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

Client Report For: Exxon Oil Spill 2013 4142-4150
Attention:
Client Address:
,

Report Date: December 02, 2013
LAB ID: AR13NOV20-04
Comment:

Approved By:_____ Date:December 02, 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: 2013-4142
Client Sample ID: WS-001
Collection Date: 11/20/2013 11:55:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112507*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.58	0.5	0.2		ug/L
Barium	14.9	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.0	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.42	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	2.12	0.02	0.01		mg/L
Manganese	5.92	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	2.33	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	8.13	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	17.3	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:00PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112607*** ***Run: 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

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	44.3	20	20		ug/L
Antimony	<10	10	5		ug/L
Arsenic	<1	1	0.5		ug/L
Barium	17.8	10	2.0		ug/L
Beryllium	<0.5	0.5	0.1		ug/L
Boron	<25	25	5.0		ug/L
Cadmium	<1	1	0.3		ug/L
Calcium	3.64	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	400	20	10.0		ug/L
Lead	<1	1	0.1		ug/L
Magnesium	1.78	0.1	0.1		mg/L
Manganese	136	1	0.2		ug/L
Nickel	<2.5	2.5	0.5		ug/L
Potassium	2.53	1	0.05		mg/L
Selenium	<2	2	0.5		ug/L
Silver	<5	5	1.0		ug/L
Sodium	9.07	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	Nov 22 2013 5:30AM				
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: 2013-4143
Client Sample ID: WS-002
Collection Date: 11/20/2013 9:56:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112507*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.51	0.5	0.2		ug/L
Barium	15.4	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.7	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.34	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	<20	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.06	0.02	0.01		mg/L
Manganese	5.36	0.3	0.07		ug/L
Nickel	0.56	0.5	0.15		ug/L
Potassium	2.31	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	9.33	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	8.32	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	16.8	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:05PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112607*** ***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	65.3	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	19.8	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.51	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	1.73	0.1	0.1	mg/L
Manganese	170	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.46	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	9.22	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	Nov 22 2013 5:36AM			
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: 2013-4144
Client Sample ID: WS-003
Collection Date: 11/20/2013 9:10:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112507*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.54	0.5	0.2		ug/L
Barium	16.2	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.0	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.46	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	0.53	0.5	0.2		ug/L
Iron	<20	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.13	0.02	0.01		mg/L
Manganese	4.21	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	2.24	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.82	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	7.78	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	17.4	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:11PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112607*** ***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	124	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.04	1	0.5	ug/L
Barium	24.2	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	3.7	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	611	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.80	0.1	0.1	mg/L
Manganese	236	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.42	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	8.62	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	Nov 22 2013 5:43AM			
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: 2013-4145
Client Sample ID: WS-005
Collection Date: 11/20/2013 11:31:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112507*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.58	0.5	0.2		ug/L
Barium	11.7	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	23.7	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.70	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	2.23	0.02	0.01		mg/L
Manganese	8.05	0.3	0.07		ug/L
Nickel	0.58	0.5	0.15		ug/L
Potassium	2.46	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.92	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	9.07	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	18.4	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:33PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112607*** ***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	31.8	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	14.7	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.88	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.36	1	0.5	ug/L
Iron	389	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.89	0.1	0.1	mg/L
Manganese	127	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.6	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	9.77	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	Nov 22 2013 6:21AM			
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: 2013-4146
Client Sample ID: WS-006
Collection Date: 11/20/2013 12:26:00 PM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112507*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.67	0.5	0.2		ug/L
Barium	10.6	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	21.4	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.30	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<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	2.04	0.02	0.01		mg/L
Manganese	2.52	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	2.32	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	8.68	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	8.12	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	16.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:39PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112607*** ***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	70.6	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.01	1	0.5	ug/L
Barium	14.3	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.48	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	370	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.72	0.1	0.1	mg/L
Manganese	124	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.46	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	9.10	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	Nov 22 2013 6:27AM			
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: 2013-4147
Client Sample ID: WS-007
Collection Date: 11/20/2013 12:12:00 PM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112507*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	140	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.55	0.5	0.2		ug/L
Barium	16.1	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	20.5	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	2.86	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	0.81	0.5	0.2		ug/L
Iron	1130	20	5.0		ug/L
Lead	0.62	0.3	0.02		ug/L
Magnesium	1.68	0.02	0.01		mg/L
Manganese	254	0.3	0.07		ug/L
Nickel	1.04	0.5	0.15		ug/L
Potassium	4.15	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	9.27	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.40	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	0.76	0.5	0.3		ug/L
Zinc	2.92	1	0.3		ug/L
Hardness	14.0	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:44PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112607*** ***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	241	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.63	1	0.5	ug/L
Barium	38.3	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.34	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	2.94	1	0.5	ug/L
Lead	1.64	1	0.1	ug/L
Magnesium	1.47	0.1	0.1	mg/L
Manganese	358	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	4.44	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	6.14	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	84.0	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Nov 22 2013 6:34AM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112607*** ***Run: 2***

	Result	Reporting Limit	MDL	Qual	Unit
Iron	3150	200	10.0		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 26 2013 12:24PM				
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: 2013-4148
Client Sample ID: WS-008
Collection Date: 11/20/2013 10:53:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112507*** ***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	40.0	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	61.5	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	15.3	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	0.95	0.5	0.2		ug/L
Iron	<20	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	8.50	0.02	0.01		mg/L
Manganese	13.6	0.3	0.07		ug/L
Nickel	0.95	0.5	0.15		ug/L
Potassium	3.06	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	9.10	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	20.0	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	5.59	1	0.3		ug/L
Hardness	73.2	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:50PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112607*** ***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	909	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	40.9	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	60.3	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	15.8	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.10	1	0.5	ug/L
Iron	444	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	8.39	0.1	0.1	mg/L
Manganese	17.8	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	3.28	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	19.6	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	7.71	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Nov 22 2013 6:40AM			
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: 2013-4149

Client Sample ID: Metals Field Blank
Collection Date: 11/20/2013 9:06:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 13112507*** ***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	<0.3	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	<0.02	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	<0.05	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	<0.02	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	<1	1	0.3		ug/L
Hardness	<1	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:55PM				

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: 2013-4142
Client Sample ID: WS-001
Collection Date: 11/20/2013 11:55:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13112104*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13112605*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	40.2	40-110			%
Nitrobenzene-d5 (% Recovery)	69.4	50-110			%
2-Fluorobiphenyl (% Recovery)	72.1	50-110			%
2,4,6-Tribromophenol (% Recovery)	81.9	40-110			%
Terphenyl-d14 (% Recovery)	80.6	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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	11/25/2013 2:38 PM			
Prep By	Jeff Ruehr			
Prep Date/Time	11/25/2013 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: 2013-4143
Client Sample ID: WS-002
Collection Date: 11/20/2013 9:56:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13112104*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13112605*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	48.2	40-110			%
Nitrobenzene-d5 (% Recovery)	77.6	50-110			%
2-Fluorobiphenyl (% Recovery)	78.6	50-110			%
2,4,6-Tribromophenol (% Recovery)	79.3	40-110			%
Terphenyl-d14 (% Recovery)	74.9	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	11/25/2013 3:07 PM			
Prep By	Jeff Ruehr			
Prep Date/Time	11/25/2013 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: 2013-4144
Client Sample ID: WS-003
Collection Date: 11/20/2013 9:10:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13112104*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13112605*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	36.1	40-110			%
Nitrobenzene-d5 (% Recovery)	66.7	50-110			%
2-Fluorobiphenyl (% Recovery)	63.9	50-110			%
2,4,6-Tribromophenol (% Recovery)	78.9	40-110			%
Terphenyl-d14 (% Recovery)	78.9	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	11/25/2013 3:35 PM			
Prep By	Jeff Ruehr			
Prep Date/Time	11/25/2013 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: 2013-4145
Client Sample ID: WS-005
Collection Date: 11/20/2013 11:31:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13112104*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13112605*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	43.4	40-110			%
Nitrobenzene-d5 (% Recovery)	81.9	50-110			%
2-Fluorobiphenyl (% Recovery)	78.6	50-110			%
2,4,6-Tribromophenol (% Recovery)	85.1	40-110			%
Terphenyl-d14 (% Recovery)	80.0	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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	11/26/2013 9:30 AM			
Prep By	Jeff Ruehr			
Prep Date/Time	11/25/2013 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: 2013-4146
Client Sample ID: WS-006
Collection Date: 11/20/2013 12:26:00 PM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13112104*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13112605*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	41.4	40-110			%
Nitrobenzene-d5 (% Recovery)	79.6	50-110			%
2-Fluorobiphenyl (% Recovery)	70.8	50-110			%
2,4,6-Tribromophenol (% Recovery)	83.6	40-110			%
Terphenyl-d14 (% Recovery)	82.6	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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	11/26/2013 9:59 AM			
Prep By	Jeff Ruehr			
Prep Date/Time	11/25/2013 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: 2013-4147
Client Sample ID: WS-007
Collection Date: 11/20/2013 12:12:00 PM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13112104*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13112605*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	41.7	40-110			%
Nitrobenzene-d5 (% Recovery)	78.5	50-110			%
2-Fluorobiphenyl (% Recovery)	73.4	50-110			%
2,4,6-Tribromophenol (% Recovery)	70.5	40-110			%
Terphenyl-d14 (% Recovery)	74.3	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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	11/26/2013 10:27 AM			
Prep By	Jeff Ruehr			
Prep Date/Time	11/25/2013 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: 2013-4148

Client Sample ID: WS-008
Collection Date: 11/20/2013 10:53:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 13112104*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 13112605*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	47.3	40-110			%
Nitrobenzene-d5 (% Recovery)	74.0	50-110			%
2-Fluorobiphenyl (% Recovery)	75.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	86.1	40-110			%
Terphenyl-d14 (% Recovery)	82.1	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	0.386	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	0.126	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	11/26/2013 10:56 AM			
Prep By	Jeff Ruehr			
Prep Date/Time	11/25/2013 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	**Client Sample ID:**	WS-001
Lab ID:	2013-4142	**Collection Date:**	11/20/2013 11:55:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13112506*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	7.20	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	11/21/2013 10:08				

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-002
Lab ID:	2013-4143	**Collection Date:**	11/20/2013 9:56:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13112506*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	5.04	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	11/21/2013 10:09				

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-003
Lab ID:	2013-4144	**Collection Date:**	11/20/2013 9:10:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13112506*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	8.49	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	11/21/2013 10:10				

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-005
Lab ID:	2013-4145	**Collection Date:**	11/20/2013 11:31:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13112506*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	6.61	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	11/21/2013 10:14				

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-006
Lab ID:	2013-4146	**Collection Date:**	11/20/2013 12:26:00 PM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13112506*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	6.12	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	11/21/2013 10:16				

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-007
Lab ID:	2013-4147	**Collection Date:**	11/20/2013 12:12:00 PM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13112506*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	16.4	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	11/21/2013 10:17				

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-008
Lab ID:	2013-4148	**Collection Date:**	11/20/2013 10:53:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 13112506*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	13.7	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	11/21/2013 10:18				

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: 2013-4142

Client Sample ID: WS-001
Collection Date: 11/20/2013 11:55:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13112102*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	112	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	98.5	70-130			%
Toluene-d8 (% Recovery)	106	70-130			%
4-Bromofluorobenzene (% Recovery)	113	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	11/20/2013 10:24 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: 2013-4143

Client Sample ID: WS-002
Collection Date: 11/20/2013 9:56:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13112102*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	112	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	98.4	70-130			%
Toluene-d8 (% Recovery)	107	70-130			%
4-Bromofluorobenzene (% Recovery)	120	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	11/20/2013 10:50 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: 2013-4144

Client Sample ID: WS-003
Collection Date: 11/20/2013 9:10:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13112102*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	110	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	97.9	70-130			%
Toluene-d8 (% Recovery)	105	70-130			%
4-Bromofluorobenzene (% Recovery)	113	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	11/21/2013 12:55 AM			

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: 2013-4145

Client Sample ID: WS-005
Collection Date: 11/20/2013 11:31:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13112102*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	114	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	98.5	70-130			%
Toluene-d8 (% Recovery)	107	70-130			%
4-Bromofluorobenzene (% Recovery)	118	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	11/20/2013 11:15 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: 2013-4146

Client Sample ID: WS-006
Collection Date: 11/20/2013 12:26:00 PM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13112102*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	116	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	100	70-130			%
Toluene-d8 (% Recovery)	106	70-130			%
4-Bromofluorobenzene (% Recovery)	122	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	11/20/2013 11:40 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: 2013-4147

Client Sample ID: WS-007
Collection Date: 11/20/2013 12:12:00 PM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13112102*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	112	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	97.5	70-130			%
Toluene-d8 (% Recovery)	105	70-130			%
4-Bromofluorobenzene (% Recovery)	119	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	11/21/2013 12:05 AM			

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: 2013-4148

Client Sample ID: WS-008
Collection Date: 11/20/2013 10:53:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13112102*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	106	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	96.4	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	11/21/2013 12:30 AM			

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: 2013-4150

Client Sample ID: Volatiles Trip Blank
Collection Date: 11/19/2013 4:02:00 PM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 13112102*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	110	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	99.4	70-130			%
Toluene-d8 (% Recovery)	107	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	0.834	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	11/20/2013 9:59 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

Analytical Quality Control Results Report

Batch: 13112605	Semi-VOA water (Prep)
WS-003	LIMS ID: 2013-4144

Semi Volatiles - water DUP — *Run: 1*

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Jeff Ruehr				
Prep Date/Time	11/25/2013 08:00				
2-Fluorophenol (% Recovery)	42.5 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	70.6 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	73.1 %			40 - 110	
2,4,6-Tribromophenol (% Recovery)	86.5 %			40 - 110	
Terphenyl-d14 (% Recovery)	72.5 %			40 - 125	
Methyl Methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate (RPD)	0 %				0 - 40
Phenol (RPD)	14.8 %				0 - 40
Aniline (RPD)	200 %				0 - 40
Bis(2-chloroethyl)ether (RPD)	0 %				0 - 40
2-Chlorophenol (RPD)	200 %				0 - 40
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
Benzyl alcohol (RPD)	20.1 %				0 - 40
1,2-Dichlorobenzene (RPD)	0 %				0 - 40
2-Methylphenol (RPD)	0 %				0 - 40
Acetophenone (RPD)	200 %				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)	4.0 %				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)	129 %	0 - 40
4-Chloroaniline (RPD)	0 %	0 - 40
2,6-Dichlorophenol (RPD)	0 %	0 - 40
Hexachlorobutadiene (RPD)	0 %	0 - 40
N-Nitrosodibutylamine (RPD)	3.6 %	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)	200 %	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)	12.2 %	0 - 40
Fluorene (RPD)	0 %	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)	0 %	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)	50.8 %				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)	23.7 %				0 - 40
Di-n-octyl phthalate (RPD)	2.3 %				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)	200 %				0 - 40
Dibenzo (a,h) anthracene (RPD)	0 %				0 - 40
Benzo (g,h,i) perylene (RPD)	3.4 %				0 - 40
Dilution Factor	1				
Analyzed By	Ed Harris				
Analysis Date/Time	11/25/2013 4:03 PM				

WS-003 ***LIMS ID: 2013-4144***

Semi Volatiles - water MS ***Run: 1***

Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Jeff Ruehr				
Prep Date/Time	11/25/2013 08:00				
2-Fluorophenol (% Recovery)	39.0 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	70.7 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	70.6 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	72.4 %			40 - 125	
Terphenyl-d14 (% Recovery)	80.6 %			40 - 125	
Phenol (% Recovery)	29.4 %			25 - 125	
2-Chlorophenol (% Recovery)	65.9 %			25 - 125	
1,4-Dichlorobenzene (% Recovery)	66.4 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	82.0 %			25 - 125	
1,2,4-Trichlorobenzene (% Recovery)	73.2 %			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)	71.8 %			25 - 125	
Acenaphthene (% Recovery)	88.7 %			25 - 125	
4-Nitrophenol (% Recovery)	47.0 %			25 - 125	
2,4-Dinitrotoluene (% Recovery)	83.5 %			25 - 125	
Pentachlorophenol (% Recovery)	111 %			25 - 125	
Pyrene (% Recovery)	95.5 %			25 - 125	
Dilution Factor	1				
Analyzed By	Ed Harris				
Analysis Date/Time	11/26/2013 8:34 AM				

WS-003 ***LIMS ID: 2013-4144***

Semi Volatiles - water MSD ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Jeff Ruehr				
Prep Date/Time	11/25/2013 08:00				
2-Fluorophenol (% Recovery)	41.1 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	75.6 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	70.3 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	75.1 %			40 - 125	
Terphenyl-d14 (% Recovery)	74.1 %			40 - 125	
Phenol (% Recovery)	28.2 %			25 - 125	
Phenol (RPD)	4.1 %				0 - 40
2-Chlorophenol (% Recovery)	69.0 %			25 - 125	
2-Chlorophenol (RPD)	4.5 %				0 - 40
1,4-Dichlorobenzene (RPD)	7.6 %				0 - 40
1,4-Dichlorobenzene (% Recovery)	71.7 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	86.7 %			25 - 125	
N-Nitrosodi-n-propylamine (RPD)	5.5 %				0 - 40
1,2,4-Trichlorobenzene (% Recovery)	76.9 %			25 - 125	
1,2,4-Trichlorobenzene (RPD)	5.0 %				0 - 40
4-Chloro-3-methylphenol (% Recovery)	73.0 %			25 - 125	
4-Chloro-3-methylphenol (RPD)	1.7 %				0 - 40
Acenaphthene (% Recovery)	88.0 %			25 - 125	
Acenaphthene (RPD)	0.8 %				0 - 40
4-Nitrophenol (% Recovery)	40.6 %			25 - 125	
4-Nitrophenol (RPD)	14.5 %				0 - 40
2,4-Dinitrotoluene (% Recovery)	77.0 %			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)	8.1 %		0 - 40
Pentachlorophenol (% Recovery)	110 %	25 - 125	
Pentachlorophenol (RPD)	0.9 %		0 - 40
Pyrene (% Recovery)	86.4 %	25 - 125	
Pyrene (RPD)	10.1 %		0 - 40
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	11/26/2013 9:02 AM		

MB ***LIMS ID: 13112605-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	Jeff Ruehr				
Prep Date/Time	11/25/2013 08:00				
2-Fluorophenol (% Recovery)	46.6 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	84.2 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	77.4 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	77.7 %			40 - 125	
Terphenyl-d14 (% Recovery)	88.9 %			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	0.626 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	11/25/2013 13:42				

LCS ***LIMS ID: 13112605-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	Jeff Ruehr				
Prep Date/Time	11/25/2013 08:00				
2-Fluorophenol (% Recovery)	53.0 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	85.8 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	77.1 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	77.0 %			40 - 125	
Terphenyl-d14 (% Recovery)	88.1 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	69.7 %			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)	88.3 %	50 - 150
Phenol (% Recovery)	33.8 %	50 - 150
Aniline (% Recovery)	54.0 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	87.4 %	50 - 150
2-Chlorophenol (% Recovery)	84.8 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	59.3 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	62.3 %	50 - 150
Benzyl alcohol (% Recovery)	86.9 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	65.6 %	50 - 150
2-Methylphenol (% Recovery)	75.1 %	50 - 150
Acetophenone (% Recovery)	93.1 %	50 - 150
4-Methylphenol (% Recovery)	72.7 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	89.9 %	50 - 150
Hexachloroethane (% Recovery)	54.8 %	50 - 150
Nitrobenzene (% Recovery)	88.4 %	50 - 150
N-Nitrosopiperidine (% Recovery)	86.4 %	50 - 150
Isophorone (% Recovery)	90.4 %	50 - 150
2-Nitrophenol (% Recovery)	88.7 %	50 - 150
2,4-Dimethylphenol (% Recovery)	8.4 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	84.6 %	50 - 150
2,4-Dichlorophenol (% Recovery)	87.8 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	68.0 %	50 - 150
Naphthalene (% Recovery)	81.2 %	50 - 150
4-Chloroaniline (% Recovery)	75.8 %	50 - 150
2,6-Dichlorophenol (% Recovery)	90.8 %	50 - 150
Hexachlorobutadiene (% Recovery)	48.4 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	86.1 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	85.4 %	50 - 150
2-Methylnaphthalene (% Recovery)	76.0 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	67.7 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	70.0 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	84.8 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	84.5 %	50 - 150
2-Chloronaphthalene (% Recovery)	77.8 %	50 - 150
1-Chloronaphthalene (% Recovery)	77.6 %	50 - 150
2-Nitroaniline (% Recovery)	84.3 %	50 - 150
Dimethyl phthalate (% Recovery)	79.1 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	80.2 %	50 - 150
Acenaphthylene (% Recovery)	77.3 %	50 - 150
3-Nitroaniline (% Recovery)	85.8 %	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)	78.5 %	50 - 150
2,4-Dinitrophenol (% Recovery)	81.5 %	50 - 150
Pentachlorobenzene (% Recovery)	69.2 %	50 - 150
4-Nitrophenol (% Recovery)	40.4 %	50 - 150
Dibenzofuran (% Recovery)	84.3 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	84.6 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	87.1 %	50 - 150
Diethyl phthalate (% Recovery)	84.7 %	50 - 150
Fluorene (% Recovery)	80.4 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	81.9 %	50 - 150
4-Nitroaniline (% Recovery)	83.9 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	79.2 %	50 - 150
Diphenylamine (% Recovery)	82.2 %	50 - 150
Azobenzene (% Recovery)	83.8 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	85.6 %	50 - 150
Hexachlorobenzene (% Recovery)	76.4 %	50 - 150
Pentachlorophenol (% Recovery)	83.8 %	50 - 150
Pentachloronitrobenzene (% Recovery)	85.4 %	50 - 150
Pronamide (% Recovery)	93.0 %	50 - 150
Phenanthrene (% Recovery)	80.4 %	50 - 150
Anthracene (% Recovery)	83.8 %	50 - 150
Carbazole (% Recovery)	89.5 %	50 - 150
Di-n-butyl phthalate (% Recovery)	121 %	50 - 150
Fluoranthene (% Recovery)	87.2 %	50 - 150
Pyrene (% Recovery)	92.8 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	90.2 %	50 - 150
Butyl benzyl phthalate (% Recovery)	86.7 %	50 - 150
Benzo (a) anthracene (% Recovery)	86.8 %	50 - 150
Chrysene (% Recovery)	92.4 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	90.8 %	50 - 150
Di-n-octyl phthalate (% Recovery)	84.1 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	84.2 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	80.2 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	88.2 %	50 - 150
Benzo (a) pyrene (% Recovery)	83.7 %	50 - 150
3-Methylcholanthrene (% Recovery)	78.4 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	80.9 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	79.1 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	84.1 %	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	11/25/2013 14:10

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

Analytical Quality Control Results Report

Batch: 13112102	***VOA - water***
WS-003	***LIMS ID: 2013-4144***

Volatiles - water DUP ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Dibromofluoromethane (% Recovery)	106 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	95.4 %			70 - 130	
Toluene-d8 (% Recovery)	102 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	113 %			70 - 130	
Dichlorodifluoromethane (RPD)	0 %				0 - 20
Chloromethane (RPD)	0 %				0 - 20
Vinyl chloride (RPD)	0 %				0 - 20
Bromomethane (RPD)	0 %				0 - 20
Chloroethane (RPD)	0 %				0 - 20
Trichlorofluoromethane (RPD)	0 %				0 - 20
1,1-Dichloroethene (RPD)	0 %				0 - 20
Acetone (RPD)	0 %				0 - 20
Methylene chloride (RPD)	0 %				0 - 20
Methyl tert-butyl ether (RPD)	0 %				0 - 20
trans-1,2-Dichloroethene (RPD)	0 %				0 - 20
1,1-Dichloroethane (RPD)	0 %				0 - 20
Methyl ethyl ketone (RPD)	0 %				0 - 20
cis-1,2-Dichloroethene (RPD)	0 %				0 - 20
2,2-Dichloropropane (RPD)	0 %				0 - 20
Bromochloromethane (RPD)	0 %				0 - 20
Chloroform (RPD)	0 %				0 - 20
1,1,1-Trichloroethane (RPD)	0 %				0 - 20
1,1-Dichloropropene (RPD)	0 %				0 - 20
Carbon tetrachloride (RPD)	0 %				0 - 20
Benzene (RPD)	0 %				0 - 20
1,2-Dichloroethane (RPD)	0 %				0 - 20
Trichloroethene (RPD)	0 %				0 - 20
1,2-Dichloropropane (RPD)	0 %				0 - 20
Dibromomethane (RPD)	0 %				0 - 20
Bromodichloromethane (RPD)	0 %				0 - 20
cis-1,3-Dichloropropene (RPD)	0 %				0 - 20
Methyl isobutyl ketone (RPD)	0 %				0 - 20
Toluene (RPD)	0 %				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

trans-1,3-Dichloropropene (RPD)	0 %	0 - 20
1,1,2-Trichloroethane (RPD)	0 %	0 - 20
2-Hexanone (RPD)	0 %	0 - 20
Tetrachloroethene (RPD)	0 %	0 - 20
1,3-Dichloropropane (RPD)	0 %	0 - 20
Dibromochloromethane (RPD)	0 %	0 - 20
1,2-Dibromoethane (EDB) (RPD)	0 %	0 - 20
Chlorobenzene (RPD)	0 %	0 - 20
Ethylbenzene (RPD)	0 %	0 - 20
1,1,1,2-Tetrachloroethane (RPD)	0 %	0 - 20
m,p-Xylene (RPD)	0 %	0 - 20
o-Xylene (RPD)	0 %	0 - 20
Styrene (RPD)	0 %	0 - 20
Bromoform (RPD)	0 %	0 - 20
Isopropylbenzene (RPD)	0 %	0 - 20
1,1,2,2-Tetrachloroethane (RPD)	0 %	0 - 20
1,2,3-Trichloropropane (RPD)	0 %	0 - 20
n-Propylbenzene (RPD)	0 %	0 - 20
Bromobenzene (RPD)	0 %	0 - 20
1,3,5-Trimethylbenzene (RPD)	0 %	0 - 20
2-Chlorotoluene (RPD)	0 %	0 - 20
4-Chlorotoluene (RPD)	0 %	0 - 20
tert-Butylbenzene (RPD)	0 %	0 - 20
1,2,4-Trimethylbenzene (RPD)	0 %	0 - 20
sec-Butylbenzene (RPD)	0 %	0 - 20
p-Isopropyltoluene (RPD)	0 %	0 - 20
1,3-Dichlorobenzene (RPD)	0 %	0 - 20
1,4-Dichlorobenzene (RPD)	0 %	0 - 20
n-Butylbenzene (RPD)	0 %	0 - 20
1,2-Dichlorobenzene (RPD)	0 %	0 - 20
1,2-Dibromo-3-chloropropane (RPD)	0 %	0 - 20
1,2,4-Trichlorobenzene (RPD)	0 %	0 - 20
Hexachlorobutadiene (RPD)	0 %	0 - 20
Naphthalene (RPD)	0 %	0 - 20
1,2,3-Trichlorobenzene (RPD)	0 %	0 - 20
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	11/21/2013 1:20 AM	

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

WS-003					***LIMS ID: 2013-4144***
Volatiles - water MS					***Run: 1***
Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Dibromofluoromethane (% Recovery)	106 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	97.4 %			70 - 130	
Toluene-d8 (% Recovery)	104 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	113 %			70 - 130	
1,1-Dichloroethene (% Recovery)	100 %			70 - 130	
Benzene (% Recovery)	102 %			70 - 130	
Trichloroethene (% Recovery)	93.6 %			70 - 130	
Toluene (% Recovery)	101 %			70 - 130	
Chlorobenzene (% Recovery)	97.9 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	11/21/2013 1:45 AM				

WS-003					***LIMS ID: 2013-4144***
Volatiles - water MSD					***Run: 1***
Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Dibromofluoromethane (% Recovery)	109 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	99.8 %			70 - 130	
Toluene-d8 (% Recovery)	110 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	117 %			70 - 130	
1,1-Dichloroethene (% Recovery)	101 %			70 - 130	
1,1-Dichloroethene (RPD)	0.1 %				0 - 20
Benzene (RPD)	3.7 %				0 - 20
Benzene (% Recovery)	106 %			70 - 130	
Trichloroethene (% Recovery)	98.4 %			70 - 130	
Trichloroethene (RPD)	5.0 %				0 - 20
Toluene (RPD)	4.0 %				0 - 20
Toluene (% Recovery)	105 %			70 - 130	
Chlorobenzene (% Recovery)	104 %			70 - 130	
Chlorobenzene (RPD)	6.2 %				0 - 20
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	11/21/2013 2:10 AM				

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: 13112102-LCS-01***

Volatiles - water LCS ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Dibromofluoromethane (% Recovery)	109 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	105 %			70 - 130	
Toluene-d8 (% Recovery)	117 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	114 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	107 %			60 - 130	
Chloromethane (% Recovery)	130 %			60 - 130	
Vinyl chloride (% Recovery)	117 %			60 - 130	
Bromomethane (% Recovery)	200 %			60 - 130	
Chloroethane (% Recovery)	166 %			60 - 130	
Trichlorofluoromethane (% Recovery)	80.1 %			60 - 130	
1,1-Dichloroethene (% Recovery)	106 %			60 - 130	
Acetone (% Recovery)	79.0 %			60 - 130	
Methylene chloride (% Recovery)	109 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	99.1 %			60 - 130	
trans-1,2-Dichloroethene (% Recovery)	104 %			60 - 130	
1,1-Dichloroethane (% Recovery)	104 %			60 - 130	
Methyl ethyl ketone (% Recovery)	93.1 %			60 - 130	
cis-1,2-Dichloroethene (% Recovery)	106 %			60 - 130	
2,2-Dichloropropane (% Recovery)	109 %			60 - 130	
Bromochloromethane (% Recovery)	106 %			60 - 130	
Chloroform (% Recovery)	105 %			60 - 130	
1,1,1-Trichloroethane (% Recovery)	105 %			60 - 130	
1,1-Dichloropropene (% Recovery)	107 %			60 - 130	
Carbon tetrachloride (% Recovery)	108 %			60 - 130	
Benzene (% Recovery)	105 %			60 - 130	
1,2-Dichloroethane (% Recovery)	104 %			60 - 130	
Trichloroethene (% Recovery)	104 %			60 - 130	
1,2-Dichloropropane (% Recovery)	112 %			60 - 130	
Dibromomethane (% Recovery)	108 %			60 - 130	
Bromodichloromethane (% Recovery)	111 %			60 - 130	
cis-1,3-Dichloropropene (% Recovery)	111 %			60 - 130	
Methyl isobutyl ketone (% Recovery)	103 %			60 - 130	
Toluene (% Recovery)	113 %			60 - 130	
trans-1,3-Dichloropropene (% Recovery)	108 %			60 - 130	
1,1,2-Trichloroethane (% Recovery)	110 %			60 - 130	
2-Hexanone (% Recovery)	98.7 %			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

Tetrachloroethene (% Recovery)	119 %	60 - 130
1,3-Dichloropropane (% Recovery)	109 %	60 - 130
Dibromochloromethane (% Recovery)	109 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	109 %	60 - 130
Chlorobenzene (% Recovery)	110 %	60 - 130
Ethylbenzene (% Recovery)	114 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	108 %	60 - 130
m,p-Xylene (% Recovery)	116 %	60 - 130
o-Xylene (% Recovery)	113 %	60 - 130
Styrene (% Recovery)	111 %	60 - 130
Bromoform (% Recovery)	93.8 %	60 - 130
Isopropylbenzene (% Recovery)	113 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	102 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	103 %	60 - 130
n-Propylbenzene (% Recovery)	115 %	60 - 130
Bromobenzene (% Recovery)	97.0 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	117 %	60 - 130
2-Chlorotoluene (% Recovery)	105 %	60 - 130
4-Chlorotoluene (% Recovery)	111 %	60 - 130
tert-Butylbenzene (% Recovery)	110 %	60 - 130
1,2,4-Trimethylbenzene (% Recovery)	115 %	60 - 130
sec-Butylbenzene (% Recovery)	113 %	60 - 130
p-Isopropyltoluene (% Recovery)	115 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	109 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	106 %	60 - 130
n-Butylbenzene (% Recovery)	112 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	109 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	94.2 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	109 %	60 - 130
Hexachlorobutadiene (% Recovery)	111 %	60 - 130
Naphthalene (% Recovery)	105 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	108 %	60 - 130
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	11/20/2013 13:47	

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: 13112104 — Oil and Grease - water

WS-003 — **LIMS ID: 2013-4144**

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)	200 %				0 - 20
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

WS-003 — **LIMS ID: 2013-4144**

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

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	92.8 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

WS-003 — **LIMS ID: 2013-4144**

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

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	94.8 %			70 - 130	
Oil and Grease (RPD)	2.1 %				0 - 20
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

MB — **LIMS ID: 13112104-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	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

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: 13112104-LCS-01***

Oil and Grease - water LCS ***Run: 1***

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease (% Recovery)	91.8 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	11/21/2013 06:48				

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: 13112507	ICP Metals - water (Diss.)
WS-003	LIMS ID: 2013-4144

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

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	<20 ug/L	20	20		
Aluminum (RPD)	8.5 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<5 ug/L	1	5		
Arsenic	0.56 ug/L	0.2	0.5		
Arsenic (RPD)	2.4 %				0 - 20
Barium (RPD)	0.9 %				0 - 20
Barium	16.3 ug/L	0.4	2		
Beryllium	<0.1 ug/L	0.04	0.1		
Beryllium (RPD)	0 %				0 - 20
Boron (RPD)	1.3 %				0 - 20
Boron	20.2 ug/L	2	5		
Cadmium	<0.1 ug/L	0.05	0.1		
Cadmium (RPD)	0 %				0 - 20
Calcium (RPD)	0.1 %				0 - 20
Calcium	3.46 mg/L	0.03	0.03		
Chromium	<0.5 ug/L	0.05	0.5		
Chromium (RPD)	51.7 %				0 - 20
Cobalt (RPD)	22.2 %				0 - 20
Cobalt	<0.5 ug/L	0.05	0.5		
Copper	<0.5 ug/L	0.2	0.5		
Copper (RPD)	51.1 %				0 - 20
Iron (RPD)	1.2 %				0 - 20
Iron	<20 ug/L	5	20		
Lead (RPD)	0 %				0 - 20
Lead	<0.3 ug/L	0.02	0.3		
Magnesium	2.13 mg/L	0.01	0.02		
Magnesium (RPD)	0 %				0 - 20
Manganese (RPD)	18 %				0 - 20
Manganese	3.5 ug/L	0.07	0.3		
Nickel	<0.5 ug/L	0.15	0.5		
Nickel (RPD)	5.3 %				0 - 20
Potassium (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

Potassium	2.24 mg/L	0.01	0.02		
Selenium	<1 ug/L	0.2	1		
Selenium (RPD)	40.0 %				0 - 20
Silicon Dioxide	8.81 mg/L	0.01	0.05		
Silicon Dioxide (RPD)	0.1 %				0 - 20
Silver (RPD)	0 %				0 - 20
Silver	<0.5 ug/L	0.02	0.5		
Sodium	7.77 mg/L	0.01	0.02		
Sodium (RPD)	0.1 %				0 - 20
Thallium (RPD)	0 %				0 - 20
Thallium	<0.5 ug/L	0	0.5		
Vanadium	<0.5 ug/L	0.3	0.5		
Vanadium (RPD)	4.4 %				0 - 20
Zinc (RPD)	50.0 %				0 - 20
Zinc	<1 ug/L	0.3	1		
Hardness	17 mg/L	1	1		
Hardness (RPD)	0 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 20 2013 11:16PM				

WS-003 ***LIMS ID: 2013-4144***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	94.7 %			70 - 130	
Antimony (% Recovery)	110 %			70 - 130	
Arsenic (% Recovery)	102 %			70 - 130	
Barium (% Recovery)	96.2 %			70 - 130	
Beryllium (% Recovery)	98.5 %			70 - 130	
Boron (% Recovery)	97.8 %			70 - 130	
Cadmium (% Recovery)	99.6 %			70 - 130	
Calcium (% Recovery)	93.5 %			70 - 130	
Chromium (% Recovery)	92.9 %			70 - 130	
Cobalt (% Recovery)	94.2 %			70 - 130	
Copper (% Recovery)	96.2 %			70 - 130	
Iron (% Recovery)	92.7 %			70 - 130	
Lead (% Recovery)	96.3 %			70 - 130	
Magnesium (% Recovery)	92.1 %			70 - 130	
Manganese (% Recovery)	93 %			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)	95 %	70 - 130	
Potassium (% Recovery)	93.6 %	70 - 130	
Selenium (% Recovery)	107 %	70 - 130	
Silver (% Recovery)	90.1 %	70 - 130	
Sodium (% Recovery)	93.4 %	70 - 130	
Thallium (% Recovery)	95.6 %	70 - 130	
Vanadium (% Recovery)	93.8 %	70 - 130	
Zinc (% Recovery)	102 %	70 - 130	
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Nov 20 2013 11:22PM		

WS-003 ***LIMS ID: 2013-4144***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	94.1 %			70 - 130	
Aluminum (RPD)	0.7 %				0 - 20
Antimony (% Recovery)	108 %			70 - 130	
Antimony (RPD)	1.4 %				0 - 20
Arsenic (% Recovery)	101 %			70 - 130	
Arsenic (RPD)	0.5 %				0 - 20
Barium (% Recovery)	95.1 %			70 - 130	
Barium (RPD)	1.1 %				0 - 20
Beryllium (% Recovery)	98.8 %			70 - 130	
Beryllium (RPD)	0.3 %				0 - 20
Boron (% Recovery)	98.3 %			70 - 130	
Boron (RPD)	0.5 %				0 - 20
Cadmium (% Recovery)	98.2 %			70 - 130	
Cadmium (RPD)	1.4 %				0 - 20
Calcium (% Recovery)	92.5 %			70 - 130	
Calcium (RPD)	0.8 %				0 - 20
Chromium (% Recovery)	93.0 %			70 - 130	
Chromium (RPD)	0.1 %				0 - 20
Cobalt (% Recovery)	94.2 %			70 - 130	
Cobalt (RPD)	0 %				0 - 20
Copper (% Recovery)	96.3 %			70 - 130	
Copper (RPD)	0.1 %				0 - 20
Iron (% Recovery)	92.9 %			70 - 130	
Iron (RPD)	0.2 %				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)	93.8 %	70 - 130	
Lead (RPD)	2.7 %		0 - 20
Magnesium (% Recovery)	92.3 %	70 - 130	
Magnesium (RPD)	0.2 %		0 - 20
Manganese (% Recovery)	93 %	70 - 130	
Manganese (RPD)	0.1 %		0 - 20
Nickel (% Recovery)	94 %	70 - 130	
Nickel (RPD)	0.2 %		0 - 20
Potassium (% Recovery)	92.0 %	70 - 130	
Potassium (RPD)	1.4 %		0 - 20
Selenium (% Recovery)	108 %	70 - 130	
Selenium (RPD)	1.1 %		0 - 20
Silver (% Recovery)	88.2 %	70 - 130	
Silver (RPD)	2.1 %		0 - 20
Sodium (% Recovery)	93.1 %	70 - 130	
Sodium (RPD)	0.2 %		0 - 20
Thallium (% Recovery)	95.2 %	70 - 130	
Thallium (RPD)	0.4 %		0 - 20
Vanadium (% Recovery)	94.0 %	70 - 130	
Vanadium (RPD)	0.2 %		0 - 20
Zinc (% Recovery)	102 %	70 - 130	
Zinc (RPD)	0.3 %		0 - 20
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Nov 20 2013 11:28PM		

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: 13112607	ICP Metals - water (total)
WS-003	LIMS ID: 2013-4144

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

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	80.2 ug/L	20	20		
Aluminum (RPD)	42.7 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<10 ug/L	5	10		
Arsenic	<1 ug/L	0.5	1		
Arsenic (RPD)	14.5 %				0 - 20
Barium (RPD)	8.7 %				0 - 20
Barium	22.2 ug/L	2	10		
Beryllium (RPD)	8.0 %				0 - 20
Beryllium	<0.5 ug/L	0.1	0.5		
Boron	<25 ug/L	5	25		
Boron (RPD)	1.3 %				0 - 20
Cadmium (RPD)	0 %				0 - 20
Cadmium	<1 ug/L	0.3	1		
Calcium	3.72 mg/L	0.04	0.04		
Calcium (RPD)	0.7 %				0 - 20
Chromium (RPD)	56.6 %				0 - 20
Chromium	<1 ug/L	0.3	1		
Cobalt	<1 ug/L	0.5	1		
Cobalt (RPD)	13.9 %				0 - 20
Copper (RPD)	15.3 %				0 - 20
Copper	<1 ug/L	0.5	1		
Iron	507 ug/L	10	20		
Iron (RPD)	18.5 %				0 - 20
Lead (RPD)	21.1 %				0 - 20
Lead	<1 ug/L	0.1	1		
Magnesium	1.78 mg/L	0.1	0.1		
Magnesium (RPD)	1.2 %				0 - 20
Manganese	200 ug/L	0.2	1		
Manganese (RPD)	16 %				0 - 20
Nickel (RPD)	1.6 %				0 - 20
Nickel	<2.5 ug/L	0.5	2.5		
Potassium	2.46 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)	1.6 %				0 - 20
Selenium (RPD)	2.3 %				0 - 20
Selenium	<2 ug/L	0.5	2		
Silver	<5 ug/L	1	5		
Silver (RPD)	0 %				0 - 20
Sodium	8.66 mg/L	0.02	0.04		
Sodium (RPD)	0.4 %				0 - 20
Thallium	<2.5 ug/L	0.05	2.5		
Thallium (RPD)	0 %				0 - 20
Vanadium (RPD)	28.8 %				0 - 20
Vanadium	<2.5 ug/L	1	2.5		
Zinc (RPD)	19.0 %				0 - 20
Zinc	<3 ug/L	2	3		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Nov 22 2013 6:02AM				

WS-003 ***LIMS ID: 2013-4144***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	100 %			70 - 130	
Antimony (% Recovery)	94.4 %			70 - 130	
Arsenic (% Recovery)	97.5 %			70 - 130	
Barium (% Recovery)	95.0 %			70 - 130	
Beryllium (% Recovery)	95.8 %			70 - 130	
Boron (% Recovery)	91.8 %			70 - 130	
Cadmium (% Recovery)	98.7 %			70 - 130	
Calcium (% Recovery)	97.6 %			70 - 130	
Chromium (% Recovery)	88.4 %			70 - 130	
Cobalt (% Recovery)	91.2 %			70 - 130	
Copper (% Recovery)	92.8 %			70 - 130	
Iron (% Recovery)	92.3 %			70 - 130	
Lead (% Recovery)	94.3 %			70 - 130	
Magnesium (% Recovery)	92.8 %			70 - 130	
Manganese (% Recovery)	76 %			70 - 130	
Nickel (% Recovery)	91 %			70 - 130	
Potassium (% Recovery)	97.9 %			70 - 130	
Selenium (% Recovery)	103 %			70 - 130	
Silver (% Recovery)	80.0 %			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)	81.0 %	70 - 130	
Thallium (% Recovery)	94.0 %	70 - 130	
Vanadium (% Recovery)	90.7 %	70 - 130	
Zinc (% Recovery)	98.3 %	70 - 130	
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Nov 22 2013 6:08AM		

WS-003 ***LIMS ID: 2013-4144***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	101 %			70 - 130	
Aluminum (RPD)	0.8 %				0 - 20
Antimony (% Recovery)	94.5 %			70 - 130	
Antimony (RPD)	0.1 %				0 - 20
Arsenic (% Recovery)	98.4 %			70 - 130	
Arsenic (RPD)	0.9 %				0 - 20
Barium (% Recovery)	95.1 %			70 - 130	
Barium (RPD)	0 %				0 - 20
Beryllium (% Recovery)	95.4 %			70 - 130	
Beryllium (RPD)	0.3 %				0 - 20
Boron (% Recovery)	91.8 %			70 - 130	
Boron (RPD)	0 %				0 - 20
Cadmium (% Recovery)	98.7 %			70 - 130	
Cadmium (RPD)	0 %				0 - 20
Calcium (% Recovery)	95.3 %			70 - 130	
Calcium (RPD)	1.7 %				0 - 20
Chromium (% Recovery)	89.4 %			70 - 130	
Chromium (RPD)	1.1 %				0 - 20
Cobalt (% Recovery)	91.7 %			70 - 130	
Cobalt (RPD)	0.5 %				0 - 20
Copper (% Recovery)	93.6 %			70 - 130	
Copper (RPD)	0.9 %				0 - 20
Iron (% Recovery)	93.8 %			70 - 130	
Iron (RPD)	0.4 %				0 - 20
Lead (% Recovery)	94.9 %			70 - 130	
Lead (RPD)	0.7 %				0 - 20
Magnesium (% Recovery)	92.5 %			70 - 130	
Magnesium (RPD)	0.3 %				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)	82 %	70 - 130	
Manganese (RPD)	0.8 %		0 - 20
Nickel (% Recovery)	92 %	70 - 130	
Nickel (RPD)	0.7 %		0 - 20
Potassium (% Recovery)	95.3 %	70 - 130	
Potassium (RPD)	2.2 %		0 - 20
Selenium (% Recovery)	104 %	70 - 130	
Selenium (RPD)	1.1 %		0 - 20
Silver (% Recovery)	79.4 %	70 - 130	
Silver (RPD)	0.8 %		0 - 20
Sodium (% Recovery)	80.0 %	70 - 130	
Sodium (RPD)	0.7 %		0 - 20
Thallium (% Recovery)	94.5 %	70 - 130	
Thallium (RPD)	0.5 %		0 - 20
Vanadium (% Recovery)	90.9 %	70 - 130	
Vanadium (RPD)	0.2 %		0 - 20
Zinc (% Recovery)	98.5 %	70 - 130	
Zinc (RPD)	0.2 %		0 - 20
Dilution Factor	1		
Analysis Date/Time	Nov 22 2013 6:14AM		
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: 13112506	***Turbidity - water***
WS-003	***LIMS ID: 2013-4144***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Turbidity	8.76 NTU	0.02	0.02		
Turbidity (RPD)	3.2 %				0 - 20
Dilution Factor	1				
Analyzed By	Angela H. Rice				
Analysis Date/Time	11/21/2013 10:12				