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

Client Report For: Exxon Oil Spill 2013 3549-3559
Attention:
Client Address:
,

Report Date: October 22, 2013
LAB ID: AR13OCT09-06
Comment:

Approved By:_____ Date:October 22, 2013

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

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

Client: Special Samples
Lab ID: 2013-3549

Client Sample ID: WS-011S
Collection Date: 10/9/2013 9:37:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	101	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	90.9	70-130			%
Toluene-d8 (% Recovery)	99.2	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 8:11 PM			

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

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

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

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

Client: Special Samples
Lab ID: 2013-3550

Client Sample ID: WS-011D
Collection Date: 10/9/2013 9:43:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	101	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	92.1	70-130			%
Toluene-d8 (% Recovery)	102	70-130			%
4-Bromofluorobenzene (% Recovery)	110	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 8:36 PM			

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

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

Client: Special Samples
Lab ID: 2013-3551

Client Sample ID: WS-014S
Collection Date: 10/9/2013 10:10:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	104	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	94.1	70-130			%
Toluene-d8 (% Recovery)	103	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 11:32 PM			

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

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

Client: Special Samples
Lab ID: 2013-3552

Client Sample ID: WS-014D
Collection Date: 10/9/2013 10:25:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	104	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	93.3	70-130			%
Toluene-d8 (% Recovery)	103	70-130			%
4-Bromofluorobenzene (% Recovery)	112	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 9:02 PM			

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

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

Client: Special Samples
Lab ID: 2013-3553

Client Sample ID: WS-012S
Collection Date: 10/9/2013 11:08:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	102	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	94.1	70-130			%
Toluene-d8 (% Recovery)	101	70-130			%
4-Bromofluorobenzene (% Recovery)	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 9:27 PM			

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

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

Client: Special Samples
Lab ID: 2013-3554

Client Sample ID: WS-012D
Collection Date: 10/9/2013 11:15:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	105	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	91.2	70-130			%
Toluene-d8 (% Recovery)	101	70-130			%
4-Bromofluorobenzene (% Recovery)	106	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 9:52 PM			

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

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

Client: Special Samples
Lab ID: 2013-3555

Client Sample ID: WS-010S
Collection Date: 10/9/2013 11:38:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	105	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	95.3	70-130			%
Toluene-d8 (% Recovery)	104	70-130			%
4-Bromofluorobenzene (% Recovery)	116	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 10:17 PM			

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

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

Client: Special Samples
Lab ID: 2013-3556

Client Sample ID: WS-010D
Collection Date: 10/9/2013 11:49:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	102	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	93.1	70-130			%
Toluene-d8 (% Recovery)	102	70-130			%
4-Bromofluorobenzene (% Recovery)	115	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 10:42 PM			

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

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

Client: Special Samples
Lab ID: 2013-3557

Client Sample ID: WS-018S
Collection Date: 10/9/2013 12:00:00 PM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	104	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	94.9	70-130			%
Toluene-d8 (% Recovery)	100	70-130			%
4-Bromofluorobenzene (% Recovery)	115	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 11:07 PM			

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

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

Client: Special Samples
Lab ID: 2013-3559
Client Sample ID: Volatiles Trip Blank
Collection Date: 10/9/2013 10:13:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13102211*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	102	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	93.7	70-130			%
Toluene-d8 (% Recovery)	101	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

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

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

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
1,1,2,2-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
Hexachlorobutadiene	<0.96	0.96	0.96	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	10/9/2013 7:46 PM			

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

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

Client: Special Samples
Lab ID: 2013-3549
Client Sample ID: WS-011S
Collection Date: 10/9/2013 9:37:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	30.1	40-110			%
Nitrobenzene-d5 (% Recovery)	61.9	50-110			%
2-Fluorobiphenyl (% Recovery)	59.7	50-110			%
2,4,6-Tribromophenol (% Recovery)	67.7	40-110			%
Terphenyl-d14 (% Recovery)	68.9	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

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

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

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 Liitle 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	10/21/2013 2:27 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3550
Client Sample ID: WS-011D
Collection Date: 10/9/2013 9:43:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	26.8	40-110			%
Nitrobenzene-d5 (% Recovery)	53.4	50-110			%
2-Fluorobiphenyl (% Recovery)	47.1	50-110			%
2,4,6-Tribromophenol (% Recovery)	52.8	40-110			%
Terphenyl-d14 (% Recovery)	68.5	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

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

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

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 Liitle 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	10/21/2013 2:55 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3551
Client Sample ID: WS-014S
Collection Date: 10/9/2013 10:10:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	21.6	40-110			%
Nitrobenzene-d5 (% Recovery)	50.4	50-110			%
2-Fluorobiphenyl (% Recovery)	41.5	50-110			%
2,4,6-Tribromophenol (% Recovery)	46.4	40-110			%
Terphenyl-d14 (% Recovery)	63.5	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

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

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

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 Liitle 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	10/21/2013 3:24 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3552
Client Sample ID: WS-014D
Collection Date: 10/9/2013 10:25:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	18.3	40-110			%
Nitrobenzene-d5 (% Recovery)	54.8	50-110			%
2-Fluorobiphenyl (% Recovery)	50.6	50-110			%
2,4,6-Tribromophenol (% Recovery)	45.0	40-110			%
Terphenyl-d14 (% Recovery)	64.7	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

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

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

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 Liitle 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	10/21/2013 3:53 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3553

Client Sample ID: WS-012S
Collection Date: 10/9/2013 11:08:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	25.9	40-110			%
Nitrobenzene-d5 (% Recovery)	56.8	50-110			%
2-Fluorobiphenyl (% Recovery)	51.0	50-110			%
2,4,6-Tribromophenol (% Recovery)	59.6	40-110			%
Terphenyl-d14 (% Recovery)	63.1	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	0.501	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

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

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

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 Liitle 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	10/21/2013 4:21 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3554
Client Sample ID: WS-012D
Collection Date: 10/9/2013 11:15:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	24.0	40-110			%
Nitrobenzene-d5 (% Recovery)	54.2	50-110			%
2-Fluorobiphenyl (% Recovery)	47.9	50-110			%
2,4,6-Tribromophenol (% Recovery)	52.6	40-110			%
Terphenyl-d14 (% Recovery)	66.2	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

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

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

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 Liitle 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	10/21/2013 4:50 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3555

Client Sample ID: WS-010S
Collection Date: 10/9/2013 11:38:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	23.7	40-110			%
Nitrobenzene-d5 (% Recovery)	51.1	50-110			%
2-Fluorobiphenyl (% Recovery)	47.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	56.3	40-110			%
Terphenyl-d14 (% Recovery)	57.4	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

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

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

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 Liitle 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	10/21/2013 5:18 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3556
Client Sample ID: WS-010D
Collection Date: 10/9/2013 11:49:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	28.5	40-110			%
Nitrobenzene-d5 (% Recovery)	60.9	50-110			%
2-Fluorobiphenyl (% Recovery)	56.2	50-110			%
2,4,6-Tribromophenol (% Recovery)	55.3	40-110			%
Terphenyl-d14 (% Recovery)	58.9	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

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

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

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 Liitle 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	10/21/2013 5:47 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3557
Client Sample ID: WS-018S
Collection Date: 10/9/2013 12:00:00 PM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13101005*** ***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	10/10/2013 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13102206*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	25.4	40-110			%
Nitrobenzene-d5 (% Recovery)	55.5	50-110			%
2-Fluorobiphenyl (% Recovery)	48.8	50-110			%
2,4,6-Tribromophenol (% Recovery)	51.0	40-110			%
Terphenyl-d14 (% Recovery)	68.7	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	0.560	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

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

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

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 Liitle 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	0.326	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	10/21/2013 6:16 PM			
Prep By	Ed Harris			
Prep Date/Time	10/11/2013 08:00			

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

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

Client: Special Samples
Lab ID: 2013-3549
Client Sample ID: WS-011S
Collection Date: 10/9/2013 9:37:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.28	0.5	0.2		ug/L
Barium	20.4	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.2	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.32	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	25.8	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.56	0.02	0.01		mg/L
Manganese	53.6	0.3	0.07		ug/L
Nickel	0.63	0.5	0.15		ug/L
Potassium	2.72	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.60	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.04	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	1.38	1	0.3		ug/L
Hardness	23.8	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 6:51PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505*** ***Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	104	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.22	1	0.5	ug/L
Barium	37.7	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	5.44	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	647	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.69	0.1	0.1	mg/L
Manganese	502	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.75	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.73	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	Oct 10 2013 6:11PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3550

Client Sample ID: WS-011D
Collection Date: 10/9/2013 9:43:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.25	0.5	0.2		ug/L
Barium	21.1	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.3	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.34	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	24.8	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.57	0.02	0.01		mg/L
Manganese	88.3	0.3	0.07		ug/L
Nickel	0.60	0.5	0.15		ug/L
Potassium	2.71	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.58	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.00	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	1.18	1	0.3		ug/L
Hardness	23.9	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 6:57PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505*** ***Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	209	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.65	1	0.5	ug/L
Barium	41.4	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	5.63	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	863	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.76	0.1	0.1	mg/L
Manganese	585	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.81	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.81	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	Oct 10 2013 6:17PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3551
Client Sample ID: WS-014S
Collection Date: 10/9/2013 10:10:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.22	0.5	0.2		ug/L
Barium	20.3	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	4.82	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	65.2	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.32	0.02	0.01		mg/L
Manganese	322	0.3	0.07		ug/L
Nickel	0.67	0.5	0.15		ug/L
Potassium	2.76	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	9.05	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.15	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	21.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 7:03PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505*** ***Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	38.5	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.69	1	0.5	ug/L
Barium	36.0	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	5.10	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	1110	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.53	0.1	0.1	mg/L
Manganese	666	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.87	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	8.07	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	Oct 10 2013 6:23PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3552
Client Sample ID: WS-014D
Collection Date: 10/9/2013 10:25:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.15	0.5	0.2		ug/L
Barium	20.8	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	4.82	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	74.1	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.38	0.02	0.01		mg/L
Manganese	335	0.3	0.07		ug/L
Nickel	0.73	0.5	0.15		ug/L
Potassium	2.77	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	9.01	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.30	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	1.13	1	0.3		ug/L
Hardness	21.8	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 7:42PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505*** ***Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	47.7	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.57	1	0.5	ug/L
Barium	38.1	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	4.93	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	1190	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.48	0.1	0.1	mg/L
Manganese	676	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.79	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.98	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	Oct 10 2013 6:49PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3553
Client Sample ID: WS-012S
Collection Date: 10/9/2013 11:08:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504 Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.20	0.5	0.2		ug/L
Barium	16.7	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	5.02	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	37.3	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.42	0.02	0.01		mg/L
Manganese	6.24	0.3	0.07		ug/L
Nickel	0.61	0.5	0.15		ug/L
Potassium	2.75	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.69	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.22	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	1.00	1	0.3		ug/L
Hardness	22.5	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 7:48PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505 Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	47.0	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.18	1	0.5	ug/L
Barium	30.2	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	5.13	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	649	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.55	0.1	0.1	mg/L
Manganese	399	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.79	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.85	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	Oct 10 2013 6:55PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3554
Client Sample ID: WS-012D
Collection Date: 10/9/2013 11:15:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504 Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.17	0.5	0.2		ug/L
Barium	17.0	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	5.19	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	32.1	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.45	0.02	0.01		mg/L
Manganese	3.67	0.3	0.07		ug/L
Nickel	0.61	0.5	0.15		ug/L
Potassium	2.79	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.77	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.17	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	23.0	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 7:54PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505 Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	63.2	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.07	1	0.5	ug/L
Barium	32.5	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	5.32	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	651	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.55	0.1	0.1	mg/L
Manganese	422	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.82	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.82	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	<3	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Oct 10 2013 7:01PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3555
Client Sample ID: WS-010S
Collection Date: 10/9/2013 11:38:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504 Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.30	0.5	0.2		ug/L
Barium	15.0	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.7	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.38	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	20.9	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.53	0.02	0.01		mg/L
Manganese	0.65	0.3	0.07		ug/L
Nickel	0.51	0.5	0.15		ug/L
Potassium	2.87	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.56	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.12	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	23.9	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 8:01PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505 Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	74.7	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.11	1	0.5	ug/L
Barium	30.2	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	5.64	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	576	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.70	0.1	0.1	mg/L
Manganese	328	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.96	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.92	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	Oct 10 2013 7:08PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3556
Client Sample ID: WS-010D
Collection Date: 10/9/2013 11:49:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.30	0.5	0.2		ug/L
Barium	16.2	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.9	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.44	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	22.0	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.51	0.02	0.01		mg/L
Manganese	0.66	0.3	0.07		ug/L
Nickel	0.54	0.5	0.15		ug/L
Potassium	2.9	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.62	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.20	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	23.9	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 8:07PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505*** ***Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	80.1	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.18	1	0.5	ug/L
Barium	30.7	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	5.56	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	609	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.67	0.1	0.1	mg/L
Manganese	334	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.91	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.87	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	Oct 10 2013 7:27PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3557
Client Sample ID: WS-018S
Collection Date: 10/9/2013 12:00:00 PM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.64	0.5	0.2		ug/L
Barium	22.8	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.0	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	5.51	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	22.0	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.60	0.02	0.01		mg/L
Manganese	137	0.3	0.07		ug/L
Nickel	0.57	0.5	0.15		ug/L
Potassium	2.77	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.56	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	6.97	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	2.34	1	0.3		ug/L
Hardness	24.4	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 8:13PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101505*** ***Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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

		Limit		
Aluminum	48.2	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.34	1	0.5	ug/L
Barium	30.8	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	5.65	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	365	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.69	0.1	0.1	mg/L
Manganese	392	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.81	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.64	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	4.57	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Oct 10 2013 7:33PM			
Prep By				
Prep Date/Time				

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

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

Client: Special Samples
Lab ID: 2013-3558

Client Sample ID: Metals Field Blank
Collection Date: 10/9/2013 10:13:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13101504*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
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	0.71	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	0.022	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	Oct 9 2013 8:20PM				

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Liitle 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:	2013-3549	**Collection Date:**	10/9/2013 9:37:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	14.0	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:05				

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

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

Client:	Special Samples	**Client Sample ID:**	WS-011D
Lab ID:	2013-3550	**Collection Date:**	10/9/2013 9:43:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	14.4	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:10				

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Liitle 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:	2013-3551	**Collection Date:**	10/9/2013 10:10:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	14.3	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:12				

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

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

Client:	Special Samples	**Client Sample ID:**	WS-014D
Lab ID:	2013-3552	**Collection Date:**	10/9/2013 10:25:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	16.1	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:17				

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Liitle 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:	2013-3553	**Collection Date:**	10/9/2013 11:08:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	12.4	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:19				

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

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

Client:	Special Samples	**Client Sample ID:**	WS-012D
Lab ID:	2013-3554	**Collection Date:**	10/9/2013 11:15:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	12.3	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:20				

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Liitle 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:	2013-3555	**Collection Date:**	10/9/2013 11:38:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	12.5	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:22				

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

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

Client:	Special Samples	**Client Sample ID:**	WS-010D
Lab ID:	2013-3556	**Collection Date:**	10/9/2013 11:49:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	12.2	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:24				

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Liitle 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:	2013-3557	**Collection Date:**	10/9/2013 12:00:00 PM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13101004*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	8.42	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:27				

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

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

Analytical Quality Control Results Report

Batch: 13102206	Semi-VOA water (Prep)
WS-014S	LIMS ID: 2013-3551

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	10/11/2013 08:00				
2-Fluorophenol (% Recovery)	25.3 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	48.3 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	46.5 %			40 - 110	
2,4,6-Tribromophenol (% Recovery)	46.8 %			40 - 110	
Terphenyl-d14 (% Recovery)	69.0 %			40 - 125	
Methyl Methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate (RPD)	0 %				0 - 40
Phenol (RPD)	9.3 %				0 - 40
Aniline (RPD)	200 %				0 - 40
Bis(2-chloroethyl)ether (RPD)	0 %				0 - 40
2-Chlorophenol (RPD)	0 %				0 - 40
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
Benzyl alcohol (RPD)	10.1 %				0 - 40
1,2-Dichlorobenzene (RPD)	0 %				0 - 40
2-Methylphenol (RPD)	0 %				0 - 40
Acetophenone (RPD)	0 %				0 - 40
4-Methylphenol (RPD)	0 %				0 - 40
N-Nitrosodi-n-propylamine (RPD)	0 %				0 - 40
Hexachloroethane (RPD)	0 %				0 - 40
Nitrobenzene (RPD)	0 %				0 - 40
N-Nitrosopiperidine (RPD)	0 %				0 - 40
Isophorone (RPD)	0 %				0 - 40
2-Nitrophenol (RPD)	0 %				0 - 40
2,4-Dimethylphenol (RPD)	0 %				0 - 40
Bis(2-chloroethoxy)methane (RPD)	0 %				0 - 40
2,4-Dichlorophenol (RPD)	0 %				0 - 40

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

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

1,2,4-Trichlorobenzene (RPD)	0 %		0 - 40
Naphthalene (RPD)	0 %		0 - 40
4-Chloroaniline (RPD)	0 %		0 - 40
2,6-Dichlorophenol (RPD)	0 %		0 - 40
Hexachlorobutadiene (RPD)	0 %		0 - 40
N-Nitrosodibutylamine (RPD)	0 %		0 - 40
4-Chloro-3-methylphenol (RPD)	0 %		0 - 40
2-Methylnaphthalene (RPD)	0 %		0 - 40
1,2,4,5-Tetrachlorobenzene (RPD)	0 %		0 - 40
Hexachlorocyclopentadiene (RPD)	0 %		0 - 40
2,4,6-Trichlorophenol (RPD)	0 %		0 - 40
2,4,5-Trichlorophenol (RPD)	0 %		0 - 40
2-Chloronaphthalene (RPD)	0 %		0 - 40
1-Chloronaphthalene (RPD)	0 %		0 - 40
2-Nitroaniline (RPD)	0 %		0 - 40
Dimethyl phthalate (RPD)	0 %		0 - 40
2,6-Dinitrotoluene (RPD)	0 %		0 - 40
Acenaphthylene (RPD)	0 %		0 - 40
3-Nitroaniline (RPD)	0 %		0 - 40
Acenaphthene (RPD)	0 %		0 - 40
2,4-Dinitrophenol (RPD)	0 %		0 - 40
Pentachlorobenzene (RPD)	0 %		0 - 40
4-Nitrophenol (RPD)	0 %		0 - 40
Dibenzofuran (RPD)	0 %		0 - 40
2,4-Dinitrotoluene (RPD)	0 %		0 - 40
2,3,4,6-Tetrachlorophenol (RPD)	0 %		0 - 40
Diethyl phthalate (RPD)	200 %		0 - 40
Fluorene (RPD)	200 %		0 - 40
4-Chlorophenyl phenyl ether (RPD)	0 %		0 - 40
4-Nitroaniline (RPD)	0 %		0 - 40
4,6-Dinitro-2-methylphenol (RPD)	0 %		0 - 40
Diphenylamine (RPD)	0 %		0 - 40
Azobenzene (RPD)	0 %		0 - 40
4-Bromophenyl phenyl ether (RPD)	0 %		0 - 40
Hexachlorobenzene (RPD)	0 %		0 - 40
Pentachlorophenol (RPD)	0 %		0 - 40
Pentachloronitrobenzene (RPD)	0 %		0 - 40
Pronamide (RPD)	0 %		0 - 40
Phenanthrene (RPD)	200 %		0 - 40
Anthracene (RPD)	0 %		0 - 40

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

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

Carbazole (RPD)	0 %				0 - 40
Di-n-butyl phthalate (RPD)	46.3 %				0 - 40
Fluoranthene (RPD)	0 %				0 - 40
Pyrene (RPD)	0 %				0 - 40
Dimethylaminoazobenzene (RPD)	0 %				0 - 40
Butyl benzyl phthalate (RPD)	0 %				0 - 40
Benzo (a) anthracene (RPD)	0 %				0 - 40
Chrysene (RPD)	0 %				0 - 40
Bis(2-ethylhexyl)phthalate (RPD)	200 %				0 - 40
Di-n-octyl phthalate (RPD)	10.3 %				0 - 40
Benzo (b) fluoranthene (RPD)	0 %				0 - 40
7,12-Dimethylbenz (a) anthracene (RPD)	0 %				0 - 40
Benzo (k) fluoranthene (RPD)	0 %				0 - 40
Benzo (a) pyrene (RPD)	0 %				0 - 40
3-Methylcholanthrene (RPD)	0 %				0 - 40
Indeno (1,2,3-cd) pyrene (RPD)	0 %				0 - 40
Dibenzo (a,h) anthracene (RPD)	0 %				0 - 40
Benzo (g,h,i) perylene (RPD)	0 %				0 - 40
Dilution Factor	1				
Analyzed By	Ed Harris				
Analysis Date/Time	10/21/2013 6:45 PM				

WS-014S ***LIMS ID: 2013-3551***

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	10/11/2013 08:00				
2-Fluorophenol (% Recovery)	21.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	57.5 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	52.9 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	44.8 %			40 - 125	
Terphenyl-d14 (% Recovery)	66.8 %			40 - 125	
Phenol (% Recovery)	17.3 %			25 - 125	
2-Chlorophenol (% Recovery)	35.7 %			25 - 125	
1,4-Dichlorobenzene (% Recovery)	52.5 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	64.7 %			25 - 125	
1,2,4-Trichlorobenzene (% Recovery)	53.5 %			25 - 125	

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

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

4-Chloro-3-methylphenol (% Recovery)	31.1 %			25 - 125	
Acenaphthene (% Recovery)	59.7 %			25 - 125	
4-Nitrophenol (% Recovery)	31.0 %			25 - 125	
2,4-Dinitrotoluene (% Recovery)	53.8 %			25 - 125	
Pentachlorophenol (% Recovery)	75.0 %			25 - 125	
Pyrene (% Recovery)	75.1 %			25 - 125	
Dilution Factor	1				
Analyzed By	Ed Harris				
Analysis Date/Time	10/21/2013 7:13 PM				

WS-014S ***LIMS ID: 2013-3551***

Semi Volatiles - water MSD ***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	10/11/2013 08:00				
2-Fluorophenol (% Recovery)	20.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	52.9 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	51.7 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	44.4 %			40 - 125	
Terphenyl-d14 (% Recovery)	66.7 %			40 - 125	
Phenol (% Recovery)	13.3 %			25 - 125	
Phenol (RPD)	25.7 %				0 - 40
2-Chlorophenol (% Recovery)	32.4 %			25 - 125	
2-Chlorophenol (RPD)	9.6 %				0 - 40
1,4-Dichlorobenzene (RPD)	7.2 %				0 - 40
1,4-Dichlorobenzene (% Recovery)	48.9 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	61.6 %			25 - 125	
N-Nitrosodi-n-propylamine (RPD)	4.9 %				0 - 40
1,2,4-Trichlorobenzene (RPD)	6.1 %				0 - 40
1,2,4-Trichlorobenzene (% Recovery)	50.3 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	32.0 %			25 - 125	
4-Chloro-3-methylphenol (RPD)	2.6 %				0 - 40
Acenaphthene (% Recovery)	57.3 %			25 - 125	
Acenaphthene (RPD)	4.1 %				0 - 40
4-Nitrophenol (% Recovery)	28.8 %			25 - 125	
4-Nitrophenol (RPD)	7.2 %				0 - 40
2,4-Dinitrotoluene (% Recovery)	54.8 %			25 - 125	

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

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

2,4-Dinitrotoluene (RPD)	1.8 %		0 - 40
Pentachlorophenol (% Recovery)	70.4 %	25 - 125	
Pentachlorophenol (RPD)	6.4 %		0 - 40
Pyrene (% Recovery)	72.6 %	25 - 125	
Pyrene (RPD)	3.3 %		0 - 40
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	10/21/2013 7:42 PM		

MB ***LIMS ID: 13102206-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	10/11/2013 08:00				
2-Fluorophenol (% Recovery)	40.8 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	72.6 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	62.1 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	58.0 %			40 - 125	
Terphenyl-d14 (% Recovery)	77.0 %			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		

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

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

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

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

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

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	0.459 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	10/21/2013 20:11				

LCS ***LIMS ID: 13102206-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	10/11/2013 08:00				
2-Fluorophenol (% Recovery)	46.0 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	74.0 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	63.3 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	71.1 %			40 - 125	
Terphenyl-d14 (% Recovery)	69.8 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	63.6 %			50 - 150	

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

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

Ethyl methanesulfonate (% Recovery)	82.5 %	50 - 150
Phenol (% Recovery)	39.2 %	50 - 150
Aniline (% Recovery)	48.1 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	75.1 %	50 - 150
2-Chlorophenol (% Recovery)	70.1 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	53.4 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	57.5 %	50 - 150
Benzyl alcohol (% Recovery)	72.1 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	55.7 %	50 - 150
2-Methylphenol (% Recovery)	55.1 %	50 - 150
Acetophenone (% Recovery)	74.0 %	50 - 150
4-Methylphenol (% Recovery)	51.0 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	80.4 %	50 - 150
Hexachloroethane (% Recovery)	38.2 %	50 - 150
Nitrobenzene (% Recovery)	76.3 %	50 - 150
N-Nitrosopiperidine (% Recovery)	77.4 %	50 - 150
Isophorone (% Recovery)	79.1 %	50 - 150
2-Nitrophenol (% Recovery)	75.8 %	50 - 150
2,4-Dimethylphenol (% Recovery)	1.0 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	76.2 %	50 - 150
2,4-Dichlorophenol (% Recovery)	68.1 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	56.7 %	50 - 150
Naphthalene (% Recovery)	69.0 %	50 - 150
4-Chloroaniline (% Recovery)	61.4 %	50 - 150
2,6-Dichlorophenol (% Recovery)	68.0 %	50 - 150
Hexachlorobutadiene (% Recovery)	49.7 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	83.5 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	65.0 %	50 - 150
2-Methylnaphthalene (% Recovery)	63.6 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	57.1 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	23.6 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	71.5 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	67.4 %	50 - 150
2-Chloronaphthalene (% Recovery)	57.9 %	50 - 150
1-Chloronaphthalene (% Recovery)	57.3 %	50 - 150
2-Nitroaniline (% Recovery)	74.5 %	50 - 150
Dimethyl phthalate (% Recovery)	70.2 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	76.6 %	50 - 150
Acenaphthylene (% Recovery)	71.8 %	50 - 150
3-Nitroaniline (% Recovery)	65.4 %	50 - 150

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

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

Acenaphthene (% Recovery)	67.3 %	50 - 150
2,4-Dinitrophenol (% Recovery)	78.0 %	50 - 150
Pentachlorobenzene (% Recovery)	59.7 %	50 - 150
4-Nitrophenol (% Recovery)	35.0 %	50 - 150
Dibenzofuran (% Recovery)	67.5 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	71.0 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	70.6 %	50 - 150
Diethyl phthalate (% Recovery)	76.7 %	50 - 150
Fluorene (% Recovery)	67.2 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	65.5 %	50 - 150
4-Nitroaniline (% Recovery)	63.9 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	77.4 %	50 - 150
Diphenylamine (% Recovery)	77.0 %	50 - 150
Azobenzene (% Recovery)	72.8 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	66.6 %	50 - 150
Hexachlorobenzene (% Recovery)	72.9 %	50 - 150
Pentachlorophenol (% Recovery)	65.0 %	50 - 150
Pentachloronitrobenzene (% Recovery)	80.2 %	50 - 150
Pronamide (% Recovery)	81.4 %	50 - 150
Phenanthrene (% Recovery)	70.1 %	50 - 150
Anthracene (% Recovery)	69.9 %	50 - 150
Carbazole (% Recovery)	73.9 %	50 - 150
Di-n-butyl phthalate (% Recovery)	112 %	50 - 150
Fluoranthene (% Recovery)	77.4 %	50 - 150
Pyrene (% Recovery)	75.1 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	78.5 %	50 - 150
Butyl benzyl phthalate (% Recovery)	82.5 %	50 - 150
Benzo (a) anthracene (% Recovery)	71.8 %	50 - 150
Chrysene (% Recovery)	74.3 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	83.4 %	50 - 150
Di-n-octyl phthalate (% Recovery)	80.6 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	66.4 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	63.9 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	64.6 %	50 - 150
Benzo (a) pyrene (% Recovery)	66.2 %	50 - 150
3-Methylcholanthrene (% Recovery)	62.7 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	56.6 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	62.0 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	56.4 %	50 - 150
Dilution Factor	1	

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

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

Analyzed By	Ed Harris
Analysis Date/Time	10/21/2013 20:40

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

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

Analytical Quality Control Results Report

Batch: 13101005 — *Oil and Grease - water*

WS-014S — ***LIMS ID: 2013-3551***

Oil and Grease - water DUP — ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease	<2.5 mg/L	2.5	2.5		
Oil and Grease (RPD)	0 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	10/10/2013 1400				

WS-014S — ***LIMS ID: 2013-3551***

Oil and Grease - water MS — ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease (% Recovery)	111 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	10/10/2013 1400				

WS-014S — ***LIMS ID: 2013-3551***

Oil and Grease - water MSD — ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease (% Recovery)	108 %			70 - 130	
Oil and Grease (RPD)	3.4 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	10/10/2013 1400				

MB — ***LIMS ID: 13101005-MB-01***

Oil and Grease - water MB — ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	10/10/2013 1400				

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

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

LCS					*LIMS ID: 13101005-LCS-01*
Oil and Grease - water LCS					***Run: 1***
Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Oil and Grease (% Recovery)	97.0 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	10/10/2013 1400				

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

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

Analytical Quality Control Results Report

Batch: 13102211	VOA - water
LCS	LIMS ID: 13102211-LCS-01

Volatiles - water LCS — *Run: 1*

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	99.2 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	96.5 %			70 - 130	
Toluene-d8 (% Recovery)	102 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	106 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	114 %			60 - 130	
Chloromethane (% Recovery)	115 %			60 - 130	
Vinyl chloride (% Recovery)	108 %			60 - 130	
Bromomethane (% Recovery)	153 %			60 - 130	
Chloroethane (% Recovery)	146 %			60 - 130	
Trichlorofluoromethane (% Recovery)	75.2 %			60 - 130	
1,1-Dichloroethene (% Recovery)	98.5 %			60 - 130	
Acetone (% Recovery)	71.9 %			60 - 130	
Methylene chloride (% Recovery)	96.9 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	94.2 %			60 - 130	
trans-1,2-Dichloroethene (% Recovery)	97.8 %			60 - 130	
1,1-Dichloroethane (% Recovery)	97.0 %			60 - 130	
Methyl ethyl ketone (% Recovery)	83.9 %			60 - 130	
cis-1,2-Dichloroethene (% Recovery)	97.2 %			60 - 130	
2,2-Dichloropropane (% Recovery)	99.8 %			60 - 130	
Bromochloromethane (% Recovery)	97.3 %			60 - 130	
Chloroform (% Recovery)	95.5 %			60 - 130	
1,1,1-Trichloroethane (% Recovery)	95.1 %			60 - 130	
1,1-Dichloropropene (% Recovery)	98.3 %			60 - 130	
Carbon tetrachloride (% Recovery)	100 %			60 - 130	
Benzene (% Recovery)	96.5 %			60 - 130	
1,2-Dichloroethane (% Recovery)	95.3 %			60 - 130	
Trichloroethene (% Recovery)	94.0 %			60 - 130	
1,2-Dichloropropane (% Recovery)	98.7 %			60 - 130	
Dibromomethane (% Recovery)	95.0 %			60 - 130	
Bromodichloromethane (% Recovery)	97.9 %			60 - 130	
cis-1,3-Dichloropropene (% Recovery)	99.2 %			60 - 130	
Methyl isobutyl ketone (% Recovery)	93.4 %			60 - 130	
Toluene (% Recovery)	100 %			60 - 130	

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

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

trans-1,3-Dichloropropene (% Recovery)	96.8 %	60 - 130
1,1,2-Trichloroethane (% Recovery)	97.2 %	60 - 130
2-Hexanone (% Recovery)	91.1 %	60 - 130
Tetrachloroethene (% Recovery)	103 %	60 - 130
1,3-Dichloropropane (% Recovery)	97.0 %	60 - 130
Dibromochloromethane (% Recovery)	98.0 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	97.9 %	60 - 130
Chlorobenzene (% Recovery)	97.9 %	60 - 130
Ethylbenzene (% Recovery)	101 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	95.4 %	60 - 130
m,p-Xylene (% Recovery)	102 %	60 - 130
o-Xylene (% Recovery)	101 %	60 - 130
Styrene (% Recovery)	100 %	60 - 130
Bromoform (% Recovery)	83.2 %	60 - 130
Isopropylbenzene (% Recovery)	105 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	94.9 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	92.4 %	60 - 130
n-Propylbenzene (% Recovery)	107 %	60 - 130
Bromobenzene (% Recovery)	93.8 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	106 %	60 - 130
2-Chlorotoluene (% Recovery)	98.7 %	60 - 130
4-Chlorotoluene (% Recovery)	105 %	60 - 130
tert-Butylbenzene (% Recovery)	101 %	60 - 130
1,2,4-Trimethylbenzene (% Recovery)	105 %	60 - 130
sec-Butylbenzene (% Recovery)	109 %	60 - 130
p-Isopropyltoluene (% Recovery)	107 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	103 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	101 %	60 - 130
n-Butylbenzene (% Recovery)	105 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	99.6 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	90.7 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	104 %	60 - 130
Hexachlorobutadiene (% Recovery)	103 %	60 - 130
Naphthalene (% Recovery)	102 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	102 %	60 - 130
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	10/9/2013 11:42	

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

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

Analytical Quality Control Results Report

Batch: 13101004	***Turbidity - water***
WS-014S	***LIMS ID: 2013-3551***

Turbidity - water DUP ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Turbidity	14.7 NTU	0.02	0.02		
Turbidity (RPD)	3.4 %				0 - 20
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	10/9/2013 15:15				

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

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

Analytical Quality Control Results Report

Batch: 13101505	ICP Metals - water (total)
WS-014S	LIMS ID: 2013-3551

ICP Metals - water (Total) DUP — Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	36.5 ug/L	20	20		
Aluminum (RPD)	5.3 %				0 - 20
Antimony (RPD)	85.7 %				0 - 20
Antimony	<10 ug/L	5	10		
Arsenic	2.48 ug/L	0.5	1		
Arsenic (RPD)	7.8 %				0 - 20
Barium (RPD)	2.1 %				0 - 20
Barium	35.3 ug/L	2	10		
Beryllium	<0.5 ug/L	0.1	0.5		
Beryllium (RPD)	200 %				0 - 20
Boron (RPD)	2.3 %				0 - 20
Boron	<25 ug/L	5	25		
Cadmium	<1 ug/L	0.3	1		
Cadmium (RPD)	66.7 %				0 - 20
Calcium (RPD)	2.6 %				0 - 20
Calcium	4.97 mg/L	0.04	0.04		
Chromium	<1 ug/L	0.3	1		
Chromium (RPD)	6.8 %				0 - 20
Cobalt (RPD)	1.6 %				0 - 20
Cobalt	<1 ug/L	0.5	1		
Copper	<1 ug/L	0.5	1		
Copper (RPD)	4.4 %				0 - 20
Iron (RPD)	5.0 %				0 - 20
Iron	1060 ug/L	10	20		
Lead	<1 ug/L	0.1	1		
Lead (RPD)	7.6 %				0 - 20
Magnesium (RPD)	3.1 %				0 - 20
Magnesium	2.46 mg/L	0.1	0.1		
Manganese	650 ug/L	0.2	1		
Manganese (RPD)	2.2 %				0 - 20
Nickel (RPD)	1.8 %				0 - 20
Nickel	<2.5 ug/L	0.5	2.5		
Potassium	2.80 mg/L	0.05	1		

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

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

Potassium (RPD)	2.6 %				0 - 20
Selenium (RPD)	9.5 %				0 - 20
Selenium	<2 ug/L	0.5	2		
Silver	<5 ug/L	1	5		
Silver (RPD)	0 %				0 - 20
Sodium	7.86 mg/L	0.02	0.04		
Sodium (RPD)	2.6 %				0 - 20
Thallium (RPD)	0 %				0 - 20
Thallium	<2.5 ug/L	0.05	2.5		
Vanadium (RPD)	1.5 %				0 - 20
Vanadium	<2.5 ug/L	1	2.5		
Zinc	<3 ug/L	2	3		
Zinc (RPD)	9.0 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 10 2013 6:30PM				

WS-014S ***LIMS ID: 2013-3551***

ICP Metals - water (Total) MS ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	104 %			70 - 130	
Antimony (% Recovery)	93.7 %			70 - 130	
Arsenic (% Recovery)	95.5 %			70 - 130	
Barium (% Recovery)	92.9 %			70 - 130	
Beryllium (% Recovery)	97.7 %			70 - 130	
Boron (% Recovery)	96.8 %			70 - 130	
Cadmium (% Recovery)	95.7 %			70 - 130	
Calcium (% Recovery)	92.5 %			70 - 130	
Chromium (% Recovery)	88.1 %			70 - 130	
Cobalt (% Recovery)	90.3 %			70 - 130	
Copper (% Recovery)	91.0 %			70 - 130	
Iron (% Recovery)	62.0 %			70 - 130	
Lead (% Recovery)	92.8 %			70 - 130	
Magnesium (% Recovery)	94.1 %			70 - 130	
Manganese (% Recovery)	0 %			70 - 130	
Nickel (% Recovery)	90 %			70 - 130	
Potassium (% Recovery)	95.1 %			70 - 130	
Selenium (% Recovery)	105 %			70 - 130	
Silver (% Recovery)	87.8 %			70 - 130	

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

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

Sodium (% Recovery)	77.7 %	70 - 130	
Thallium (% Recovery)	91.4 %	70 - 130	
Vanadium (% Recovery)	89.8 %	70 - 130	
Zinc (% Recovery)	97.4 %	70 - 130	
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Oct 10 2013 6:36PM		

WS-014S ***LIMS ID: 2013-3551***

ICP Metals - water (Total) MSD ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	100 %			70 - 130	
Aluminum (RPD)	3.1 %				0 - 20
Antimony (% Recovery)	93.4 %			70 - 130	
Antimony (RPD)	0.3 %				0 - 20
Arsenic (% Recovery)	95.9 %			70 - 130	
Arsenic (RPD)	0.4 %				0 - 20
Barium (% Recovery)	92.3 %			70 - 130	
Barium (RPD)	0.5 %				0 - 20
Beryllium (% Recovery)	97.8 %			70 - 130	
Beryllium (RPD)	0.1 %				0 - 20
Boron (% Recovery)	96.4 %			70 - 130	
Boron (RPD)	0.4 %				0 - 20
Cadmium (% Recovery)	96.0 %			70 - 130	
Cadmium (RPD)	0.3 %				0 - 20
Calcium (% Recovery)	88.6 %			70 - 130	
Calcium (RPD)	2.8 %				0 - 20
Chromium (% Recovery)	89.2 %			70 - 130	
Chromium (RPD)	1.2 %				0 - 20
Cobalt (% Recovery)	90.6 %			70 - 130	
Cobalt (RPD)	0.4 %				0 - 20
Copper (% Recovery)	91.8 %			70 - 130	
Copper (RPD)	1.0 %				0 - 20
Iron (% Recovery)	64.5 %			70 - 130	
Iron (RPD)	0.4 %				0 - 20
Lead (% Recovery)	92.4 %			70 - 130	
Lead (RPD)	0.4 %				0 - 20
Magnesium (% Recovery)	93.4 %			70 - 130	
Magnesium (RPD)	0.6 %				0 - 20

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

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

Manganese (% Recovery)	0 %	70 - 130	
Manganese (RPD)	0.5 %		0 - 20
Nickel (% Recovery)	90 %	70 - 130	
Nickel (RPD)	0.5 %		0 - 20
Potassium (% Recovery)	92.3 %	70 - 130	
Potassium (RPD)	2.3 %		0 - 20
Selenium (% Recovery)	106 %	70 - 130	
Selenium (RPD)	0.5 %		0 - 20
Silver (% Recovery)	87.8 %	70 - 130	
Silver (RPD)	0.1 %		0 - 20
Sodium (% Recovery)	77.4 %	70 - 130	
Sodium (RPD)	0.2 %		0 - 20
Thallium (% Recovery)	91.1 %	70 - 130	
Thallium (RPD)	0.4 %		0 - 20
Vanadium (% Recovery)	90.1 %	70 - 130	
Vanadium (RPD)	0.3 %		0 - 20
Zinc (% Recovery)	98.3 %	70 - 130	
Zinc (RPD)	0.8 %		0 - 20
Dilution Factor	1		
Analysis Date/Time	Oct 10 2013 6:42PM		
Analyzed By	Robert Graddy		

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

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

Analytical Quality Control Results Report

Batch: 13101504	ICP Metals - water (Diss.)
WS-014S	LIMS ID: 2013-3551

ICP Metals - water (Dissolved) DUP — Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	<20 ug/L	20	20		
Aluminum (RPD)	7.5 %				0 - 20
Antimony (RPD)	8.7 %				0 - 20
Antimony	<5 ug/L	1	5		
Arsenic	1.20 ug/L	0.2	0.5		
Arsenic (RPD)	1.2 %				0 - 20
Barium (RPD)	0.4 %				0 - 20
Barium	20.3 ug/L	0.4	2		
Beryllium	<0.1 ug/L	0.04	0.1		
Beryllium (RPD)	125 %				0 - 20
Boron (RPD)	1.0 %				0 - 20
Boron	21.4 ug/L	2	5		
Cadmium	<0.1 ug/L	0.05	0.1		
Cadmium (RPD)	66.7 %				0 - 20
Calcium (RPD)	0.3 %				0 - 20
Calcium	4.83 mg/L	0.03	0.03		
Chromium	<0.5 ug/L	0.05	0.5		
Chromium (RPD)	5.9 %				0 - 20
Cobalt (RPD)	5.6 %				0 - 20
Cobalt	<0.5 ug/L	0.05	0.5		
Copper	0.94 ug/L	0.2	0.5		
Copper (RPD)	131 %				0 - 20
Iron (RPD)	5.5 %				0 - 20
Iron	68.9 ug/L	5	20		
Lead	<0.3 ug/L	0.02	0.3		
Lead (RPD)	33.3 %				0 - 20
Magnesium (RPD)	0 %				0 - 20
Magnesium	2.32 mg/L	0.01	0.02		
Manganese	320 ug/L	0.07	0.3		
Manganese (RPD)	0.2 %				0 - 20
Nickel (RPD)	4.9 %				0 - 20
Nickel	0.64 ug/L	0.15	0.5		
Potassium	2.76 mg/L	0.01	0.02		

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

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

Potassium (RPD)	0.1 %				0 - 20
Selenium (RPD)	33.7 %				0 - 20
Selenium	<1 ug/L	0.2	1		
Silicon Dioxide	9.06 mg/L	0.01	0.05		
Silicon Dioxide (RPD)	0 %				0 - 20
Silver	<0.5 ug/L	0.02	0.5		
Silver (RPD)	0 %				0 - 20
Sodium	7.14 mg/L	0.01	0.02		
Sodium (RPD)	0.2 %				0 - 20
Thallium (RPD)	0 %				0 - 20
Thallium	<0.5 ug/L	0	0.5		
Vanadium (RPD)	19.6 %				0 - 20
Vanadium	<0.5 ug/L	0.3	0.5		
Zinc	1.01 ug/L	0.3	1		
Zinc (RPD)	17.1 %				0 - 20
Hardness (RPD)	0 %				0 - 20
Hardness	22 mg/L	1	1		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Oct 9 2013 7:10PM				

WS-014S ***LIMS ID: 2013-3551***

ICP Metals - water (Dissolved) MS ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	93.8 %			70 - 130	
Antimony (% Recovery)	85.2 %			70 - 130	
Arsenic (% Recovery)	88.2 %			70 - 130	
Barium (% Recovery)	82.8 %			70 - 130	
Beryllium (% Recovery)	85.7 %			70 - 130	
Boron (% Recovery)	87.8 %			70 - 130	
Cadmium (% Recovery)	84.8 %			70 - 130	
Calcium (% Recovery)	85.3 %			70 - 130	
Chromium (% Recovery)	80.5 %			70 - 130	
Cobalt (% Recovery)	80.7 %			70 - 130	
Copper (% Recovery)	82.5 %			70 - 130	
Iron (% Recovery)	79.5 %			70 - 130	
Lead (% Recovery)	83.2 %			70 - 130	
Magnesium (% Recovery)	84.9 %			70 - 130	
Manganese (% Recovery)	58 %			70 - 130	

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

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

Nickel (% Recovery)	80 %	70 - 130	
Potassium (% Recovery)	89.7 %	70 - 130	
Selenium (% Recovery)	95.7 %	70 - 130	
Silver (% Recovery)	77.3 %	70 - 130	
Sodium (% Recovery)	68.2 %	70 - 130	
Thallium (% Recovery)	81.2 %	70 - 130	
Vanadium (% Recovery)	81.7 %	70 - 130	
Zinc (% Recovery)	88.0 %	70 - 130	
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Oct 9 2013 7:16PM		

WS-014S ***LIMS ID: 2013-3551***

ICP Metals - water (Dissolved) MSD ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	92.9 %			70 - 130	
Aluminum (RPD)	0.9 %				0 - 20
Antimony (% Recovery)	85.6 %			70 - 130	
Antimony (RPD)	0.5 %				0 - 20
Arsenic (% Recovery)	86.2 %			70 - 130	
Arsenic (RPD)	2.1 %				0 - 20
Barium (% Recovery)	83.0 %			70 - 130	
Barium (RPD)	0.2 %				0 - 20
Beryllium (% Recovery)	85.4 %			70 - 130	
Beryllium (RPD)	0.4 %				0 - 20
Boron (% Recovery)	88.0 %			70 - 130	
Boron (RPD)	0.2 %				0 - 20
Cadmium (% Recovery)	84.8 %			70 - 130	
Cadmium (RPD)	0.1 %				0 - 20
Calcium (% Recovery)	83.9 %			70 - 130	
Calcium (RPD)	1.1 %				0 - 20
Chromium (% Recovery)	80.5 %			70 - 130	
Chromium (RPD)	0 %				0 - 20
Cobalt (% Recovery)	81.0 %			70 - 130	
Cobalt (RPD)	0.4 %				0 - 20
Copper (% Recovery)	82.7 %			70 - 130	
Copper (RPD)	0.2 %				0 - 20
Iron (% Recovery)	79.6 %			70 - 130	
Iron (RPD)	0.1 %				0 - 20

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

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

Lead (% Recovery)	83.4 %	70 - 130	
Lead (RPD)	0.3 %		0 - 20
Magnesium (% Recovery)	86.0 %	70 - 130	
Magnesium (RPD)	1.0 %		0 - 20
Manganese (% Recovery)	64 %	70 - 130	
Manganese (RPD)	0.6 %		0 - 20
Nickel (% Recovery)	80 %	70 - 130	
Nickel (RPD)	0.3 %		0 - 20
Potassium (% Recovery)	88.2 %	70 - 130	
Potassium (RPD)	1.3 %		0 - 20
Selenium (% Recovery)	94.0 %	70 - 130	
Selenium (RPD)	1.8 %		0 - 20
Silver (% Recovery)	77.4 %	70 - 130	
Silver (RPD)	0.1 %		0 - 20
Sodium (% Recovery)	86.8 %	70 - 130	
Sodium (RPD)	12.5 %		0 - 20
Thallium (% Recovery)	81.8 %	70 - 130	
Thallium (RPD)	0.7 %		0 - 20
Vanadium (% Recovery)	82.1 %	70 - 130	
Vanadium (RPD)	0.5 %		0 - 20
Zinc (% Recovery)	88.6 %	70 - 130	
Zinc (RPD)	0.6 %		0 - 20
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Oct 9 2013 7:22PM		