Analytical and Quality Control Report

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Report Date: January 9, 2007

Work Order: 6121829

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
112182	HLSF-0085-HMW-038-1206	water	2006-12-15	11:00	2006-12-15
112183	HLSF-0085-TB-766-1206	water	2006-12-15	11:00	2006-12-15

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 33 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: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	33158	Date Analyzed:	2006-12-27	Analyzed By:	JG
Prep Batch:	28824	Sample Preparation:	2006-12-27	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		**154**	mg/L as CaCo3	1	4.00
Total Alkalinity		**154**	mg/L as CaCo3	1	4.00

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	33018	Date Analyzed:	2006-12-21	Analyzed By:	SM
Prep Batch:	28702	Sample Preparation:	2006-12-21	Prepared By:	SM

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

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	33068	Date Analyzed:	2006-12-19	Analyzed By:	DR
Prep Batch:	28743	Sample Preparation:	2006-12-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		**12100**	µMHOS/cm	1	0.00

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	33148	Date Analyzed:	2006-12-27	Analyzed By:	RR
Prep Batch:	28730	Sample Preparation:	2006-12-22	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00200	mg/L	1	0.00200
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Copper		<0.0125	mg/L	1	0.0125
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Zinc		<0.00500	mg/L	1	0.00500

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	33009	Date Analyzed:	2006-12-16	Analyzed By:	WB
Prep Batch:	28699	Sample Preparation:	2006-12-16	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		**1.87**	mg/L	5	0.200
Chloride		**1530**	mg/L	50	0.500
Fluoride		**4.01**	mg/L	5	0.200
Nitrite-N		<1.00	mg/L	5	0.200
Nitrate-N		**71.2**	mg/L	50	0.200
Sulfate		**6840**	mg/L	500	0.500

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	33061	Date Analyzed:	2006-12-15	Analyzed By:	DR
Prep Batch:	28737	Sample Preparation:	2006-12-15	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
pH		**7.67**	s.u.	1	0.00

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	33295	Date Analyzed:	2007-01-02	Analyzed By:	TP
Prep Batch:	28730	Sample Preparation:	2006-12-22	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Sodium		**2320**	mg/L	100	0.500

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Salts, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	33135	Date Analyzed:	2006-12-27	Analyzed By:	RR
Prep Batch:	28689	Sample Preparation:	2006-12-20	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Sodium		**2330**	mg/L	100	0.500

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Semivolatiles WTS	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	33114	Date Analyzed:	2006-12-21	Analyzed By:	DS
Prep Batch:	28786	Sample Preparation:	2006-12-19	Prepared By:	DS

Parameter	Flag	Result	RL	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
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

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sample 112182 continued . . .

Parameter	Flag	Result	RL	Units	Dilution	RL
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
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		0.0217	mg/L	1	0.0800	27	10 - 75.1
Phenol-d5		0.0153	mg/L	1	0.0800	19	10 - 56.2

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0567	mg/L	1	0.0800	71	18.1 - 108
2-Fluorobiphenyl		0.0555	mg/L	1	0.0800	69	20 - 112
2,4,6-Tribromophenol		0.0360	mg/L	1	0.0800	45	10 - 135
Terphenyl-d14		0.0762	mg/L	1	0.0800	95	28.2 - 134

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	33159	Date Analyzed:	2006-12-21	Analyzed By:	JG
Prep Batch:	28825	Sample Preparation:	2006-12-21	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**10800**	mg/L	1	5.00

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	33032	Date Analyzed:	2006-12-21	Analyzed By:	RR
Prep Batch:	28689	Sample Preparation:	2006-12-20	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00200	mg/L	1	0.00200
Total Cadmium		<0.00100	mg/L	1	0.00100
Total Chromium		**0.0230**	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Phosphorous		<0.0500	mg/L	1	0.0500
Total Lead		<0.00500	mg/L	1	0.00500
Total Zinc		<0.00500	mg/L	1	0.00500

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	32991	Date Analyzed:	2006-12-20	Analyzed By:	SP
Prep Batch:	28681	Sample Preparation:	2006-12-20	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		19.0	mg/L	1	15.0	127	57 - 132.3

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	33089	Date Analyzed:	2006-12-22	Analyzed By:	MT
Prep Batch:	28763	Sample Preparation:	2006-12-22	Prepared By:	MT

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)		0.0957	mg/L	1	0.100	96	58.5 - 135
4-Bromofluorobenzene (4-BFB)		0.0973	mg/L	1	0.100	97	66.8 - 115

Sample: 112182 - HLSF-0085-HMW-038-1206

Analysis:	Volatiles WTS	Analytical Method:	S 8260B	Prep Method:	S 3510C
QC Batch:	33129	Date Analyzed:	2006-12-23	Analyzed By:	JG
Prep Batch:	28803	Sample Preparation:	2006-12-23	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

continued . . .

sample 112182 continued . . .

Parameter	Flag	Result	RL	Units	Dilution	RL
Trichloroethene (TCE)		**5.60**		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
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		50.3	µg/L	1	50.0	101	82.4 - 115
Toluene-d8		50.0	µg/L	1	50.0	100	89.7 - 108
4-Bromofluorobenzene (4-BFB)		45.4	µg/L	1	50.0	91	84.6 - 114

Sample: 112183 - HLSF-0085-TB-766-1206

Analysis:	Volatiles WTS	Analytical Method:	S 8260B	Prep Method:	S 3510C
QC Batch:	33129	Date Analyzed:	2006-12-23	Analyzed By:	JG
Prep Batch:	28803	Sample Preparation:	2006-12-23	Prepared By:	JG

Parameter	Flag	Result	RL 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

continued . . .

sample 112183 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
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
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		49.3	µg/L	1	50.0	99	82.4 - 115
Toluene-d8		50.9	µg/L	1	50.0	102	89.7 - 108
4-Bromofluorobenzene (4-BFB)		46.0	µg/L	1	50.0	92	84.6 - 114

Method Blank (1) QC Batch: 32991

QC Batch: 32991 | Date Analyzed: 2006-12-20 | Analyzed By: SP
Prep Batch: 28681 | QC Preparation: 2006-12-20 | Prepared By: SP

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		15.7	mg/L	1	15.0	105	57 - 132.3

Method Blank (1) QC Batch: 33009

QC Batch: 33009 Date Analyzed: 2006-12-16 Analyzed By: WB
Prep Batch: 28699 QC Preparation: 2006-12-16 Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
Bromide		<0.0429	mg/L	0.2
Chloride		<0.0181	mg/L	0.5
Fluoride		<0.0119	mg/L	0.2
Nitrite-N		<0.0128	mg/L	0.2
Nitrate-N		<0.0106	mg/L	0.2
Sulfate		<0.0485	mg/L	0.5

Method Blank (1) QC Batch: 33018

QC Batch: 33018 Date Analyzed: 2006-12-21 Analyzed By: SM
Prep Batch: 28702 QC Preparation: 2006-12-21 Prepared By: SM

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

Method Blank (1) QC Batch: 33032

QC Batch: 33032 Date Analyzed: 2006-12-21 Analyzed By: RR
Prep Batch: 28689 QC Preparation: 2006-12-20 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Total Silver		<0.000274	mg/L	0.002
Total Cadmium		<0.000268	mg/L	0.001
Total Chromium		<0.00357	mg/L	0.005
Total Copper		<0.00127	mg/L	0.005
Total Phosphorous		<0.0229	mg/L	0.05
Total Lead		<0.00310	mg/L	0.005
Total Zinc		<0.000666	mg/L	0.005

Method Blank (1) QC Batch: 33068

QC Batch: 33068 Date Analyzed: 2006-12-19 Analyzed By: DR
Prep Batch: 28743 QC Preparation: 2006-12-19 Prepared By: DR

Parameter	Flag	MDL Result	Units	RL
Specific Conductance		0.00	µMHOS/cm	

Method Blank (1) QC Batch: 33089

QC Batch: 33089 | Date Analyzed: 2006-12-22 | Analyzed By: MT
Prep Batch: 28763 | QC Preparation: 2006-12-22 | Prepared By: MT

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)		0.105	mg/L	1	0.100	105	77.2 - 124
4-Bromofluorobenzene (4-BFB)		0.0953	mg/L	1	0.100	95	58 - 111

Method Blank (1) QC Batch: 33114

QC Batch: 33114 | Date Analyzed: 2006-12-21 | Analyzed By: DS
Prep Batch: 28786 | QC Preparation: 2006-12-19 | 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
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

continued ...

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
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
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

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
Chrysene		<0.000937	mg/L	0.005
bis(2-ethylhexyl)phthalate		0.00740	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		0.0242	mg/L	1	0.0800	30	15.6 - 49.6
Phenol-d5		0.0179	mg/L	1	0.0800	22	10.2 - 33.6
Nitrobenzene-d5		0.0597	mg/L	1	0.0800	75	46.7 - 112
2-Fluorobiphenyl		0.0616	mg/L	1	0.0800	77	44.4 - 108
2,4,6-Tribromophenol		0.0381	mg/L	1	0.0800	48	24.9 - 147
Terphenyl-d14		0.0729	mg/L	1	0.0800	91	25.6 - 143

Method Blank (1) QC Batch: 33129

QC Batch: 33129 Date Analyzed: 2006-12-23 Analyzed By: JG
Prep Batch: 28803 QC Preparation: 2006-12-23 Prepared By: JG

Parameter	Flag	MDL Result	Units	RL
Bromochloromethane		<0.0699	µg/L	1
Dichlorodifluoromethane		<0.0598	µg/L	1
Chloromethane (methyl chloride)		<0.230	µg/L	1
Vinyl Chloride		<0.0902	µg/L	1
Bromomethane (methyl bromide)		<0.740	µg/L	5
Chloroethane		<0.195	µg/L	1
Trichlorofluoromethane		<0.160	µg/L	1
Acetone		<0.854	µg/L	10
Iodomethane (methyl iodide)		<0.112	µg/L	5
Carbon Disulfide		<0.0764	µg/L	1
Acrylonitrile		<0.184	µg/L	1
2-Butanone (MEK)		<0.394	µg/L	5
4-Methyl-2-pentanone (MIBK)		<0.484	µg/L	5
2-Hexanone		<0.0975	µg/L	5
trans 1,4-Dichloro-2-butene		<0.420	µg/L	10
1,1-Dichloroethene		<0.0736	µg/L	1
Methylene chloride		<0.689	µg/L	5
MTBE		<0.0504	µg/L	1
trans-1,2-Dichloroethene		<0.0598	µg/L	1

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
1,1-Dichloroethane		<0.0299	µg/L	1
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		0.330	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

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
Isopropyl Alcohol		<5.00	µg/L	5
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		50.0	µg/L	1	50.0	100	82.4 - 115
Toluene-d8		50.9	µg/L	1	50.0	102	89.7 - 108
4-Bromofluorobenzene (4-BFB)		46.3	µg/L	1	50.0	93	84.6 - 114

Method Blank (1) QC Batch: 33135

QC Batch: 33135 Date Analyzed: 2006-12-27 Analyzed By: RR
Prep Batch: 28689 QC Preparation: 2006-12-20 Prepared By: TS

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

Method Blank (1) QC Batch: 33148

QC Batch: 33148 Date Analyzed: 2006-12-27 Analyzed By: RR
Prep Batch: 28730 QC Preparation: 2006-12-22 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Silver		<0.000199	mg/L	0.002
Dissolved Cadmium		<0.000577	mg/L	0.001
Dissolved Chromium		<0.00357	mg/L	0.005
Dissolved Copper		<0.00127	mg/L	0.0125
Dissolved Lead		<0.00398	mg/L	0.005
Dissolved Zinc		<0.00300	mg/L	0.005

Method Blank (1) QC Batch: 33158

QC Batch: 33158 Date Analyzed: 2006-12-27 Analyzed By: JG
Prep Batch: 28824 QC Preparation: 2006-12-27 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: 33159

QC Batch: 33159 Date Analyzed: 2006-12-21 Analyzed By: JG
Prep Batch: 28825 QC Preparation: 2006-12-21 Prepared By: JG

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

Method Blank (1) QC Batch: 33295

QC Batch: 33295 Date Analyzed: 2007-01-02 Analyzed By: TP
Prep Batch: 28730 QC Preparation: 2006-12-22 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Sodium		0.256	mg/L	0.5

Duplicates (1)

QC Batch: 33061 Date Analyzed: 2006-12-15 Analyzed By: DR
Prep Batch: 28737 QC Preparation: 2006-12-15 Prepared By: DR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.66	7.66	s.u.	1	0	20

Duplicates (1)

QC Batch: 33068 Date Analyzed: 2006-12-19 Analyzed By: DR
Prep Batch: 28743 QC Preparation: 2006-12-19 Prepared By: DR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	21400	21400	µMHOS/cm	1	0	6.7

Duplicates (1)

QC Batch: 33158 Date Analyzed: 2006-12-27 Analyzed By: JG
Prep Batch: 28824 QC Preparation: 2006-12-27 Prepared By: JG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	222	220	mg/L as CaCo3	1	1	6.3
Total Alkalinity	222	220	mg/L as CaCo3	1	1	6.3

Duplicates (1)

QC Batch: 33159 | Date Analyzed: 2006-12-21 | Analyzed By: JG
Prep Batch: 28825 | QC Preparation: 2006-12-21 | Prepared By: JG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	10900	10800	mg/L	1	1	20

Laboratory Control Spike (LCS-1)

QC Batch: 32991 | Date Analyzed: 2006-12-20 | Analyzed By: SP
Prep Batch: 28681 | QC Preparation: 2006-12-20 | Prepared By: SP

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	26.4	mg/L	1	25.0	<1.19	106	73.2 - 123

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
DRO	25.7	mg/L	1	25.0	<1.19	103	73.2 - 123	3	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
n-Triacontane	15.2	15.2	mg/L	1	15.0	101	101	57 - 132.3

Laboratory Control Spike (LCS-1)

QC Batch: 33009 | Date Analyzed: 2006-12-16 | Analyzed By: WB
Prep Batch: 28699 | QC Preparation: 2006-12-16 | Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	2.67	mg/L	1	2.50	<0.0429	107	90 - 110
Chloride	12.0	mg/L	1	12.5	<0.0181	96	90 - 110
Fluoride	2.53	mg/L	1	2.50	<0.0119	101	90 - 110
Nitrite-N	2.50	mg/L	1	2.50	<0.0128	100	90 - 110
Nitrate-N	2.47	mg/L	1	2.50	<0.0106	99	90 - 110
Sulfate	12.8	mg/L	1	12.5	<0.0485	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	2.68	mg/L	1	2.50	<0.0429	107	90 - 110	0	20
Chloride	12.0	mg/L	1	12.5	<0.0181	96	90 - 110	0	20
Fluoride	2.54	mg/L	1	2.50	<0.0119	102	90 - 110	0	20
Nitrite-N	2.50	mg/L	1	2.50	<0.0128	100	90 - 110	0	20
Nitrate-N	2.46	mg/L	1	2.50	<0.0106	98	90 - 110	0	20

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control spikes continued . . .

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Sulfate	12.7	mg/L	1	12.5	<0.0485	102	90 - 110	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: 33018 Date Analyzed: 2006-12-21 Analyzed By: SM
Prep Batch: 28702 QC Preparation: 2006-12-21 Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ammonia-N	4.31	mg/L	1	5.00	<0.820	86	66 - 122

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
Ammonia-N	4.54	mg/L	1	5.00	<0.820	91	66 - 122	5	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: 33032 Date Analyzed: 2006-12-21 Analyzed By: RR
Prep Batch: 28689 QC Preparation: 2006-12-20 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.117	mg/L	1	0.125	<0.000274	94	87.9 - 111
Total Cadmium	0.225	mg/L	1	0.250	<0.000268	90	86.8 - 110
Total Chromium	0.0980	mg/L	1	0.100	<0.00357	98	86.5 - 115
Total Copper	0.120	mg/L	1	0.125	<0.00127	96	83.4 - 117
Total Phosphorous	0.472	mg/L	1	0.500	<0.0229	94	87.3 - 114
Total Lead	0.483	mg/L	1	0.500	<0.00310	97	83 - 109
Total Zinc	0.222	mg/L	1	0.250	<0.000666	89	82.9 - 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
Total Silver	0.115	mg/L	1	0.125	<0.000274	92	87.9 - 111	2	20
Total Cadmium	0.225	mg/L	1	0.250	<0.000268	90	86.8 - 110	0	20
Total Chromium	0.0980	mg/L	1	0.100	<0.00357	98	86.5 - 115	0	20
Total Copper	0.121	mg/L	1	0.125	<0.00127	97	83.4 - 117	1	20
Total Phosphorous	0.445	mg/L	1	0.500	<0.0229	89	87.3 - 114	6	20
Total Lead	0.491	mg/L	1	0.500	<0.00310	98	83 - 109	2	20
Total Zinc	0.224	mg/L	1	0.250	<0.000666	90	82.9 - 109	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: 33089 | Date Analyzed: 2006-12-22 | Analyzed By: MT
Prep Batch: 28763 | QC Preparation: 2006-12-22 | Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.993	mg/L	1	1.00	<0.0272	99	71.4 - 123

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
GRO	0.947	mg/L	1	1.00	<0.0272	95	71.4 - 123	5	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
Trifluorotoluene (TFT)	0.0990	0.0954	mg/L	1	0.100	99	95	73.8 - 122
4-Bromofluorobenzene (4-BFB)	0.102	0.0977	mg/L	1	0.100	102	98	82.6 - 112

Laboratory Control Spike (LCS-1)

QC Batch: 33114 | Date Analyzed: 2006-12-21 | Analyzed By: DS
Prep Batch: 28786 | QC Preparation: 2006-12-19 | Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Phenol	0.0180	mg/L	1	0.0800	<0.000590	22	10 - 51.1
2-Chlorophenol	0.0500	mg/L	1	0.0800	<0.00279	62	10 - 116
1,4-Dichlorobenzene (para)	0.0437	mg/L	1	0.0800	<0.000817	55	10.7 - 109
n-Nitrosodi-n-propylamine	0.0682	mg/L	1	0.0800	<0.00117	85	16.9 - 125
1,2,4-Trichlorobenzene	0.0596	mg/L	1	0.0800	<0.00108	74	13.9 - 134
4-Chloro-3-methylphenol	0.0415	mg/L	1	0.0800	<0.00102	52	13.3 - 141
Acenaphthene	0.0667	mg/L	1	0.0800	<0.000990	83	34 - 120
4-Nitrophenol	0.0135	mg/L	1	0.0800	<0.00914	17	12.8 - 106
2,4-Dinitrotoluene	0.0854	mg/L	1	0.0800	<0.000729	107	40.5 - 142
Pentachlorophenol	0.0549	mg/L	1	0.0800	<0.00539	69	10 - 152
Pyrene	0.0761	mg/L	1	0.0800	<0.00101	95	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	0.0183	mg/L	1	0.0800	<0.000590	23	10 - 51.1	2	20
2-Chlorophenol	0.0497	mg/L	1	0.0800	<0.00279	62	10 - 116	1	20
1,4-Dichlorobenzene (para)	0.0440	mg/L	1	0.0800	<0.000817	55	10.7 - 109	1	20
n-Nitrosodi-n-propylamine	0.0704	mg/L	1	0.0800	<0.00117	88	16.9 - 125	3	20
1,2,4-Trichlorobenzene	0.0598	mg/L	1	0.0800	<0.00108	75	13.9 - 134	0	20
4-Chloro-3-methylphenol	0.0434	mg/L	1	0.0800	<0.00102	54	13.3 - 141	4	20
Acenaphthene	0.0670	mg/L	1	0.0800	<0.000990	84	34 - 120	0	20
4-Nitrophenol	0.0136	mg/L	1	0.0800	<0.00914	17	12.8 - 106	1	20
2,4-Dinitrotoluene	0.0833	mg/L	1	0.0800	<0.000729	104	40.5 - 142	2	20

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control spikes continued . . .

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Pentachlorophenol	0.0575	mg/L	1	0.0800	<0.00539	72	10 - 152	5	20
Pyrene	0.0772	mg/L	1	0.0800	<0.00101	96	47.2 - 151	1	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	0.0263	0.0261	mg/L	1	0.0800	33	33	10 - 77.8
Phenol-d5	0.0190	0.0187	mg/L	1	0.0800	24	23	10 - 47
Nitrobenzene-d5	0.0738	0.0730	mg/L	1	0.0800	92	91	10 - 170
2-Fluorobiphenyl	0.0732	0.0725	mg/L	1	0.0800	92	91	10 - 200
2,4,6-Tribromophenol	0.0761	0.0772	mg/L	1	0.0800	95	96	29 - 99.9
Terphenyl-d14	0.0793	0.0803	mg/L	1	0.0800	99	100	10 - 179

Laboratory Control Spike (LCS-1)

QC Batch: 33129 Date Analyzed: 2006-12-23 Analyzed By: JG
Prep Batch: 28803 QC Preparation: 2006-12-23 Prepared By: JG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	50.8	µg/L	1	50.0	<0.0736	102	83.4 - 114
Benzene	52.8	µg/L	1	50.0	<0.0495	106	83.5 - 115
Trichloroethene (TCE)	50.3	µg/L	1	50.0	<0.0495	101	91.3 - 111
Toluene	46.5	µg/L	1	50.0	<0.0736	93	82 - 110
Chlorobenzene	48.2	µg/L	1	50.0	<0.0217	96	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	50.6	µg/L	1	50.0	<0.0736	101	83.4 - 114	0	20
Benzene	53.1	µg/L	1	50.0	<0.0495	106	83.5 - 115	1	20
Trichloroethene (TCE)	51.6	µg/L	1	50.0	<0.0495	103	91.3 - 111	3	20
Toluene	47.8	µg/L	1	50.0	<0.0736	96	82 - 110	3	20
Chlorobenzene	50.1	µg/L	1	50.0	<0.0217	100	87.9 - 109	4	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	48.2	48.5	µg/L	1	50.0	96	97	82.4 - 115
Toluene-d8	48.6	48.9	µg/L	1	50.0	97	98	89.7 - 108
4-Bromofluorobenzene (4-BFB)	48.3	48.3	µg/L	1	50.0	97	97	84.6 - 114

Laboratory Control Spike (LCS-1)

QC Batch: 33135 Date Analyzed: 2006-12-27 Analyzed By: RR
Prep Batch: 28689 QC Preparation: 2006-12-20 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Sodium	51.5	mg/L	1	50.0	<0.0309	103	87.1 - 120

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 Sodium	50.6	mg/L	1	50.0	<0.0309	101	87.1 - 120	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: 33148 Date Analyzed: 2006-12-27 Analyzed By: RR
Prep Batch: 28730 QC Preparation: 2006-12-22 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.118	mg/L	1	0.125	<0.000199	94	86.2 - 116
Dissolved Cadmium	0.224	mg/L	1	0.250	<0.000577	90	83.3 - 113
Dissolved Chromium	0.101	mg/L	1	0.100	<0.00357	101	83 - 112
Dissolved Copper	0.121	mg/L	1	0.125	<0.00127	97	84.3 - 114
Dissolved Lead	0.501	mg/L	1	0.500	<0.00398	100	81.1 - 111
Dissolved Zinc	0.215	mg/L	1	0.250	<0.00300	86	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 Silver	0.118	mg/L	1	0.125	<0.000199	94	86.2 - 116	0	20
Dissolved Cadmium	0.224	mg/L	1	0.250	<0.000577	90	83.3 - 113	0	20
Dissolved Chromium	0.0970	mg/L	1	0.100	<0.00357	97	83 - 112	4	20
Dissolved Copper	0.119	mg/L	1	0.125	<0.00127	95	84.3 - 114	2	20
Dissolved Lead	0.492	mg/L	1	0.500	<0.00398	98	81.1 - 111	2	20
Dissolved Zinc	0.229	mg/L	1	0.250	<0.00300	92	84.7 - 113	6	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: 33295 Date Analyzed: 2007-01-02 Analyzed By: TP
Prep Batch: 28730 QC Preparation: 2006-12-22 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Sodium	51.9	mg/L	1	50.0	<0.0309	104	85 - 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
Dissolved Sodium	52.5	mg/L	1	50.0	<0.0309	105	85 - 115	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: 112182

QC Batch: 32991 Date Analyzed: 2006-12-20 Analyzed By: SP
Prep Batch: 28681 QC Preparation: 2006-12-20 Prepared By: SP

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	23.5	mg/L	1	25.0	<1.19	94	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	26.7	mg/L	1	25.0	<1.19	107	77.8 - 112	13	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	17.1	16.5	mg/L	1	15	114	110	57 - 132.3

Matrix Spike (MS-1) Spiked Sample: 112182

QC Batch: 33009 Date Analyzed: 2006-12-16 Analyzed By: WB
Prep Batch: 28699 QC Preparation: 2006-12-16 Prepared By: WB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	1360	mg/L	500	1250	<21.4	109	95.4 - 114
Chloride	7750	mg/L	500	6250	1530	100	10 - 6384
Fluoride	1250	mg/L	500	1250	<5.95	100	73.4 - 119
Nitrite-N	1310	mg/L	500	1250	<6.40	105	58.3 - 151
Nitrate-N	1390	mg/L	500	1250	71.2	106	85.7 - 123
Sulfate	12800	mg/L	500	6250	6840	95	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
Bromide	1390	mg/L	500	1250	<21.4	111	95.4 - 114	2	20
Chloride	7780	mg/L	500	6250	1530	100	10 - 6384	0	20
Fluoride	1240	mg/L	500	1250	<5.95	99	73.4 - 119	1	20
Nitrite-N	1340	mg/L	500	1250	<6.40	107	58.3 - 151	2	20
Nitrate-N	1380	mg/L	500	1250	71.2	105	85.7 - 123	1	20
Sulfate [1]	12200	mg/L	500	6250	6840	86	86.2 - 117	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: 111874

QC Batch: 33018 Date Analyzed: 2006-12-21 Analyzed By: SM
Prep Batch: 28702 QC Preparation: 2006-12-21 Prepared By: SM

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

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ammonia-N	4.59	mg/L	1	5.00	<0.820	92	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	4.37	mg/L	1	5.00	<0.820	87	58 - 134	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: 112184

QC Batch: 33032 Date Analyzed: 2006-12-21 Analyzed By: RR
Prep Batch: 28689 QC Preparation: 2006-12-20 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
Total Cadmium	0.249	mg/L	1	0.250	<0.000268	100	66.5 - 121
Total Chromium	0.0930	mg/L	1	0.100	<0.00357	93	69.2 - 129
Total Copper	0.119	mg/L	1	0.125	<0.00127	95	83.8 - 118
Total Phosphorous	0.469	mg/L	1	0.500	0.047	84	70.1 - 115
Total Lead	0.511	mg/L	1	0.500	<0.00310	102	71.9 - 115
Total Zinc	0.251	mg/L	1	0.250	<0.000666	100	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 Silver	0.118	mg/L	1	0.125	<0.000274	94	88.2 - 114	3	20
Total Cadmium	0.252	mg/L	1	0.250	<0.000268	101	66.5 - 121	1	20
Total Chromium	0.0890	mg/L	1	0.100	<0.00357	89	69.2 - 129	4	20
Total Copper	0.118	mg/L	1	0.125	<0.00127	94	83.8 - 118	1	20
Total Phosphorous	0.471	mg/L	1	0.500	0.047	85	70.1 - 115	0	20
Total Lead	0.523	mg/L	1	0.500	<0.00310	105	71.9 - 115	2	20
Total Zinc	0.255	mg/L	1	0.250	<0.000666	102	75.5 - 113	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: 112182

QC Batch: 33089 Date Analyzed: 2006-12-22 Analyzed By: MT
Prep Batch: 28763 QC Preparation: 2006-12-22 Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.853	mg/L	1	1.00	<0.0272	85	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	0.866	mg/L	1	1.00	<0.0272	87	53.7 - 136	2	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)	0.0858	0.0876	mg/L	1	0.1	86	88	58.8 - 134
4-Bromofluorobenzene (4-BFB)	0.0974	0.0981	mg/L	1	0.1	97	98	68.5 - 128

Matrix Spike (MS-1) Spiked Sample: 112182

QC Batch: 33114 Date Analyzed: 2006-12-21 Analyzed By: DS
Prep Batch: 28786 QC Preparation: 2006-12-19 Prepared By: DS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Phenol	0.0173	mg/L	1	0.0800	<0.000590	22	10 - 60.9
2-Chlorophenol	0.0451	mg/L	1	0.0800	<0.00279	56	10 - 125
1,4-Dichlorobenzene (para)	0.0526	mg/L	1	0.0800	<0.000817	66	10 - 180
n-Nitrosodi-n-propylamine	0.0719	mg/L	1	0.0800	<0.00117	90	16 - 95
1,2,4-Trichlorobenzene	0.0651	mg/L	1	0.0800	<0.00108	81	10 - 187
4-Chloro-3-methylphenol	0.0446	mg/L	1	0.0800	<0.00102	56	10 - 170
Acenaphthene	0.0683	mg/L	1	0.0800	<0.000990	85	10 - 173
4-Nitrophenol	0.00920	mg/L	1	0.0800	<0.00914	12	10 - 155
2,4-Dinitrotoluene	0.0785	mg/L	1	0.0800	<0.000729	98	10 - 240
Pentachlorophenol	0.0314	mg/L	1	0.0800	<0.00539	39	10 - 153
Pyrene	0.0756	mg/L	1	0.0800	<0.00101	94	10 - 182

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
Phenol	0.0172	mg/L	1	0.0800	<0.000590	22	10 - 60.9	1	20
2-Chlorophenol	0.0446	mg/L	1	0.0800	<0.00279	56	10 - 125	1	20
1,4-Dichlorobenzene (para)	0.0514	mg/L	1	0.0800	<0.000817	64	10 - 180	2	20
n-Nitrosodi-n-propylamine	0.0743	mg/L	1	0.0800	<0.00117	93	16 - 95	3	20
1,2,4-Trichlorobenzene	0.0653	mg/L	1	0.0800	<0.00108	82	10 - 187	0	20
4-Chloro-3-methylphenol	0.0450	mg/L	1	0.0800	<0.00102	56	10 - 170	1	20
Acenaphthene	0.0670	mg/L	1	0.0800	<0.000990	84	10 - 173	2	20
4-Nitrophenol	0.00930	mg/L	1	0.0800	<0.00914	12	10 - 155	1	20
2,4-Dinitrotoluene	0.0786	mg/L	1	0.0800	<0.000729	98	10 - 240	0	20
Pentachlorophenol	0.0312	mg/L	1	0.0800	<0.00539	39	10 - 153	1	20
Pyrene	0.0742	mg/L	1	0.0800	<0.00101	93	10 - 182	2	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
2-Fluorophenol	0.0216	0.0211	mg/L	1	0.08	27	26	10 - 71.4
Phenol-d5	0.0169	0.0174	mg/L	1	0.08	21	22	10 - 53.1
Nitrobenzene-d5	0.0756	0.0761	mg/L	1	0.08	94	95	10 - 200
2-Fluorobiphenyl	0.0611	0.0616	mg/L	1	0.08	76	77	11 - 145
2,4,6-Tribromophenol	0.0528	0.0517	mg/L	1	0.08	66	65	10 - 174
Terphenyl-d14	0.0769	0.0758	mg/L	1	0.08	96	95	10 - 164

Matrix Spike (MS-1) Spiked Sample: 112184

QC Batch: 33135 | Date Analyzed: 2006-12-27 | Analyzed By: RR
Prep Batch: 28689 | QC Preparation: 2006-12-20 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Sodium [2]	5030	mg/L	1	50.0	4760	540	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 [3]	5040	mg/L	1	50.0	4760	560	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: 112182

QC Batch: 33148 | Date Analyzed: 2006-12-27 | Analyzed By: RR
Prep Batch: 28730 | QC Preparation: 2006-12-22 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.117	mg/L	1	0.125	<0.000199	94	90.1 - 120
Dissolved Cadmium	0.192	mg/L	1	0.250	<0.000577	77	75 - 112
Dissolved Chromium	0.0830	mg/L	1	0.100	<0.00357	83	75 - 121
Dissolved Copper	0.113	mg/L	1	0.125	<0.00127	90	81.5 - 125
Dissolved Lead	0.464	mg/L	1	0.500	<0.00398	93	75 - 111
Dissolved Zinc	0.220	mg/L	1	0.250	<0.00300	88	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 Silver	0.116	mg/L	1	0.125	<0.000199	93	90.1 - 120	1	20
Dissolved Cadmium	0.201	mg/L	1	0.250	<0.000577	80	75 - 112	5	20
Dissolved Chromium	0.0880	mg/L	1	0.100	<0.00357	88	75 - 121	6	20
Dissolved Copper	0.113	mg/L	1	0.125	<0.00127	90	81.5 - 125	0	20
Dissolved Lead	0.461	mg/L	1	0.500	<0.00398	92	75 - 111	1	20
Dissolved Zinc	0.223	mg/L	1	0.250	<0.00300	89	80.4 - 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: 112182

QC Batch: 33295 | Date Analyzed: 2007-01-02 | Analyzed By: TP
Prep Batch: 28730 | QC Preparation: 2006-12-22 | Prepared By: TS

continued . . .

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

matrix spikes continued . . .

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Sodium	[4]	2350	mg/L	1	50.0	2320	60	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
Dissolved Sodium	[5]	2560	mg/L	1	50.0	2320	480	75 - 125	9	20

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

Standard (ICV-1)

QC Batch: 32991 Date Analyzed: 2006-12-20 Analyzed By: SP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	276	110	85 - 115	2006-12-20

Standard (CCV-1)

QC Batch: 32991 Date Analyzed: 2006-12-20 Analyzed By: SP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	268	107	85 - 115	2006-12-20

Standard (ICV-1)

QC Batch: 33009 Date Analyzed: 2006-12-16 Analyzed By: WB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.65	106	90 - 110	2006-12-16
Chloride		mg/L	12.5	12.2	98	90 - 110	2006-12-16
Fluoride		mg/L	2.50	2.67	107	90 - 110	2006-12-16
Nitrite-N		mg/L	2.50	2.65	106	90 - 110	2006-12-16
Nitrate-N		mg/L	2.50	2.50	100	90 - 110	2006-12-16
Sulfate		mg/L	12.5	12.9	103	90 - 110	2006-12-16

Standard (CCV-1)

QC Batch: 33009 Date Analyzed: 2006-12-16 Analyzed By: WB

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

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.68	107	90 - 110	2006-12-16
Chloride		mg/L	12.5	12.3	98	90 - 110	2006-12-16
Fluoride		mg/L	2.50	2.69	108	90 - 110	2006-12-16
Nitrite-N		mg/L	2.50	2.69	108	90 - 110	2006-12-16
Nitrate-N		mg/L	2.50	2.52	101	90 - 110	2006-12-16
Sulfate		mg/L	12.5	12.7	102	90 - 110	2006-12-16

Standard (ICV-1)

QC Batch: 33018 Date Analyzed: 2006-12-21 Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.82	96	85 - 115	2006-12-21

Standard (CCV-1)

QC Batch: 33018 Date Analyzed: 2006-12-21 Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.65	93	85 - 115	2006-12-21

Standard (ICV-1)

QC Batch: 33032 Date Analyzed: 2006-12-21 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	0.118	94	90 - 110	2006-12-21
Total Cadmium		mg/L	1.00	0.920	92	90 - 110	2006-12-21
Total Chromium		mg/L	1.00	0.915	92	90 - 110	2006-12-21
Total Copper		mg/L	1.00	0.946	95	90 - 110	2006-12-21
Total Phosphorous		mg/L	5.00	4.55	91	90 - 110	2006-12-21
Total Lead		mg/L	1.00	0.967	97	90 - 110	2006-12-21
Total Zinc		mg/L	1.00	0.971	97	90 - 110	2006-12-21

Standard (CCV-1)

QC Batch: 33032 Date Analyzed: 2006-12-21 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	0.132	106	90 - 110	2006-12-21

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cadmium		mg/L	1.00	1.03	103	90 - 110	2006-12-21
Total Chromium		mg/L	1.00	1.02	102	90 - 110	2006-12-21
Total Copper		mg/L	1.00	1.04	104	90 - 110	2006-12-21
Total Phosphorous		mg/L	5.00	5.16	103	90 - 110	2006-12-21
Total Lead		mg/L	1.00	1.05	105	90 - 110	2006-12-21
Total Zinc		mg/L	1.00	1.08	108	90 - 110	2006-12-21

Standard (ICV-1)

QC Batch: 33061 Date Analyzed: 2006-12-15 Analyzed By: DR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.99	100	98.8 - 101	2006-12-15

Standard (CCV-1)

QC Batch: 33061 Date Analyzed: 2006-12-15 Analyzed By: DR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.01	100	98.8 - 101	2006-12-15

Standard (ICV-1)

QC Batch: 33068 Date Analyzed: 2006-12-19 Analyzed By: DR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1410	1410	100	96.7 - 108	2006-12-19

Standard (CCV-1)

QC Batch: 33068 Date Analyzed: 2006-12-19 Analyzed By: DR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1410	1420	100	96.7 - 108	2006-12-19

Standard (ICV-1)

QC Batch: 33089 Date Analyzed: 2006-12-22 Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.970	97	85 - 115	2006-12-22

Standard (CCV-1)

QC Batch: 33089 Date Analyzed: 2006-12-22 Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.892	89	85 - 115	2006-12-22

Standard (CCV-1)

QC Batch: 33114 Date Analyzed: 2006-12-21 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	63.4	106	80 - 120	2006-12-21
1,4-Dichlorobenzene (para)		mg/L	60.0	61.6	103	80 - 120	2006-12-21
2-Nitrophenol		mg/L	60.0	70.2	117	80 - 120	2006-12-21
2,4-Dichlorophenol		mg/L	60.0	52.7	88	80 - 120	2006-12-21
Hexachlorobutadiene		mg/L	60.0	65.6	109	80 - 120	2006-12-21
4-Chloro-3-methylphenol		mg/L	60.0	53.7	90	80 - 120	2006-12-21
2,4,6-Trichlorophenol		mg/L	60.0	70.5	118	80 - 120	2006-12-21
Acenaphthene		mg/L	60.0	61.9	103	80 - 120	2006-12-21
Diphenylamine		mg/L	60.0	59.5	99	80 - 120	2006-12-21
Pentachlorophenol		mg/L	60.0	70.8	118	80 - 120	2006-12-21
Fluoranthene		mg/L	60.0	59.2	99	80 - 120	2006-12-21
Di-n-octylphthalate		mg/L	60.0	57.8	96	80 - 120	2006-12-21
Benzo(a)pyrene		mg/L	60.0	65.5	109	80 - 120	2006-12-21

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		63.0	mg/L	1	60.0	105	80 - 120
Phenol-d5		63.5	mg/L	1	60.0	106	80 - 120
Nitrobenzene-d5	[6]	73.1	mg/L	1	60.0	122	80 - 120
2-Fluorobiphenyl		60.5	mg/L	1	60.0	101	80 - 120
2,4,6-Tribromophenol		67.2	mg/L	1	60.0	112	80 - 120
Terphenyl-d14		65.9	mg/L	1	60.0	110	80 - 120

Standard (CCV-2)

QC Batch: 33114 Date Analyzed: 2006-12-21 Analyzed By: DS

[6]Nitrobenzene-d5 outside of control limits on CCV(ICV). CCV(ICV) component average is 106% which is within acceptable range. This is acceptable by Method 8000.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	68.6	114	80 - 120	2006-12-21
1,4-Dichlorobenzene (para)		mg/L	60.0	60.9	102	80 - 120	2006-12-21
2-Nitrophenol		mg/L	60.0	66.4	111	80 - 120	2006-12-21
2,4-Dichlorophenol		mg/L	60.0	59.9	100	80 - 120	2006-12-21
Hexachlorobutadiene		mg/L	60.0	59.5	99	80 - 120	2006-12-21
4-Chloro-3-methylphenol		mg/L	60.0	56.2	94	80 - 120	2006-12-21
2,4,6-Trichlorophenol		mg/L	60.0	63.9	106	80 - 120	2006-12-21
Acenaphthene		mg/L	60.0	60.0	100	80 - 120	2006-12-21
Diphenylamine		mg/L	60.0	60.2	100	80 - 120	2006-12-21
Pentachlorophenol		mg/L	60.0	71.1	118	80 - 120	2006-12-21
Fluoranthene		mg/L	60.0	65.6	109	80 - 120	2006-12-21
Di-n-octylphthalate		mg/L	60.0	57.9	96	80 - 120	2006-12-21
Benzo(a)pyrene		mg/L	60.0	64.7	108	80 - 120	2006-12-21

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		63.0	mg/L	1	60.0	105	80 - 120
Phenol-d5		68.4	mg/L	1	60.0	114	80 - 120
Nitrobenzene-d5		72.0	mg/L	1	60.0	120	80 - 120
2-Fluorobiphenyl		65.3	mg/L	1	60.0	109	80 - 120
2,4,6-Tribromophenol		52.6	mg/L	1	60.0	88	80 - 120
Terphenyl-d14		63.6	mg/L	1	60.0	106	80 - 120

Standard (CCV-1)

QC Batch: 33129 Date Analyzed: 2006-12-23 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	49.4	99	80 - 120	2006-12-23
1,1-Dichloroethene		µg/L	50.0	52.8	106	80 - 120	2006-12-23
Chloroform		µg/L	50.0	49.8	100	80 - 120	2006-12-23
1,2-Dichloropropane		µg/L	50.0	51.6	103	80 - 120	2006-12-23
Toluene		µg/L	50.0	48.0	96	80 - 120	2006-12-23
Chlorobenzene		µg/L	50.0	49.8	100	80 - 120	2006-12-23
Ethylbenzene		µg/L	50.0	52.6	105	80 - 120	2006-12-23

Standard (ICV-1)

QC Batch: 33135 Date Analyzed: 2006-12-27 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	53.0	106	90 - 110	2006-12-27

Standard (CCV-1)

QC Batch: 33135 Date Analyzed: 2006-12-27 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	48.5	97	90 - 110	2006-12-27

Standard (ICV-1)

QC Batch: 33148 Date Analyzed: 2006-12-27 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	0.124	99	90 - 110	2006-12-27
Dissolved Cadmium		mg/L	1.00	0.953	95	95 - 105	2006-12-27
Dissolved Chromium		mg/L	1.00	0.956	96	90 - 110	2006-12-27
Dissolved Copper		mg/L	1.00	0.981	98	90 - 110	2006-12-27
Dissolved Lead		mg/L	1.00	1.01	101	90 - 110	2006-12-27
Dissolved Zinc		mg/L	1.00	1.01	101	90 - 110	2006-12-27

Standard (CCV-1)

QC Batch: 33148 Date Analyzed: 2006-12-27 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	0.122	98	90 - 110	2006-12-27
Dissolved Cadmium		mg/L	1.00	0.924	92	90 - 110	2006-12-27
Dissolved Chromium		mg/L	1.00	0.942	94	90 - 110	2006-12-27
Dissolved Copper		mg/L	1.00	0.988	99	90 - 110	2006-12-27
Dissolved Lead		mg/L	1.00	0.934	93	90 - 110	2006-12-27
Dissolved Zinc		mg/L	1.00	0.994	99	90 - 110	2006-12-27

Standard (ICV-1)

QC Batch: 33158 Date Analyzed: 2006-12-27 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	2006-12-27
Carbonate Alkalinity		mg/L as CaCo3	0.00	228		0 - 105	2006-12-27
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	16.0		0 - 105	2006-12-27
Total Alkalinity		mg/L as CaCo3	250	244	98	93.7 - 99.9	2006-12-27

Standard (CCV-1)

QC Batch: 33158 Date Analyzed: 2006-12-27 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	2006-12-27
Carbonate Alkalinity		mg/L as CaCo3	0.00	232		0 - 105	2006-12-27
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	16.0		0 - 105	2006-12-27
Total Alkalinity		mg/L as CaCo3	250	248	99	93.7 - 99.9	2006-12-27

Standard (ICV-1)

QC Batch: 33159 Date Analyzed: 2006-12-21 Analyzed By: JG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	986	99	94.4 - 106	2006-12-21

Standard (CCV-1)

QC Batch: 33159 Date Analyzed: 2006-12-21 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	1010	101	94.4 - 106	2006-12-21

Standard (ICV-1)

QC Batch: 33295 Date Analyzed: 2007-01-02 Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Sodium		mg/L	50.0	50.6	101	90 - 110	2007-01-02

Standard (CCV-1)

QC Batch: 33295 Date Analyzed: 2007-01-02 Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Sodium		mg/L	50.0	50.3	101	90 - 110	2007-01-02