Chloromethane (% Recovery)	101 %			60 - 130	
Vinyl chloride (% Recovery)	100 %			60 - 130	
Bromomethane (% Recovery)	116 %			60 - 130	
Chloroethane (% Recovery)	113 %			60 - 130	
Trichlorofluoromethane (% Recovery)	93.8 %			60 - 130	
1,1-Dichloroethene (% Recovery)	96.1 %			60 - 130	
Acetone (% Recovery)	127 %			60 - 130	
Methylene chloride (% Recovery)	97.4 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	92.2 %			60 - 130	

trans-1,2-Dichloroethene (% Recovery)	101 %	60 - 130
1,1-Dichloroethane (% Recovery)	98.6 %	60 - 130
Methyl ethyl ketone (% Recovery)	118 %	60 - 130
cis-1,2-Dichloroethene (% Recovery)	99.3 %	60 - 130
2,2-Dichloropropane (% Recovery)	96.1 %	60 - 130
Bromochloromethane (% Recovery)	99.8 %	60 - 130
Chloroform (% Recovery)	101 %	60 - 130
1,1,1-Trichloroethane (% Recovery)	98.8 %	60 - 130
1,1-Dichloropropene (% Recovery)	101 %	60 - 130
Carbon tetrachloride (% Recovery)	97.5 %	60 - 130
Benzene (% Recovery)	97.0 %	60 - 130
1,2-Dichloroethane (% Recovery)	97.4 %	60 - 130
Trichloroethene (% Recovery)	103 %	60 - 130
1,2-Dichloropropane (% Recovery)	99.5 %	60 - 130
Dibromomethane (% Recovery)	97.1 %	60 - 130
Bromodichloromethane (% Recovery)	98.8 %	60 - 130
cis-1,3-Dichloropropene (% Recovery)	100 %	60 - 130
Methyl isobutyl ketone (% Recovery)	101 %	60 - 130
Toluene (% Recovery)	99.9 %	60 - 130
trans-1,3-Dichloropropene (% Recovery)	99.1 %	60 - 130
1,1,2-Trichloroethane (% Recovery)	101 %	60 - 130
2-Hexanone (% Recovery)	122 %	60 - 130
Tetrachloroethene (% Recovery)	100 %	60 - 130
1,3-Dichloropropane (% Recovery)	97.7 %	60 - 130
Dibromochloromethane (% Recovery)	99.3 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	98.6 %	60 - 130
Chlorobenzene (% Recovery)	101 %	60 - 130
Ethylbenzene (% Recovery)	101 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	99.3 %	60 - 130
m,p-Xylene (% Recovery)	97.6 %	60 - 130
o-Xylene (% Recovery)	101 %	60 - 130
Styrene (% Recovery)	96.9 %	60 - 130
Bromoform (% Recovery)	101 %	60 - 130
Isopropylbenzene (% Recovery)	104 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	104 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	101 %	60 - 130
n-Propylbenzene (% Recovery)	96.8 %	60 - 130
Bromobenzene (% Recovery)	96.9 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	104 %	60 - 130
2-Chlorotoluene (% Recovery)	104 %	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

4-Chlorotoluene (% Recovery)	105 %	60 - 130
tert-Butylbenzene (% Recovery)	102 %	60 - 130
1,2,4-Trimethylbenzene (% Recovery)	105 %	60 - 130
sec-Butylbenzene (% Recovery)	93.9 %	60 - 130
p-Isopropyltoluene (% Recovery)	104 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	104 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	101 %	60 - 130
n-Butylbenzene (% Recovery)	104 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	102 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	104 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	101 %	60 - 130
Naphthalene (% Recovery)	100 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	102 %	60 - 130
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	9/4/2013 14:32	

Analytical Quality Control Results Report

Batch: 13090901	Semi-VOA water (Prep)
WS-012S	LIMS ID: 2013-3114

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	9/5/2013 08:00				
2-Fluorophenol (% Recovery)	15.3 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	68.2 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	59.7 %			40 - 110	
2,4,6-Tribromophenol (% Recovery)	29.5 %			40 - 110	
Terphenyl-d14 (% Recovery)	44.1 %			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)	11.7 %				0 - 40
Aniline (RPD)	200 %				0 - 40
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.24 ug/L	0.2	0.24		
Bis(2-chloroethyl)ether (RPD)	0 %				0 - 40
2-Chlorophenol (RPD)	0 %				0 - 40
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 ug/L	0.16	0.16		
Benzyl alcohol (RPD)	19.2 %				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)	15.1 %				0 - 40
Acetophenone	<0.1 ug/L	0.1	0.1		

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

2,4,6-Trichlorophenol (RPD)	0 %			0 - 40
2,4,6-Trichlorophenol	<0.4 ug/L	0.2	0.4	
2,4,5-Trichlorophenol	<0.2 ug/L	0.2	0.2	
2,4,5-Trichlorophenol (RPD)	0 %			0 - 40
2-Chloronaphthalene (RPD)	200 %			0 - 40
2-Chloronaphthalene	<0.1 ug/L	0.1	0.1	
1-Chloronaphthalene	<0.1 ug/L	0.1	0.1	
1-Chloronaphthalene (RPD)	0 %			0 - 40
2-Nitroaniline (RPD)	0 %			0 - 40
2-Nitroaniline	<0.2 ug/L	0.2	0.2	
Dimethyl phthalate	<0.2 ug/L	0.2	0.2	
Dimethyl phthalate (RPD)	0 %			0 - 40
2,6-Dinitrotoluene (RPD)	0 %			0 - 40
2,6-Dinitrotoluene	<0.2 ug/L	0.2	0.2	
Acenaphthylene	<0.08 ug/L	0.08	0.08	
Acenaphthylene (RPD)	0 %			0 - 40
3-Nitroaniline (RPD)	0 %			0 - 40
3-Nitroaniline	<0.2 ug/L	0.2	0.2	
Acenaphthene	<0.1 ug/L	0.1	0.1	
Acenaphthene (RPD)	0 %			0 - 40
2,4-Dinitrophenol (RPD)	0 %			0 - 40
2,4-Dinitrophenol	<4 ug/L	4	4	
Pentachlorobenzene	<0.12 ug/L	0.12	0.12	
Pentachlorobenzene (RPD)	0 %			0 - 40
4-Nitrophenol (RPD)	0 %			0 - 40
4-Nitrophenol	<2 ug/L	2	2	
Dibenzofuran	<0.1 ug/L	0.1	0.1	
Dibenzofuran (RPD)	0 %			0 - 40
2,4-Dinitrotoluene (RPD)	0 %			0 - 40
2,4-Dinitrotoluene	<0.2 ug/L	0.2	0.2	
2,3,4,6-Tetrachlorophenol	<0.6 ug/L	0.6	0.6	
2,3,4,6-Tetrachlorophenol (RPD)	0 %			0 - 40
Diethyl phthalate (RPD)	19.1 %			0 - 40
Diethyl phthalate	<0.4 ug/L	0.2	0.4	
Fluorene	<0.1 ug/L	0.1	0.1	
Fluorene (RPD)	0 %			0 - 40
4-Chlorophenyl phenyl ether (RPD)	0 %			0 - 40
4-Chlorophenyl phenyl ether	<0.1 ug/L	0.1	0.1	
4-Nitroaniline	<0.3 ug/L	0.2	0.3	
4-Nitroaniline (RPD)	0 %			0 - 40

4,6-Dinitro-2-methylphenol (RPD)	0 %			0 - 40
4,6-Dinitro-2-methylphenol	<6 ug/L	6	6	
Diphenylamine	<0.1 ug/L	0.1	0.1	
Diphenylamine (RPD)	0 %			0 - 40
Azobenzene (RPD)	0 %			0 - 40
Azobenzene	<0.08 ug/L	0.08	0.08	
4-Bromophenyl phenyl ether	<0.2 ug/L	0.2	0.2	
4-Bromophenyl phenyl ether (RPD)	0 %			0 - 40
Hexachlorobenzene (RPD)	0 %			0 - 40
Hexachlorobenzene	<0.16 ug/L	0.16	0.16	
Pentachlorophenol	<1 ug/L	1	1	
Pentachlorophenol (RPD)	0 %			0 - 40
Pentachloronitrobenzene (RPD)	0 %			0 - 40
Pentachloronitrobenzene	<0.2 ug/L	0.2	0.2	
Pronamide	<0.2 ug/L	0.2	0.2	
Pronamide (RPD)	0 %			0 - 40
Phenanthrene (RPD)	0 %			0 - 40
Phenanthrene	<0.08 ug/L	0.08	0.08	
Anthracene	<0.08 ug/L	0.08	0.08	
Anthracene (RPD)	0 %			0 - 40
Carbazole (RPD)	0 %			0 - 40
Carbazole	<0.1 ug/L	0.1	0.1	
Di-n-butyl phthalate	<0.2 ug/L	0.2	0.2	
Di-n-butyl phthalate (RPD)	30.0 %			0 - 40
Fluoranthene (RPD)	0 %			0 - 40
Fluoranthene	<0.08 ug/L	0.08	0.08	
Pyrene	<0.08 ug/L	0.08	0.08	
Pyrene (RPD)	0 %			0 - 40
Dimethylaminoazobenzene (RPD)	0 %			0 - 40
Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2	
Butyl benzyl phthalate	<0.4 ug/L	0.4	0.4	
Butyl benzyl phthalate (RPD)	0 %			0 - 40
Benzo (a) anthracene (RPD)	0 %			0 - 40
Benzo (a) anthracene	<0.1 ug/L	0.1	0.1	
Chrysene	<0.1 ug/L	0.1	0.1	
Chrysene (RPD)	0 %			0 - 40
Bis(2-ethylhexyl)phthalate (RPD)	200 %			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)	1.5 %			0 - 40

Benzo (b) fluoranthene (RPD)	0 %			0 - 40
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16	
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2	
7,12-Dimethylbenz (a) anthracene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene (RPD)	0 %			0 - 40
3-Methylcholanthrene (RPD)	0 %			0 - 40
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene (RPD)	0 %			0 - 40
Dibenzo (a,h) anthracene (RPD)	0 %			0 - 40
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene (RPD)	0 %			0 - 40
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	9/9/2013 4:55 PM			

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

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	9/5/2013 08:00				
2-Fluorophenol (% Recovery)	20.4 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	65.5 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	55.7 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	29.1 %			40 - 125	
Terphenyl-d14 (% Recovery)	44.6 %			40 - 125	
Phenol (% Recovery)	14.4 %			25 - 125	
2-Chlorophenol (% Recovery)	26.7 %			25 - 125	
1,4-Dichlorobenzene (% Recovery)	65.4 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	67.7 %			25 - 125	
1,2,4-Trichlorobenzene (% Recovery)	61.1 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	21.9 %			25 - 125	
Acenaphthene (% Recovery)	61.1 %			25 - 125	

4-Nitrophenol (% Recovery)	11.5 %	25 - 125
2,4-Dinitrotoluene (% Recovery)	57.4 %	25 - 125
Pentachlorophenol (% Recovery)	31.2 %	25 - 125
Pyrene (% Recovery)	51.7 %	25 - 125
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	9/9/2013 5:24 PM	

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

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	9/5/2013 08:00				
2-Fluorophenol (% Recovery)	14.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	58.6 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	54.4 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	24.3 %			40 - 125	
Terphenyl-d14 (% Recovery)	37.7 %			40 - 125	
Phenol (% Recovery)	12.4 %			25 - 125	
Phenol (RPD)	14.4 %				0 - 40
2-Chlorophenol (% Recovery)	20.5 %			25 - 125	
2-Chlorophenol (RPD)	25.9 %				0 - 40
1,4-Dichlorobenzene (RPD)	16.4 %				0 - 40
1,4-Dichlorobenzene (% Recovery)	55.5 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	59.3 %			25 - 125	
N-Nitrosodi-n-propylamine (RPD)	13.3 %				0 - 40
1,2,4-Trichlorobenzene (RPD)	12.6 %				0 - 40
1,2,4-Trichlorobenzene (% Recovery)	53.9 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	19.0 %			25 - 125	
4-Chloro-3-methylphenol (RPD)	13.9 %				0 - 40
Acenaphthene (% Recovery)	56.1 %			25 - 125	
Acenaphthene (RPD)	8.7 %				0 - 40
4-Nitrophenol (% Recovery)	8.1 %			25 - 125	
4-Nitrophenol (RPD)	34.3 %				0 - 40
2,4-Dinitrotoluene (% Recovery)	57.5 %			25 - 125	
2,4-Dinitrotoluene (RPD)	0.1 %				0 - 40
Pentachlorophenol (% Recovery)	27.2 %			25 - 125	

Pentachlorophenol (RPD)	13.5 %	0 - 40
Pyrene (% Recovery)	45.6 %	25 - 125
Pyrene (RPD)	12.5 %	0 - 40
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	9/9/2013 5:53 PM	

MB	LIMS ID: 13090901-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	9/5/2013 08:00				
2-Fluorophenol (% Recovery)	27.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	66.6 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	55.2 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	52.2 %			40 - 125	
Terphenyl-d14 (% Recovery)	64.3 %			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	0.775 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	9/9/2013 15:56		

LCS	LIMS ID: 13090901-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	9/5/2013 08:00				
2-Fluorophenol (% Recovery)	31.9 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	75.7 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	66.2 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	64.9 %			40 - 125	
Terphenyl-d14 (% Recovery)	71.9 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	51.2 %			50 - 150	
Ethyl methanesulfonate (% Recovery)	55.7 %			50 - 150	
Phenol (% Recovery)	35.5 %			50 - 150	

Aniline (% Recovery)	19.5 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	90.0 %	50 - 150
2-Chlorophenol (% Recovery)	74.1 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	55.0 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	60.6 %	50 - 150
Benzyl alcohol (% Recovery)	75.8 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	66.0 %	50 - 150
2-Methylphenol (% Recovery)	50.2 %	50 - 150
Acetophenone (% Recovery)	81.2 %	50 - 150
4-Methylphenol (% Recovery)	40.4 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	76.9 %	50 - 150
Hexachloroethane (% Recovery)	39.2 %	50 - 150
Nitrobenzene (% Recovery)	78.3 %	50 - 150
N-Nitrosopiperidine (% Recovery)	82.2 %	50 - 150
Isophorone (% Recovery)	76.7 %	50 - 150
2-Nitrophenol (% Recovery)	75.3 %	50 - 150
2,4-Dimethylphenol (% Recovery)	0.5 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	64.1 %	50 - 150
2,4-Dichlorophenol (% Recovery)	62.1 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	54.7 %	50 - 150
Naphthalene (% Recovery)	67.0 %	50 - 150
4-Chloroaniline (% Recovery)	33.5 %	50 - 150
2,6-Dichlorophenol (% Recovery)	73.5 %	50 - 150
Hexachlorobutadiene (% Recovery)	41.3 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	90.9 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	60.8 %	50 - 150
2-Methylnaphthalene (% Recovery)	66.5 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	56.9 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	25.6 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	71.7 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	73.4 %	50 - 150
2-Chloronaphthalene (% Recovery)	72.4 %	50 - 150
1-Chloronaphthalene (% Recovery)	73.0 %	50 - 150
2-Nitroaniline (% Recovery)	84.5 %	50 - 150
Dimethyl phthalate (% Recovery)	72.6 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	85.1 %	50 - 150
Acenaphthylene (% Recovery)	76.1 %	50 - 150
3-Nitroaniline (% Recovery)	72.5 %	50 - 150
Acenaphthene (% Recovery)	74.1 %	50 - 150
2,4-Dinitrophenol (% Recovery)	73.6 %	50 - 150

Pentachlorobenzene (% Recovery)	58.7 %	50 - 150
4-Nitrophenol (% Recovery)	25.7 %	50 - 150
Dibenzofuran (% Recovery)	76.1 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	83.0 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	73.9 %	50 - 150
Diethyl phthalate (% Recovery)	82.5 %	50 - 150
Fluorene (% Recovery)	79.7 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	75.7 %	50 - 150
4-Nitroaniline (% Recovery)	72.8 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	72.4 %	50 - 150
Diphenylamine (% Recovery)	71.8 %	50 - 150
Azobenzene (% Recovery)	77.5 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	75.5 %	50 - 150
Hexachlorobenzene (% Recovery)	58.2 %	50 - 150
Pentachlorophenol (% Recovery)	62.1 %	50 - 150
Pentachloronitrobenzene (% Recovery)	77.7 %	50 - 150
Pronamide (% Recovery)	81.2 %	50 - 150
Phenanthrene (% Recovery)	74.6 %	50 - 150
Anthracene (% Recovery)	74.1 %	50 - 150
Carbazole (% Recovery)	88.1 %	50 - 150
Di-n-butyl phthalate (% Recovery)	113 %	50 - 150
Fluoranthene (% Recovery)	78.4 %	50 - 150
Pyrene (% Recovery)	73.1 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	68.0 %	50 - 150
Butyl benzyl phthalate (% Recovery)	81.3 %	50 - 150
Benzo (a) anthracene (% Recovery)	70.5 %	50 - 150
Chrysene (% Recovery)	73.3 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	52.0 %	50 - 150
Di-n-octyl phthalate (% Recovery)	44.9 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	57.9 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	69.3 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	68.2 %	50 - 150
Benzo (a) pyrene (% Recovery)	68.7 %	50 - 150
3-Methylcholanthrene (% Recovery)	50.9 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	52.3 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	49.3 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	55.9 %	50 - 150
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	9/9/2013 16:25	

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

Analytical Quality Control Results Report

Batch: 13090601	Oil and Grease - water
WS-012S	LIMS ID: 2013-3114

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	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

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)	91.3 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

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)	82.0 %			70 - 130	
Oil and Grease (RPD)	10.7 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

MB	LIMS ID: 13090601-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	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

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

LCS **LIMS ID: 13090601-LCS-01**

Oil and Grease - water LCS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	98.5 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	09/05/2013 1300				

Analytical Quality Control Results Report

Batch: 13091001	ICP Metals - water (Diss.)
WS-012S	LIMS ID: 2013-3114

ICP Metals - water (Dissolved) DUP

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	<20 ug/L	20	20		
Aluminum (RPD)	127 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<5 ug/L	1	5		
Arsenic	2.47 ug/L	0.2	0.5		
Arsenic (RPD)	4.3 %				0 - 20
Barium (RPD)	1.9 %				0 - 20
Barium	7.73 ug/L	0.4	2		
Beryllium	<0.1 ug/L	0.04	0.1		
Beryllium (RPD)	0 %				0 - 20
Boron (RPD)	2.7 %				0 - 20
Boron	22.4 ug/L	2	5		
Cadmium	<0.1 ug/L	0.05	0.1		
Cadmium (RPD)	0 %				0 - 20
Calcium (RPD)	5.6 %				0 - 20
Calcium	7.03 mg/L	0.03	0.03		
Chromium	<0.5 ug/L	0.05	0.5		
Chromium (RPD)	771 %				0 - 20
Cobalt (RPD)	0 %				0 - 20
Cobalt	<0.5 ug/L	0.05	0.5		
Copper	<0.5 ug/L	0.2	0.5		
Copper (RPD)	3.7 %				0 - 20
Iron (RPD)	15.9 %				0 - 20
Iron	29.4 ug/L	5	20		
Lead	<0.3 ug/L	0.02	0.3		
Lead (RPD)	0 %				0 - 20
Magnesium (RPD)	2.8 %				0 - 20
Magnesium	3.22 mg/L	0.01	0.02		
Manganese	17 ug/L	0.07	0.3		
Manganese (RPD)	37 %				0 - 20
Nickel (RPD)	3.9 %				0 - 20
Nickel	<0.5 ug/L	0.15	0.5		
Potassium	3.04 mg/L	0.01	0.02		

Potassium (RPD)	0.6 %			0 - 20
Selenium (RPD)	13.6 %			0 - 20
Selenium	<1 ug/L	0.2	1	
Silicon Dioxide	8.48 mg/L	0.01	0.05	
Silicon Dioxide (RPD)	1.8 %			0 - 20
Silver	<0.5 ug/L	0.02	0.5	
Silver (RPD)	0 %			0 - 20
Sodium	8.07 mg/L	0.01	0.02	
Sodium (RPD)	3.8 %			0 - 20
Thallium (RPD)	0 %			0 - 20
Thallium	<0.5 ug/L	0	0.5	
Vanadium (RPD)	0 %			0 - 20
Vanadium	<0.5 ug/L	0.3	0.5	
Zinc	1.42 ug/L	0.3	1	
Zinc (RPD)	50.7 %			0 - 20
Hardness	31 mg/L	1	1	
Hardness (RPD)	4 %			0 - 20
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Sep 9 2013 5:38PM			

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

ICP Metals - water (Dissolved) MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	102 %			70 - 130	
Antimony (% Recovery)	101 %			70 - 130	
Arsenic (% Recovery)	105 %			70 - 130	
Barium (% Recovery)	98.1 %			70 - 130	
Beryllium (% Recovery)	103 %			70 - 130	
Boron (% Recovery)	104 %			70 - 130	
Cadmium (% Recovery)	101 %			70 - 130	
Calcium (% Recovery)	94.3 %			70 - 130	
Chromium (% Recovery)	99.2 %			70 - 130	
Cobalt (% Recovery)	100 %			70 - 130	
Copper (% Recovery)	102 %			70 - 130	
Iron (% Recovery)	97.9 %			70 - 130	
Lead (% Recovery)	97.7 %			70 - 130	
Magnesium (% Recovery)	101 %			70 - 130	
Manganese (% Recovery)	95 %			70 - 130	

Nickel (% Recovery)	100 %	70 - 130
Potassium (% Recovery)	97.8 %	70 - 130
Selenium (% Recovery)	111 %	70 - 130
Silver (% Recovery)	95.6 %	70 - 130
Sodium (% Recovery)	106 %	70 - 130
Thallium (% Recovery)	97.0 %	70 - 130
Vanadium (% Recovery)	99.0 %	70 - 130
Zinc (% Recovery)	106 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	Sep 9 2013 5:44PM	

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

ICP Metals - water (Dissolved) MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	101 %			70 - 130	
Aluminum (RPD)	0.8 %				0 - 20
Antimony (% Recovery)	101 %			70 - 130	
Antimony (RPD)	0.1 %				0 - 20
Arsenic (% Recovery)	106 %			70 - 130	
Arsenic (RPD)	0.8 %				0 - 20
Barium (% Recovery)	97.8 %			70 - 130	
Barium (RPD)	0.3 %				0 - 20
Beryllium (% Recovery)	101 %			70 - 130	
Beryllium (RPD)	1.6 %				0 - 20
Boron (% Recovery)	104 %			70 - 130	
Boron (RPD)	0.4 %				0 - 20
Cadmium (% Recovery)	100 %			70 - 130	
Cadmium (RPD)	0.4 %				0 - 20
Calcium (% Recovery)	89.4 %			70 - 130	
Calcium (RPD)	3.1 %				0 - 20
Chromium (% Recovery)	100 %			70 - 130	
Chromium (RPD)	1.1 %				0 - 20
Cobalt (% Recovery)	101 %			70 - 130	
Cobalt (RPD)	0.7 %				0 - 20
Copper (% Recovery)	102 %			70 - 130	
Copper (RPD)	0.3 %				0 - 20
Iron (% Recovery)	99.1 %			70 - 130	
Iron (RPD)	1.0 %				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)	97.6 %	70 - 130	
Lead (RPD)	0.1 %		0 - 20
Magnesium (% Recovery)	102 %	70 - 130	
Magnesium (RPD)	0.7 %		0 - 20
Manganese (% Recovery)	97 %	70 - 130	
Manganese (RPD)	1.1 %		0 - 20
Nickel (% Recovery)	100 %	70 - 130	
Nickel (RPD)	0.7 %		0 - 20
Potassium (% Recovery)	95.9 %	70 - 130	
Potassium (RPD)	1.5 %		0 - 20
Selenium (% Recovery)	112 %	70 - 130	
Selenium (RPD)	0.4 %		0 - 20
Silver (% Recovery)	95.3 %	70 - 130	
Silver (RPD)	0.3 %		0 - 20
Sodium (% Recovery)	109 %	70 - 130	
Sodium (RPD)	1.6 %		0 - 20
Thallium (% Recovery)	96.5 %	70 - 130	
Thallium (RPD)	0.5 %		0 - 20
Vanadium (% Recovery)	100 %	70 - 130	
Vanadium (RPD)	1.5 %		0 - 20
Zinc (% Recovery)	107 %	70 - 130	
Zinc (RPD)	0.6 %		0 - 20
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Sep 9 2013 5:51PM		

Analytical Quality Control Results Report

Batch: 13090514	Turbidity - water
WS-012S	LIMS ID: 2013-3114

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	10.7 NTU	0.02	0.02		
Turbidity (RPD)	2.8 %				0 - 20
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	9/4/2013 15:21				

Analytical Quality Control Results Report

Batch: 13091101	ICP Metals - water (total)
WS-012S	LIMS ID: 2013-3114

ICP Metals - water (Total) DUP

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	<20 ug/L	20	20		
Aluminum (RPD)	21.5 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<10 ug/L	5	10		
Arsenic	4.09 ug/L	0.5	1		
Arsenic (RPD)	3.3 %				0 - 20
Barium (RPD)	0.4 %				0 - 20
Barium	43.4 ug/L	2	10		
Beryllium	<0.5 ug/L	0.1	0.5		
Beryllium (RPD)	%				0 - 20
Boron (RPD)	0 %				0 - 20
Boron	<25 ug/L	5	25		
Cadmium	<1 ug/L	0.3	1		
Cadmium (RPD)	0 %				0 - 20
Calcium (RPD)	0.7 %				0 - 20
Calcium	6.52 mg/L	0.04	0.04		
Chromium	<1 ug/L	0.3	1		
Chromium (RPD)	19.8 %				0 - 20
Cobalt (RPD)	1.2 %				0 - 20
Cobalt	<1 ug/L	0.5	1		
Copper	<1 ug/L	0.5	1		
Copper (RPD)	15.2 %				0 - 20
Iron (RPD)	0.1 %				0 - 20
Iron	765 ug/L	10	20		
Lead	<1 ug/L	0.1	1		
Lead (RPD)	1.3 %				0 - 20
Magnesium (RPD)	0.8 %				0 - 20
Magnesium	3.53 mg/L	0.1	0.1		
Manganese	1000 ug/L	0.2	1		
Manganese (RPD)	0.4 %				0 - 20
Nickel (RPD)	2.6 %				0 - 20
Nickel	<2.5 ug/L	0.5	2.5		
Potassium	3.05 mg/L	0.05	1		

Potassium (RPD)	0.8 %			0 - 20
Selenium (RPD)	9.6 %			0 - 20
Selenium	<2 ug/L	0.5	2	
Silver	<5 ug/L	1	5	
Silver (RPD)	0 %			0 - 20
Sodium	8.63 mg/L	0.02	0.04	
Sodium (RPD)	0.9 %			0 - 20
Thallium (RPD)	0 %			0 - 20
Thallium	<2.5 ug/L	0.05	2.5	
Vanadium (RPD)	2.0 %			0 - 20
Vanadium	<2.5 ug/L	1	2.5	
Zinc	<3 ug/L	2	3	
Zinc (RPD)	59.9 %			0 - 20
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Sep 10 2013 6:12PM			

WS-012S	LIMS ID: 2013-3114
----------------	---------------------------

ICP Metals - water (Total) MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	105 %			70 - 130	
Antimony (% Recovery)	99.8 %			70 - 130	
Arsenic (% Recovery)	107 %			70 - 130	
Barium (% Recovery)	99.5 %			70 - 130	
Beryllium (% Recovery)	106 %			70 - 130	
Boron (% Recovery)	110 %			70 - 130	
Cadmium (% Recovery)	103 %			70 - 130	
Calcium (% Recovery)	90.8 %			70 - 130	
Chromium (% Recovery)	102 %			70 - 130	
Cobalt (% Recovery)	103 %			70 - 130	
Copper (% Recovery)	104 %			70 - 130	
Iron (% Recovery)	87.6 %			70 - 130	
Lead (% Recovery)	97.9 %			70 - 130	
Magnesium (% Recovery)	109 %			70 - 130	
Manganese (% Recovery)	0 %			70 - 130	
Nickel (% Recovery)	100 %			70 - 130	
Potassium (% Recovery)	95.3 %			70 - 130	
Selenium (% Recovery)	114 %			70 - 130	
Silver (% Recovery)	98.7 %			70 - 130	

Sodium (% Recovery)	114 %	70 - 130
Thallium (% Recovery)	97.3 %	70 - 130
Vanadium (% Recovery)	104 %	70 - 130
Zinc (% Recovery)	110 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	Sep 10 2013 6:18PM	

WS-012S **LIMS ID: 2013-3114**

ICP Metals - water (Total) MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	105 %			70 - 130	
Aluminum (RPD)	0.4 %				0 - 20
Antimony (% Recovery)	99.7 %			70 - 130	
Antimony (RPD)	0.1 %				0 - 20
Arsenic (% Recovery)	107 %			70 - 130	
Arsenic (RPD)	0.6 %				0 - 20
Barium (% Recovery)	99.1 %			70 - 130	
Barium (RPD)	0.4 %				0 - 20
Beryllium (% Recovery)	107 %			70 - 130	
Beryllium (RPD)	0.8 %				0 - 20
Boron (% Recovery)	109 %			70 - 130	
Boron (RPD)	0.5 %				0 - 20
Cadmium (% Recovery)	102 %			70 - 130	
Cadmium (RPD)	1.3 %				0 - 20
Calcium (% Recovery)	90.5 %			70 - 130	
Calcium (RPD)	0.1 %				0 - 20
Chromium (% Recovery)	103 %			70 - 130	
Chromium (RPD)	1.3 %				0 - 20
Cobalt (% Recovery)	104 %			70 - 130	
Cobalt (RPD)	0.1 %				0 - 20
Copper (% Recovery)	104 %			70 - 130	
Copper (RPD)	0.3 %				0 - 20
Iron (% Recovery)	92.1 %			70 - 130	
Iron (RPD)	1.0 %				0 - 20
Lead (% Recovery)	98.0 %			70 - 130	
Lead (RPD)	0 %				0 - 20
Magnesium (% Recovery)	110 %			70 - 130	
Magnesium (RPD)	0.7 %				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

Manganese (% Recovery)	6.7 %	70 - 130	
Manganese (RPD)	0.6 %		0 - 20
Nickel (% Recovery)	100 %	70 - 130	
Nickel (RPD)	0.2 %		0 - 20
Potassium (% Recovery)	95.9 %	70 - 130	
Potassium (RPD)	0.4 %		0 - 20
Selenium (% Recovery)	114 %	70 - 130	
Selenium (RPD)	0.3 %		0 - 20
Silver (% Recovery)	98.1 %	70 - 130	
Silver (RPD)	0.6 %		0 - 20
Sodium (% Recovery)	114 %	70 - 130	
Sodium (RPD)	0.2 %		0 - 20
Thallium (% Recovery)	97.4 %	70 - 130	
Thallium (RPD)	0.2 %		0 - 20
Vanadium (% Recovery)	105 %	70 - 130	
Vanadium (RPD)	0.8 %		0 - 20
Zinc (% Recovery)	111 %	70 - 130	
Zinc (RPD)	0.8 %		0 - 20
Dilution Factor	1		
Analysis Date/Time	Sep 10 2013 6:25PM		
Analyzed By	Robert Graddy		