

Analytical and Quality Control Report

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Report Date: January 5, 2007

Work Order: 6120821



Project Name: HELSTF Groundwater Samples
Project Number: 7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
111154	HLSF-0085-HMW-062-1206	water	2006-12-06	11:10	2006-12-07
111155	HLSF-0085-TB-772-1206	water	2006-12-06	11:10	2006-12-07

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 51 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Ag, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	32720	Date Analyzed:	2006-12-12	Analyzed By:	RR
Prep Batch:	28394	Sample Preparation:	2006-12-08	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00200	mg/L	1	0.00200

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	32745	Date Analyzed:	2006-12-12	Analyzed By:	RR
Prep Batch:	28447	Sample Preparation:	2006-12-11	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00200	mg/L	1	0.00200

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	33042	Date Analyzed:	2006-12-12	Analyzed By:	JG
Prep Batch:	28719	Sample Preparation:	2006-12-12	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		208	mg/L as CaCo3	1	4.00
Total Alkalinity		208	mg/L as CaCo3	1	4.00

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	32702	Date Analyzed:	2006-12-11	Analyzed By:	SM
Prep Batch:	28456	Sample Preparation:	2006-12-11	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Ammonia-N		<1.00	mg/L	1	1.00

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Bromide (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	32998	Date Analyzed:	2006-12-07	Analyzed By:	JR
Prep Batch:	28687	Sample Preparation:	2006-12-07	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		0.950	mg/L	1	0.200

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Cd, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	32720	Date Analyzed:	2006-12-12	Analyzed By:	RR
Prep Batch:	28394	Sample Preparation:	2006-12-08	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Cadmium		0.00100	mg/L	1	0.00100

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	32745	Date Analyzed:	2006-12-12	Analyzed By:	RR
Prep Batch:	28447	Sample Preparation:	2006-12-11	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Cadmium		0.00100	mg/L	1	0.00100

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	32699	Date Analyzed:	2006-12-08	Analyzed By:	DR
Prep Batch:	28448	Sample Preparation:	2006-12-08	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		13700	μ MHOS/cm	1	0.00

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Cr, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	32720	Date Analyzed:	2006-12-12	Analyzed By:	RR
Prep Batch:	28394	Sample Preparation:	2006-12-08	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Chromium		0.0240	mg/L	1	0.00500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Cr, Total	Analytical Method: S 6010B	Prep Method: S 3010A
QC Batch: 32745	Date Analyzed: 2006-12-12	Analyzed By: RR
Prep Batch: 28447	Sample Preparation: 2006-12-11	Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Chromium		0.0240	mg/L	1	0.00500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Cu, Dissolved	Analytical Method: S 6010B	Prep Method: S 3005A
QC Batch: 32720	Date Analyzed: 2006-12-12	Analyzed By: RR
Prep Batch: 28394	Sample Preparation: 2006-12-08	Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Copper		<0.0125	mg/L	1	0.0125

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Cu, Total	Analytical Method: S 6010B	Prep Method: S 3010A
QC Batch: 32745	Date Analyzed: 2006-12-12	Analyzed By: RR
Prep Batch: 28447	Sample Preparation: 2006-12-11	Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Copper		<0.00500	mg/L	1	0.00500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Ion Chromatography	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 32998	Date Analyzed: 2006-12-07	Analyzed By: JR
Prep Batch: 28687	Sample Preparation: 2006-12-07	Prepared By: JR
QC Batch: 33182	Date Analyzed: 2006-12-27	Analyzed By: WB
Prep Batch: 28842	Sample Preparation: 2006-12-27	Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1790	mg/L	50	0.500
Fluoride		1.92	mg/L	5	0.200
Sulfate		6530	mg/L	500	0.500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Na, Dissolved	Analytical Method: S 6010B	Prep Method: S 3005A
QC Batch: 32769	Date Analyzed: 2006-12-13	Analyzed By: RR
Prep Batch: 28394	Sample Preparation: 2006-12-08	Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Sodium		5300	mg/L	10	1.00

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Na, Total Analytical Method: S 6010B Prep Method: S 3010A
 QC Batch: 32825 Date Analyzed: 2006-12-14 Analyzed By: RR
 Prep Batch: 28447 Sample Preparation: 2006-12-11 Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Sodium		3130	mg/L	10	0.500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: NO2 (IC) Analytical Method: E 300.0 Prep Method: N/A
 QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR
 Prep Batch: 28687 Sample Preparation: 2006-12-07 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrite-N		<0.100	mg/L	1	0.100

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A
 QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR
 Prep Batch: 28687 Sample Preparation: 2006-12-07 Prepared By: JR

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		32.7	mg/L	10	0.100

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: P, Total Analytical Method: S 6010B Prep Method: S 3010A
 QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28447 Sample Preparation: 2006-12-11 Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Phosphorous		<0.0500	mg/L	1	0.0500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Pb, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	32720	Date Analyzed:	2006-12-12	Analyzed By:	RR
Prep Batch:	28394	Sample Preparation:	2006-12-08	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Lead		<0.00500	mg/L	1	0.00500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	32745	Date Analyzed:	2006-12-12	Analyzed By:	RR
Prep Batch:	28447	Sample Preparation:	2006-12-11	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Lead		<0.00500	mg/L	1	0.00500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	32901	Date Analyzed:	2006-12-07	Analyzed By:	JG
Prep Batch:	28609	Sample Preparation:	2006-12-07	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.36	s.u.	1	0.00

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	Semivolatiles WTS	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	32955	Date Analyzed:	2006-12-14	Analyzed By:	DS
Prep Batch:	28649	Sample Preparation:	2006-12-12	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	1	0.00500
n-Nitrosodimethylamine		<0.00500	mg/L	1	0.00500
2-Picoline		<0.00500	mg/L	1	0.00500
Methyl methanesulfonate		<0.00500	mg/L	1	0.00500
Ethyl methanesulfonate		<0.00500	mg/L	1	0.00500
Phenol		<0.00500	mg/L	1	0.00500
Aniline		<0.00500	mg/L	1	0.00500
bis(2-chloroethyl)ether		<0.00500	mg/L	1	0.00500
2-Chlorophenol		<0.00500	mg/L	1	0.00500
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	1	0.00500
1,4-Dichlorobenzene (para)		<0.00500	mg/L	1	0.00500
Benzyl alcohol		<0.00500	mg/L	1	0.00500

continued...

sample 111154 continued ...

Parameter	Flag	RL	Units	Dilution	RL
		Result			
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	1	0.00500
2-Methylphenol		<0.00500	mg/L	1	0.00500
bis(2-chloroisopropyl)ether		<0.00500	mg/L	1	0.00500
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	1	0.00500
Acetophenone		<0.00500	mg/L	1	0.00500
n-Nitrosodi-n-propylamine		<0.00500	mg/L	1	0.00500
Hexachloroethane		<0.00500	mg/L	1	0.00500
Nitrobenzene		<0.00500	mg/L	1	0.00500
n-Nitrosopiperidine		<0.00500	mg/L	1	0.00500
Isophorone		<0.00500	mg/L	1	0.00500
2-Nitrophenol		<0.00500	mg/L	1	0.00500
2,4-Dimethylphenol		<0.00500	mg/L	1	0.00500
bis(2-chloroethoxy)methane		<0.00500	mg/L	1	0.00500
Benzoic acid		<0.00500	mg/L	1	0.00500
2,4-Dichlorophenol		<0.00500	mg/L	1	0.00500
1,2,4-Trichlorobenzene		<0.00500	mg/L	1	0.00500
a,a-Dimethylphenethylamine		<0.00500	mg/L	1	0.00500
Naphthalene		<0.00500	mg/L	1	0.00500
4-Chloroaniline		<0.00500	mg/L	1	0.00500
2,6-Dichlorophenol		<0.0100	mg/L	1	0.0100
Hexachlorobutadiene		<0.00500	mg/L	1	0.00500
n-Nitroso-di-n-butylamine		<0.00500	mg/L	1	0.00500
4-Chloro-3-methylphenol		<0.00500	mg/L	1	0.00500
1-Methylnaphthalene		<0.00500	mg/L	1	0.00500
2-Methylnaphthalene		<0.00500	mg/L	1	0.00500
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	1	0.00500
Hexachlorocyclopentadiene		<0.00500	mg/L	1	0.00500
2,4,6-Trichlorophenol		<0.0100	mg/L	1	0.0100
2,4,5-Trichlorophenol		<0.00500	mg/L	1	0.00500
2-Chloronaphthalene		<0.00500	mg/L	1	0.00500
1-Chloronaphthalene		<0.00500	mg/L	1	0.00500
2-Nitroaniline		<0.00500	mg/L	1	0.00500
Dimethylphthalate		<0.00500	mg/L	1	0.00500
Acenaphthylene		<0.00500	mg/L	1	0.00500
2,6-Dinitrotoluene		<0.00500	mg/L	1	0.00500
3-Nitroaniline		<0.00500	mg/L	1	0.00500
Acenaphthene		<0.00500	mg/L	1	0.00500
2,4-Dinitrophenol		<0.00500	mg/L	1	0.00500
Dibenzofuran		<0.00500	mg/L	1	0.00500
Pentachlorobenzene		<0.00500	mg/L	1	0.00500
4-Nitrophenol		<0.0250	mg/L	1	0.0250
1-Naphthylamine		<0.00500	mg/L	1	0.00500
2,4-Dinitrotoluene		<0.00500	mg/L	1	0.00500
2-Naphthylamine		<0.00500	mg/L	1	0.00500
2,3,4,6-Tetrachlorophenol		<0.0100	mg/L	1	0.0100
Fluorene		<0.00500	mg/L	1	0.00500
Diethylphthalate		<0.00500	mg/L	1	0.00500
4-Chlorophenyl-phenylether		<0.00500	mg/L	1	0.00500
4-Nitroaniline		<0.00500	mg/L	1	0.00500

continued ...

sample 111154 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	1	0.00500
Diphenylamine		<0.00500	mg/L	1	0.00500
Diphenylhydrazine		<0.00500	mg/L	1	0.00500
4-Bromophenyl-phenylether		<0.00500	mg/L	1	0.00500
Phenacetin		<0.00500	mg/L	1	0.00500
Hexachlorobenzene		<0.00500	mg/L	1	0.00500
4-Aminobiphenyl		<0.00500	mg/L	1	0.00500
Pentachlorophenol		<0.0100	mg/L	1	0.0100
Pentachloronitrobenzene		<0.00500	mg/L	1	0.00500
Pronamide		<0.00500	mg/L	1	0.00500
Phenanthrene		<0.00500	mg/L	1	0.00500
Anthracene		<0.00500	mg/L	1	0.00500
Di-n-butylphthalate		<0.00500	mg/L	1	0.00500
Fluoranthene		<0.00500	mg/L	1	0.00500
Benzidine		<0.0250	mg/L	1	0.0250
Pyrene		<0.00500	mg/L	1	0.00500
p-Dimethylaminoazobenzene		<0.00500	mg/L	1	0.00500
Butylbenzylphthalate		<0.00500	mg/L	1	0.00500
Benzo(a)anthracene		<0.00500	mg/L	1	0.00500
3,3-Dichlorobenzidine		<0.00500	mg/L	1	0.00500
Chrysene		<0.00500	mg/L	1	0.00500
bis(2-ethylhexyl)phthalate		<0.00500	mg/L	1	0.00500
Di-n-octylphthalate		<0.00500	mg/L	1	0.00500
Benzo(b)fluoranthene		<0.00500	mg/L	1	0.00500
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	1	0.00500
Benzo(k)fluoranthene		<0.00500	mg/L	1	0.00500
Benzo(a)pyrene		<0.00500	mg/L	1	0.00500
3-Methylcholanthrene		<0.00500	mg/L	1	0.00500
Dibenzo(a,j)acridine		<0.00500	mg/L	1	0.00500
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	1	0.00500
Dibenzo(a,h)anthracene		<0.00500	mg/L	1	0.00500
Benzo(g,h,i)perylene		<0.00500	mg/L	1	0.00500
2-Butoxy Ethanol		<0.00500	mg/L	1	0.00500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol	1	0.00410	mg/L	1	0.0800	5	10 - 75.1
Phenol-d5	2	0.00680	mg/L	1	0.0800	8	10 - 56.2
Nitrobenzene-d5		0.0542	mg/L	1	0.0800	68	18.1 - 108
2-Fluorobiphenyl		0.0583	mg/L	1	0.0800	73	20 - 112
2,4,6-Tribromophenol	3	0.00560	mg/L	1	0.0800	7	10 - 135
Terphenyl-d14		0.0788	mg/L	1	0.0800	98	28.2 - 134

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	32715	Date Analyzed:	2006-12-07	Analyzed By:	JG
Prep Batch:	28464	Sample Preparation:	2006-12-07	Prepared By:	JR

¹Matrix interference retained surrogate during solvent phase of extraction. Accompanying quality control recoveries within limits shows extraction was performed properly. •

²Matrix interference retained surrogate during solvent phase of extraction. Accompanying quality control recoveries within limits shows extraction was performed properly. •

³Matrix interference retained surrogate during solvent phase of extraction. Accompanying quality control recoveries within limits shows extraction was performed properly. •

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Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		12700	mg/L	1	5.00

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 32665 Date Analyzed: 2006-12-09 Analyzed By: SP
 Prep Batch: 28422 Sample Preparation: 2006-12-09 Prepared By: SP

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.2	mg/L	1	15.0	88	57 - 132.3

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
 QC Batch: 32657 Date Analyzed: 2006-12-08 Analyzed By: KB
 Prep Batch: 28416 Sample Preparation: 2006-12-08 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<0.100	mg/L	1	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.102	mg/L	1	0.100	102	58.5 - 135
4-Bromofluorobenzene (4-BFB)		0.0932	mg/L	1	0.100	93	66.8 - 115

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Volatiles WTS Analytical Method: S 8260B Prep Method: S 3510C
 QC Batch: 32812 Date Analyzed: 2006-12-09 Analyzed By: JG
 Prep Batch: 28544 Sample Preparation: 2006-12-09 Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00

continued...

sample 111154 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		3.78	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		<1.00	µg/L	1	1.00
Bromobenzene		<1.00	µg/L	1	1.00
n-Propylbenzene		<1.00	µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1.00
tert-Butylbenzene		<1.00	µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1.00

continued...

sample 111154 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
sec-Butylbenzene		<1.00	µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1.00
p-Isopropyltoluene		<1.00	µg/L	1	1.00
4-Chlorotoluene		<1.00	µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1.00
n-Butylbenzene		<1.00	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00
Isopropyl Alcohol		<5.00	µg/L	1	5.00
Tert-butyl Alcohol		<5.00	µg/L	1	5.00
1,4-Dioxane		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		55.4	µg/L	1	50.0	111	82.4 - 115
Toluene-d8		52.0	µg/L	1	50.0	104	89.7 - 108
4-Bromofluorobenzene (4-BFB)		44.8	µg/L	1	50.0	90	84.6 - 114

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Zn, Dissolved	Analytical Method: S 6010B	Prep Method: S 3005A
QC Batch: 32720	Date Analyzed: 2006-12-12	Analyzed By: RR
Prep Batch: 28394	Sample Preparation: 2006-12-08	Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Zinc		<0.00500	mg/L	1	0.00500

Sample: 111154 - HLSF-0085-HMW-062-1206

Analysis: Zn, Total	Analytical Method: S 6010B	Prep Method: S 3010A
QC Batch: 32745	Date Analyzed: 2006-12-12	Analyzed By: RR
Prep Batch: 28447	Sample Preparation: 2006-12-11	Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Zinc		<0.00500	mg/L	1	0.00500

Sample: 111155 - HLSF-0085-TB-772-1206

Analysis: Volatiles WTS	Analytical Method: S 8260B	Prep Method: S 3510C
QC Batch: 32812	Date Analyzed: 2006-12-09	Analyzed By: JG
Prep Batch: 28544	Sample Preparation: 2006-12-09	Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00

continued ...

sample 111155 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
Isopropylbenzene		<1.00	µg/L	1	1.00
Bromobenzene		<1.00	µg/L	1	1.00
n-Propylbenzene		<1.00	µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1.00
tert-Butylbenzene		<1.00	µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1.00
sec-Butylbenzene		<1.00	µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1.00
p-Isopropyltoluene		<1.00	µg/L	1	1.00
4-Chlorotoluene		<1.00	µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1.00
n-Butylbenzene		<1.00	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00
Isopropyl Alcohol		51.3	µg/L	1	5.00
Tert-butyl Alcohol		<5.00	µg/L	1	5.00
1,4-Dioxane		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		55.5	µg/L	1	50.0	111	82.4 - 115
Toluene-d8		53.6	µg/L	1	50.0	107	89.7 - 108
4-Bromofluorobenzene (4-BFB)		43.5	µg/L	1	50.0	87	84.6 - 114

Method Blank (1) QC Batch: 32657

QC Batch: 32657 Date Analyzed: 2006-12-08 Analyzed By: KB
Prep Batch: 28416 QC Preparation: 2006-12-08 Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
GRO		<0.0272	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0929	mg/L	1	0.100	93	77.2 - 124
4-Bromofluorobenzene (4-BFB)		0.0834	mg/L	1	0.100	83	58 - 111

Method Blank (1) QC Batch: 32665

QC Batch: 32665 Date Analyzed: 2006-12-09 Analyzed By: SP
Prep Batch: 28422 QC Preparation: 2006-12-09 Prepared By: SP

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Parameter	Flag	MDL Result	Units	RL
DRO		<1.19	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		12.7	mg/L	1	15.0	85	57 - 132.3

Method Blank (1) QC Batch: 32699QC Batch: 32699
Prep Batch: 28448Date Analyzed: 2006-12-08
QC Preparation: 2006-12-08Analyzed By: DR
Prepared By: DR

Parameter	Flag	MDL Result	Units	RL
Specific Conductance		0.00	μ MHOS/cm	

Method Blank (1) QC Batch: 32702QC Batch: 32702
Prep Batch: 28456Date Analyzed: 2006-12-11
QC Preparation: 2006-12-11Analyzed By: SM
Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Ammonia-N		<0.820	mg/L	1

Method Blank (1) QC Batch: 32715QC Batch: 32715
Prep Batch: 28464Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07Analyzed By: JG
Prepared By: JG

Parameter	Flag	MDL Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 32720QC Batch: 32720
Prep Batch: 28394Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Silver		<0.000199	mg/L	0.002

Method Blank (1) QC Batch: 32720QC Batch: 32720
Prep Batch: 28394Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Cadmium		<0.000577	mg/L	0.001

Method Blank (1) QC Batch: 32720

QC Batch: 32720 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28394 QC Preparation: 2006-12-08 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Chromium		<0.00357	mg/L	0.005

Method Blank (1) QC Batch: 32720

QC Batch: 32720 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28394 QC Preparation: 2006-12-08 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Copper		<0.00127	mg/L	0.0125

Method Blank (1) QC Batch: 32720

QC Batch: 32720 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28394 QC Preparation: 2006-12-08 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Lead		<0.00398	mg/L	0.005

Method Blank (1) QC Batch: 32720

QC Batch: 32720 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28394 QC Preparation: 2006-12-08 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Zinc		<0.00300	mg/L	0.005

Method Blank (1) QC Batch: 32745

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28447 QC Preparation: 2006-12-11 Prepared By: TS

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Parameter	Flag	MDL Result	Units	RL
Total Silver		<0.000274	mg/L	0.002

Method Blank (1) QC Batch: 32745

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28447 QC Preparation: 2006-12-11 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Total Cadmium		<0.000268	mg/L	0.001

Method Blank (1) QC Batch: 32745

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28447 QC Preparation: 2006-12-11 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Total Chromium		<0.00357	mg/L	0.005

Method Blank (1) QC Batch: 32745

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28447 QC Preparation: 2006-12-11 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Total Copper		<0.00127	mg/L	0.005

Method Blank (1) QC Batch: 32745

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28447 QC Preparation: 2006-12-11 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Total Phosphorous		<0.0229	mg/L	0.05

Method Blank (1) QC Batch: 32745

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR
 Prep Batch: 28447 QC Preparation: 2006-12-11 Prepared By: TS

method blank continued ...

Parameter	Flag	MDL	Units	RL
		Result		
cis-1,2-Dichloroethene		<0.101	µg/L	1
2,2-Dichloropropane		<0.0665	µg/L	1
1,2-Dichloroethane (EDC)		<0.0557	µg/L	1
Chloroform		<0.0475	µg/L	1
1,1,1-Trichloroethane		<0.0846	µg/L	1
1,1-Dichloropropene		<0.0423	µg/L	1
Benzene		<0.0495	µg/L	1
Carbon Tetrachloride		<0.121	µg/L	1
1,2-Dichloropropane		<0.0933	µg/L	1
Trichloroethene (TCE)		<0.0495	µg/L	1
Dibromomethane (methylene bromide)		<0.0640	µg/L	1
Bromodichloromethane		<0.0651	µg/L	1
2-Chloroethyl vinyl ether		<0.0905	µg/L	5
cis-1,3-Dichloropropene		<0.0640	µg/L	1
trans-1,3-Dichloropropene		<0.0504	µg/L	1
Toluene		0.370	µg/L	1
1,1,2-Trichloroethane		<0.106	µg/L	1
1,3-Dichloropropane		<0.0625	µg/L	1
Dibromochloromethane		<0.0791	µg/L	1
1,2-Dibromoethane (EDB)		<0.0460	µg/L	1
Tetrachloroethene (PCE)		<0.0696	µg/L	1
Chlorobenzene		<0.0217	µg/L	1
1,1,1,2-Tetrachloroethane		<0.125	µg/L	1
Ethylbenzene		<0.0566	µg/L	1
m,p-Xylene		<0.0363	µg/L	1
Bromoform		<0.0859	µg/L	1
Styrene		<0.0394	µg/L	1
o-Xylene		<0.0505	µg/L	1
1,1,2,2-Tetrachloroethane		<0.0672	µg/L	1
2-Chlorotoluene		<0.0283	µg/L	1
1,2,3-Trichloropropane		<0.0679	µg/L	1
Isopropylbenzene		<0.0406	µg/L	1
Bromobenzene		<0.103	µg/L	1
n-Propylbenzene		<0.0423	µg/L	1
1,3,5-Trimethylbenzene		<0.0557	µg/L	1
tert-Butylbenzene		<0.0770	µg/L	1
1,2,4-Trimethylbenzene		<0.0336	µg/L	1
1,4-Dichlorobenzene (para)		<0.0672	µg/L	1
sec-Butylbenzene		<0.0439	µg/L	1
1,3-Dichlorobenzene (meta)		<0.0672	µg/L	1
p-Isopropyltoluene		<0.0513	µg/L	1
4-Chlorotoluene		<0.0460	µg/L	1
1,2-Dichlorobenzene (ortho)		<0.0629	µg/L	1
n-Butylbenzene		<0.0400	µg/L	1
1,2-Dibromo-3-chloropropane		<0.538	µg/L	5
1,2,3-Trichlorobenzene		<0.504	µg/L	5
1,2,4-Trichlorobenzene		<0.166	µg/L	5
Naphthalene		<0.417	µg/L	5
Hexachlorobutadiene		<0.176	µg/L	5
Isopropyl Alcohol		<5.00	µg/L	5

continued ...

method blank continued...

Parameter	Flag	MDL Result	Units	RL
Tert-butyl Alcohol		<5.00	µg/L	5
1,4-Dioxane		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane	4	58.4	µg/L	1	50.0	117	82.4 - 115
Toluene-d8		51.5	µg/L	1	50.0	103	89.7 - 108
4-Bromofluorobenzene (4-BFB)		46.8	µg/L	1	50.0	94	84.6 - 114

Method Blank (1) QC Batch: 32825QC Batch: 32825
Prep Batch: 28447Date Analyzed: 2006-12-14
QC Preparation: 2006-12-11Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Total Sodium		<0.0309	mg/L	0.5

Method Blank (1) QC Batch: 32955QC Batch: 32955
Prep Batch: 28649Date Analyzed: 2006-12-14
QC Preparation: 2006-12-12Analyzed By: DS
Prepared By: DS

Parameter	Flag	MDL Result	Units	RL
Pyridine		<0.000235	mg/L	0.005
n-Nitrosodimethylamine		<0.00143	mg/L	0.005
2-Picoline		<0.000437	mg/L	0.005
Methyl methanesulfonate		<0.000662	mg/L	0.005
Ethyl methanesulfonate		<0.000990	mg/L	0.005
Phenol		<0.000591	mg/L	0.005
Aniline		<0.000774	mg/L	0.005
bis(2-chloroethyl)ether		<0.00116	mg/L	0.005
2-Chlorophenol		<0.00279	mg/L	0.005
1,3-Dichlorobenzene (meta)		<0.000784	mg/L	0.005
1,4-Dichlorobenzene (para)		<0.000820	mg/L	0.005
Benzyl alcohol		<0.000607	mg/L	0.005
1,2-Dichlorobenzene (ortho)		<0.000869	mg/L	0.005
2-Methylphenol		<0.000950	mg/L	0.005
bis(2-chloroisopropyl)ether		<0.00151	mg/L	0.005
4-Methylphenol / 3-Methylphenol		<0.000782	mg/L	0.005
n-Nitrosodi-n-propylamine		<0.00117	mg/L	0.005
Hexachloroethane		<0.000738	mg/L	0.005
Acetophenone		<0.00131	mg/L	0.005
Nitrobenzene		<0.00121	mg/L	0.005
n-Nitrosopiperidine		<0.00150	mg/L	0.005

*continued...*⁴8260 Only - One surrogate is out of control limits. The other two surrogates show the sample preparation was performed properly.

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Isophorone		<0.00114	mg/L	0.005
2-Nitrophenol		<0.00430	mg/L	0.005
2,4-Dimethylphenol		<0.00110	mg/L	0.005
bis(2-chloroethoxy)methane		<0.00126	mg/L	0.005
2,4-Dichlorophenol		<0.00372	mg/L	0.005
1,2,4-Trichlorobenzene		<0.00108	mg/L	0.005
Benzoic acid		<0.000478	mg/L	0.005
Naphthalene		<0.00123	mg/L	0.005
a,a-Dimethylphenethylamine		<0.00316	mg/L	0.005
4-Chloroaniline		<0.000998	mg/L	0.005
2,6-Dichlorophenol		<0.00604	mg/L	0.01
Hexachlorobutadiene		<0.00104	mg/L	0.005
n-Nitroso-di-n-butylamine		<0.00159	mg/L	0.005
4-Chloro-3-methylphenol		<0.00102	mg/L	0.005
2-Methylnaphthalene		<0.00119	mg/L	0.005
1-Methylnaphthalene		<0.00118	mg/L	0.005
1,2,4,5-Tetrachlorobenzene		<0.00104	mg/L	0.005
Hexachlorocyclopentadiene		<0.000808	mg/L	0.005
2,4,6-Trichlorophenol		<0.00538	mg/L	0.01
2,4,5-Trichlorophenol		<0.00477	mg/L	0.005
2-Chloronaphthalene		<0.00110	mg/L	0.005
1-Chloronaphthalene		<0.00110	mg/L	0.005
2-Nitroaniline		<0.00103	mg/L	0.005
Dimethylphthalate		<0.000832	mg/L	0.005
Acenaphthylene		<0.00104	mg/L	0.005
2,6-Dinitrotoluene		<0.00103	mg/L	0.005
3-Nitroaniline		<0.000706	mg/L	0.005
Acenaphthene		<0.000990	mg/L	0.005
2,4-Dinitrophenol		<0.00261	mg/L	0.005
Dibenzofuran		<0.000945	mg/L	0.005
Pentachlorobenzene		<0.000907	mg/L	0.005
4-Nitrophenol		<0.00914	mg/L	0.025
2,4-Dinitrotoluene		<0.000729	mg/L	0.005
1-Naphthylamine		<0.000928	mg/L	0.005
2,3,4,6-Tetrachlorophenol		<0.00510	mg/L	0.01
2-Naphthylamine		<0.00100	mg/L	0.005
Fluorene		<0.000919	mg/L	0.005
4-Chlorophenyl-phenylether		<0.000952	mg/L	0.005
Diethylphthalate		<0.000816	mg/L	0.005
4-Nitroaniline		<0.000622	mg/L	0.005
Diphenylhydrazine		<0.000786	mg/L	0.005
4,6-Dinitro-2-methylphenol		<0.00311	mg/L	0.005
Diphenylamine		<0.000860	mg/L	0.005
4-Bromophenyl-phenylether		<0.000871	mg/L	0.005
Phenacetin		<0.000550	mg/L	0.005
Hexachlorobenzene		<0.000920	mg/L	0.005
4-Aminobiphenyl		<0.000934	mg/L	0.005
Pentachlorophenol		<0.00539	mg/L	0.01
Anthracene		<0.000826	mg/L	0.005
Pentachloronitrobenzene		<0.000934	mg/L	0.005

continued ...

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
Pronamide		<0.000716	mg/L	0.005
Phenanthrene		<0.000830	mg/L	0.005
Di-n-butylphthalate		<0.000811	mg/L	0.005
Fluoranthene		<0.000778	mg/L	0.005
Benzidine		<0.0167	mg/L	0.025
Pyrene		<0.00101	mg/L	0.005
p-Dimethylaminoazobenzene		<0.000974	mg/L	0.005
Butylbenzylphthalate		<0.000900	mg/L	0.005
Benzo(a)anthracene		<0.000632	mg/L	0.005
3,3-Dichlorobenzidine		<0.000938	mg/L	0.005
Chrysene		<0.000937	mg/L	0.005
bis(2-ethylhexyl)phthalate		0.00790	mg/L	0.005
Di-n-octylphthalate		<0.000689	mg/L	0.005
Benzo(b)fluoranthene		<0.000492	mg/L	0.005
Benzo(k)fluoranthene		<0.000887	mg/L	0.005
7,12-Dimethylbenz(a)anthracene		<0.000687	mg/L	0.005
Benzo(a)pyrene		<0.000712	mg/L	0.005
3-Methylcholanthrene		<0.000641	mg/L	0.005
Dibenzo(a,j)acridine		<0.000620	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.000655	mg/L	0.005
Dibenzo(a,h)anthracene		<0.000684	mg/L	0.005
Benzo(g,h,i)perylene		<0.000324	mg/L	0.005
2-Butoxy Ethanol		<0.00150	mg/L	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0238	mg/L	1	0.0800	30	15.6 - 49.6
Phenol-d5		0.0171	mg/L	1	0.0800	21	10.2 - 33.6
Nitrobenzene-d5		0.0551	mg/L	1	0.0800	69	46.7 - 112
2-Fluorobiphenyl		0.0591	mg/L	1	0.0800	74	44.4 - 108
2,4,6-Tribromophenol		0.0440	mg/L	1	0.0800	55	24.9 - 147
Terphenyl-d14		0.0718	mg/L	1	0.0800	90	25.6 - 143

Method Blank (1) QC Batch: 32998

QC Batch: 32998

Date Analyzed: 2006-12-07

Analyzed By: JR

Prep Batch: 28687

QC Preparation: 2006-12-07

Prepared By: JR

Parameter	Flag	MDL Result	Units	RL
Bromide		<0.0217	mg/L	0.2

Method Blank (1) QC Batch: 32998

QC Batch: 32998

Date Analyzed: 2006-12-07

Analyzed By: JR

Prep Batch: 28687

QC Preparation: 2006-12-07

Prepared By: JR

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Parameter	Flag	MDL Result	Units	RL
Nitrite-N		<0.0168	mg/L	0.1

Method Blank (1) QC Batch: 32998

QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR
Prep Batch: 28687 QC Preparation: 2006-12-07 Prepared By: JR

Parameter	Flag	MDL Result	Units	RL
Nitrate-N		<0.0168	mg/L	0.1

Method Blank (1) QC Batch: 32998

QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR
Prep Batch: 28687 QC Preparation: 2006-12-07 Prepared By: JR

Parameter	Flag	MDL Result	Units	RL
Fluoride		<0.0168	mg/L	0.2

Method Blank (1) QC Batch: 33042

QC Batch: 33042 Date Analyzed: 2006-12-12 Analyzed By: JG
Prep Batch: 28719 QC Preparation: 2006-12-12 Prepared By: JG

Parameter	Flag	MDL Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<2.38	mg/L as CaCo3	4

Method Blank (1) QC Batch: 33182

QC Batch: 33182 Date Analyzed: 2006-12-27 Analyzed By: WB
Prep Batch: 28842 QC Preparation: 2006-12-27 Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0181	mg/L	0.5
Sulfate		<0.0485	mg/L	0.5

Duplicates (1)

QC Batch: 32699 Date Analyzed: 2006-12-08 Analyzed By: DR
Prep Batch: 28448 QC Preparation: 2006-12-08 Prepared By: DR

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control spikes continued...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	1.01	mg/L	1	1.00	<0.0272	101	71.4 - 123	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0966	0.0945	mg/L	1	0.100	97	94	73.8 - 122
4-Bromofluorobenzene (4-BFB)	0.0909	0.0918	mg/L	1	0.100	91	92	82.6 - 112

Laboratory Control Spike (LCS-1)QC Batch: 32665
Prep Batch: 28422Date Analyzed: 2006-12-09
QC Preparation: 2006-12-09Analyzed By: SP
Prepared By: SP

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	27.1	mg/L	1	25.0	<1.19	108	73.2 - 123

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	26.1	mg/L	1	25.0	<1.19	104	73.2 - 123	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
n-Triacontane	12.9	12.6	mg/L	1	15.0	86	84	57 - 132.3

Laboratory Control Spike (LCS-1)QC Batch: 32702
Prep Batch: 28456Date Analyzed: 2006-12-11
QC Preparation: 2006-12-11Analyzed By: SM
Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ammonia-N	4.82	mg/L	1	5.00	<0.820	96	66 - 122

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Ammonia-N	5.04	mg/L	1	5.00	<0.820	101	66 - 122	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 32720
Prep Batch: 28394

Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.133	mg/L	1	0.125	<0.000199	106	86.2 - 116

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Silver	0.132	mg/L	1	0.125	<0.000199	106	86.2 - 116	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 32720
Prep Batch: 28394

Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Cadmium	0.264	mg/L	1	0.250	<0.000577	106	83.3 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Cadmium	0.263	mg/L	1	0.250	<0.000577	105	83.3 - 113	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 32720
Prep Batch: 28394

Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Chromium	0.111	mg/L	1	0.100	<0.00357	111	83 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Chromium	0.109	mg/L	1	0.100	<0.00357	109	83 - 112	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 32720
Prep Batch: 28394

Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08

Analyzed By: RR
Prepared By: TS

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Copper	0.136	mg/L	1	0.125	<0.00127	109	84.3 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Copper	0.137	mg/L	1	0.125	<0.00127	110	84.3 - 114	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32720
Prep Batch: 28394Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Lead	0.502	mg/L	1	0.500	<0.00398	100	81.1 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Lead	0.504	mg/L	1	0.500	<0.00398	101	81.1 - 111	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32720
Prep Batch: 28394Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Zinc	0.247	mg/L	1	0.250	<0.00300	99	84.7 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Zinc	0.247	mg/L	1	0.250	<0.00300	99	84.7 - 113	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32745
Prep Batch: 28447Date Analyzed: 2006-12-12
QC Preparation: 2006-12-11Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.125	mg/L	1	0.125	<0.000274	100	87.9 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver	0.123	mg/L	1	0.125	<0.000274	98	87.9 - 111	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32745
Prep Batch: 28447Date Analyzed: 2006-12-12
QC Preparation: 2006-12-11Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cadmium	0.250	mg/L	1	0.250	<0.000268	100	86.8 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Cadmium	0.249	mg/L	1	0.250	<0.000268	100	86.8 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32745
Prep Batch: 28447Date Analyzed: 2006-12-12
QC Preparation: 2006-12-11Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.112	mg/L	1	0.100	<0.00357	112	86.5 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Chromium	0.110	mg/L	1	0.100	<0.00357	110	86.5 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32745
Prep Batch: 28447Date Analyzed: 2006-12-12
QC Preparation: 2006-12-11Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper	0.126	mg/L	1	0.125	<0.00127	101	83.4 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Copper	0.124	mg/L	1	0.125	<0.00127	99	83.4 - 117	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Sodium	48.8	mg/L	1	50.0	<0.261	98	85 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Sodium	50.5	mg/L	1	50.0	<0.261	101	85 - 111	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 32812

Date Analyzed: 2006-12-09

Analyzed By: JG

Prep Batch: 28544

QC Preparation: 2006-12-09

Prepared By: JG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	45.2	µg/L	1	50.0	<0.0736	90	83.4 - 114
Benzene	48.2	µg/L	1	50.0	<0.0495	96	83.5 - 115
Trichloroethene (TCE)	⁵ 44.4	µg/L	1	50.0	<0.0495	89	91.3 - 111
Toluene	42.2	µg/L	1	50.0	<0.0736	84	82 - 110
Chlorobenzene	45.2	µg/L	1	50.0	<0.0217	90	87.9 - 109

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,1-Dichloroethene	49.4	µg/L	1	50.0	<0.0736	99	83.4 - 114	9	20
Benzene	50.3	µg/L	1	50.0	<0.0495	101	83.5 - 115	4	20
Trichloroethene (TCE)	49.4	µg/L	1	50.0	<0.0495	99	91.3 - 111	11	20
Toluene	46.4	µg/L	1	50.0	<0.0736	93	82 - 110	10	20
Chlorobenzene	49.5	µg/L	1	50.0	<0.0217	99	87.9 - 109	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	52.5	52.2	µg/L	1	50.0	105	104	82.4 - 115
Toluene-d8	52.5	52.7	µg/L	1	50.0	105	105	89.7 - 108
4-Bromofluorobenzene (4-BFB)	48.6	49.6	µg/L	1	50.0	97	99	84.6 - 114

Laboratory Control Spike (LCS-1)

QC Batch: 32825

Date Analyzed: 2006-12-14

Analyzed By: RR

Prep Batch: 28447

QC Preparation: 2006-12-11

Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Sodium	58.7	mg/L	1	50.0	<0.0309	117	87.1 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

⁵Spike recovery out of control limits. RPD within limits showing extraction was performed properly. •

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Sodium	56.8	mg/L	1	50.0	<0.0309	114	87.1 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 32955

Date Analyzed: 2006-12-14

Analyzed By: DS

Prep Batch: 28649

QC Preparation: 2006-12-12

Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Phenol	0.0234	mg/L	1	0.0800	<0.000590	29	10 - 51.1
2-Chlorophenol	0.0632	mg/L	1	0.0800	<0.00279	79	10 - 116
1,4-Dichlorobenzene (para)	0.0635	mg/L	1	0.0800	<0.000817	79	10.7 - 109
n-Nitrosodi-n-propylamine	0.0878	mg/L	1	0.0800	<0.00117	110	16.9 - 125
1,2,4-Trichlorobenzene	0.0751	mg/L	1	0.0800	<0.00108	94	13.9 - 134
4-Chloro-3-methylphenol	0.0659	mg/L	1	0.0800	<0.00102	82	13.3 - 141
Acenaphthene	0.0707	mg/L	1	0.0800	<0.000990	88	34 - 120
4-Nitrophenol	0.0164	mg/L	1	0.0800	<0.00914	20	12.8 - 106
2,4-Dinitrotoluene	0.0704	mg/L	1	0.0800	<0.000729	88	40.5 - 142
Pentachlorophenol	0.0690	mg/L	1	0.0800	<0.00539	86	10 - 152
Pyrene	0.0804	mg/L	1	0.0800	<0.00101	100	47.2 - 151

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Phenol	0.0232	mg/L	1	0.0800	<0.000590	29	10 - 51.1	1	20
2-Chlorophenol	0.0626	mg/L	1	0.0800	<0.00279	78	10 - 116	1	20
1,4-Dichlorobenzene (para)	0.0623	mg/L	1	0.0800	<0.000817	78	10.7 - 109	2	20
n-Nitrosodi-n-propylamine	0.0840	mg/L	1	0.0800	<0.00117	105	16.9 - 125	4	20
1,2,4-Trichlorobenzene	0.0756	mg/L	1	0.0800	<0.00108	94	13.9 - 134	1	20
4-Chloro-3-methylphenol	0.0676	mg/L	1	0.0800	<0.00102	84	13.3 - 141	2	20
Acenaphthene	0.0704	mg/L	1	0.0800	<0.000990	88	34 - 120	0	20
4-Nitrophenol	0.0167	mg/L	1	0.0800	<0.00914	21	12.8 - 106	2	20
2,4-Dinitrotoluene	0.0720	mg/L	1	0.0800	<0.000729	90	40.5 - 142	2	20
Pentachlorophenol	0.0703	mg/L	1	0.0800	<0.00539	88	10 - 152	2	20
Pyrene	0.0806	mg/L	1	0.0800	<0.00101	101	47.2 - 151	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	0.0345	0.0342	mg/L	1	0.0800	43	43	10 - 77.8
Phenol-d5	0.0245	0.0242	mg/L	1	0.0800	31	30	10 - 47
Nitrobenzene-d5	0.0861	0.0868	mg/L	1	0.0800	108	108	10 - 170
2-Fluorobiphenyl	0.0792	0.0785	mg/L	1	0.0800	99	98	10 - 200
2,4,6-Tribromophenol	0.0958	0.0930	mg/L	1	0.0800	120	116	29 - 99.9
Terphenyl-d14	0.0909	0.0902	mg/L	1	0.0800	114	113	10 - 179

⁶2,4,6-Tribromophenol out of control limits for LCS/LCSD. Entire QC batch non-detect, bias high. •

⁷2,4,6-Tribromophenol out of control limits for LCS/LCSD. Entire QC batch non-detect, bias high. •

Laboratory Control Spike (LCS-1)QC Batch: 32998
Prep Batch: 28687Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07Analyzed By: JR
Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	2.54	mg/L	1	2.50	<0.0217	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromide	2.49	mg/L	1	2.50	<0.0217	100	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32998
Prep Batch: 28687Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07Analyzed By: JR
Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrite-N	2.51	mg/L	1	2.50	<0.0168	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrite-N	2.51	mg/L	1	2.50	<0.0168	100	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32998
Prep Batch: 28687Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07Analyzed By: JR
Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	2.51	mg/L	1	2.50	<0.0168	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N	2.51	mg/L	1	2.50	<0.0168	100	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 32998
Prep Batch: 28687Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07Analyzed By: JR
Prepared By: JR

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Fluoride	2.50	mg/L	1	2.50	<0.0168	100	88.6 - 107

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Fluoride	2.51	mg/L	1	2.50	<0.0168	100	88.6 - 107	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)QC Batch: 33182
Prep Batch: 28842Date Analyzed: 2006-12-27
QC Preparation: 2006-12-27Analyzed By: WB
Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11.6	mg/L	1	12.5	<0.0181	93	90 - 110
Sulfate	12.3	mg/L	1	12.5	<0.0485	98	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11.8	mg/L	1	12.5	<0.0181	94	90 - 110	2	20
Sulfate	12.2	mg/L	1	12.5	<0.0485	98	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110939QC Batch: 32657
Prep Batch: 28416Date Analyzed: 2006-12-08
QC Preparation: 2006-12-08Analyzed By: KB
Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.978	mg/L	1	1.00	<0.0272	98	53.7 - 136

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	1.03	mg/L	1	1.00	<0.0272	103	53.7 - 136	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0882	0.0940	mg/L	1	0.1	88	94	58.8 - 134
4-Bromofluorobenzene (4-BFB)	0.0858	0.0896	mg/L	1	0.1	86	90	68.5 - 128

Matrix Spike (MS-1) Spiked Sample: 110939

QC Batch: 32665 Date Analyzed: 2006-12-09 Analyzed By: SP
Prep Batch: 28422 QC Preparation: 2006-12-09 Prepared By: SP

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	24.7	mg/L	1	25.0	<1.19	99	77.8 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	23.9	mg/L	1	25.0	<1.19	96	77.8 - 112	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	14.0	14.2	mg/L	1	15	93	95	57 - 132.3

Matrix Spike (MS-1) Spiked Sample: 111243

QC Batch: 32702 Date Analyzed: 2006-12-11 Analyzed By: SM
Prep Batch: 28456 QC Preparation: 2006-12-11 Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ammonia-N	4.76	mg/L	1	5.00	<0.820	95	58 - 134

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Ammonia-N	4.82	mg/L	1	5.00	<0.820	96	58 - 134	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110862

QC Batch: 32720 Date Analyzed: 2006-12-12 Analyzed By: RR
Prep Batch: 28394 QC Preparation: 2006-12-08 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.126	mg/L	1	0.125	<0.000199	101	90.1 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Silver	0.127	mg/L	1	0.125	<0.000199	102	90.1 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110862QC Batch: 32720
Prep Batch: 28394Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Cadmium	0.243	mg/L	1	0.250	<0.000577	97	75 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Cadmium	0.250	mg/L	1	0.250	<0.000577	100	75 - 112	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110862QC Batch: 32720
Prep Batch: 28394Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Chromium	0.105	mg/L	1	0.100	<0.00357	105	75 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Chromium	0.109	mg/L	1	0.100	<0.00357	109	75 - 121	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110862QC Batch: 32720
Prep Batch: 28394Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Copper	0.127	mg/L	1	0.125	<0.00127	102	81.5 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Copper	0.129	mg/L	1	0.125	<0.00127	103	81.5 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110862QC Batch: 32720
Prep Batch: 28394Date Analyzed: 2006-12-12
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

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Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Lead	0.443	mg/L	1	0.500	<0.00398	89	75 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Lead	0.452	mg/L	1	0.500	<0.00398	90	75 - 111	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110862

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Prep Batch: 28394

QC Preparation: 2006-12-08

Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Zinc	0.245	mg/L	1	0.250	<0.00300	98	80.4 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Zinc	0.251	mg/L	1	0.250	<0.00300	100	80.4 - 120	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111245

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Prep Batch: 28447

QC Preparation: 2006-12-11

Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.115	mg/L	1	0.125	<0.000274	92	88.2 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver	0.116	mg/L	1	0.125	<0.000274	93	88.2 - 114	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111245

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Prep Batch: 28447

QC Preparation: 2006-12-11

Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cadmium	0.185	mg/L	1	0.250	<0.000268	74	66.5 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Cadmium	0.203	mg/L	1	0.250	<0.000268	81	66.5 - 121	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111245

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Prep Batch: 28447

QC Preparation: 2006-12-11

Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.0840	mg/L	1	0.100	<0.00357	84	69.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Chromium	0.0860	mg/L	1	0.100	<0.00357	86	69.2 - 129	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111245

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Prep Batch: 28447

QC Preparation: 2006-12-11

Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper	0.114	mg/L	1	0.125	<0.00127	91	83.8 - 118

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Copper	0.115	mg/L	1	0.125	<0.00127	92	83.8 - 118	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111245

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Prep Batch: 28447

QC Preparation: 2006-12-11

Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Phosphorous	0.422	mg/L	1	0.500	<0.0229	84	70.1 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Phosphorous	0.401	mg/L	1	0.500	<0.0229	80	70.1 - 115	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111245QC Batch: 32745
Prep Batch: 28447Date Analyzed: 2006-12-12
QC Preparation: 2006-12-11Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Lead	0.441	mg/L	1	0.500	<0.00310	88	71.9 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Lead	0.449	mg/L	1	0.500	<0.00310	90	71.9 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111245QC Batch: 32745
Prep Batch: 28447Date Analyzed: 2006-12-12
QC Preparation: 2006-12-11Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc	0.216	mg/L	1	0.250	<0.000666	86	75.5 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc	0.224	mg/L	1	0.250	<0.000666	90	75.5 - 113	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110862QC Batch: 32769
Prep Batch: 28394Date Analyzed: 2006-12-13
QC Preparation: 2006-12-08Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Sodium	167	mg/L	1	50.0	116	102	81.8 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Sodium	167	mg/L	1	50.0	116	102	81.8 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111158QC Batch: 32812
Prep Batch: 28544Date Analyzed: 2006-12-09
QC Preparation: 2006-12-09Analyzed By: JG
Prepared By: JG

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Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	50.8	µg/L	1	50.0	<0.0736	102	78.7 - 119
Benzene	53.7	µg/L	1	50.0	<0.0495	107	75.8 - 125
Trichloroethene (TCE)	51.6	µg/L	1	50.0	<0.0495	103	83.6 - 112
Toluene	47.9	µg/L	1	50.0	<0.0736	96	81.6 - 115
Chlorobenzene	52.2	µg/L	1	50.0	<0.0217	104	83.9 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,1-Dichloroethene	⁸ n/a	µg/L	1	50.0	<0.0736	0	78.7 - 119	200	20
Benzene	⁹ n/a	µg/L	1	50.0	<0.0495	0	75.8 - 125	200	20
Trichloroethene (TCE)	¹⁰ n/a	µg/L	1	50.0	<0.0495	0	83.6 - 112	200	20
Toluene	¹¹ n/a	µg/L	1	50.0	<0.0736	0	81.6 - 115	200	20
Chlorobenzene	¹² n/a	µg/L	1	50.0	<0.0217	0	83.9 - 113	200	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	¹³ 51.8	n/a	µg/L	1	50	104	0	86.6 - 114
Toluene-d8	¹⁴ 52.7	n/a	µg/L	1	50	105	0	91 - 109
4-Bromofluorobenzene (4-BFB)	¹⁵ 49.1	n/a	µg/L	1	50	98	0	87.2 - 113

Matrix Spike (MS-1) Spiked Sample: 111245QC Batch: 32825
Prep Batch: 28447Date Analyzed: 2006-12-14
QC Preparation: 2006-12-11Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Sodium	2340	mg/L	1	50.0	2290	100	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Sodium	2340	mg/L	1	50.0	2290	100	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111156QC Batch: 32998
Prep Batch: 28687Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07Analyzed By: JR
Prepared By: JR⁸RPD is out of range because a matrix spike duplicate was not prepared.⁹RPD is out of range because a matrix spike duplicate was not prepared.¹⁰RPD is out of range because a matrix spike duplicate was not prepared.¹¹RPD is out of range because a matrix spike duplicate was not prepared.¹²RPD is out of range because a matrix spike duplicate was not prepared.¹³RPD is out of range because a matrix spike duplicate was not prepared.¹⁴RPD is out of range because a matrix spike duplicate was not prepared.¹⁵RPD is out of range because a matrix spike duplicate was not prepared.

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Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	1260	mg/L	500	1250	<10.8	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromide	1260	mg/L	500	1250	<10.8	101	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111156

QC Batch: 32998

Date Analyzed: 2006-12-07

Analyzed By: JR

Prep Batch: 28687

QC Preparation: 2006-12-07

Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrite-N	1250	mg/L	500	1250	<8.40	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrite-N	1250	mg/L	500	1250	<8.40	100	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111156

QC Batch: 32998

Date Analyzed: 2006-12-07

Analyzed By: JR

Prep Batch: 28687

QC Preparation: 2006-12-07

Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	1470	mg/L	500	1250	314	92	78.6 - 105

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N	1470	mg/L	500	1250	314	92	78.6 - 105	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 111156

QC Batch: 32998

Date Analyzed: 2006-12-07

Analyzed By: JR

Prep Batch: 28687

QC Preparation: 2006-12-07

Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Fluoride	1250	mg/L	500	1250	<8.40	100	89.9 - 104

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Fluoride	1260	mg/L	500	1250	<8.40	101	89.9 - 104	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 112625

QC Batch: 33182

Date Analyzed: 2006-12-27

Analyzed By: WB

Prep Batch: 28842

QC Preparation: 2006-12-27

Prepared By: WB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	787	mg/L	50	625	203	93	10 - 6384
Sulfate	925	mg/L	50	625	357	91	86.2 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	773	mg/L	50	625	203	91	10 - 6384	2	20
Sulfate	¹⁶ 857	mg/L	50	625	357	80	86.2 - 117	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 32657

Date Analyzed: 2006-12-08

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.957	96	85 - 115	2006-12-08

Standard (CCV-1)

QC Batch: 32657

Date Analyzed: 2006-12-08

Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.971	97	85 - 115	2006-12-08

Standard (ICV-1)

QC Batch: 32665

Date Analyzed: 2006-12-09

Analyzed By: SP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	282	113	85 - 115	2006-12-09

¹⁶Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

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Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1020	102	94.4 - 106	2006-12-07

Standard (CCV-1)

QC Batch: 32715

Date Analyzed: 2006-12-07

Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1020	102	94.4 - 106	2006-12-07

Standard (ICV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.132	106	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Cadmium		mg/L	1.00	1.04	104	95 - 105	2006-12-12

Standard (ICV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Chromium		mg/L	1.00	1.04	104	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Copper		mg/L	1.00	1.03	103	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lead		mg/L	1.00	1.05	105	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Zinc		mg/L	1.00	1.08	108	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.130	104	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Cadmium		mg/L	1.00	1.01	101	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Chromium		mg/L	1.00	1.01	101	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Copper		mg/L	1.00	1.01	101	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Lead		mg/L	1.00	1.01	101	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32720

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Zinc		mg/L	1.00	1.06	106	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.126	101	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cadmium		mg/L	1.00	0.991	99	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	0.995	100	90 - 110	2006-12-12

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Standard (ICV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		mg/L	1.00	0.979	98	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Phosphorous		mg/L	5.00	4.90	98	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Lead		mg/L	1.00	0.997	100	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	1.04	104	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.127	102	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32745

Date Analyzed: 2006-12-12

Analyzed By: RR

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cadmium		mg/L	1.00	0.988	99	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	0.990	99	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		mg/L	1.00	0.978	98	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Phosphorous		mg/L	5.00	4.91	98	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Lead		mg/L	1.00	0.993	99	90 - 110	2006-12-12

Standard (CCV-1)

QC Batch: 32745 Date Analyzed: 2006-12-12 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	1.04	104	90 - 110	2006-12-12

Standard (ICV-1)

QC Batch: 32769

Date Analyzed: 2006-12-13

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Sodium		mg/L	50.0	51.5	103	90 - 110	2006-12-13

Standard (CCV-1)

QC Batch: 32769

Date Analyzed: 2006-12-13

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Sodium		mg/L	50.0	49.4	99	90 - 110	2006-12-13

Standard (CCV-1)

QC Batch: 32812

Date Analyzed: 2006-12-09

Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	59.4	119	80 - 120	2006-12-09
1,1-Dichloroethene		µg/L	50.0	51.9	104	80 - 120	2006-12-09
Chloroform		µg/L	50.0	52.6	105	80 - 120	2006-12-09
1,2-Dichloropropane		µg/L	50.0	53.5	107	80 - 120	2006-12-09
Toluene		µg/L	50.0	48.7	97	80 - 120	2006-12-09
Chlorobenzene		µg/L	50.0	51.7	103	80 - 120	2006-12-09
Ethylbenzene		µg/L	50.0	53.3	107	80 - 120	2006-12-09

Standard (ICV-1)

QC Batch: 32825

Date Analyzed: 2006-12-14

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Sodium		mg/L	50.0	51.5	103	90 - 110	2006-12-14

Standard (CCV-1)

QC Batch: 32825

Date Analyzed: 2006-12-14

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Sodium		mg/L	50.0	48.9	98	90 - 110	2006-12-14

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Standard (ICV-1)

QC Batch: 32901

Date Analyzed: 2006-12-07

Analyzed By: JG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98.8 - 101	2006-12-07

Standard (CCV-1)

QC Batch: 32901

Date Analyzed: 2006-12-07

Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.00	100	98.8 - 101	2006-12-07

Standard (CCV-1)

QC Batch: 32955

Date Analyzed: 2006-12-14

Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	67.1	112	80 - 120	2006-12-14
1,4-Dichlorobenzene (para)		mg/L	60.0	61.2	102	80 - 120	2006-12-14
2-Nitrophenol		mg/L	60.0	65.1	108	80 - 120	2006-12-14
2,4-Dichlorophenol		mg/L	60.0	71.1	118	80 - 120	2006-12-14
Hexachlorobutadiene		mg/L	60.0	64.5	108	80 - 120	2006-12-14
4-Chloro-3-methylphenol		mg/L	60.0	58.9	98	80 - 120	2006-12-14
2,4,6-Trichlorophenol		mg/L	60.0	64.0	107	80 - 120	2006-12-14
Acenaphthene		mg/L	60.0	60.4	101	80 - 120	2006-12-14
Diphenylamine		mg/L	60.0	61.1	102	80 - 120	2006-12-14
Pentachlorophenol		mg/L	60.0	67.2	112	80 - 120	2006-12-14
Fluoranthene		mg/L	60.0	61.5	102	80 - 120	2006-12-14
Di-n-octylphthalate		mg/L	60.0	54.5	91	80 - 120	2006-12-14
Benzo(a)pyrene		mg/L	60.0	65.0	108	80 - 120	2006-12-14

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		62.8	mg/L	1	60.0	105	80 - 120
Phenol-d5		66.5	mg/L	1	60.0	111	80 - 120
Nitrobenzene-d5		65.7	mg/L	1	60.0	110	80 - 120
2-Fluorobiphenyl		61.0	mg/L	1	60.0	102	80 - 120
2,4,6-Tribromophenol	17	78.3	mg/L	1	60.0	130	80 - 120
Terphenyl-d14		65.5	mg/L	1	60.0	109	80 - 120

Standard (ICV-1)

QC Batch: 32998

Date Analyzed: 2006-12-07

Analyzed By: JR

¹⁷2,4,6-Tribromophenol outside of control limits on CCV(ICV). CCV(ICV) component average is 107% which is within acceptable range. This is acceptable by Method 8000.

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.42	97	93.2 - 98.5	2006-12-07

Standard (ICV-1)

QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrite-N		mg/L	2.50	2.42	97	90 - 110	2006-12-07

Standard (ICV-1)

QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.34	94	90 - 110	2006-12-07

Standard (ICV-1)

QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.46	98	90 - 110	2006-12-07

Standard (CCV-1)

QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.46	98	93.2 - 98.5	2006-12-07

Standard (CCV-1)

QC Batch: 32998 Date Analyzed: 2006-12-07 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrite-N		mg/L	2.50	2.46	98	90 - 110	2006-12-07

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Standard (CCV-1)

QC Batch: 32998

Date Analyzed: 2006-12-07

Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.38	95	90 - 110	2006-12-07

Standard (CCV-1)

QC Batch: 32998

Date Analyzed: 2006-12-07

Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.50	100	90 - 110	2006-12-07

Standard (ICV-1)

QC Batch: 33042

Date Analyzed: 2006-12-12

Analyzed By: JG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 105	2006-12-12
Carbonate Alkalinity		mg/L as CaCo3	0.00	240		0 - 105	2006-12-12
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	10.0		0 - 105	2006-12-12
Total Alkalinity		mg/L as CaCo3	250	250	100	93.7 - 99.9	2006-12-12

Standard (CCV-1)

QC Batch: 33042

Date Analyzed: 2006-12-12

Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 105	2006-12-12
Carbonate Alkalinity		mg/L as CaCo3	0.00	232		0 - 105	2006-12-12
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	12.0		0 - 105	2006-12-12
Total Alkalinity		mg/L as CaCo3	250	244	98	93.7 - 99.9	2006-12-12

Standard (ICV-1)

QC Batch: 33182

Date Analyzed: 2006-12-27

Analyzed By: WB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	5.00	5.48	110	90 - 110	2006-12-27
Sulfate		mg/L	5.00	5.42	108	90 - 110	2006-12-27

Standard (CCV-1)

QC Batch: 33182

Date Analyzed: 2006-12-27

Analyzed By: WB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.9	95	90 - 110	2006-12-27
Sulfate		mg/L	12.5	12.3	98	90 - 110	2006-12-27