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

Client Report For: Exxon Oil Spill 2014 2704-2708
Attention:
Client Address:
,

Report Date: September 11, 2014
LAB ID: AR14AUG14-01
Comment:

Approved By:_____ Date:September 11, 2014

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: 2014-2704
Client Sample ID: WS-001
Collection Date: 8/14/2014 10:20:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 14082606 Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.67	0.5	0.2		ug/L
Barium	15.0	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	19.4	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.15	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	2.52	0.02	0.01		mg/L
Manganese	89.4	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	2.62	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	6.55	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	6.57	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	5.04	1	0.3		ug/L
Hardness	25.8	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Aug 20 2014 8:28PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 14082608 Run: 1***

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North Liitle Rock, AR 72118

Laboratory Contact: Jeff Ruehr
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	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	29.4	20	20		ug/L
Antimony	<10	10	5		ug/L
Arsenic	2.61	1	0.5		ug/L
Barium	39.2	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	6.14	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	533	20	10.0		ug/L
Lead	<1	1	0.1		ug/L
Magnesium	2.60	0.1	0.1		mg/L
Manganese	589	1	0.2		ug/L
Nickel	<2.5	2.5	0.5		ug/L
Potassium	2.67	1	0.05		mg/L
Selenium	<2	2	0.5		ug/L
Silver	<5	5	1.0		ug/L
Sodium	7.35	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	3.02	3	2.0		ug/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Aug 25 2014 10:00AM				
Prep By					
Prep Date/Time					

Arkansas Department of Environmental Quality
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Laboratory Contact: Jeff Ruehr
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Client: Special Samples
Lab ID: 2014-2705
Client Sample ID: WS-002
Collection Date: 8/14/2014 11:02:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 14082606 Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.74	0.5	0.2		ug/L
Barium	12.1	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	19.3	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.52	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	2.68	0.02	0.01		mg/L
Manganese	77.3	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	2.78	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	6.62	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	6.64	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	<1	1	0.3		ug/L
Hardness	27.3	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Aug 20 2014 8:54PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 14082608 Run: 1***

	Result	Reporting	MDL	Qual	Unit

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

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		Limit		
Aluminum	<20	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.51	1	0.5	ug/L
Barium	23.2	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	6.38	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	345	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.70	0.1	0.1	mg/L
Manganese	402	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.72	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.31	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	Aug 25 2014 10:26AM			
Prep By				
Prep Date/Time				

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Laboratory Contact: Jeff Ruehr
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Client: Special Samples
Lab ID: 2014-2706
Client Sample ID: WS-005
Collection Date: 8/14/2014 11:35:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 14082606*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.61	0.5	0.2		ug/L
Barium	17.5	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	19.9	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	6.24	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	28.0	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	2.48	0.02	0.01		mg/L
Manganese	128	0.3	0.07		ug/L
Nickel	0.52	0.5	0.15		ug/L
Potassium	2.77	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	6.92	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	6.73	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	25.8	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Aug 20 2014 9:01PM				

Total Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 14082608*** ***Run: 1***

	Result	Reporting	MDL	Qual	Unit

Arkansas Department of Environmental Quality
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			Limit	
Aluminum	52.4	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.17	1	0.5	ug/L
Barium	25.7	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	6.14	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	386	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	2.47	0.1	0.1	mg/L
Manganese	374	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.71	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	7.44	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	3.12	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	Aug 25 2014 10:32AM			
Prep By				
Prep Date/Time				

Arkansas Department of Environmental Quality
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Laboratory Contact: Jeff Ruehr
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Client: Special Samples
Lab ID: 2014-2708

Client Sample ID: Metals Field Blank
Collection Date: 8/14/2014 10:13:00 AM
Matrix: Water

Analyses

Dissolved Metals by EPA 200.8 ***EPA 200.8*** ***Batch: 14082606*** ***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	Aug 20 2014 9:07PM				

Arkansas Department of Environmental Quality
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Laboratory Contact: Jeff Ruehr
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Client:	Special Samples	**Client Sample ID:**	WS-001
Lab ID:	2014-2704	**Collection Date:**	8/14/2014 10:20:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 14081509*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	15.1	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	8/15/2014 8:57				

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

Client:	Special Samples	**Client Sample ID:**	WS-002
Lab ID:	2014-2705	**Collection Date:**	8/14/2014 11:02:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 14081509*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	8.74	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	8/15/2014 9:05				

Arkansas Department of Environmental Quality
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Laboratory Contact: Jeff Ruehr
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Client:	Special Samples	**Client Sample ID:**	WS-005
Lab ID:	2014-2706	**Collection Date:**	8/14/2014 11:35:00 AM
		Matrix:	Water

Analyses

Turbidity ***EPA 180.1*** ***Batch: 14081509*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Turbidity	9.81	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	8/15/2014 9:07				

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

Laboratory Contact: Jeff Ruehr
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Client: Special Samples
Lab ID: 2014-2704
Client Sample ID: WS-001
Collection Date: 8/14/2014 10:20:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 14082002*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	08-20-2014 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 14081514*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	38.7	40-110			%
Nitrobenzene-d5 (% Recovery)	63.3	50-110			%
2-Fluorobiphenyl (% Recovery)	67.3	50-110			%
2,4,6-Tribromophenol (% Recovery)	71.7	40-110			%
Terphenyl-d14 (% Recovery)	71.1	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

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Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	8/15/2014 12:14 PM			
Prep By	Ed Harris			
Prep Date/Time	8-15-2014 08:00			

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

Client: Special Samples
Lab ID: 2014-2705
Client Sample ID: WS-002
Collection Date: 8/14/2014 11:02:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 14082002*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	08-20-2014 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 14081514*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	38.2	40-110			%
Nitrobenzene-d5 (% Recovery)	66.8	50-110			%
2-Fluorobiphenyl (% Recovery)	65.2	50-110			%
2,4,6-Tribromophenol (% Recovery)	74.4	40-110			%
Terphenyl-d14 (% Recovery)	73.6	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

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

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Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	8/15/2014 2:07 PM			
Prep By	Ed Harris			
Prep Date/Time	8-15-2014 08:00			

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Client: Special Samples
Lab ID: 2014-2706
Client Sample ID: WS-005
Collection Date: 8/14/2014 11:35:00 AM
Matrix: Water

Analyses

Oil and Grease ***EPA1664*** ***Batch: 14082002*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	08-20-2014 1400				

Semi-Volatiles by GC/MS ***EPA 3510C/EPA 8270D*** ***Batch: 14081514*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	48.1	40-110			%
Nitrobenzene-d5 (% Recovery)	66.8	50-110			%
2-Fluorobiphenyl (% Recovery)	78.4	50-110			%
2,4,6-Tribromophenol (% Recovery)	69.9	40-110			%
Terphenyl-d14 (% Recovery)	77.7	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

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Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	8/15/2014 2:36 PM			
Prep By	Ed Harris			
Prep Date/Time	8-15-2014 08:00			

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Client:	Special Samples	**Client Sample ID:**	WS-001
Lab ID:	2014-2704	**Collection Date:**	8/14/2014 10:20:00 AM
		Matrix:	Water

Analyses

Conductivity ***EPA 120.1*** ***Batch: 14082807*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Specific Conductance (EC)	91	1	1.0		uMHOS
Analyzed By	Clark Baker				
Analysis Date/Time	8/14/2014 10:20				

Field Data ***Batch: 14082806*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dissolved Oxygen	7.08				mg/L
pH	8.01				SU
Temperature	29.5				C
Analyzed By	Clark Baker				
Analysis Date/Time	8/14/2014 10:20				

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Client:	Special Samples	**Client Sample ID:**	WS-002
Lab ID:	2014-2705	**Collection Date:**	8/14/2014 11:02:00 AM
		Matrix:	Water

Analyses

Conductivity ***EPA 120.1*** ***Batch: 14082807*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Specific Conductance (EC)	93	1	1.0		uMHOS
Analyzed By	Clark Baker				
Analysis Date/Time	8/14/2014 11:02				

Field Data ***Batch: 14082806*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dissolved Oxygen	5.29				mg/L
pH	7.42				SU
Temperature	29.6				C
Analyzed By	Clark Baker				
Analysis Date/Time	8/14/2014 11:02				

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Client:	Special Samples	**Client Sample ID:**	WS-005
Lab ID:	2014-2706	**Collection Date:**	8/14/2014 11:35:00 AM
		Matrix:	Water

Analyses

Conductivity ***EPA 120.1*** ***Batch: 14082807*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Specific Conductance (EC)	90	1	1.0		uMHOS
Analyzed By	Clark Baker				
Analysis Date/Time	8/14/2014 11:35				

Field Data ***Batch: 14082806*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dissolved Oxygen	7.29				mg/L
pH	7.76				SU
Temperature	29.7				C
Analyzed By	Clark Baker				
Analysis Date/Time	8/14/2014 11:35				

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Client: Special Samples
Lab ID: 2014-2704

Client Sample ID: WS-001
Collection Date: 8/14/2014 10:20:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 14081516*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	83.4	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	104	70-130			%
Toluene-d8 (% Recovery)	97.9	70-130			%
4-Bromofluorobenzene (% Recovery)	112	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

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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	8/15/2014 11:33 AM			

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Client: Special Samples
Lab ID: 2014-2705

Client Sample ID: WS-002
Collection Date: 8/14/2014 11:02:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 14081516*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	82.2	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	104	70-130			%
Toluene-d8 (% Recovery)	99.6	70-130			%
4-Bromofluorobenzene (% Recovery)	110	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

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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	8/15/2014 10:42 AM			

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Client: Special Samples
Lab ID: 2014-2706

Client Sample ID: WS-005
Collection Date: 8/14/2014 11:35:00 AM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 14081516*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	84.4	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	103	70-130			%
Toluene-d8 (% Recovery)	100	70-130			%
4-Bromofluorobenzene (% Recovery)	110	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

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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	8/15/2014 11:07 AM			

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Client: Special Samples
Lab ID: 2014-2707

Client Sample ID: Trip Blank
Collection Date: 8/13/2014 3:20:00 PM
Matrix: Water

Analyses

Volatile Organics by GCMS ***EPA 8260C*** ***Batch: 14081516*** ***Run: 1***

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	82.8	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	103	70-130			%
Toluene-d8 (% Recovery)	98.1	70-130			%
4-Bromofluorobenzene (% Recovery)	110	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	58.5	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

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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	8/15/2014 10:17 AM			

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Analytical Quality Control Results Report

Batch: 14081516	***VOA - water***
WS-001	***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Dibromofluoromethane (% Recovery)	84.0 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	104 %			70 - 130	
Toluene-d8 (% Recovery)	103 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	116 %			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)	1.9 %				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

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Methyl isobutyl ketone (RPD)	0 %	0 - 20
Toluene (RPD)	5.0 %	0 - 20
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	8/15/2014 11:58 AM	

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WS-001					***LIMS ID: 2014-2704***
Volatiles - water MS					***Run: 1***
Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Dibromofluoromethane (% Recovery)	85.9 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	103 %			70 - 130	
Toluene-d8 (% Recovery)	99.7 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	110 %			70 - 130	
1,1-Dichloroethene (% Recovery)	116 %			70 - 130	
Benzene (% Recovery)	106 %			70 - 130	
Trichloroethene (% Recovery)	107 %			70 - 130	
Toluene (% Recovery)	98.4 %			70 - 130	
Chlorobenzene (% Recovery)	111 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	8/15/2014 12:33 PM				

WS-001					***LIMS ID: 2014-2704***
Volatiles - water MSD					***Run: 1***
Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Dibromofluoromethane (% Recovery)	82.6 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	101 %			70 - 130	
Toluene-d8 (% Recovery)	97.9 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	116 %			70 - 130	
1,1-Dichloroethene (% Recovery)	115 %			70 - 130	
1,1-Dichloroethene (RPD)	1.3 %				0 - 20
Benzene (RPD)	2.2 %				0 - 20
Benzene (% Recovery)	108 %			70 - 130	
Trichloroethene (% Recovery)	104 %			70 - 130	
Trichloroethene (RPD)	3.1 %				0 - 20
Toluene (RPD)	0.8 %				0 - 20
Toluene (% Recovery)	97.6 %			70 - 130	
Chlorobenzene (RPD)	0.7 %				0 - 20
Chlorobenzene (% Recovery)	110 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	8/15/2014 12:58 PM				

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LCS ***LIMS ID: 14081516-LCS-01***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Dibromofluoromethane (% Recovery)	85.7 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	102 %			70 - 130	
Toluene-d8 (% Recovery)	99.1 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	104 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	116 %			60 - 130	
Chloromethane (% Recovery)	105 %			60 - 130	
Vinyl chloride (% Recovery)	108 %			60 - 130	
Bromomethane (% Recovery)	43.5 %			60 - 130	
Chloroethane (% Recovery)	109 %			60 - 130	
Trichlorofluoromethane (% Recovery)	106 %			60 - 130	
1,1-Dichloroethene (% Recovery)	108 %			60 - 130	
Acetone (% Recovery)	140 %			60 - 130	
Methylene chloride (% Recovery)	116 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	103 %			60 - 130	
trans-1,2-Dichloroethene (% Recovery)	108 %			60 - 130	
1,1-Dichloroethane (% Recovery)	106 %			60 - 130	
Methyl ethyl ketone (% Recovery)	134 %			60 - 130	
cis-1,2-Dichloroethene (% Recovery)	108 %			60 - 130	
2,2-Dichloropropane (% Recovery)	109 %			60 - 130	
Bromochloromethane (% Recovery)	107 %			60 - 130	
Chloroform (% Recovery)	106 %			60 - 130	
1,1,1-Trichloroethane (% Recovery)	105 %			60 - 130	
1,1-Dichloropropene (% Recovery)	105 %			60 - 130	
Carbon tetrachloride (% Recovery)	106 %			60 - 130	
Benzene (% Recovery)	102 %			60 - 130	
1,2-Dichloroethane (% Recovery)	104 %			60 - 130	
Trichloroethene (% Recovery)	118 %			60 - 130	
1,2-Dichloropropane (% Recovery)	104 %			60 - 130	
Dibromomethane (% Recovery)	102 %			60 - 130	
Bromodichloromethane (% Recovery)	99.9 %			60 - 130	
cis-1,3-Dichloropropene (% Recovery)	102 %			60 - 130	
Methyl isobutyl ketone (% Recovery)	102 %			60 - 130	
Toluene (% Recovery)	103 %			60 - 130	
trans-1,3-Dichloropropene (% Recovery)	101 %			60 - 130	
1,1,2-Trichloroethane (% Recovery)	101 %			60 - 130	

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2-Hexanone (% Recovery)	130 %	60 - 130
Tetrachloroethene (% Recovery)	105 %	60 - 130
1,3-Dichloropropane (% Recovery)	102 %	60 - 130
Dibromochloromethane (% Recovery)	99.6 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	102 %	60 - 130
Chlorobenzene (% Recovery)	105 %	60 - 130
Ethylbenzene (% Recovery)	102 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	106 %	60 - 130
m,p-Xylene (% Recovery)	104 %	60 - 130
o-Xylene (% Recovery)	104 %	60 - 130
Styrene (% Recovery)	99.8 %	60 - 130
Bromoform (% Recovery)	102 %	60 - 130
Isopropylbenzene (% Recovery)	106 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	82.9 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	107 %	60 - 130
n-Propylbenzene (% Recovery)	103 %	60 - 130
Bromobenzene (% Recovery)	107 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	110 %	60 - 130
2-Chlorotoluene (% Recovery)	108 %	60 - 130
4-Chlorotoluene (% Recovery)	109 %	60 - 130
tert-Butylbenzene (% Recovery)	105 %	60 - 130
1,2,4-Trimethylbenzene (% Recovery)	110 %	60 - 130
sec-Butylbenzene (% Recovery)	103 %	60 - 130
p-Isopropyltoluene (% Recovery)	109 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	110 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	109 %	60 - 130
n-Butylbenzene (% Recovery)	107 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	106 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	108 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	110 %	60 - 130
Hexachlorobutadiene (% Recovery)	110 %	60 - 130
Naphthalene (% Recovery)	106 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	108 %	60 - 130
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	8/15/2014 8:36	

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Analytical Quality Control Results Report

Batch: 14081514	Semi-VOA water (Prep)
WS-001	LIMS ID: 2014-2704

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

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	8-15-2014 08:00				
2-Fluorophenol (% Recovery)	36.3 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	67.1 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	72.3 %			40 - 110	
2,4,6-Tribromophenol (% Recovery)	63.5 %			40 - 110	
Terphenyl-d14 (% Recovery)	67.6 %			40 - 125	
Methyl Methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate (RPD)	0 %				0 - 40
Phenol (RPD)	12.8 %				0 - 40
Aniline (RPD)	6.5 %				0 - 40
Bis(2-chloroethyl)ether (RPD)	14.2 %				0 - 40
2-Chlorophenol (RPD)	0 %				0 - 40
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
Benzyl alcohol (RPD)	47.7 %				0 - 40
1,2-Dichlorobenzene (RPD)	0 %				0 - 40
2-Methylphenol (RPD)	0 %				0 - 40
Acetophenone (RPD)	5.7 %				0 - 40
4-Methylphenol (RPD)	0 %				0 - 40
N-Nitrosodi-n-propylamine (RPD)	17.2 %				0 - 40
Hexachloroethane (RPD)	0 %				0 - 40
Nitrobenzene (RPD)	0 %				0 - 40
N-Nitrosopiperidine (RPD)	0 %				0 - 40
Isophorone (RPD)	0 %				0 - 40
2-Nitrophenol (RPD)	0 %				0 - 40
2,4-Dimethylphenol (RPD)	0 %				0 - 40
Bis(2-chloroethoxy)methane (RPD)	0 %				0 - 40
2,4-Dichlorophenol (RPD)	0 %				0 - 40
1,2,4-Trichlorobenzene (RPD)	0 %				0 - 40
Naphthalene (RPD)	0 %				0 - 40

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4-Chloroaniline (RPD)	0 %	0 - 40
2,6-Dichlorophenol (RPD)	0 %	0 - 40
Hexachlorobutadiene (RPD)	0 %	0 - 40
N-Nitrosodibutylamine (RPD)	0 %	0 - 40
4-Chloro-3-methylphenol (RPD)	0 %	0 - 40
2-Methylnaphthalene (RPD)	0 %	0 - 40
1,2,4,5-Tetrachlorobenzene (RPD)	0 %	0 - 40
Hexachlorocyclopentadiene (RPD)	0 %	0 - 40
2,4,6-Trichlorophenol (RPD)	0 %	0 - 40
2,4,5-Trichlorophenol (RPD)	0 %	0 - 40
2-Chloronaphthalene (RPD)	0 %	0 - 40
1-Chloronaphthalene (RPD)	0 %	0 - 40
2-Nitroaniline (RPD)	0 %	0 - 40
Dimethyl phthalate (RPD)	0 %	0 - 40
2,6-Dinitrotoluene (RPD)	0 %	0 - 40
Acenaphthylene (RPD)	0 %	0 - 40
3-Nitroaniline (RPD)	200 %	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)	114 %	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
Carbazole (RPD)	0 %	0 - 40
Di-n-butyl phthalate (RPD)	22.5 %	0 - 40

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Fluoranthene (RPD)	0 %	0 - 40
Pyrene (RPD)	0 %	0 - 40
Dimethylaminoazobenzene (RPD)	0 %	0 - 40
Butyl benzyl phthalate (RPD)	200 %	0 - 40
Benzo (a) anthracene (RPD)	0 %	0 - 40
Chrysene (RPD)	0 %	0 - 40
Bis(2-ethylhexyl)phthalate (RPD)	23.3 %	0 - 40
Di-n-octyl phthalate (RPD)	3.4 %	0 - 40
Benzo (b) fluoranthene (RPD)	0 %	0 - 40
7,12-Dimethylbenz (a) anthracene (RPD)	0 %	0 - 40
Benzo (k) fluoranthene (RPD)	0 %	0 - 40
Benzo (a) pyrene (RPD)	0 %	0 - 40
3-Methylcholanthrene (RPD)	0 %	0 - 40
Indeno (1,2,3-cd) pyrene (RPD)	0 %	0 - 40
Dibenzo (a,h) anthracene (RPD)	0 %	0 - 40
Benzo (g,h,i) perylene (RPD)	0 %	0 - 40
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	8/15/2014 12:42 PM	

WS-001 ***LIMS ID: 2014-2704***

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

Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	8-15-2014 08:00				
2-Fluorophenol (% Recovery)	34.6 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	66.7 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	66.4 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	69.5 %			40 - 125	
Terphenyl-d14 (% Recovery)	71.1 %			40 - 125	
Phenol (% Recovery)	31.8 %			25 - 125	
2-Chlorophenol (% Recovery)	61.0 %			25 - 125	
1,4-Dichlorobenzene (% Recovery)	72.1 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	82.8 %			25 - 125	
1,2,4-Trichlorobenzene (% Recovery)	76.8 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	74.5 %			25 - 125	
Acenaphthene (% Recovery)	77.1 %			25 - 125	

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4-Nitrophenol (% Recovery)	45.3 %	25 - 125	
2,4-Dinitrotoluene (% Recovery)	80.1 %	25 - 125	
Pentachlorophenol (% Recovery)	92.8 %	25 - 125	
Pyrene (% Recovery)	83.8 %	25 - 125	
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	8/15/2014 1:11 PM		

WS-001 ***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	8-15-2014 08:00				
2-Fluorophenol (% Recovery)	40.7 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	70.1 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	75.4 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	76.8 %			40 - 125	
Terphenyl-d14 (% Recovery)	72.8 %			40 - 125	
Phenol (% Recovery)	36.6 %			25 - 125	
Phenol (RPD)	14.0 %				0 - 40
2-Chlorophenol (% Recovery)	71.2 %			25 - 125	
2-Chlorophenol (RPD)	15.5 %				0 - 40
1,4-Dichlorobenzene (RPD)	13.8 %				0 - 40
1,4-Dichlorobenzene (% Recovery)	82.8 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	90.4 %			25 - 125	
N-Nitrosodi-n-propylamine (RPD)	8.7 %				0 - 40
1,2,4-Trichlorobenzene (% Recovery)	79.5 %			25 - 125	
1,2,4-Trichlorobenzene (RPD)	3.5 %				0 - 40
4-Chloro-3-methylphenol (% Recovery)	81.6 %			25 - 125	
4-Chloro-3-methylphenol (RPD)	9.1 %				0 - 40
Acenaphthene (% Recovery)	79.5 %			25 - 125	
Acenaphthene (RPD)	3.1 %				0 - 40
4-Nitrophenol (% Recovery)	50.0 %			25 - 125	
4-Nitrophenol (RPD)	9.7 %				0 - 40
2,4-Dinitrotoluene (% Recovery)	86.8 %			25 - 125	
2,4-Dinitrotoluene (RPD)	7.9 %				0 - 40
Pentachlorophenol (% Recovery)	105 %			25 - 125	

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Pentachlorophenol (RPD)	12.7 %		0 - 40
Pyrene (% Recovery)	85.0 %	25 - 125	
Pyrene (RPD)	1.4 %		0 - 40
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	8/15/2014 1:39 PM		

MB ***LIMS ID: 14081514-MB-01***

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

Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	8-15-2014 08:00				
2-Fluorophenol (% Recovery)	36.4 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	68.0 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	72.4 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	75.6 %			40 - 125	
Terphenyl-d14 (% Recovery)	77.5 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.2 ug/L	0.2	0.2		
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 ug/L	0.16	0.16		
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
Acetophenone	<0.1 ug/L	0.1	0.1		
4-Methylphenol	<0.1 ug/L	0.1	0.1		
N-Nitrosodi-n-propylamine	<0.2 ug/L	0.2	0.2		
Hexachloroethane	<0.2 ug/L	0.2	0.2		
Nitrobenzene	<0.2 ug/L	0.2	0.2		
N-Nitrosopiperidine	<0.2 ug/L	0.2	0.2		
Isophorone	<0.1 ug/L	0.1	0.1		
2-Nitrophenol	<0.3 ug/L	0.3	0.3		
2,4-Dimethylphenol	<0.1 ug/L	0.1	0.1		

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Bis(2-chloroethoxy)methane	<0.2 ug/L	0.2	0.2
2,4-Dichlorophenol	<0.2 ug/L	0.2	0.2
1,2,4-Trichlorobenzene	<0.12 ug/L	0.12	0.12
Naphthalene	<0.08 ug/L	0.08	0.08
4-Chloroaniline	<0.1 ug/L	0.1	0.1
2,6-Dichlorophenol	<0.2 ug/L	0.2	0.2
Hexachlorobutadiene	<0.2 ug/L	0.2	0.2
N-Nitrosodibutylamine	<0.2 ug/L	0.2	0.2
4-Chloro-3-methylphenol	<0.16 ug/L	0.16	0.16
2-Methylnaphthalene	<0.12 ug/L	0.12	0.12
1,2,4,5-Tetrachlorobenzene	<0.1 ug/L	0.1	0.1
Hexachlorocyclopentadiene	<0.16 ug/L	0.16	0.16
2,4,6-Trichlorophenol	<0.2 ug/L	0.2	0.2
2,4,5-Trichlorophenol	<0.2 ug/L	0.2	0.2
2-Chloronaphthalene	<0.1 ug/L	0.1	0.1
1-Chloronaphthalene	<0.1 ug/L	0.1	0.1
2-Nitroaniline	<0.2 ug/L	0.2	0.2
Dimethyl phthalate	<0.2 ug/L	0.2	0.2
2,6-Dinitrotoluene	<0.2 ug/L	0.2	0.2
Acenaphthylene	<0.08 ug/L	0.08	0.08
3-Nitroaniline	<0.2 ug/L	0.2	0.2
Acenaphthene	<0.1 ug/L	0.1	0.1
2,4-Dinitrophenol	<4 ug/L	4	4
Pentachlorobenzene	<0.12 ug/L	0.12	0.12
4-Nitrophenol	<2 ug/L	2	2
Dibenzofuran	<0.1 ug/L	0.1	0.1
2,4-Dinitrotoluene	<0.2 ug/L	0.2	0.2
2,3,4,6-Tetrachlorophenol	<0.6 ug/L	0.6	0.6
Diethyl phthalate	<0.2 ug/L	0.2	0.2
Fluorene	<0.1 ug/L	0.1	0.1
4-Chlorophenyl phenyl ether	<0.1 ug/L	0.1	0.1
4-Nitroaniline	<0.2 ug/L	0.2	0.2
4,6-Dinitro-2-methylphenol	<6 ug/L	6	6
Diphenylamine	<0.1 ug/L	0.1	0.1
Azobenzene	<0.08 ug/L	0.08	0.08
4-Bromophenyl phenyl ether	<0.2 ug/L	0.2	0.2
Hexachlorobenzene	<0.16 ug/L	0.16	0.16
Pentachlorophenol	<1 ug/L	1	1
Pentachloronitrobenzene	<0.2 ug/L	0.2	0.2
Pronamide	<0.2 ug/L	0.2	0.2

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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	0.870 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	8/15/2014 11:17		

LCS ***LIMS ID: 14081514-LCS-01***

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

Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	8-15-2014 08:00				
2-Fluorophenol (% Recovery)	48.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	74.7 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	67.0 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	76.0 %			40 - 125	
Terphenyl-d14 (% Recovery)	78.0 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	63.9 %			50 - 150	
Ethyl methanesulfonate (% Recovery)	89.5 %			50 - 150	
Phenol (% Recovery)	43.7 %			50 - 150	

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Aniline (% Recovery)	66.4 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	85.2 %	50 - 150
2-Chlorophenol (% Recovery)	76.1 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	62.8 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	62.5 %	50 - 150
Benzyl alcohol (% Recovery)	88.0 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	63.8 %	50 - 150
2-Methylphenol (% Recovery)	76.0 %	50 - 150
Acetophenone (% Recovery)	87.7 %	50 - 150
4-Methylphenol (% Recovery)	71.7 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	91.7 %	50 - 150
Hexachloroethane (% Recovery)	53.2 %	50 - 150
Nitrobenzene (% Recovery)	76.9 %	50 - 150
N-Nitrosopiperidine (% Recovery)	87.2 %	50 - 150
Isophorone (% Recovery)	95.5 %	50 - 150
2-Nitrophenol (% Recovery)	81.8 %	50 - 150
2,4-Dimethylphenol (% Recovery)	8.3 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	84.1 %	50 - 150
2,4-Dichlorophenol (% Recovery)	77.7 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	62.0 %	50 - 150
Naphthalene (% Recovery)	76.7 %	50 - 150
4-Chloroaniline (% Recovery)	84.1 %	50 - 150
2,6-Dichlorophenol (% Recovery)	82.3 %	50 - 150
Hexachlorobutadiene (% Recovery)	58.7 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	98.8 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	91.1 %	50 - 150
2-Methylnaphthalene (% Recovery)	75.8 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	61.7 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	32.3 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	77.3 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	75.3 %	50 - 150
2-Chloronaphthalene (% Recovery)	74.0 %	50 - 150
1-Chloronaphthalene (% Recovery)	66.7 %	50 - 150
2-Nitroaniline (% Recovery)	86.6 %	50 - 150
Dimethyl phthalate (% Recovery)	83.0 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	78.6 %	50 - 150
Acenaphthylene (% Recovery)	78.7 %	50 - 150
3-Nitroaniline (% Recovery)	80.6 %	50 - 150
Acenaphthene (% Recovery)	74.7 %	50 - 150
2,4-Dinitrophenol (% Recovery)	71.8 %	50 - 150

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Pentachlorobenzene (% Recovery)	66.0 %	50 - 150
4-Nitrophenol (% Recovery)	39.8 %	50 - 150
Dibenzofuran (% Recovery)	76.8 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	80.5 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	81.6 %	50 - 150
Diethyl phthalate (% Recovery)	87.5 %	50 - 150
Fluorene (% Recovery)	77.9 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	77.9 %	50 - 150
4-Nitroaniline (% Recovery)	84.5 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	79.9 %	50 - 150
Diphenylamine (% Recovery)	85.3 %	50 - 150
Azobenzene (% Recovery)	82.1 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	79.8 %	50 - 150
Hexachlorobenzene (% Recovery)	80.7 %	50 - 150
Pentachlorophenol (% Recovery)	67.8 %	50 - 150
Pentachloronitrobenzene (% Recovery)	91.7 %	50 - 150
Pronamide (% Recovery)	90.0 %	50 - 150
Phenanthrene (% Recovery)	84.0 %	50 - 150
Anthracene (% Recovery)	81.5 %	50 - 150
Carbazole (% Recovery)	105 %	50 - 150
Di-n-butyl phthalate (% Recovery)	126 %	50 - 150
Fluoranthene (% Recovery)	86.6 %	50 - 150
Pyrene (% Recovery)	85.5 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	88.3 %	50 - 150
Butyl benzyl phthalate (% Recovery)	86.5 %	50 - 150
Benzo (a) anthracene (% Recovery)	85.6 %	50 - 150
Chrysene (% Recovery)	89.3 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	91.4 %	50 - 150
Di-n-octyl phthalate (% Recovery)	80.8 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	93.8 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	73.4 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	91.5 %	50 - 150
Benzo (a) pyrene (% Recovery)	90.3 %	50 - 150
3-Methylcholanthrene (% Recovery)	78.9 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	90.0 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	93.1 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	95.6 %	50 - 150
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	8/15/2014 11:46	

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Analytical Quality Control Results Report

Batch: 14082002 — *Oil and Grease - water*

WS-001 — ***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease (RPD)	0 %				0 - 20
Oil and Grease	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	08-20-2014 1400				

WS-001 — ***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease (% Recovery)	93.0 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	08-20-2014 1400				

WS-001 — ***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease (% Recovery)	100 %			70 - 130	
Oil and Grease (RPD)	7.5 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	08-20-2014 1400				

MB — ***LIMS ID: 14082002-MB-01***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Oil and Grease	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	08-20-2014 1400				

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LCS					*LIMS ID: 14082002-LCS-01*
Oil and Grease - water LCS					***Run: 1***
Parameter	***Result***	***DL***	***RL***	***Accuracy Control***	***Precision Control***
Oil and Grease (% Recovery)	93.2 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	08-20-2014 1400				

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Analytical Quality Control Results Report

Batch: 14082608	ICP Metals - water (total)
WS-001	LIMS ID: 2014-2704

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

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	21.8 ug/L	20	20		
Aluminum (RPD)	30.1 %				0 - 20
Antimony (RPD)	124 %				0 - 20
Antimony	<10 ug/L	5	10		
Arsenic	2.55 ug/L	0.5	1		
Arsenic (RPD)	2.1 %				0 - 20
Barium (RPD)	1.8 %				0 - 20
Barium	38.5 ug/L	2	10		
Beryllium	<0.5 ug/L	0.1	0.5		
Beryllium (RPD)	0 %				0 - 20
Boron (RPD)	3.0 %				0 - 20
Boron	<25 ug/L	5	25		
Cadmium (RPD)	0 %				0 - 20
Cadmium	<1 ug/L	0.3	1		
Calcium	6.19 mg/L	0.04	0.04		
Calcium (RPD)	0.7 %				0 - 20
Chromium (RPD)	133 %				0 - 20
Chromium	<1 ug/L	0.3	1		
Cobalt	<1 ug/L	0.5	1		
Cobalt (RPD)	42.9 %				0 - 20
Copper	<1 ug/L	0.5	1		
Copper (RPD)	16.8 %				0 - 20
Iron (RPD)	3.2 %				0 - 20
Iron	516 ug/L	10	20		
Lead	<1 ug/L	0.1	1		
Lead (RPD)	6.6 %				0 - 20
Magnesium (RPD)	0.7 %				0 - 20
Magnesium	2.62 mg/L	0.1	0.1		
Manganese	580 ug/L	0.2	1		
Manganese (RPD)	1.2 %				0 - 20
Nickel (RPD)	13 %				0 - 20
Nickel	<2.5 ug/L	0.5	2.5		
Potassium	2.68 mg/L	0.05	1		

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Potassium (RPD)	0.3 %				0 - 20
Selenium (RPD)	16.4 %				0 - 20
Selenium	<2 ug/L	0.5	2		
Silver	<5 ug/L	1	5		
Silver (RPD)	0 %				0 - 20
Sodium (RPD)	1.8 %				0 - 20
Sodium	7.48 mg/L	0.02	0.04		
Thallium	<2.5 ug/L	0.05	2.5		
Thallium (RPD)	0 %				0 - 20
Vanadium (RPD)	43.1 %				0 - 20
Vanadium	<2.5 ug/L	1	2.5		
Zinc	<3 ug/L	2	3		
Zinc (RPD)	5.7 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Aug 25 2014 10:06AM				

WS-001 ***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	94.6 %			70 - 130	
Antimony (% Recovery)	92.9 %			70 - 130	
Arsenic (% Recovery)	99.8 %			70 - 130	
Barium (% Recovery)	92.2 %			70 - 130	
Beryllium (% Recovery)	95.7 %			70 - 130	
Boron (% Recovery)	97.8 %			70 - 130	
Cadmium (% Recovery)	96.5 %			70 - 130	
Calcium (% Recovery)	94.1 %			70 - 130	
Chromium (% Recovery)	88.4 %			70 - 130	
Cobalt (% Recovery)	91.3 %			70 - 130	
Copper (% Recovery)	94.3 %			70 - 130	
Iron (% Recovery)	79.8 %			70 - 130	
Lead (% Recovery)	92.0 %			70 - 130	
Magnesium (% Recovery)	91.3 %			70 - 130	
Manganese (% Recovery)	7.7 %			70 - 130	
Nickel (% Recovery)	93 %			70 - 130	
Potassium (% Recovery)	92.3 %			70 - 130	
Selenium (% Recovery)	108 %			70 - 130	
Silver (% Recovery)	87.9 %			70 - 130	

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Sodium (% Recovery)	71.5 %	70 - 130	
Thallium (% Recovery)	90.9 %	70 - 130	
Vanadium (% Recovery)	89.0 %	70 - 130	
Zinc (% Recovery)	101 %	70 - 130	
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Aug 25 2014 10:13AM		

WS-001 ***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	94.1 %			70 - 130	
Aluminum (RPD)	0.5 %				0 - 20
Antimony (% Recovery)	92.0 %			70 - 130	
Antimony (RPD)	1.0 %				0 - 20
Arsenic (% Recovery)	97.3 %			70 - 130	
Arsenic (RPD)	2.3 %				0 - 20
Barium (% Recovery)	92.9 %			70 - 130	
Barium (RPD)	0.7 %				0 - 20
Beryllium (% Recovery)	96.2 %			70 - 130	
Beryllium (RPD)	0.5 %				0 - 20
Boron (% Recovery)	98.3 %			70 - 130	
Boron (RPD)	0.5 %				0 - 20
Cadmium (% Recovery)	95.6 %			70 - 130	
Cadmium (RPD)	1.0 %				0 - 20
Calcium (% Recovery)	92.6 %			70 - 130	
Calcium (RPD)	1.0 %				0 - 20
Chromium (% Recovery)	90.2 %			70 - 130	
Chromium (RPD)	2.0 %				0 - 20
Cobalt (% Recovery)	91.9 %			70 - 130	
Cobalt (RPD)	0.6 %				0 - 20
Copper (% Recovery)	91.8 %			70 - 130	
Copper (RPD)	2.7 %				0 - 20
Iron (% Recovery)	95.6 %			70 - 130	
Iron (RPD)	4.5 %				0 - 20
Lead (% Recovery)	89.2 %			70 - 130	
Lead (RPD)	3.0 %				0 - 20
Magnesium (% Recovery)	91.2 %			70 - 130	
Magnesium (RPD)	0.1 %				0 - 20

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Manganese (% Recovery)	76 %	70 - 130	
Manganese (RPD)	3.4 %		0 - 20
Nickel (% Recovery)	91 %	70 - 130	
Nickel (RPD)	2.1 %		0 - 20
Potassium (% Recovery)	90.9 %	70 - 130	
Potassium (RPD)	1.2 %		0 - 20
Selenium (% Recovery)	102 %	70 - 130	
Selenium (RPD)	5.4 %		0 - 20
Silver (% Recovery)	90.3 %	70 - 130	
Silver (RPD)	2.7 %		0 - 20
Sodium (% Recovery)	65.7 %	70 - 130	
Sodium (RPD)	4.1 %		0 - 20
Thallium (% Recovery)	88.7 %	70 - 130	
Thallium (RPD)	2.4 %		0 - 20
Vanadium (% Recovery)	89.7 %	70 - 130	
Vanadium (RPD)	0.8 %		0 - 20
Zinc (% Recovery)	97.7 %	70 - 130	
Zinc (RPD)	3.2 %		0 - 20
Dilution Factor	1		
Analysis Date/Time	Aug 25 2014 10:19AM		
Analyzed By	Robert Graddy		

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Analytical Quality Control Results Report

Batch: 14082606	ICP Metals - water (Diss.)
WS-001	LIMS ID: 2014-2704

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

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	<20 ug/L	20	20		
Aluminum (RPD)	90.8 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<5 ug/L	1	5		
Arsenic	1.71 ug/L	0.2	0.5		
Arsenic (RPD)	2.3 %				0 - 20
Barium (RPD)	0.9 %				0 - 20
Barium	15.2 ug/L	0.4	2		
Beryllium	<0.1 ug/L	0.04	0.1		
Beryllium (RPD)	0 %				0 - 20
Boron (RPD)	2.0 %				0 - 20
Boron	19 ug/L	2	5		
Cadmium (RPD)	0 %				0 - 20
Cadmium	<0.1 ug/L	0.05	0.1		
Calcium	6.43 mg/L	0.03	0.03		
Calcium (RPD)	4.4 %				0 - 20
Chromium (RPD)	143 %				0 - 20
Chromium	<0.5 ug/L	0.05	0.5		
Cobalt	<0.5 ug/L	0.05	0.5		
Cobalt (RPD)	0 %				0 - 20
Copper (RPD)	99.0 %				0 - 20
Copper	<0.5 ug/L	0.2	0.5		
Iron	<20 ug/L	5	20		
Iron (RPD)	4.3 %				0 - 20
Lead (RPD)	0 %				0 - 20
Lead	<0.3 ug/L	0.02	0.3		
Magnesium	2.57 mg/L	0.01	0.02		
Magnesium (RPD)	1.8 %				0 - 20
Manganese (RPD)	2.7 %				0 - 20
Manganese	92 ug/L	0.07	0.3		
Nickel	<0.5 ug/L	0.15	0.5		
Nickel (RPD)	3.2 %				0 - 20
Potassium (RPD)	4.5 %				0 - 20

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Potassium	2.74 mg/L	0.01	0.02		
Selenium	<1 ug/L	0.2	1		
Selenium (RPD)	0 %				0 - 20
Silicon Dioxide	6.85 mg/L	0.01	0.05		
Silicon Dioxide (RPD)	4.5 %				0 - 20
Silver (RPD)	0 %				0 - 20
Silver	<0.5 ug/L	0.02	0.5		
Sodium	6.77 mg/L	0.01	0.02		
Sodium (RPD)	3.0 %				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)	93.8 %				0 - 20
Zinc (RPD)	21.0 %				0 - 20
Zinc	6.23 ug/L	0.3	1		
Hardness	27 mg/L	1	1		
Hardness (RPD)	3 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	Aug 20 2014 8:35PM				

WS-001 ***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	92.7 %			70 - 130	
Antimony (% Recovery)	92.9 %			70 - 130	
Arsenic (% Recovery)	95.3 %			70 - 130	
Barium (% Recovery)	91.9 %			70 - 130	
Beryllium (% Recovery)	96.2 %			70 - 130	
Boron (% Recovery)	92.7 %			70 - 130	
Cadmium (% Recovery)	94.8 %			70 - 130	
Calcium (% Recovery)	94.0 %			70 - 130	
Chromium (% Recovery)	91.0 %			70 - 130	
Cobalt (% Recovery)	92.0 %			70 - 130	
Copper (% Recovery)	93.5 %			70 - 130	
Iron (% Recovery)	90.5 %			70 - 130	
Lead (% Recovery)	95.1 %			70 - 130	
Magnesium (% Recovery)	92.2 %			70 - 130	
Manganese (% Recovery)	79 %			70 - 130	

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Nickel (% Recovery)	92 %	70 - 130	
Potassium (% Recovery)	93.9 %	70 - 130	
Selenium (% Recovery)	100 %	70 - 130	
Silver (% Recovery)	91.7 %	70 - 130	
Sodium (% Recovery)	76.1 %	70 - 130	
Thallium (% Recovery)	97.2 %	70 - 130	
Vanadium (% Recovery)	90.8 %	70 - 130	
Zinc (% Recovery)	97.6 %	70 - 130	
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Aug 20 2014 8:41PM		

WS-001 ***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Aluminum (% Recovery)	93.3 %			70 - 130	
Aluminum (RPD)	0.7 %				0 - 20
Antimony (% Recovery)	92.3 %			70 - 130	
Antimony (RPD)	0.6 %				0 - 20
Arsenic (% Recovery)	95.9 %			70 - 130	
Arsenic (RPD)	0.6 %				0 - 20
Barium (% Recovery)	92.4 %			70 - 130	
Barium (RPD)	0.5 %				0 - 20
Beryllium (% Recovery)	95.9 %			70 - 130	
Beryllium (RPD)	0.3 %				0 - 20
Boron (% Recovery)	93.4 %			70 - 130	
Boron (RPD)	0.7 %				0 - 20
Cadmium (% Recovery)	95.6 %			70 - 130	
Cadmium (RPD)	0.9 %				0 - 20
Calcium (% Recovery)	96.2 %			70 - 130	
Calcium (RPD)	1.4 %				0 - 20
Chromium (% Recovery)	88.4 %			70 - 130	
Chromium (RPD)	2.9 %				0 - 20
Cobalt (% Recovery)	91.9 %			70 - 130	
Cobalt (RPD)	0.1 %				0 - 20
Copper (% Recovery)	95.4 %			70 - 130	
Copper (RPD)	2.1 %				0 - 20
Iron (% Recovery)	86.8 %			70 - 130	
Iron (RPD)	3.7 %				0 - 20

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Lead (% Recovery)	94.0 %	70 - 130	
Lead (RPD)	1.1 %		0 - 20
Magnesium (% Recovery)	94.0 %	70 - 130	
Magnesium (RPD)	1.5 %		0 - 20
Manganese (% Recovery)	72 %	70 - 130	
Manganese (RPD)	1.9 %		0 - 20
Nickel (% Recovery)	93 %	70 - 130	
Nickel (RPD)	1.0 %		0 - 20
Potassium (% Recovery)	95.0 %	70 - 130	
Potassium (RPD)	0.9 %		0 - 20
Selenium (% Recovery)	102 %	70 - 130	
Selenium (RPD)	1.2 %		0 - 20
Silver (% Recovery)	90.9 %	70 - 130	
Silver (RPD)	0.9 %		0 - 20
Sodium (% Recovery)	80.9 %	70 - 130	
Sodium (RPD)	3.3 %		0 - 20
Thallium (% Recovery)	95.3 %	70 - 130	
Thallium (RPD)	2.0 %		0 - 20
Vanadium (% Recovery)	88.4 %	70 - 130	
Vanadium (RPD)	2.7 %		0 - 20
Zinc (% Recovery)	98.6 %	70 - 130	
Zinc (RPD)	0.9 %		0 - 20
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	Aug 20 2014 8:48PM		

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Analytical Quality Control Results Report

Batch: 14081509	***Turbidity - water***
WS-001	***LIMS ID: 2014-2704***

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

Parameter	*Result*	*DL*	*RL*	*Accuracy Control*	*Precision Control*
Turbidity (RPD)	15.8 %				0 - 20
Turbidity	12.9 NTU	0.02	0.02		
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	8/15/2014 9:00				