



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

Client Report For: Exxon Oil Spill 2013 1606-1616
Attention:
Client Address:

,

Report Date: May 24, 2013
LAB ID: AR13MAY13-05
Comment:

Approved By: _____

Date: May 24, 2013

Client: Special Samples	Client Sample ID: WS-BKG-001
Lab ID: 2013-1606	Collection Date: 5/13/2013 10:48:00 AM
	Matrix: Water

Analyses

<i>Volatile Organics by GCMS</i>	<i>EPA 8260C</i>	<i>Batch: 13051501 Run: 1</i>		
	Result	Reporting Limit	MDL	Qual Unit
Dibromofluoromethane (% Recovery)	106	70-130		%
1,2-Dichloroethane-d4 (% Recovery)	98.4	70-130		%
Toluene-d8 (% Recovery)	98.6	70-130		%
4-Bromofluorobenzene (% Recovery)	106	70-130		%
Dichlorodifluoromethane	<1.12	1.12	1.12	ug/L
Chloromethane	<0.58	0.58	0.58	ug/L
Vinyl chloride	<0.82	0.82	0.82	ug/L
Bromomethane	<3.9	3.9	3.90	ug/L
Chloroethane	<2.68	2.68	2.68	ug/L
Trichlorofluoromethane	<0.51	0.51	0.51	ug/L
1,1-Dichloroethene	<0.43	0.43	0.43	ug/L
Acetone	<10.5	10.5	10.5	ug/L
Methylene chloride	<2.5	2.5	2.5	ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83	ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59	ug/L
1,1-Dichloroethane	<0.42	0.42	0.42	ug/L
Methyl ethyl ketone	<12.8	12.8	12.8	ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15	ug/L
2,2-Dichloropropane	<0.81	0.81	0.81	ug/L
Bromochloromethane	<0.66	0.66	0.66	ug/L
Chloroform	<0.27	0.27	0.27	ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46	ug/L
1,1-Dichloropropene	<0.59	0.59	0.59	ug/L
Carbon tetrachloride	<0.6	0.6	0.6	ug/L
Benzene	<0.66	0.66	0.66	ug/L
1,2-Dichloroethane	<1.15	1.15	1.15	ug/L
Trichloroethene	<0.6	0.6	0.60	ug/L
1,2-Dichloropropane	<0.98	0.98	0.98	ug/L
Dibromomethane	<1.78	1.78	1.78	ug/L
Bromodichloromethane	<0.65	0.65	0.65	ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86	ug/L

Methyl isobutyl ketone	<8.1	8.1	8.10	ug/L
Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/14/2013 6:55 PM			

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1607

Collection Date: 5/13/2013 1:33:00 PM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13051501 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
<i>Dibromofluoromethane (% Recovery)</i>	102	70-130			%
<i>1,2-Dichloroethane-d4 (% Recovery)</i>	93.9	70-130			%
<i>Toluene-d8 (% Recovery)</i>	97.5	70-130			%
<i>4-Bromofluorobenzene (% Recovery)</i>	105	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/14/2013 7:21 PM			

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1608

Collection Date: 5/13/2013 10:03:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13051501 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	108	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	97.1	70-130			%
Toluene-d8 (% Recovery)	96.8	70-130			%
4-Bromofluorobenzene (% Recovery)	106	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/14/2013 7:45 PM			

Client: Special Samples

Client Sample ID: WS-003

Lab ID: 2013-1609

Collection Date: 5/13/2013 8:30:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13052303 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	104	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	92.9	70-130			%
Toluene-d8 (% Recovery)	94.0	70-130			%
4-Bromofluorobenzene (% Recovery)	99.5	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/15/2013 12:21 PM			

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1610

Collection Date: 5/13/2013 2:08:00 PM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13052303 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	100	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	92.6	70-130			%
Toluene-d8 (% Recovery)	91.3	70-130			%
4-Bromofluorobenzene (% Recovery)	104	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/15/2013 10:15 AM			

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1611

Collection Date: 5/13/2013 3:50:00 PM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13052303 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	102	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	94.0	70-130			%
Toluene-d8 (% Recovery)	98.7	70-130			%
4-Bromofluorobenzene (% Recovery)	100	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	0.572	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/15/2013 10:40 AM			

Client: Special Samples

Client Sample ID: WS-007

Lab ID: 2013-1612

Collection Date: 5/13/2013 2:33:00 PM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13052303 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	100	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	93.5	70-130			%
Toluene-d8 (% Recovery)	93.2	70-130			%
4-Bromofluorobenzene (% Recovery)	103	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/15/2013 11:05 AM			

Client: Special Samples

Client Sample ID: WS-008

Lab ID: 2013-1613

Collection Date: 5/13/2013 11:27:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13052303 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	102	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	94.2	70-130			%
Toluene-d8 (% Recovery)	93.8	70-130			%
4-Bromofluorobenzene (% Recovery)	102	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	0.688	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	0.52	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/15/2013 11:30 AM			

Client: Special Samples

Client Sample ID: WS-019

Lab ID: 2013-1614

Collection Date: 5/13/2013 9:19:00 AM

Matrix: Water

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13052303 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	103	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	96.2	70-130			%
Toluene-d8 (% Recovery)	93.3	70-130			%
4-Bromofluorobenzene (% Recovery)	105	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/15/2013 11:56 AM			

Client: Special Samples	Client Sample ID: Volatiles Trip Blank
Lab ID: 2013-1616	Collection Date: 5/10/2013 10:00:00 AM
Matrix: Water	

Analyses

Volatile Organics by GCMS

EPA 8260C

Batch: 13051501 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	105	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	96.6	70-130			%
Toluene-d8 (% Recovery)	98.0	70-130			%
4-Bromofluorobenzene (% Recovery)	102	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	<0.53	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/14/2013 6:30 PM			

Client: Special Samples	Client Sample ID: WS-BKG-001
Lab ID: 2013-1606	Collection Date: 5/13/2013 10:48:00 AM
Matrix: Water	

Analyses

Oil and Grease		EPA1664	Batch: 13051401 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	5/14/2013 08:00					

Semi-Volatiles by GC/MS		EPA 3510C/EPA 8270D	Batch: 13051402 Run: 1			
	Result		Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	26.5		40-110			%
Nitrobenzene-d5 (% Recovery)	62.6		50-110			%
2-Fluorobiphenyl (% Recovery)	57.8		50-110			%
2,4,6-Tribromophenol (% Recovery)	60.3		40-110			%
Terphenyl-d14 (% Recovery)	71.7		50-110			%
Methyl Methanesulfonate	<0.2		0.2	100		ug/L
Ethyl methanesulfonate	<0.2		0.2	100		ug/L
Phenol	<0.2		0.2	100		ug/L
Aniline	<0.2		0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2		0.2	100		ug/L
2-Chlorophenol	<0.2		0.2	100		ug/L
1,3-Dichlorobenzene	<0.12		0.12	60		ug/L
1,4-Dichlorobenzene	<0.12		0.12	60		ug/L
Benzyl alcohol	<0.16		0.16	80		ug/L
1,2-Dichlorobenzene	<0.12		0.12	60		ug/L
2-Methylphenol	<0.1		0.1	50		ug/L
Acetophenone	<0.1		0.1	50		ug/L
4-Methylphenol	<0.1		0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2		0.2	100		ug/L
Hexachloroethane	<0.2		0.2	100		ug/L
Nitrobenzene	<0.2		0.2	100		ug/L
N-Nitrosopiperidine	<0.2		0.2	100		ug/L
Isophorone	<0.1		0.1	50		ug/L

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

Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	0.941	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	0.626	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/14/2013 8:06 PM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 08:00			

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1607

Collection Date: 5/13/2013 1:33:00 PM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13051401 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	5/14/2013 08:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13051402 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	25.5	40-110			%
Nitrobenzene-d5 (% Recovery)	64.0	50-110			%
2-Fluorobiphenyl (% Recovery)	63.7	50-110			%
2,4,6-Tribromophenol (% Recovery)	64.0	40-110			%
Terphenyl-d14 (% Recovery)	81.0	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

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

Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	1.03	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/14/2013 8:35 PM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 08:00			

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1608

Collection Date: 5/13/2013 10:03:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13051401 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	5/14/2013 08:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13051402 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	30.6	40-110			%
Nitrobenzene-d5 (% Recovery)	67.7	50-110			%
2-Fluorobiphenyl (% Recovery)	67.0	50-110			%
2,4,6-Tribromophenol (% Recovery)	76.7	40-110			%
Terphenyl-d14 (% Recovery)	74.1	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

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	5/14/2013 9:05 PM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 08:00			

Client: Special Samples

Client Sample ID: WS-003

Lab ID: 2013-1609

Collection Date: 5/13/2013 8:30:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13051401 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	5/14/2013 08:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13051505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	23.4	40-110			%
Nitrobenzene-d5 (% Recovery)	68.6	50-110			%
2-Fluorobiphenyl (% Recovery)	64.8	50-110			%
2,4,6-Tribromophenol (% Recovery)	62.1	40-110			%
Terphenyl-d14 (% Recovery)	76.9	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/15/2013 11:23 AM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 13:00			

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1610

Collection Date: 5/13/2013 2:08:00 PM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13051401 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	5/14/2013 08:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13051402 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	10.6	40-110			%
Nitrobenzene-d5 (% Recovery)	46.1	50-110			%
2-Fluorobiphenyl (% Recovery)	36.6	50-110			%
2,4,6-Tribromophenol (% Recovery)	11.9	40-110			%
Terphenyl-d14 (% Recovery)	20.0	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	0.504	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

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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	5/14/2013 9:35 PM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 08:00			

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1611

Collection Date: 5/13/2013 3:50:00 PM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13051401 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	5/14/2013 08:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13051402 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	26.8	40-110			%
Nitrobenzene-d5 (% Recovery)	66.3	50-110			%
2-Fluorobiphenyl (% Recovery)	57.9	50-110			%
2,4,6-Tribromophenol (% Recovery)	56.0	40-110			%
Terphenyl-d14 (% Recovery)	64.5	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

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	0.312	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/14/2013 10:04 PM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 08:00			

Client: Special Samples

Client Sample ID: WS-007

Lab ID: 2013-1612

Collection Date: 5/13/2013 2:33:00 PM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13051401 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	5/14/2013 08:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13051402 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	8.8	40-110			%
Nitrobenzene-d5 (% Recovery)	29.1	50-110			%
2-Fluorobiphenyl (% Recovery)	22.6	50-110			%
2,4,6-Tribromophenol (% Recovery)	15.4	40-110			%
Terphenyl-d14 (% Recovery)	23.1	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	2.39	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

2-Nitrophenol	<0.3	0.3	150	ug/L
2,4-Dimethylphenol	<0.1	0.1	50	ug/L
Bis(2-chloroethoxy)methane	<0.2	0.2	100	ug/L
2,4-Dichlorophenol	<0.2	0.2	100	ug/L
1,2,4-Trichlorobenzene	<0.12	0.12	60	ug/L
Naphthalene	<0.08	0.08	40	ug/L
4-Chloroaniline	<0.1	0.1	50	ug/L
2,6-Dichlorophenol	<0.2	0.2	100	ug/L
Hexachlorobutadiene	<0.2	0.2	100	ug/L
N-Nitrosodibutylamine	<0.2	0.2	100	ug/L
4-Chloro-3-methylphenol	<0.16	0.16	80	ug/L
2-Methylnaphthalene	<0.1	0.1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<0.1	0.1	50	ug/L
Hexachlorocyclopentadiene	<0.16	0.16	80	ug/L
2,4,6-Trichlorophenol	<0.2	0.2	100	ug/L
2,4,5-Trichlorophenol	<0.2	0.2	100	ug/L
2-Chloronaphthalene	<0.1	0.1	50	ug/L
1-Chloronaphthalene	<0.1	0.1	50	ug/L
2-Nitroaniline	<0.2	0.2	100	ug/L
Dimethyl phthalate	<0.2	0.2	100	ug/L
2,6-Dinitrotoluene	<0.2	0.2	100	ug/L
Acenaphthylene	<0.08	0.08	40	ug/L
3-Nitroaniline	<0.2	0.2	100	ug/L
Acenaphthene	<0.1	0.1	50	ug/L
2,4-Dinitrophenol	<4	4	2000	ug/L
Pentachlorobenzene	<0.12	0.12	60	ug/L
4-Nitrophenol	<2	2	1000	ug/L
Dibenzofuran	<0.1	0.1	50	ug/L
2,4-Dinitrotoluene	<0.2	0.2	100	ug/L
2,3,4,6-Tetrachlorophenol	<0.6	0.6	300	ug/L
Diethyl phthalate	0.498	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	1.48	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	2.50	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/14/2013 10:34 PM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 08:00			

Client: Special Samples

Client Sample ID: WS-008

Lab ID: 2013-1613

Collection Date: 5/13/2013 11:27:00 AM

Matrix: Water

Analyses

Oil and Grease

EPA1664

Batch: 13051401 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	5/14/2013 08:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13051505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	22.0	40-110			%
Nitrobenzene-d5 (% Recovery)	66.9	50-110			%
2-Fluorobiphenyl (% Recovery)	63.7	50-110			%
2,4,6-Tribromophenol (% Recovery)	60.2	40-110			%
Terphenyl-d14 (% Recovery)	62.4	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	<0.16	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/15/2013 1:20 PM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 13:00			

Client: Special Samples	Client Sample ID: WS-019
Lab ID: 2013-1614	Collection Date: 5/13/2013 9:19:00 AM
Matrix: Water	

Analyses

Oil and Grease

EPA1664

Batch: 13051401 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	5/14/2013 08:00				

Semi-Volatiles by GC/MS

EPA 3510C/EPA 8270D

Batch: 13051505 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
2-Fluorophenol (% Recovery)	13.4	40-110			%
Nitrobenzene-d5 (% Recovery)	58.7	50-110			%
2-Fluorobiphenyl (% Recovery)	40.6	50-110			%
2,4,6-Tribromophenol (% Recovery)	17.4	40-110			%
Terphenyl-d14 (% Recovery)	15.8	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	0.200	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L
Isophorone	<0.1	0.1	50		ug/L

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

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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	0.402	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
Initial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/15/2013 1:49 PM			
Prep By	Ed Harris			
Prep Date/Time	5/14/2013 13:00			

Client: Special Samples	Client Sample ID: WS-BKG-001
Lab ID: 2013-1606	Collection Date: 5/13/2013 10:48:00 AM
Matrix: Water	

Analyses

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13052401 Run: 1</i>			
	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	96.4	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.01	0.5	0.2		ug/L
Barium	32.3	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	17.0	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	8.61	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	0.57	0.5	0.05		ug/L
Copper	1.05	0.5	0.2		ug/L
Iron	495	20	5.0		ug/L
Lead	0.73	0.3	0.02		ug/L
Magnesium	3.63	0.02	0.01		mg/L
Manganese	85.8	0.3	0.07		ug/L
Nickel	1.85	0.5	0.15		ug/L
Potassium	2.33	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	5.82	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	15.0	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	0.72	0.5	0.3		ug/L
Zinc	7.14	1	0.3		ug/L
Hardness	36.4	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 4:07PM				

<i>Total Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13052402 Run: 1</i>			
	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>

Limit

Aluminum	2600	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.65	1	0.5	ug/L
Barium	45.1	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	9.14	0.04	0.04	mg/L
Chromium	2.21	1	0.3	ug/L
Cobalt	1.7	1	0.5	ug/L
Copper	3.08	1	0.5	ug/L
Lead	4.18	1	0.1	ug/L
Magnesium	3.77	0.1	0.1	mg/L
Manganese	127	1	0.2	ug/L
Nickel	3.55	2.5	0.5	ug/L
Potassium	2.60	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	14.5	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	3.90	2.5	1.0	ug/L
Zinc	13.9	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 23 2013 11:25PM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 2

	Result	Reporting Limit	MDL	Qual	Unit
Iron	2960	200	10.0		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 24 2013 9:03AM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1607

Collection Date: 5/13/2013 1:33:00 PM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13052401 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	130	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.70	0.5	0.2		ug/L
Barium	15.0	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	16.1	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.50	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	222	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.74	0.02	0.01		mg/L
Manganese	100	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	1.94	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.92	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.22	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	5.06	1	0.3		ug/L
Hardness	15.9	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 4:13PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 1

Result Reporting MDL Qual Unit

		Limit		
Aluminum	1370	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.31	1	0.5	ug/L
Barium	22.6	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.64	0.04	0.04	mg/L
Chromium	1.14	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.37	1	0.5	ug/L
Iron	1670	20	10.0	ug/L
Lead	1.17	1	0.1	ug/L
Magnesium	1.84	0.1	0.1	mg/L
Manganese	363	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.12	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	5.35	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	8.93	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 23 2013 11:32PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-002

Lab ID: 2013-1608

Collection Date: 5/13/2013 10:03:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13052401 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	25.3	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	<0.5	0.5	0.2		ug/L
Barium	14.4	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	16.1	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.38	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	<0.5	0.5	0.05		ug/L
Copper	<0.5	0.5	0.2		ug/L
Iron	122	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.75	0.02	0.01		mg/L
Manganese	5.93	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	1.92	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.40	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.34	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	2.38	1	0.3		ug/L
Hardness	15.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 4:20PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 1

Result Reporting MDL Qual Unit

		Limit		
Aluminum	235	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	15.9	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.56	0.04	0.04	mg/L
Chromium	<1	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	<1	1	0.5	ug/L
Iron	559	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.80	0.1	0.1	mg/L
Manganese	219	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	2.04	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	5.48	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	<3	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 23 2013 11:38PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-003

Lab ID: 2013-1609

Collection Date: 5/13/2013 8:30:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13052401 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	27.3	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.51	0.5	0.2		ug/L
Barium	14.8	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	15.9	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	107	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.70	0.02	0.01		mg/L
Manganese	3.50	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	1.89	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.23	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.03	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	2.55	1	0.3		ug/L
Hardness	15.3	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 4:26PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 1

Result Reporting MDL Qual Unit

		Limit		
Aluminum	291	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	<1	1	0.5	ug/L
Barium	18.0	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.45	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	566	20	10.0	ug/L
Lead	<1	1	0.1	ug/L
Magnesium	1.76	0.1	0.1	mg/L
Manganese	264	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.95	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	5.20	0.04	0.02	mg/L
Thallium	<2.5	2.5	0.05	ug/L
Vanadium	<2.5	2.5	1.0	ug/L
Zinc	<3	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 23 2013 11:44PM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1610

Collection Date: 5/13/2013 2:08:00 PM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13052401 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	1300	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.29	0.5	0.2		ug/L
Barium	26	2	0.4		ug/L
Beryllium	0.12	0.1	0.04		ug/L
Boron	16.8	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.25	0.03	0.03		mg/L
Chromium	1.24	0.5	0.05		ug/L
Cobalt	2.41	0.5	0.05		ug/L
Copper	1.55	0.5	0.2		ug/L
Iron	750	20	5.0		ug/L
Lead	0.74	0.3	0.02		ug/L
Magnesium	1.58	0.02	0.01		mg/L
Manganese	725	0.3	0.07		ug/L
Nickel	2.26	0.5	0.15		ug/L
Potassium	2.69	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	9.01	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	4.49	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	2.23	0.5	0.3		ug/L
Zinc	6.56	1	0.3		ug/L
Hardness	14.6	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 4:52PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 2

Result Reporting MDL Qual Unit

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

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

		<u>Limit</u>		
Aluminum	31400	1000	20	ug/L
Iron	37600	1000	10.0	ug/L
Manganese	3020	50	0.2	ug/L
Dilution Factor	50			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 24 2013 3:53AM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Antimony	<10	10	5		ug/L
Arsenic	5.16	1	0.5		ug/L
Barium	226	10	2.0		ug/L
Beryllium	1.97	0.5	0.1		ug/L
Boron	<25	25	5.0		ug/L
Cadmium	<1	1	0.3		ug/L
Calcium	6.63	0.04	0.04		mg/L
Chromium	13.3	1	0.3		ug/L
Cobalt	13.0	1	0.5		ug/L
Copper	9.21	1	0.5		ug/L
Lead	32.2	1	0.1		ug/L
Magnesium	4.24	0.1	0.1		mg/L
Nickel	14.8	2.5	0.5		ug/L
Potassium	3.72	1	0.05		mg/L
Selenium	<2	2	0.5		ug/L
Silver	<5	5	1.0		ug/L
Sodium	4.33	0.04	0.02		mg/L
Thallium	<2.5	2.5	0.05		ug/L
Vanadium	17.8	2.5	1.0		ug/L
Zinc	57.4	3	2.0		ug/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 24 2013 12:23AM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-006

Lab ID: 2013-1611

Collection Date: 5/13/2013 3:50:00 PM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13052401 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	195	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	1.54	0.5	0.2		ug/L
Barium	15.8	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	17.1	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	3.40	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	332	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	1.69	0.02	0.01		mg/L
Manganese	141	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	1.87	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	2.26	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.20	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	4.47	1	0.3		ug/L
Hardness	15.4	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 4:58PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 1

Result Reporting MDL Qual Unit

Limit

Aluminum	1330	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	2.90	1	0.5	ug/L
Barium	22.6	10	2.0	ug/L
Beryllium	<0.5	0.5	0.1	ug/L
Boron	<25	25	5.0	ug/L
Cadmium	<1	1	0.3	ug/L
Calcium	3.45	0.04	0.04	mg/L
Chromium	1.21	1	0.3	ug/L
Cobalt	<1	1	0.5	ug/L
Copper	1.52	1	0.5	ug/L
Iron	1890	20	10.0	ug/L
Lead	1.25	1	0.1	ug/L
Magnesium	1.84	0.1	0.1	mg/L
Manganese	423	1	0.2	ug/L
Nickel	<2.5	2.5	0.5	ug/L
Potassium	1.96	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	5.32	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	8.60	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 24 2013 12:29AM			
Prep By				
Prep Date/Time				

Client: Special Samples

Client Sample ID: WS-007

Lab ID: 2013-1612

Collection Date: 5/13/2013 2:33:00 PM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13052401 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	1280	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.24	0.5	0.2		ug/L
Barium	25.3	2	0.4		ug/L
Beryllium	0.12	0.1	0.04		ug/L
Boron	16.2	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	2.83	0.03	0.03		mg/L
Chromium	1.17	0.5	0.05		ug/L
Cobalt	2.33	0.5	0.05		ug/L
Copper	1.34	0.5	0.2		ug/L
Iron	751	20	5.0		ug/L
Lead	0.85	0.3	0.02		ug/L
Magnesium	1.42	0.02	0.01		mg/L
Manganese	699	0.3	0.07		ug/L
Nickel	2.36	0.5	0.15		ug/L
Potassium	2.67	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	9.58	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	4.73	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	2.24	0.5	0.3		ug/L
Zinc	6.08	1	0.3		ug/L
Hardness	12.9	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 5:17PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 2

Result Reporting MDL Qual Unit

		Limit		
Aluminum	25900	1000	20	ug/L
Iron	25900	1000	10.0	ug/L
Manganese	2090	50	0.2	ug/L
Dilution Factor	50			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 24 2013 4:37AM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Antimony	<10	10	5		ug/L
Arsenic	5.08	1	0.5		ug/L
Barium	242	10	2.0		ug/L
Beryllium	2.14	0.5	0.1		ug/L
Boron	<25	25	5.0		ug/L
Cadmium	<1	1	0.3		ug/L
Calcium	6.36	0.04	0.04		mg/L
Chromium	14.4	1	0.3		ug/L
Cobalt	14.1	1	0.5		ug/L
Copper	9.53	1	0.5		ug/L
Lead	35.0	1	0.1		ug/L
Magnesium	4.35	0.1	0.1		mg/L
Nickel	16.2	2.5	0.5		ug/L
Potassium	3.50	1	0.05		mg/L
Selenium	<2	2	0.5		ug/L
Silver	<5	5	1.0		ug/L
Sodium	4.42	0.04	0.02		mg/L
Thallium	<2.5	2.5	0.05		ug/L
Vanadium	19.4	2.5	1.0		ug/L
Zinc	66.9	3	2.0		ug/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 24 2013 12:35AM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-008

Lab ID: 2013-1613

Collection Date: 5/13/2013 11:27:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13052401 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<20	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	0.85	0.5	0.2		ug/L
Barium	47.9	2	0.4		ug/L
Beryllium	<0.1	0.1	0.04		ug/L
Boron	23.8	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	18.1	0.03	0.03		mg/L
Chromium	<0.5	0.5	0.05		ug/L
Cobalt	1.66	0.5	0.05		ug/L
Copper	0.57	0.5	0.2		ug/L
Iron	21.8	20	5.0		ug/L
Lead	<0.3	0.3	0.02		ug/L
Magnesium	10.1	0.02	0.01		mg/L
Manganese	1460	0.3	0.07		ug/L
Nickel	4.92	0.5	0.15		ug/L
Potassium	3.35	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	1.63	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	17.7	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	7.83	1	0.3		ug/L
Hardness	86.7	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 5:23PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 1

Result Reporting MDL Qual Unit

		Limit		
Aluminum	1610	20	20	ug/L
Antimony	<10	10	5	ug/L
Arsenic	1.07	1	0.5	ug/L
Barium	50.8	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	17.7	0.04	0.04	mg/L
Chromium	1.76	1	0.3	ug/L
Cobalt	2.30	1	0.5	ug/L
Copper	2.34	1	0.5	ug/L
Iron	1340	20	10.0	ug/L
Lead	1.04	1	0.1	ug/L
Magnesium	10.4	0.1	0.1	mg/L
Nickel	6.80	2.5	0.5	ug/L
Potassium	3.41	1	0.05	mg/L
Selenium	<2	2	0.5	ug/L
Silver	<5	5	1.0	ug/L
Sodium	17.8	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	12.9	3	2.0	ug/L
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 24 2013 12:42AM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 2

	Result	Reporting Limit	MDL	Qual	Unit
Manganese	1560	10	0.2		ug/L
Dilution Factor	10				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 24 2013 9:10AM				
Prep By					
Prep Date/Time					

Client: Special Samples

Client Sample ID: WS-019

Lab ID: 2013-1614

Collection Date: 5/13/2013 9:19:00 AM

Matrix: Water

Analyses

Dissolved Metals by EPA 200.8

EPA 200.8

Batch: 13052401 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	1230	20	20		ug/L
Antimony	<5	5	1.0		ug/L
Arsenic	2.42	0.5	0.2		ug/L
Barium	29.4	2	0.4		ug/L
Beryllium	0.16	0.1	0.04		ug/L
Boron	14.3	5	2.0		ug/L
Cadmium	<0.1	0.1	0.05		ug/L
Calcium	2.57	0.03	0.03		mg/L
Chromium	1.32	0.5	0.05		ug/L
Cobalt	3.37	0.5	0.05		ug/L
Copper	1.26	0.5	0.2		ug/L
Iron	1080	20	5.0		ug/L
Lead	1.04	0.3	0.02		ug/L
Magnesium	1.34	0.02	0.01		mg/L
Manganese	743	0.3	0.07		ug/L
Nickel	2.82	0.5	0.15		ug/L
Potassium	2.23	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	10.0	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	5.41	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	2.12	0.5	0.3		ug/L
Zinc	8.38	1	0.3		ug/L
Hardness	12.0	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 5:30PM				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 2

Result Reporting MDL Qual Unit

		Limit		
Aluminum	47200	1000	20	ug/L
Iron	38700	1000	10.0	ug/L
Manganese	2550	50	0.2	ug/L
Dilution Factor	50			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 24 2013 4:44AM			
Prep By				
Prep Date/Time				

Total Metals by EPA 200.8

EPA 200.8

Batch: 13052402 Run: 1

	Result	Reporting Limit	MDL	Qual	Unit
Antimony	<10	10	5		ug/L
Arsenic	6.28	1	0.5		ug/L
Barium	332	10	2.0		ug/L
Beryllium	2.74	0.5	0.1		ug/L
Boron	<25	25	5.0		ug/L
Cadmium	<1	1	0.3		ug/L
Calcium	6.85	0.04	0.04		mg/L
Chromium	19.6	1	0.3		ug/L
Cobalt	18.9	1	0.5		ug/L
Copper	12.3	1	0.5		ug/L
Lead	49.3	1	0.1		ug/L
Magnesium	5.17	0.1	0.1		mg/L
Nickel	20.9	2.5	0.5		ug/L
Potassium	3.89	1	0.05		mg/L
Selenium	<2	2	0.5		ug/L
Silver	<5	5	1.0		ug/L
Sodium	5.10	0.04	0.02		mg/L
Thallium	<2.5	2.5	0.05		ug/L
Vanadium	27.0	2.5	1.0		ug/L
Zinc	86.9	3	2.0		ug/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 24 2013 12:48AM				
Prep By					
Prep Date/Time					

Client: Special Samples	Client Sample ID: Metals Field Blank
Lab ID: 2013-1615	Collection Date: 5/13/2013 8:40:00 AM
Matrix: Water	

Analyses

<i>Dissolved Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 13052401 Run: 1</i>			
	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	3.99	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	0.065	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	0.04	0.02	0.01		mg/L
Manganese	0.41	0.3	0.07		ug/L
Nickel	<0.5	0.5	0.15		ug/L
Potassium	<0.02	0.02	0.01		mg/L
Selenium	<1	1	0.2		ug/L
Silicon Dioxide	<0.05	0.05	0.01		mg/L
Silver	<0.5	0.5	0.02		ug/L
Sodium	<0.02	0.02	0.01		mg/L
Thallium	<0.5	0.5	0.005		ug/L
Vanadium	<0.5	0.5	0.3		ug/L
Zinc	<1	1	0.3		ug/L
Hardness	<1	1	1.0		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	May 23 2013 5:36PM				

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

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

Client: Special Samples

Client Sample ID: WS-BKG-001

Lab ID: 2013-1606

Collection Date: 5/13/2013 10:48:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13052007 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	146	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 10:02				

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

Laboratory Contact: Jeff Ruehr
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501-682-0955

Client: Special Samples

Client Sample ID: WS-001

Lab ID: 2013-1607

Collection Date: 5/13/2013 1:33:00 PM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13052007 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	53.7	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 10:07				

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: 2013-1608

Collection Date: 5/13/2013 10:03:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13052007 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	7.94	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 10:10				

Arkansas Department of Environmental Quality
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Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

Client: Special Samples **Client Sample ID:** WS-003
Lab ID: 2013-1609 **Collection Date:** 5/13/2013 8:30:00 AM
Matrix: Water

Analyses

<i>Turbidity</i>	<i>EPA 180.1</i>	<i>Batch: 13052007 Run: 1</i>			
	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	9.95	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 8:43				

Arkansas Department of Environmental Quality
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501-682-0955

Client: Special Samples

Client Sample ID: WS-004

Lab ID: 2013-1610

Collection Date: 5/13/2013 2:08:00 PM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13052007 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	1090	0.06	0.02		NTU
Dilution Factor	3				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 8:48				

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-006

Lab ID: 2013-1611

Collection Date: 5/13/2013 3:50:00 PM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13052007 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	52.8	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 8:50				

Arkansas Department of Environmental Quality
5301 Northshore Drive
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Laboratory Contact: Jeff Ruehr
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501-682-0955

Client: Special Samples

Client Sample ID: WS-007

Lab ID: 2013-1612

Collection Date: 5/13/2013 2:33:00 PM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13052007 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	1380	0.08	0.02		NTU
Dilution Factor	4				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 9:19				

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-008

Lab ID: 2013-1613

Collection Date: 5/13/2013 11:27:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13052007 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	55.9	0.02	0.02		NTU
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 9:21				

Arkansas Department of Environmental Quality
5301 Northshore Drive
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Laboratory Contact: Jeff Ruehr
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501-682-0955

Client: Special Samples

Client Sample ID: WS-019

Lab ID: 2013-1614

Collection Date: 5/13/2013 9:19:00 AM

Matrix: Water

Analyses

Turbidity

EPA 180.1

Batch: 13052007 Run: 1

	<u>Result</u>	<u>Reporting Limit</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Turbidity	3930	0.2	0.02		NTU
Dilution Factor	10				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 9:28				

Analytical Quality Control Results Report

Batch: 13051402	Semi-VOA water (Prep)
MB	LIMS ID: 13051402-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	5/14/2013 08:00				
2-Fluorophenol (% Recovery)	30.8 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	67.6 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	61.4 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	79.0 %			40 - 125	
Terphenyl-d14 (% Recovery)	85.0 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.2 ug/L	0.2	0.2		
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 ug/L	0.16	0.16		
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
Acetophenone	<0.1 ug/L	0.1	0.1		
4-Methylphenol	<0.1 ug/L	0.1	0.1		
N-Nitrosodi-n-propylamine	<0.2 ug/L	0.2	0.2		
Hexachloroethane	<0.2 ug/L	0.2	0.2		
Nitrobenzene	<0.2 ug/L	0.2	0.2		
N-Nitrosopiperidine	<0.2 ug/L	0.2	0.2		
Isophorone	<0.1 ug/L	0.1	0.1		
2-Nitrophenol	<0.3 ug/L	0.3	0.3		
2,4-Dimethylphenol	<0.1 ug/L	0.1	0.1		
Bis(2-chloroethoxy)methane	<0.2 ug/L	0.2	0.2		
2,4-Dichlorophenol	<0.2 ug/L	0.2	0.2		

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

Carbazole	<0.1 ug/L	0.1	0.1
Di-n-butyl phthalate	1.06 ug/L	0.2	0.2
Fluoranthene	<0.08 ug/L	0.08	0.08
Pyrene	<0.08 ug/L	0.08	0.08
Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2
Butyl benzyl phthalate	<0.3 ug/L	0.3	0.3
Benzo (a) anthracene	<0.2 ug/L	0.2	0.2
Chrysene	<0.1 ug/L	0.1	0.1
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3
Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	5/14/2013 13:46		

LCS	LIMS ID: 13051402-LCS-01
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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	5/14/2013 08:00				
2-Fluorophenol (% Recovery)	33.6 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	74.3 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	60.6 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	78.8 %			40 - 125	
Terphenyl-d14 (% Recovery)	80.2 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	56.9 %			50 - 150	
Ethyl methanesulfonate (% Recovery)	69.3 %			50 - 150	
Phenol (% Recovery)	30.0 %			50 - 150	
Aniline (% Recovery)	42.4 %			50 - 150	
Bis(2-chloroethyl)ether (% Recovery)	79.3 %			50 - 150	

2-Chlorophenol (% Recovery)	74.1 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	58.9 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	54.8 %	50 - 150
Benzyl alcohol (% Recovery)	72.9 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	62.0 %	50 - 150
2-Methylphenol (% Recovery)	67.6 %	50 - 150
Acetophenone (% Recovery)	88.4 %	50 - 150
4-Methylphenol (% Recovery)	61.3 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	89.1 %	50 - 150
Hexachloroethane (% Recovery)	58.3 %	50 - 150
Nitrobenzene (% Recovery)	88.0 %	50 - 150
N-Nitrosopiperidine (% Recovery)	92.7 %	50 - 150
Isophorone (% Recovery)	89.7 %	50 - 150
2-Nitrophenol (% Recovery)	88.2 %	50 - 150
2,4-Dimethylphenol (% Recovery)	8.0 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	76.2 %	50 - 150
2,4-Dichlorophenol (% Recovery)	81.8 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	68.3 %	50 - 150
Naphthalene (% Recovery)	78.3 %	50 - 150
4-Chloroaniline (% Recovery)	64.6 %	50 - 150
2,6-Dichlorophenol (% Recovery)	87.6 %	50 - 150
Hexachlorobutadiene (% Recovery)	55.6 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	94.6 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	84.3 %	50 - 150
2-Methylnaphthalene (% Recovery)	79.7 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	68.9 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	70.5 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	88.1 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	93.9 %	50 - 150
2-Chloronaphthalene (% Recovery)	68.5 %	50 - 150
1-Chloronaphthalene (% Recovery)	69.7 %	50 - 150
2-Nitroaniline (% Recovery)	82.8 %	50 - 150
Dimethyl phthalate (% Recovery)	60.1 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	84.9 %	50 - 150
Acenaphthylene (% Recovery)	80.6 %	50 - 150
3-Nitroaniline (% Recovery)	76.3 %	50 - 150
Acenaphthene (% Recovery)	77.6 %	50 - 150
2,4-Dinitrophenol (% Recovery)	67.6 %	50 - 150
Pentachlorobenzene (% Recovery)	77.0 %	50 - 150
4-Nitrophenol (% Recovery)	24.7 %	50 - 150

Dibenzofuran (% Recovery)	81.8 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	87.3 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	84.1 %	50 - 150
Diethyl phthalate (% Recovery)	79.3 %	50 - 150
Fluorene (% Recovery)	82.1 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	83.1 %	50 - 150
4-Nitroaniline (% Recovery)	54.1 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	76.7 %	50 - 150
Diphenylamine (% Recovery)	86.5 %	50 - 150
Azobenzene (% Recovery)	81.0 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	89.4 %	50 - 150
Hexachlorobenzene (% Recovery)	82.2 %	50 - 150
Pentachlorophenol (% Recovery)	78.3 %	50 - 150
Pentachloronitrobenzene (% Recovery)	95.7 %	50 - 150
Pronamide (% Recovery)	96.4 %	50 - 150
Phenanthrene (% Recovery)	88.8 %	50 - 150
Anthracene (% Recovery)	84.5 %	50 - 150
Carbazole (% Recovery)	87.3 %	50 - 150
Di-n-butyl phthalate (% Recovery)	130 %	50 - 150
Fluoranthene (% Recovery)	86.5 %	50 - 150
Pyrene (% Recovery)	87.2 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	85.4 %	50 - 150
Butyl benzyl phthalate (% Recovery)	70.5 %	50 - 150
Benzo (a) anthracene (% Recovery)	83.1 %	50 - 150
Chrysene (% Recovery)	88.9 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	85.6 %	50 - 150
Di-n-octyl phthalate (% Recovery)	74.1 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	75.1 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	84.0 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	85.5 %	50 - 150
Benzo (a) pyrene (% Recovery)	88.6 %	50 - 150
3-Methylcholanthrene (% Recovery)	82.0 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	85.4 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	89.5 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	89.7 %	50 - 150
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	5/14/2013 14:15	

Analytical Quality Control Results Report

Batch: 13052303	VOA - water
WS-003	LIMS ID: 2013-1609

Volatiles - water DUP

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Dibromofluoromethane (% Recovery)	101 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	95.7 %			70 - 130	
Toluene-d8 (% Recovery)	93.3 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	105 %			70 - 130	
Dichlorodifluoromethane	<1.12 ug/L	1.12	1.12		
Dichlorodifluoromethane (RPD)	0 %				0 - 20
Chloromethane (RPD)	0 %				0 - 20
Chloromethane	<0.58 ug/L	0.58	0.58		
Vinyl chloride	<0.82 ug/L	0.82	0.82		
Vinyl chloride (RPD)	0 %				0 - 20
Bromomethane (RPD)	0 %				0 - 20
Bromomethane	<3.9 ug/L	3.9	3.9		
Chloroethane	<2.68 ug/L	2.68	2.68		
Chloroethane (RPD)	0 %				0 - 20
Trichlorofluoromethane (RPD)	0 %				0 - 20
Trichlorofluoromethane	<0.51 ug/L	0.51	0.51		
1,1-Dichloroethene (RPD)	0 %				0 - 20
1,1-Dichloroethene	<0.43 ug/L	0.43	0.43		
Acetone	<10.5 ug/L	10.5	10.5		
Acetone (RPD)	200 %				0 - 20
Methylene chloride (RPD)	3.0 %				0 - 20
Methylene chloride	<2.5 ug/L	2.5	2.5		
Methyl tert-butyl ether	<0.83 ug/L	0.83	0.83		
Methyl tert-butyl ether (RPD)	0 %				0 - 20
trans-1,2-Dichloroethene (RPD)	0 %				0 - 20
trans-1,2-Dichloroethene	<0.59 ug/L	0.59	0.59		
1,1-Dichloroethane	<0.42 ug/L	0.42	0.42		
1,1-Dichloroethane (RPD)	0 %				0 - 20
Methyl ethyl ketone (RPD)	0 %				0 - 20
Methyl ethyl ketone	<12.8 ug/L	12.8	12.8		
cis-1,2-Dichloroethene	<1.15 ug/L	1.15	1.15		
cis-1,2-Dichloroethene (RPD)	0 %				0 - 20
2,2-Dichloropropane (RPD)	0 %				0 - 20

2,2-Dichloropropane	<0.81 ug/L	0.81	0.81	
Bromochloromethane	<0.66 ug/L	0.66	0.66	
Bromochloromethane (RPD)	0 %			0 - 20
Chloroform (RPD)	0 %			0 - 20
Chloroform	<0.27 ug/L	0.27	0.27	
1,1,1-Trichloroethane	<0.46 ug/L	0.46	0.46	
1,1,1-Trichloroethane (RPD)	0 %			0 - 20
1,1-Dichloropropene (RPD)	0 %			0 - 20
1,1-Dichloropropene	<0.59 ug/L	0.59	0.59	
Carbon tetrachloride	<0.6 ug/L	0.6	0.6	
Carbon tetrachloride (RPD)	0 %			0 - 20
Benzene (RPD)	0 %			0 - 20
Benzene	<0.66 ug/L	0.66	0.66	
1,2-Dichloroethane	<1.15 ug/L	1.15	1.15	
1,2-Dichloroethane (RPD)	0 %			0 - 20
Trichloroethene (RPD)	0 %			0 - 20
Trichloroethene	<0.6 ug/L	0.6	0.6	
1,2-Dichloropropane	<0.98 ug/L	0.98	0.98	
1,2-Dichloropropane (RPD)	0 %			0 - 20
Dibromomethane (RPD)	0 %			0 - 20
Dibromomethane	<1.78 ug/L	1.78	1.78	
Bromodichloromethane	<0.65 ug/L	0.65	0.65	
Bromodichloromethane (RPD)	0 %			0 - 20
cis-1,3-Dichloropropene (RPD)	0 %			0 - 20
cis-1,3-Dichloropropene	<0.86 ug/L	0.86	0.86	
Methyl isobutyl ketone	<8.1 ug/L	8.1	8.1	
Methyl isobutyl ketone (RPD)	0 %			0 - 20
Toluene (RPD)	0 %			0 - 20
Toluene	<0.57 ug/L	0.57	0.57	
trans-1,3-Dichloropropene	<0.84 ug/L	0.84	0.84	
trans-1,3-Dichloropropene (RPD)	0 %			0 - 20
1,1,2-Trichloroethane (RPD)	0 %			0 - 20
1,1,2-Trichloroethane	<0.78 ug/L	0.78	0.78	
2-Hexanone	<9.5 ug/L	9.5	9.5	
2-Hexanone (RPD)	0 %			0 - 20
Tetrachloroethene (RPD)	0 %			0 - 20
Tetrachloroethene	<0.96 ug/L	0.96	0.96	
1,3-Dichloropropane	<0.94 ug/L	0.94	0.94	
1,3-Dichloropropane (RPD)	0 %			0 - 20
Dibromochloromethane (RPD)	0 %			0 - 20

Dibromochloromethane	<1.25 ug/L	1.25	1.25	
1,2-Dibromoethane (EDB)	<0.68 ug/L	0.68	0.68	
1,2-Dibromoethane (EDB) (RPD)	0 %			0 - 20
Chlorobenzene (RPD)	0 %			0 - 20
Chlorobenzene	<0.62 ug/L	0.62	0.62	
Ethylbenzene	<0.51 ug/L	0.51	0.51	
Ethylbenzene (RPD)	0 %			0 - 20
1,1,1,2-Tetrachloroethane (RPD)	0 %			0 - 20
1,1,1,2-Tetrachloroethane	<0.57 ug/L	0.57	0.57	
m,p-Xylene	<1.2 ug/L	1.2	1.2	
m,p-Xylene (RPD)	0 %			0 - 20
o-Xylene (RPD)	0 %			0 - 20
o-Xylene	<0.5 ug/L	0.5	0.5	
Styrene	<0.53 ug/L	0.53	0.53	
Styrene (RPD)	0 %			0 - 20
Bromoform (RPD)	0 %			0 - 20
Bromoform	<1.56 ug/L	1.56	1.56	
Isopropylbenzene	<0.59 ug/L	0.59	0.59	
Isopropylbenzene (RPD)	0 %			0 - 20
1,1,1,2,2-Tetrachloroethane (RPD)	0 %			0 - 20
1,1,1,2,2-Tetrachloroethane	<0.39 ug/L	0.39	0.39	
1,2,3-Trichloropropane	<1.83 ug/L	1.83	1.83	
1,2,3-Trichloropropane (RPD)	0 %			0 - 20
n-Propylbenzene (RPD)	0 %			0 - 20
n-Propylbenzene	<0.49 ug/L	0.49	0.49	
Bromobenzene	<0.5 ug/L	0.5	0.5	
Bromobenzene (RPD)	0 %			0 - 20
1,3,5-Trimethylbenzene (RPD)	0 %			0 - 20
1,3,5-Trimethylbenzene	<0.3 ug/L	0.3	0.3	
2-Chlorotoluene	<0.66 ug/L	0.66	0.66	
2-Chlorotoluene (RPD)	0 %			0 - 20
4-Chlorotoluene (RPD)	0 %			0 - 20
4-Chlorotoluene	<0.8 ug/L	0.8	0.8	
tert-Butylbenzene	<0.85 ug/L	0.85	0.85	
tert-Butylbenzene (RPD)	0 %			0 - 20
1,2,4-Trimethylbenzene (RPD)	0 %			0 - 20
1,2,4-Trimethylbenzene	<0.46 ug/L	0.46	0.46	
sec-Butylbenzene	<0.63 ug/L	0.63	0.63	
sec-Butylbenzene (RPD)	0 %			0 - 20
p-Isopropyltoluene (RPD)	0 %			0 - 20

p-Isopropyltoluene	<0.59 ug/L	0.59	0.59	
1,3-Dichlorobenzene	<0.7 ug/L	0.7	0.7	
1,3-Dichlorobenzene (RPD)	0 %			0 - 20
1,4-Dichlorobenzene (RPD)	0 %			0 - 20
1,4-Dichlorobenzene	<0.53 ug/L	0.53	0.53	
n-Butylbenzene	<0.72 ug/L	0.72	0.72	
n-Butylbenzene (RPD)	0 %			0 - 20
1,2-Dichlorobenzene (RPD)	0 %			0 - 20
1,2-Dichlorobenzene	<0.7 ug/L	0.7	0.7	
1,2-Dibromo-3-chloropropane	<0.86 ug/L	0.86	0.86	
1,2-Dibromo-3-chloropropane (RPD)	0 %			0 - 20
1,2,4-Trichlorobenzene (RPD)	0 %			0 - 20
1,2,4-Trichlorobenzene	<1.14 ug/L	1.14	1.14	
Naphthalene	<1.53 ug/L	1.53	1.53	
Naphthalene (RPD)	0 %			0 - 20
1,2,3-Trichlorobenzene (RPD)	0 %			0 - 20
1,2,3-Trichlorobenzene	<1.3 ug/L	1.3	1.3	
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	5/15/2013 12:46 PM			

WS-003 **LIMS ID: 2013-1609**

Volatiles - water MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	103 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	98.0 %			70 - 130	
Toluene-d8 (% Recovery)	95.1 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	101 %			70 - 130	
1,1-Dichloroethene (% Recovery)	68.0 %			70 - 130	
Benzene (% Recovery)	72.9 %			70 - 130	
Trichloroethene (% Recovery)	71.2 %			70 - 130	
Toluene (% Recovery)	68.7 %			70 - 130	
Chlorobenzene (% Recovery)	70.5 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	5/15/2013 1:11 PM				

WS-003 **LIMS ID: 2013-1609**

Volatiles - water MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	101 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	94.5 %			70 - 130	
Toluene-d8 (% Recovery)	91.9 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	102 %			70 - 130	
1,1-Dichloroethene (% Recovery)	75.8 %			70 - 130	
1,1-Dichloroethene (RPD)	10.8 %				0 - 20
Benzene (RPD)	8.6 %				0 - 20
Benzene (% Recovery)	79.5 %			70 - 130	
Trichloroethene (RPD)	8.7 %				0 - 20
Trichloroethene (% Recovery)	77.6 %			70 - 130	
Toluene (% Recovery)	75.0 %			70 - 130	
Toluene (RPD)	8.7 %				0 - 20
Chlorobenzene (RPD)	10.1 %				0 - 20
Chlorobenzene (% Recovery)	78.0 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	5/15/2013 1:36 PM				

LCS	LIMS ID: 13052303-LCS-01
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Volatiles - water LCS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	95.1 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	94.5 %			70 - 130	
Toluene-d8 (% Recovery)	90.6 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	95.5 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	88.0 %			60 - 130	
Chloromethane (% Recovery)	86.6 %			60 - 130	
Vinyl chloride (% Recovery)	87.5 %			60 - 130	
Bromomethane (% Recovery)	69.4 %			60 - 130	
Chloroethane (% Recovery)	96.5 %			60 - 130	
Trichlorofluoromethane (% Recovery)	95.6 %			60 - 130	
1,1-Dichloroethene (% Recovery)	94.2 %			60 - 130	
Acetone (% Recovery)	102 %			60 - 130	
Methylene chloride (% Recovery)	93.1 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	94.3 %			60 - 130	
trans-1,2-Dichloroethene (% Recovery)	93.5 %			60 - 130	

1,1-Dichloroethane (% Recovery)	93.4 %	60 - 130
Methyl ethyl ketone (% Recovery)	93.4 %	60 - 130
cis-1,2-Dichloroethene (% Recovery)	92.3 %	60 - 130
2,2-Dichloropropane (% Recovery)	94.9 %	60 - 130
Bromochloromethane (% Recovery)	93.8 %	60 - 130
Chloroform (% Recovery)	94.1 %	60 - 130
1,1,1-Trichloroethane (% Recovery)	94.0 %	60 - 130
1,1-Dichloropropene (% Recovery)	94.7 %	60 - 130
Carbon tetrachloride (% Recovery)	93.4 %	60 - 130
Benzene (% Recovery)	93.8 %	60 - 130
1,2-Dichloroethane (% Recovery)	94.0 %	60 - 130
Trichloroethene (% Recovery)	92.6 %	60 - 130
1,2-Dichloropropane (% Recovery)	90.0 %	60 - 130
Dibromomethane (% Recovery)	90.6 %	60 - 130
Bromodichloromethane (% Recovery)	91.8 %	60 - 130
cis-1,3-Dichloropropene (% Recovery)	90.2 %	60 - 130
Methyl isobutyl ketone (% Recovery)	87.3 %	60 - 130
Toluene (% Recovery)	90.2 %	60 - 130
trans-1,3-Dichloropropene (% Recovery)	88.7 %	60 - 130
1,1,2-Trichloroethane (% Recovery)	90.8 %	60 - 130
2-Hexanone (% Recovery)	88.5 %	60 - 130
Tetrachloroethene (% Recovery)	93.4 %	60 - 130
1,3-Dichloropropane (% Recovery)	92.0 %	60 - 130
Dibromochloromethane (% Recovery)	88.3 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	89.8 %	60 - 130
Chlorobenzene (% Recovery)	93.4 %	60 - 130
Ethylbenzene (% Recovery)	87.8 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	89.0 %	60 - 130
m,p-Xylene (% Recovery)	91.2 %	60 - 130
o-Xylene (% Recovery)	91.7 %	60 - 130
Styrene (% Recovery)	89.6 %	60 - 130
Bromoform (% Recovery)	87.9 %	60 - 130
Isopropylbenzene (% Recovery)	94.9 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	88.0 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	88.4 %	60 - 130
n-Propylbenzene (% Recovery)	90.3 %	60 - 130
Bromobenzene (% Recovery)	94.4 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	97.4 %	60 - 130
2-Chlorotoluene (% Recovery)	92.5 %	60 - 130
4-Chlorotoluene (% Recovery)	96.2 %	60 - 130

Arkansas Department of Environmental Quality
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tert-Butylbenzene (% Recovery)	93.8 %	60 - 130
1,2,4-Trimethylbenzene (% Recovery)	95.2 %	60 - 130
sec-Butylbenzene (% Recovery)	96.2 %	60 - 130
p-Isopropyltoluene (% Recovery)	95.1 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	93.8 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	93.5 %	60 - 130
n-Butylbenzene (% Recovery)	95.9 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	93.9 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	87.1 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	95.5 %	60 - 130
Naphthalene (% Recovery)	89.3 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	96.2 %	60 - 130
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	5/15/2013 8:34	

Analytical Quality Control Results Report

Batch: 13051505	Semi-VOA water (Prep)
WS-003	LIMS ID: 2013-1609

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	5/14/2013 13:00				
2-Fluorophenol (% Recovery)	25.6 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	67.3 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	65.0 %			40 - 110	
2,4,6-Tribromophenol (% Recovery)	66.4 %			40 - 110	
Terphenyl-d14 (% Recovery)	74.5 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Methyl Methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Phenol (RPD)	0 %				0 - 40
Aniline (RPD)	0 %				0 - 40
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.24 ug/L	0.2	0.24		
Bis(2-chloroethyl)ether (RPD)	0 %				0 - 40
2-Chlorophenol (RPD)	0 %				0 - 40
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 ug/L	0.16	0.16		
Benzyl alcohol (RPD)	200 %				0 - 40
1,2-Dichlorobenzene (RPD)	0 %				0 - 40
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
2-Methylphenol (RPD)	0 %				0 - 40
Acetophenone (RPD)	200 %				0 - 40
Acetophenone	<0.1 ug/L	0.1	0.1		

4-Methylphenol	<0.1 ug/L	0.1	0.1	
4-Methylphenol (RPD)	0 %			0 - 40
N-Nitrosodi-n-propylamine (RPD)	0 %			0 - 40
N-Nitrosodi-n-propylamine	<0.2 ug/L	0.2	0.2	
Hexachloroethane	<0.2 ug/L	0.2	0.2	
Hexachloroethane (RPD)	0 %			0 - 40
Nitrobenzene (RPD)	0 %			0 - 40
Nitrobenzene	<0.2 ug/L	0.2	0.2	
N-Nitrosopiperidine	<0.2 ug/L	0.2	0.2	
N-Nitrosopiperidine (RPD)	0 %			0 - 40
Isophorone (RPD)	200 %			0 - 40
Isophorone	<0.1 ug/L	0.1	0.1	
2-Nitrophenol	<0.3 ug/L	0.3	0.3	
2-Nitrophenol (RPD)	0 %			0 - 40
2,4-Dimethylphenol (RPD)	0 %			0 - 40
2,4-Dimethylphenol	<0.1 ug/L	0.1	0.1	
Bis(2-chloroethoxy)methane	<0.2 ug/L	0.2	0.2	
Bis(2-chloroethoxy)methane (RPD)	0 %			0 - 40
2,4-Dichlorophenol (RPD)	0 %			0 - 40
2,4-Dichlorophenol	<0.2 ug/L	0.2	0.2	
1,2,4-Trichlorobenzene	<0.12 ug/L	0.12	0.12	
1,2,4-Trichlorobenzene (RPD)	0 %			0 - 40
Naphthalene (RPD)	0 %			0 - 40
Naphthalene	<0.08 ug/L	0.08	0.08	
4-Chloroaniline	<0.1 ug/L	0.1	0.1	
4-Chloroaniline (RPD)	0 %			0 - 40
2,6-Dichlorophenol (RPD)	0 %			0 - 40
2,6-Dichlorophenol	<0.2 ug/L	0.2	0.2	
Hexachlorobutadiene	<0.2 ug/L	0.2	0.2	
Hexachlorobutadiene (RPD)	0 %			0 - 40
N-Nitrosodibutylamine	<0.24 ug/L	0.2	0.24	
N-Nitrosodibutylamine (RPD)	0 %			0 - 40
4-Chloro-3-methylphenol (RPD)	0 %			0 - 40
4-Chloro-3-methylphenol	<0.16 ug/L	0.16	0.16	
2-Methylnaphthalene	<0.1 ug/L	0.1	0.1	
2-Methylnaphthalene (RPD)	0 %			0 - 40
1,2,4,5-Tetrachlorobenzene (RPD)	0 %			0 - 40
1,2,4,5-Tetrachlorobenzene	<0.1 ug/L	0.1	0.1	
Hexachlorocyclopentadiene	<0.16 ug/L	0.16	0.16	
Hexachlorocyclopentadiene (RPD)	0 %			0 - 40

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

4,6-Dinitro-2-methylphenol (RPD)	0 %			0 - 40
4,6-Dinitro-2-methylphenol	<6 ug/L	6	6	
Diphenylamine	<0.1 ug/L	0.1	0.1	
Diphenylamine (RPD)	0 %			0 - 40
Azobenzene (RPD)	0 %			0 - 40
Azobenzene	<0.08 ug/L	0.08	0.08	
4-Bromophenyl phenyl ether	<0.2 ug/L	0.2	0.2	
4-Bromophenyl phenyl ether (RPD)	0 %			0 - 40
Hexachlorobenzene (RPD)	0 %			0 - 40
Hexachlorobenzene	<0.16 ug/L	0.16	0.16	
Pentachlorophenol	<1 ug/L	1	1	
Pentachlorophenol (RPD)	0 %			0 - 40
Pentachloronitrobenzene (RPD)	0 %			0 - 40
Pentachloronitrobenzene	<0.2 ug/L	0.2	0.2	
Pronamide	<0.2 ug/L	0.2	0.2	
Pronamide (RPD)	0 %			0 - 40
Phenanthrene (RPD)	0 %			0 - 40
Phenanthrene	<0.08 ug/L	0.08	0.08	
Anthracene	<0.08 ug/L	0.08	0.08	
Anthracene (RPD)	0 %			0 - 40
Carbazole (RPD)	0 %			0 - 40
Carbazole	<0.1 ug/L	0.1	0.1	
Di-n-butyl phthalate	<0.2 ug/L	0.2	0.2	
Di-n-butyl phthalate (RPD)	0 %			0 - 40
Fluoranthene (RPD)	0 %			0 - 40
Fluoranthene	<0.08 ug/L	0.08	0.08	
Pyrene	<0.08 ug/L	0.08	0.08	
Pyrene (RPD)	0 %			0 - 40
Dimethylaminoazobenzene (RPD)	0 %			0 - 40
Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2	
Butyl benzyl phthalate	<0.4 ug/L	0.4	0.4	
Butyl benzyl phthalate (RPD)	0 %			0 - 40
Benzo (a) anthracene (RPD)	0 %			0 - 40
Benzo (a) anthracene	<0.1 ug/L	0.1	0.1	
Chrysene	<0.1 ug/L	0.1	0.1	
Chrysene (RPD)	0 %			0 - 40
Bis(2-ethylhexyl)phthalate (RPD)	0 %			0 - 40
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3	
Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3	
Di-n-octyl phthalate (RPD)	200 %			0 - 40

Benzo (b) fluoranthene (RPD)	0 %			0 - 40
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16	
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2	
7,12-Dimethylbenz (a) anthracene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene (RPD)	0 %			0 - 40
3-Methylcholanthrene (RPD)	0 %			0 - 40
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene (RPD)	0 %			0 - 40
Dibenzo (a,h) anthracene (RPD)	0 %			0 - 40
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene (RPD)	0 %			0 - 40
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	5/15/2013 11:52 AM			

WS-003	LIMS ID: 2013-1609
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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	5/14/2013 13:00				
2-Fluorophenol (% Recovery)	27.0 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	69.5 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	61.9 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	56.6 %			40 - 125	
Terphenyl-d14 (% Recovery)	66.4 %			40 - 125	
Phenol (% Recovery)	9.9 %			25 - 125	
2-Chlorophenol (% Recovery)	36.5 %			25 - 125	
1,4-Dichlorobenzene (% Recovery)	61.7 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	71.7 %			25 - 125	
1,2,4-Trichlorobenzene (% Recovery)	67.5 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	29.5 %			25 - 125	
Acenaphthene (% Recovery)	63.9 %			25 - 125	

4-Nitrophenol (% Recovery)	12.6 %	25 - 125
2,4-Dinitrotoluene (% Recovery)	54.9 %	25 - 125
Pentachlorophenol (% Recovery)	47.7 %	25 - 125
Pyrene (% Recovery)	64.3 %	25 - 125
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	5/15/2013 12:21 PM	

WS-003 **LIMS ID: 2013-1609**

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	5/14/2013 13:00				
2-Fluorophenol (% Recovery)	26.3 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	63.1 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	60.4 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	60.2 %			40 - 125	
Terphenyl-d14 (% Recovery)	72.5 %			40 - 125	
Phenol (% Recovery)	9.4 %			25 - 125	
Phenol (RPD)	4.7 %				0 - 40
2-Chlorophenol (% Recovery)	33.6 %			25 - 125	
2-Chlorophenol (RPD)	8.2 %				0 - 40
1,4-Dichlorobenzene (RPD)	0.7 %				0 - 40
1,4-Dichlorobenzene (% Recovery)	62.1 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	68.7 %			25 - 125	
N-Nitrosodi-n-propylamine (RPD)	4.3 %				0 - 40
1,2,4-Trichlorobenzene (RPD)	11.6 %				0 - 40
1,2,4-Trichlorobenzene (% Recovery)	60.1 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	26.4 %			25 - 125	
4-Chloro-3-methylphenol (RPD)	10.9 %				0 - 40
Acenaphthene (% Recovery)	61.5 %			25 - 125	
Acenaphthene (RPD)	3.9 %				0 - 40
4-Nitrophenol (% Recovery)	12.6 %			25 - 125	
4-Nitrophenol (RPD)	0.5 %				0 - 40
2,4-Dinitrotoluene (% Recovery)	55.4 %			25 - 125	
2,4-Dinitrotoluene (RPD)	1.0 %				0 - 40
Pentachlorophenol (% Recovery)	46.6 %			25 - 125	

Pentachlorophenol (RPD)	2.3 %	0 - 40
Pyrene (% Recovery)	64.4 %	25 - 125
Pyrene (RPD)	0.2 %	0 - 40
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	5/15/2013 12:50 PM	

MB **LIMS ID: 13051505-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	5/14/2013 13:00				
2-Fluorophenol (% Recovery)	29.7 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	62.3 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	53.2 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	57.7 %			40 - 125	
Terphenyl-d14 (% Recovery)	102 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.2 ug/L	0.2	0.2		
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 ug/L	0.16	0.16		
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
Acetophenone	<0.1 ug/L	0.1	0.1		
4-Methylphenol	<0.1 ug/L	0.1	0.1		
N-Nitrosodi-n-propylamine	<0.2 ug/L	0.2	0.2		
Hexachloroethane	<0.2 ug/L	0.2	0.2		
Nitrobenzene	<0.2 ug/L	0.2	0.2		
N-Nitrosopiperidine	<0.2 ug/L	0.2	0.2		
Isophorone	<0.1 ug/L	0.1	0.1		
2-Nitrophenol	<0.3 ug/L	0.3	0.3		
2,4-Dimethylphenol	<0.1 ug/L	0.1	0.1		

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

Phenanthrene	<0.08 ug/L	0.08	0.08
Anthracene	<0.08 ug/L	0.08	0.08
Carbazole	<0.1 ug/L	0.1	0.1
Di-n-butyl phthalate	0.452 ug/L	0.2	0.2
Fluoranthene	<0.08 ug/L	0.08	0.08
Pyrene	<0.08 ug/L	0.08	0.08
Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2
Butyl benzyl phthalate	<0.3 ug/L	0.3	0.3
Benzo (a) anthracene	<0.2 ug/L	0.2	0.2
Chrysene	<0.1 ug/L	0.1	0.1
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3
Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16
Dilution Factor	1		
Analyzed By	Ed Harris		
Analysis Date/Time	5/15/2013 10:25		

LCS	LIMS ID: 13051505-LCS-01
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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	5/14/2013 13:00				
2-Fluorophenol (% Recovery)	35.4 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	73.5 %			50 - 125	
2-Fluorobiphenyl (% Recovery)	73.1 %			50 - 125	
2,4,6-Tribromophenol (% Recovery)	72.2 %			40 - 125	
Terphenyl-d14 (% Recovery)	82.5 %			50 - 125	
Methyl Methanesulfonate (% Recovery)	61.7 %			50 - 150	
Ethyl methanesulfonate (% Recovery)	70.0 %			50 - 150	
Phenol (% Recovery)	27.6 %			50 - 150	

Aniline (% Recovery)	56.6 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	82.5 %	50 - 150
2-Chlorophenol (% Recovery)	75.0 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	64.4 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	61.9 %	50 - 150
Benzyl alcohol (% Recovery)	72.9 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	65.8 %	50 - 150
2-Methylphenol (% Recovery)	67.1 %	50 - 150
Acetophenone (% Recovery)	85.9 %	50 - 150
4-Methylphenol (% Recovery)	56.7 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	88.8 %	50 - 150
Hexachloroethane (% Recovery)	57.6 %	50 - 150
Nitrobenzene (% Recovery)	77.8 %	50 - 150
N-Nitrosopiperidine (% Recovery)	80.8 %	50 - 150
Isophorone (% Recovery)	83.3 %	50 - 150
2-Nitrophenol (% Recovery)	76.4 %	50 - 150
2,4-Dimethylphenol (% Recovery)	7.6 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	75.6 %	50 - 150
2,4-Dichlorophenol (% Recovery)	80.2 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	69.8 %	50 - 150
Naphthalene (% Recovery)	76.6 %	50 - 150
4-Chloroaniline (% Recovery)	64.3 %	50 - 150
2,6-Dichlorophenol (% Recovery)	81.7 %	50 - 150
Hexachlorobutadiene (% Recovery)	59.0 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	92.2 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	76.8 %	50 - 150
2-Methylnaphthalene (% Recovery)	77.9 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	76.1 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	60.2 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	84.1 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	87.9 %	50 - 150
2-Chloronaphthalene (% Recovery)	73.1 %	50 - 150
1-Chloronaphthalene (% Recovery)	75.7 %	50 - 150
2-Nitroaniline (% Recovery)	81.3 %	50 - 150
Dimethyl phthalate (% Recovery)	78.9 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	89.1 %	50 - 150
Acenaphthylene (% Recovery)	82.1 %	50 - 150
3-Nitroaniline (% Recovery)	73.0 %	50 - 150
Acenaphthene (% Recovery)	83.4 %	50 - 150
2,4-Dinitrophenol (% Recovery)	63.4 %	50 - 150

Pentachlorobenzene (% Recovery)	85.4 %	50 - 150
4-Nitrophenol (% Recovery)	14.1 %	50 - 150
Dibenzofuran (% Recovery)	84.7 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	92.4 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	80.5 %	50 - 150
Diethyl phthalate (% Recovery)	85.3 %	50 - 150
Fluorene (% Recovery)	84.5 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	87.7 %	50 - 150
4-Nitroaniline (% Recovery)	48.4 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	62.7 %	50 - 150
Diphenylamine (% Recovery)	77.9 %	50 - 150
Azobenzene (% Recovery)	75.6 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	82.0 %	50 - 150
Hexachlorobenzene (% Recovery)	77.8 %	50 - 150
Pentachlorophenol (% Recovery)	61.2 %	50 - 150
Pentachloronitrobenzene (% Recovery)	83.0 %	50 - 150
Pronamide (% Recovery)	83.4 %	50 - 150
Phenanthrene (% Recovery)	79.7 %	50 - 150
Anthracene (% Recovery)	72.9 %	50 - 150
Carbazole (% Recovery)	77.5 %	50 - 150
Di-n-butyl phthalate (% Recovery)	108 %	50 - 150
Fluoranthene (% Recovery)	76.1 %	50 - 150
Pyrene (% Recovery)	87.8 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	81.5 %	50 - 150
Butyl benzyl phthalate (% Recovery)	79.9 %	50 - 150
Benzo (a) anthracene (% Recovery)	76.8 %	50 - 150
Chrysene (% Recovery)	77.3 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	79.6 %	50 - 150
Di-n-octyl phthalate (% Recovery)	74.0 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	62.9 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	67.2 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	60.8 %	50 - 150
Benzo (a) pyrene (% Recovery)	74.4 %	50 - 150
3-Methylcholanthrene (% Recovery)	67.8 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	70.1 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	78.0 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	69.9 %	50 - 150
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	5/15/2013 10:54	

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

Laboratory Contact: Jeff Ruehr
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501-682-0955

Analytical Quality Control Results Report

Batch: 13052007	Turbidity - water
WS-003	LIMS ID: 2013-1609

Turbidity - water DUP

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Turbidity (RPD)	2.7 %				0 - 20
Turbidity	9.68 NTU	0.02	0.02		
Dilution Factor	1				
Analyzed By	Penny Semberski				
Analysis Date/Time	5/14/2013 8:44				

Analytical Quality Control Results Report

Batch: 13051501	VOA - water
LCS	LIMS ID: 13051501-LCS-01

Volatiles - water LCS

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Dibromofluoromethane (% Recovery)	95.9 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	97.1 %			70 - 130	
Toluene-d8 (% Recovery)	92.5 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	100 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	87.3 %			60 - 130	
Chloromethane (% Recovery)	80.9 %			60 - 130	
Vinyl chloride (% Recovery)	88.3 %			60 - 130	
Bromomethane (% Recovery)	59.1 %			60 - 130	
Chloroethane (% Recovery)	71.4 %			60 - 130	
Trichlorofluoromethane (% Recovery)	89.6 %			60 - 130	
1,1-Dichloroethene (% Recovery)	92.5 %			60 - 130	
Acetone (% Recovery)	102 %			60 - 130	
Methylene chloride (% Recovery)	95.2 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	95.8 %			60 - 130	
trans-1,2-Dichloroethene (% Recovery)	91.7 %			60 - 130	
1,1-Dichloroethane (% Recovery)	94.4 %			60 - 130	
Methyl ethyl ketone (% Recovery)	100 %			60 - 130	
cis-1,2-Dichloroethene (% Recovery)	93.5 %			60 - 130	
2,2-Dichloropropane (% Recovery)	93.8 %			60 - 130	
Bromochloromethane (% Recovery)	93.8 %			60 - 130	
Chloroform (% Recovery)	94.3 %			60 - 130	
1,1,1-Trichloroethane (% Recovery)	93.8 %			60 - 130	
1,1-Dichloropropene (% Recovery)	92.8 %			60 - 130	
Carbon tetrachloride (% Recovery)	94.0 %			60 - 130	
Benzene (% Recovery)	93.4 %			60 - 130	
1,2-Dichloroethane (% Recovery)	93.5 %			60 - 130	
Trichloroethene (% Recovery)	94.3 %			60 - 130	
1,2-Dichloropropane (% Recovery)	90.6 %			60 - 130	
Dibromomethane (% Recovery)	94.8 %			60 - 130	
Bromodichloromethane (% Recovery)	94.0 %			60 - 130	
cis-1,3-Dichloropropene (% Recovery)	91.3 %			60 - 130	
Methyl isobutyl ketone (% Recovery)	92.2 %			60 - 130	
Toluene (% Recovery)	93.7 %			60 - 130	

trans-1,3-Dichloropropene (% Recovery)	92.3 %	60 - 130
1,1,2-Trichloroethane (% Recovery)	94.7 %	60 - 130
2-Hexanone (% Recovery)	96.4 %	60 - 130
Tetrachloroethene (% Recovery)	91.7 %	60 - 130
1,3-Dichloropropane (% Recovery)	93.0 %	60 - 130
Dibromochloromethane (% Recovery)	93.0 %	60 - 130
1,2-Dibromoethane (EDB) (% Recovery)	94.3 %	60 - 130
Chlorobenzene (% Recovery)	91.7 %	60 - 130
Ethylbenzene (% Recovery)	91.0 %	60 - 130
1,1,1,2-Tetrachloroethane (% Recovery)	92.5 %	60 - 130
m,p-Xylene (% Recovery)	93.4 %	60 - 130
o-Xylene (% Recovery)	93.1 %	60 - 130
Styrene (% Recovery)	85.9 %	60 - 130
Bromoform (% Recovery)	91.0 %	60 - 130
Isopropylbenzene (% Recovery)	93.0 %	60 - 130
1,1,2,2-Tetrachloroethane (% Recovery)	92.3 %	60 - 130
1,2,3-Trichloropropane (% Recovery)	95.7 %	60 - 130
n-Propylbenzene (% Recovery)	89.7 %	60 - 130
Bromobenzene (% Recovery)	94.4 %	60 - 130
1,3,5-Trimethylbenzene (% Recovery)	94.0 %	60 - 130
2-Chlorotoluene (% Recovery)	97.5 %	60 - 130
4-Chlorotoluene (% Recovery)	93.2 %	60 - 130
tert-Butylbenzene (% Recovery)	91.4 %	60 - 130
1,2,4-Trimethylbenzene (% Recovery)	94.1 %	60 - 130
sec-Butylbenzene (% Recovery)	93.5 %	60 - 130
p-Isopropyltoluene (% Recovery)	90.9 %	60 - 130
1,3-Dichlorobenzene (% Recovery)	90.2 %	60 - 130
1,4-Dichlorobenzene (% Recovery)	92.4 %	60 - 130
n-Butylbenzene (% Recovery)	91.1 %	60 - 130
1,2-Dichlorobenzene (% Recovery)	92.8 %	60 - 130
1,2-Dibromo-3-chloropropane (% Recovery)	93.5 %	60 - 130
1,2,4-Trichlorobenzene (% Recovery)	92.7 %	60 - 130
Naphthalene (% Recovery)	94.4 %	60 - 130
1,2,3-Trichlorobenzene (% Recovery)	94.2 %	60 - 130
Dilution Factor	1	
Analyzed By	Jeff Ruehr	
Analysis Date/Time	5/14/2013 8:17	

Analytical Quality Control Results Report

Batch: 13051401	Oil and Grease - water
WS-003	LIMS ID: 2013-1609

Oil and Grease - water DUP

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Oil and Grease	<2.5 mg/L	2.5	2.5		
Oil and Grease (RPD)	36.4 %				0 - 20
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	5/14/2013 08:00				

WS-003	LIMS ID: 2013-1609
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Oil and Grease - water MS

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Oil and Grease (% Recovery)	90.3 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	5/14/2013 08:00				

WS-003	LIMS ID: 2013-1609
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Oil and Grease - water MSD

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Oil and Grease (% Recovery)	89.8 %			70 - 130	
Oil and Grease (RPD)	0.5 %				0 - 20
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	5/14/2013 08:00				

MB	LIMS ID: 13051401-MB-01
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Oil and Grease - water MB

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Oil and Grease	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	5/13/2013 14:40				

LCS	LIMS ID: 13051401-LCS-01
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Oil and Grease - water LCS

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Oil and Grease (% Recovery)	105 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	5/13/2013 14:40				

MB	LIMS ID: 13051401-MB-02
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Oil and Grease - water MB

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Oil and Grease	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	5/14/2013 08:00				

LCS	LIMS ID: 13051401-LCS-02
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Oil and Grease - water LCS

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Oil and Grease (% Recovery)	103 %			70 - 130	
Dilution Factor	1				
Analyzed By	Chad Carrington				
Analysis Date/Time	5/13/2013 14:40				

Analytical Quality Control Results Report

Batch: 13052401	ICP Metals - water (Diss.)
WS-003	LIMS ID: 2013-1609

ICP Metals - water (Dissolved) DUP

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum	37.5 ug/L	20	20		
Aluminum (RPD)	31.6 %				0 - 20
Antimony (RPD)	1.9 %				0 - 20
Antimony	<5 ug/L	1	5		
Arsenic	<0.5 ug/L	0.2	0.5		
Arsenic (RPD)	2.8 %				0 - 20
Barium (RPD)	1.2 %				0 - 20
Barium	14.7 ug/L	0.4	2		
Beryllium	<0.1 ug/L	0.04	0.1		
Beryllium (RPD)	2.0 %				0 - 20
Boron (RPD)	0.1 %				0 - 20
Boron	15.9 ug/L	2	5		
Cadmium	<0.1 ug/L	0.05	0.1		
Cadmium (RPD)	21.6 %				0 - 20
Calcium (RPD)	1.0 %				0 - 20
Calcium	3.38 mg/L	0.03	0.03		
Chromium	<0.5 ug/L	0.05	0.5		
Chromium (RPD)	0 %				0 - 20
Cobalt (RPD)	0 %				0 - 20
Cobalt	<0.5 ug/L	0.05	0.5		
Copper	<0.5 ug/L	0.2	0.5		
Copper (RPD)	0 %				0 - 20
Iron (RPD)	1.3 %				0 - 20
Iron	109 ug/L	5	20		
Lead	<0.3 ug/L	0.02	0.3		
Lead (RPD)	6.0 %				0 - 20
Magnesium (RPD)	1.6 %				0 - 20
Magnesium	1.67 mg/L	0.01	0.02		
Manganese	3.7 ug/L	0.07	0.3		
Manganese (RPD)	5.2 %				0 - 20
Nickel (RPD)	76 %				0 - 20
Nickel	<0.5 ug/L	0.15	0.5		
Potassium	1.88 mg/L	0.01	0.02		

Potassium (RPD)	0.3 %			0 - 20
Selenium (RPD)	6.3 %			0 - 20
Selenium	<1 ug/L	0.2	1	
Silicon Dioxide	1.30 mg/L	0.01	0.05	
Silicon Dioxide (RPD)	5.5 %			0 - 20
Silver	<0.5 ug/L	0.02	0.5	
Silver (RPD)	0 %			0 - 20
Sodium	4.95 mg/L	0.01	0.02	
Sodium (RPD)	1.6 %			0 - 20
Thallium (RPD)	0.3 %			0 - 20
Thallium	<0.5 ug/L	0	0.5	
Vanadium (RPD)	27.1 %			0 - 20
Vanadium	<0.5 ug/L	0.3	0.5	
Zinc	6.84 ug/L	0.3	1	
Zinc (RPD)	91.3 %			0 - 20
Hardness	15 mg/L	1	1	
Hardness (RPD)	0 %			0 - 20
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 23 2013 4:33PM			

WS-003	LIMS ID: 2013-1609
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ICP Metals - water (Dissolved) MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	99.8 %			70 - 130	
Antimony (% Recovery)	97.9 %			70 - 130	
Arsenic (% Recovery)	106 %			70 - 130	
Barium (% Recovery)	94.7 %			70 - 130	
Beryllium (% Recovery)	101 %			70 - 130	
Boron (% Recovery)	106 %			70 - 130	
Cadmium (% Recovery)	101 %			70 - 130	
Calcium (% Recovery)	94.2 %			70 - 130	
Chromium (% Recovery)	99.8 %			70 - 130	
Cobalt (% Recovery)	100 %			70 - 130	
Copper (% Recovery)	103 %			70 - 130	
Iron (% Recovery)	102 %			70 - 130	
Lead (% Recovery)	95.5 %			70 - 130	
Magnesium (% Recovery)	98.8 %			70 - 130	
Manganese (% Recovery)	98 %			70 - 130	

Nickel (% Recovery)	100 %	70 - 130
Potassium (% Recovery)	95.2 %	70 - 130
Selenium (% Recovery)	113 %	70 - 130
Silver (% Recovery)	91.7 %	70 - 130
Sodium (% Recovery)	99.8 %	70 - 130
Thallium (% Recovery)	95.0 %	70 - 130
Vanadium (% Recovery)	100 %	70 - 130
Zinc (% Recovery)	107 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	May 23 2013 4:39PM	

WS-003	LIMS ID: 2013-1609
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ICP Metals - water (Dissolved) MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	99.4 %			70 - 130	
Aluminum (RPD)	0.3 %				0 - 20
Antimony (% Recovery)	98.9 %			70 - 130	
Antimony (RPD)	1.1 %				0 - 20
Arsenic (% Recovery)	106 %			70 - 130	
Arsenic (RPD)	0.2 %				0 - 20
Barium (% Recovery)	95.9 %			70 - 130	
Barium (RPD)	1.1 %				0 - 20
Beryllium (% Recovery)	101 %			70 - 130	
Beryllium (RPD)	0.2 %				0 - 20
Boron (% Recovery)	106 %			70 - 130	
Boron (RPD)	0.4 %				0 - 20
Cadmium (% Recovery)	101 %			70 - 130	
Cadmium (RPD)	0.4 %				0 - 20
Calcium (% Recovery)	93.2 %			70 - 130	
Calcium (RPD)	0.8 %				0 - 20
Chromium (% Recovery)	101 %			70 - 130	
Chromium (RPD)	1.5 %				0 - 20
Cobalt (% Recovery)	101 %			70 - 130	
Cobalt (RPD)	0.9 %				0 - 20
Copper (% Recovery)	103 %			70 - 130	
Copper (RPD)	0.6 %				0 - 20
Iron (% Recovery)	103 %			70 - 130	
Iron (RPD)	0.7 %				0 - 20

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

Lead (% Recovery)	95.8 %	70 - 130	
Lead (RPD)	0.3 %		0 - 20
Magnesium (% Recovery)	98.9 %	70 - 130	
Magnesium (RPD)	0.1 %		0 - 20
Manganese (% Recovery)	100 %	70 - 130	
Manganese (RPD)	1.6 %		0 - 20
Nickel (% Recovery)	100 %	70 - 130	
Nickel (RPD)	0.8 %		0 - 20
Potassium (% Recovery)	93.7 %	70 - 130	
Potassium (RPD)	1.3 %		0 - 20
Selenium (% Recovery)	112 %	70 - 130	
Selenium (RPD)	0.6 %		0 - 20
Silver (% Recovery)	91.5 %	70 - 130	
Silver (RPD)	0.2 %		0 - 20
Sodium (% Recovery)	99.8 %	70 - 130	
Sodium (RPD)	0 %		0 - 20
Thallium (% Recovery)	95.3 %	70 - 130	
Thallium (RPD)	0.3 %		0 - 20
Vanadium (% Recovery)	102 %	70 - 130	
Vanadium (RPD)	1.7 %		0 - 20
Zinc (% Recovery)	107 %	70 - 130	
Zinc (RPD)	0.2 %		0 - 20
Dilution Factor	1		
Analyzed By	Robert Graddy		
Analysis Date/Time	May 23 2013 4:45PM		

Analytical Quality Control Results Report

Batch: 13052402	ICP Metals - water (total)
WS-003	LIMS ID: 2013-1609

ICP Metals - water (Total) DUP

Run: 1

<i>Parameter</i>	<i>Result</i>	<i>DL</i>	<i>RL</i>	<i>Accuracy Control</i>	<i>Precision Control</i>
Aluminum	312 ug/L	20	20		
Aluminum (RPD)	7.1 %				0 - 20
Antimony (RPD)	0 %				0 - 20
Antimony	<10 ug/L	5	10		
Arsenic	<1 ug/L	0.5	1		
Arsenic (RPD)	3.6 %				0 - 20
Barium (RPD)	2.2 %				0 - 20
Barium	17.6 ug/L	2	10		
Beryllium	<0.5 ug/L	0.1	0.5		
Beryllium (RPD)	0 %				0 - 20
Boron (RPD)	2.5 %				0 - 20
Boron	<25 ug/L	5	25		
Cadmium	<1 ug/L	0.3	1		
Cadmium (RPD)	0 %				0 - 20
Calcium (RPD)	0.4 %				0 - 20
Calcium	3.43 mg/L	0.04	0.04		
Chromium	<1 ug/L	0.3	1		
Chromium (RPD)	2.1 %				0 - 20
Cobalt (RPD)	0 %				0 - 20
Cobalt	<1 ug/L	0.5	1		
Copper	<1 ug/L	0.5	1		
Copper (RPD)	1.4 %				0 - 20
Iron (RPD)	2.5 %				0 - 20
Iron	553 ug/L	10	20		
Lead	<1 ug/L	0.1	1		
Lead (RPD)	0 %				0 - 20
Magnesium (RPD)	3.5 %				0 - 20
Magnesium	1.70 mg/L	0.1	0.1		
Manganese	260 ug/L	0.2	1		
Manganese (RPD)	1.5 %				0 - 20
Nickel (RPD)	0.8 %				0 - 20
Nickel	<2.5 ug/L	0.5	2.5		
Potassium	1.94 mg/L	0.05	1		

Potassium (RPD)	0.9 %			0 - 20
Selenium (RPD)	4.0 %			0 - 20
Selenium	<2 ug/L	0.5	2	
Silver	<5 ug/L	1	5	
Silver (RPD)	0 %			0 - 20
Sodium	5.04 mg/L	0.02	0.04	
Sodium (RPD)	3.1 %			0 - 20
Thallium (RPD)	0 %			0 - 20
Thallium	<2.5 ug/L	0.05	2.5	
Vanadium (RPD)	1.3 %			0 - 20
Vanadium	<2.5 ug/L	1	2.5	
Zinc	3.77 ug/L	2	3	
Zinc (RPD)	39.4 %			0 - 20
Dilution Factor	1			
Analyzed By	Robert Graddy			
Analysis Date/Time	May 23 2013 11:51PM			

WS-003	LIMS ID: 2013-1609
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ICP Metals - water (Total) MS

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	121 %			70 - 130	
Antimony (% Recovery)	98.6 %			70 - 130	
Arsenic (% Recovery)	104 %			70 - 130	
Barium (% Recovery)	101 %			70 - 130	
Beryllium (% Recovery)	102 %			70 - 130	
Boron (% Recovery)	102 %			70 - 130	
Cadmium (% Recovery)	104 %			70 - 130	
Calcium (% Recovery)	99.6 %			70 - 130	
Chromium (% Recovery)	100 %			70 - 130	
Cobalt (% Recovery)	102 %			70 - 130	
Copper (% Recovery)	103 %			70 - 130	
Iron (% Recovery)	102 %			70 - 130	
Lead (% Recovery)	101 %			70 - 130	
Magnesium (% Recovery)	103 %			70 - 130	
Manganese (% Recovery)	78 %			70 - 130	
Nickel (% Recovery)	100 %			70 - 130	
Potassium (% Recovery)	99.3 %			70 - 130	
Selenium (% Recovery)	104 %			70 - 130	
Silver (% Recovery)	97.6 %			70 - 130	

Sodium (% Recovery)	102 %	70 - 130
Thallium (% Recovery)	102 %	70 - 130
Vanadium (% Recovery)	101 %	70 - 130
Zinc (% Recovery)	104 %	70 - 130
Dilution Factor	1	
Analyzed By	Robert Graddy	
Analysis Date/Time	May 23 2013 11:57PM	

WS-003 **LIMS ID: 2013-1609**

ICP Metals - water (Total) MSD

Run: 1

Parameter	Result	DL	RL	Accuracy Control	Precision Control
Aluminum (% Recovery)	121 %			70 - 130	
Aluminum (RPD)	0 %				0 - 20
Antimony (% Recovery)	98.6 %			70 - 130	
Antimony (RPD)	0 %				0 - 20
Arsenic (% Recovery)	106 %			70 - 130	
Arsenic (RPD)	1.1 %				0 - 20
Barium (% Recovery)	101 %			70 - 130	
Barium (RPD)	0.1 %				0 - 20
Beryllium (% Recovery)	102 %			70 - 130	
Beryllium (RPD)	0.1 %				0 - 20
Boron (% Recovery)	103 %			70 - 130	
Boron (RPD)	0.9 %				0 - 20
Cadmium (% Recovery)	104 %			70 - 130	
Cadmium (RPD)	0.1 %				0 - 20
Calcium (% Recovery)	98.1 %			70 - 130	
Calcium (RPD)	1.1 %				0 - 20
Chromium (% Recovery)	103 %			70 - 130	
Chromium (RPD)	2.0 %				0 - 20
Cobalt (% Recovery)	104 %			70 - 130	
Cobalt (RPD)	1.8 %				0 - 20
Copper (% Recovery)	104 %			70 - 130	
Copper (RPD)	1.8 %				0 - 20
Iron (% Recovery)	110 %			70 - 130	
Iron (RPD)	2.0 %				0 - 20
Lead (% Recovery)	101 %			70 - 130	
Lead (RPD)	0.4 %				0 - 20
Magnesium (% Recovery)	104 %			70 - 130	
Magnesium (RPD)	1.0 %				0 - 20

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Manganese (% Recovery)	98 %	70 - 130	
Manganese (RPD)	2.1 %		0 - 20
Nickel (% Recovery)	100 %	70 - 130	
Nickel (RPD)	1.8 %		0 - 20
Potassium (% Recovery)	97.2 %	70 - 130	
Potassium (RPD)	1.8 %		0 - 20
Selenium (% Recovery)	104 %	70 - 130	
Selenium (RPD)	0.3 %		0 - 20
Silver (% Recovery)	97.5 %	70 - 130	
Silver (RPD)	0.2 %		0 - 20
Sodium (% Recovery)	104 %	70 - 130	
Sodium (RPD)	1.0 %		0 - 20
Thallium (% Recovery)	102 %	70 - 130	
Thallium (RPD)	0.1 %		0 - 20
Vanadium (% Recovery)	103 %	70 - 130	
Vanadium (RPD)	2.2 %		0 - 20
Zinc (% Recovery)	106 %	70 - 130	
Zinc (RPD)	1.0 %		0 - 20
Dilution Factor	1		
Analysis Date/Time	May 24 2013 12:04AM		
Analyzed By	Robert Graddy		