Analytical and Quality Control Report

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Report Date: January 5, 2007

Work Order: 6121510

Project Name: HELSTF Groundwater Study
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
111876	HLSF-0085-HMW-002-1206	water	2006-12-13	12:40	2006-12-14
111877	HLSF-0085-TB-756-1206	water	2006-12-13	12:40	2006-12-14

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 34 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director

Standard Flags

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

Analytical Report

Sample: 111876 - HLSF-0085-HMW-002-1206

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	33076	Date Analyzed:	2006-12-22	Analyzed By:	JG
Prep Batch:	28752	Sample Preparation:	2006-12-22	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		**308**	mg/L as CaCo3	1	4.00
Total Alkalinity		**308**	mg/L as CaCo3	1	4.00

Sample: 111876 - HLSF-0085-HMW-002-1206

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: 111876 - HLSF-0085-HMW-002-1206

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	33065	Date Analyzed:	2006-12-19	Analyzed By:	DR
Prep Batch:	28741	Sample Preparation:	2006-12-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		**46100**	µMHOS/cm	1	0.00

Sample: 111876 - HLSF-0085-HMW-002-1206

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	32994	Date Analyzed:	2006-12-20	Analyzed By:	RR
Prep Batch:	28613	Sample Preparation:	2006-12-18	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00200	mg/L	1	0.00200
Dissolved Cadmium		**0.00200**	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: 111876 - HLSF-0085-HMW-002-1206

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	33005	Date Analyzed:	2006-12-15	Analyzed By:	WB
Prep Batch:	28665	Sample Preparation:	2006-12-15	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		**405**	mg/L	100	0.500
Fluoride		**6.08**	mg/L	5	0.200
Nitrite-N		<1.00	mg/L	5	0.200
Nitrate-N		**4.05**	mg/L	5	0.200
Sulfate		**2590**	mg/L	100	0.500

Sample: 111876 - HLSF-0085-HMW-002-1206

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	32906	Date Analyzed:	2006-12-14	Analyzed By:	JR
Prep Batch:	28614	Sample Preparation:	2006-12-14	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
pH		**7.28**	s.u.	1	0.00

Sample: 111876 - HLSF-0085-HMW-002-1206

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	33035	Date Analyzed:	2006-12-21	Analyzed By:	RR
Prep Batch:	28613	Sample Preparation:	2006-12-18	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Sodium		**430**	mg/L	10	0.500

Sample: 111876 - HLSF-0085-HMW-002-1206

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		**351**	mg/L	10	0.500

Sample: 111876 - HLSF-0085-HMW-002-1206

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	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
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

continued . . .

sample 111876 continued . . .

Parameter	Flag	RL Result	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		0.0308	mg/L	1	0.0800	38	10 - 75.1
Phenol-d5		0.0213	mg/L	1	0.0800	27	10 - 56.2

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sample continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0853	mg/L	1	0.0800	107	18.1 - 108
2-Fluorobiphenyl		0.0871	mg/L	1	0.0800	109	20 - 112
2,4,6-Tribromophenol		0.0547	mg/L	1	0.0800	68	10 - 135
Terphenyl-d14		0.0890	mg/L	1	0.0800	111	28.2 - 134

Sample: 111876 - HLSF-0085-HMW-002-1206

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	33074	Date Analyzed:	2006-12-19	Analyzed By:	JG
Prep Batch:	28751	Sample Preparation:	2006-12-19	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**4640**	mg/L	1	5.00

Sample: 111876 - HLSF-0085-HMW-002-1206

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		<0.00500	mg/L	1	0.00500
Total Copper		<0.00500	mg/L	1	0.00500
Total Phosphorous		**0.0570**	mg/L	1	0.0500
Total Lead		<0.00500	mg/L	1	0.00500
Total Zinc		<0.00500	mg/L	1	0.00500

Sample: 111876 - HLSF-0085-HMW-002-1206

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	32860	Date Analyzed:	2006-12-15	Analyzed By:	SP
Prep Batch:	28578	Sample Preparation:	2006-12-15	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	[1]	21.0	mg/L	1	15.0	140	57 - 132.3

[1] High surrogate recovery. Sample non-detect, result bias high.

Sample: 111876 - HLSF-0085-HMW-002-1206

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	32868	Date Analyzed:	2006-12-15	Analyzed By:	KB
Prep Batch:	28584	Sample Preparation:	2006-12-15	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)		0.0841	mg/L	1	0.100	84	58.5 - 135
4-Bromofluorobenzene (4-BFB)		0.0778	mg/L	1	0.100	78	66.8 - 115

Sample: 111876 - HLSF-0085-HMW-002-1206

Analysis:	Volatiles WTS	Analytical Method:	S 8260B	Prep Method:	S 3510C
QC Batch:	33094	Date Analyzed:	2006-12-21	Analyzed By:	JG
Prep Batch:	28770	Sample Preparation:	2006-12-21	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 111876 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
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
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		49.9	µg/L	1	50.0	100	82.4 - 115
Toluene-d8		49.9	µg/L	1	50.0	100	89.7 - 108
4-Bromofluorobenzene (4-BFB)		46.7	µg/L	1	50.0	93	84.6 - 114

Sample: 111877 - HLSF-0085-TB-756-1206

Analysis:	Volatiles WTS	Analytical Method:	S 8260B	Prep Method:	S 3510C
QC Batch:	33094	Date Analyzed:	2006-12-21	Analyzed By:	JG
Prep Batch:	28770	Sample Preparation:	2006-12-21	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		**15.2**	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	*B*	**5.61**	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 111877 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		50.5	µg/L	1	50.0	101	82.4 - 115
Toluene-d8		50.8	µg/L	1	50.0	102	89.7 - 108
4-Bromofluorobenzene (4-BFB)		47.1	µg/L	1	50.0	94	84.6 - 114

Method Blank (1) QC Batch: 32860

QC Batch: 32860 Date Analyzed: 2006-12-15 Analyzed By: SP
Prep Batch: 28578 QC Preparation: 2006-12-15 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		17.8	mg/L	1	15.0	119	57 - 132.3

Method Blank (1) QC Batch: 32868

QC Batch: 32868 | Date Analyzed: 2006-12-15 | Analyzed By: KB
Prep Batch: 28584 | QC Preparation: 2006-12-15 | 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)		0.106	mg/L	1	0.100	106	77.2 - 124
4-Bromofluorobenzene (4-BFB)		0.0976	mg/L	1	0.100	98	58 - 111

Method Blank (1) QC Batch: 32994

QC Batch: 32994 | Date Analyzed: 2006-12-20 | Analyzed By: RR
Prep Batch: 28613 | QC Preparation: 2006-12-18 | 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: 33005

QC Batch: 33005 | Date Analyzed: 2006-12-15 | Analyzed By: WB
Prep Batch: 28665 | QC Preparation: 2006-12-15 | 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: 33035

QC Batch: 33035 Date Analyzed: 2006-12-21 Analyzed By: RR
Prep Batch: 28613 QC Preparation: 2006-12-18 Prepared By: TS

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

Method Blank (1) QC Batch: 33065

QC Batch: 33065 Date Analyzed: 2006-12-19 Analyzed By: DR
Prep Batch: 28741 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: 33074

QC Batch: 33074 Date Analyzed: 2006-12-19 Analyzed By: JG
Prep Batch: 28751 QC Preparation: 2006-12-19 Prepared By: JG

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

Method Blank (1) QC Batch: 33076

QC Batch: 33076 Date Analyzed: 2006-12-22 Analyzed By: JG
Prep Batch: 28752 QC Preparation: 2006-12-22 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: 33094

QC Batch:	33094	Date Analyzed:	2006-12-21	Analyzed By:	JG
Prep Batch:	28770	QC Preparation:	2006-12-21	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		1.85	µg/L	5
MTBE		<0.0504	µg/L	1
trans-1,2-Dichloroethene		<0.0598	µg/L	1
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		0.600	µg/L	1
1,1,2-Trichloroethane		<0.106	µg/L	1
1,3-Dichloropropane		<0.0625	µg/L	1

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
Dibromochloromethane		<0.0791	µg/L	1
1,2-Dibromoethane (EDB)		<0.0460	µg/L	1
Tetrachloroethene (PCE)		0.0900	µg/L	1
Chlorobenzene		0.0400	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		0.980	µg/L	5
Hexachlorobutadiene		<0.176	µg/L	5
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		49.8	µg/L	1	50.0	100	82.4 - 115
Toluene-d8		50.1	µg/L	1	50.0	100	89.7 - 108
4-Bromofluorobenzene (4-BFB)		47.2	µg/L	1	50.0	94	84.6 - 114

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

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
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
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

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
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
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

continued . . .

method blank continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
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: 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

Duplicates (1)

QC Batch: 32906 Date Analyzed: 2006-12-14 Analyzed By: JR
Prep Batch: 28614 QC Preparation: 2006-12-14 Prepared By: JG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.32	7.28	s.u.	1	0	20

Duplicates (1)

QC Batch: 33065 Date Analyzed: 2006-12-19 Analyzed By: DR
Prep Batch: 28741 QC Preparation: 2006-12-19 Prepared By: DR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	53600	53700	μMHOS/cm	1	0	6.7

Duplicates (1)

QC Batch: 33074 Date Analyzed: 2006-12-19 Analyzed By: JG
Prep Batch: 28751 QC Preparation: 2006-12-19 Prepared By: JG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	16900	16700	mg/L	1	1	20

Duplicates (1)

QC Batch: 33076 Date Analyzed: 2006-12-22 Analyzed By: JG
Prep Batch: 28752 QC Preparation: 2006-12-22 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	132	134	mg/L as CaCo3	1	2	6.3
Total Alkalinity	132	134	mg/L as CaCo3	1	2	6.3

Laboratory Control Spike (LCS-1)

QC Batch: 32860 Date Analyzed: 2006-12-15 Analyzed By: SP
Prep Batch: 28578 QC Preparation: 2006-12-15 Prepared By: SP

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	28.8	mg/L	1	25.0	<1.19	115	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	30.6	mg/L	1	25.0	<1.19	122	73.2 - 123	6	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	16.0	16.0	mg/L	1	15.0	107	107	57 - 132.3

Laboratory Control Spike (LCS-1)

QC Batch: 32868 Date Analyzed: 2006-12-15 Analyzed By: KB
Prep Batch: 28584 QC Preparation: 2006-12-15 Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	1.02	mg/L	1	1.00	<0.0272	102	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	1.07	mg/L	1	1.00	<0.0272	107	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)	0.0984	0.0963	mg/L	1	0.100	98	96	73.8 - 122
4-Bromofluorobenzene (4-BFB)	0.0988	0.0913	mg/L	1	0.100	99	91	82.6 - 112

Laboratory Control Spike (LCS-1)

QC Batch: 32994 Date Analyzed: 2006-12-20 Analyzed By: RR
Prep Batch: 28613 QC Preparation: 2006-12-18 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.127	mg/L	1	0.125	<0.000199	102	86.2 - 116
Dissolved Cadmium	0.240	mg/L	1	0.250	<0.000577	96	83.3 - 113
Dissolved Chromium	0.0980	mg/L	1	0.100	<0.00357	98	83 - 112
Dissolved Copper	0.126	mg/L	1	0.125	<0.00127	101	84.3 - 114
Dissolved Lead	0.503	mg/L	1	0.500	<0.00398	101	81.1 - 111
Dissolved Zinc	0.225	mg/L	1	0.250	<0.00300	90	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	0.124	mg/L	1	0.125	<0.000199	99	86.2 - 116	2	20
Dissolved Cadmium	0.236	mg/L	1	0.250	<0.000577	94	83.3 - 113	2	20
Dissolved Chromium	0.0980	mg/L	1	0.100	<0.00357	98	83 - 112	0	20
Dissolved Copper	0.123	mg/L	1	0.125	<0.00127	98	84.3 - 114	2	20
Dissolved Lead	0.479	mg/L	1	0.500	<0.00398	96	81.1 - 111	5	20
Dissolved Zinc	0.223	mg/L	1	0.250	<0.00300	89	84.7 - 113	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: 33005 Date Analyzed: 2006-12-15 Analyzed By: WB
Prep Batch: 28665 QC Preparation: 2006-12-15 Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	2.60	mg/L	1	2.50	<0.0429	104	90 - 110
Chloride	12.3	mg/L	1	12.5	<0.0181	98	90 - 110
Fluoride	2.61	mg/L	1	2.50	<0.0119	104	90 - 110
Nitrite-N	2.71	mg/L	1	2.50	<0.0128	108	90 - 110
Nitrate-N	2.67	mg/L	1	2.50	<0.0106	107	90 - 110
Sulfate	13.1	mg/L	1	12.5	<0.0485	105	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	2.72	mg/L	1	2.50	<0.0429	109	90 - 110	4	20
Chloride	13.1	mg/L	1	12.5	<0.0181	105	90 - 110	6	20
Fluoride	2.69	mg/L	1	2.50	<0.0119	108	90 - 110	3	20
Nitrite-N	2.64	mg/L	1	2.50	<0.0128	106	90 - 110	3	20
Nitrate-N	2.72	mg/L	1	2.50	<0.0106	109	90 - 110	2	20
Sulfate	13.4	mg/L	1	12.5	<0.0485	107	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: 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: 33035 Date Analyzed: 2006-12-21 Analyzed By: RR
Prep Batch: 28613 QC Preparation: 2006-12-18 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Sodium	47.0	mg/L	1	50.0	<0.0309	94	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	48.4	mg/L	1	50.0	<0.0309	97	85 - 115	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: 33094 Date Analyzed: 2006-12-21 Analyzed By: JG
Prep Batch: 28770 QC Preparation: 2006-12-21 Prepared By: JG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	49.3	µg/L	1	50.0	<0.0736	99	83.4 - 114
Benzene	51.4	µg/L	1	50.0	<0.0495	103	83.5 - 115
Trichloroethene (TCE)	49.9	µg/L	1	50.0	<0.0495	100	91.3 - 111
Toluene	47.0	µg/L	1	50.0	<0.0736	94	82 - 110
Chlorobenzene	49.3	µg/L	1	50.0	<0.0217	99	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	49.9	µg/L	1	50.0	<0.0736	100	83.4 - 114	1	20
Benzene	51.9	µg/L	1	50.0	<0.0495	104	83.5 - 115	1	20
Trichloroethene (TCE)	50.8	µg/L	1	50.0	<0.0495	102	91.3 - 111	2	20
Toluene	47.6	µg/L	1	50.0	<0.0736	95	82 - 110	1	20
Chlorobenzene	49.7	µg/L	1	50.0	<0.0217	99	87.9 - 109	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
Dibromofluoromethane	49.5	49.7	µg/L	1	50.0	99	99	82.4 - 115
Toluene-d8	49.8	49.8	µg/L	1	50.0	100	100	89.7 - 108
4-Bromofluorobenzene (4-BFB)	48.9	49.2	µg/L	1	50.0	98	98	84.6 - 114

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
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: 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.

Matrix Spike (MS-1) Spiked Sample: 111623

QC Batch: 32860 Date Analyzed: 2006-12-15 Analyzed By: SP
Prep Batch: 28578 QC Preparation: 2006-12-15 Prepared By: SP

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	26.3	mg/L	1	25.0	<1.19	105	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	[2]	28.8	mg/L	1	25.0	<1.19	115	77.8 - 112	9	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	16.3	17.3	mg/L	1	15	109	115	57 - 132.3

Matrix Spike (MS-1) Spiked Sample: 111614

QC Batch: 32994 Date Analyzed: 2006-12-20 Analyzed By: RR
Prep Batch: 28613 QC Preparation: 2006-12-18 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.115	mg/L	1	0.125	<0.000199	92	90.1 - 120
Dissolved Cadmium	0.195	mg/L	1	0.250	<0.000577	78	75 - 112
Dissolved Chromium	0.0820	mg/L	1	0.100	<0.00357	82	75 - 121
Dissolved Copper	0.118	mg/L	1	0.125	0.003	92	81.5 - 125
Dissolved Lead	0.495	mg/L	1	0.500	<0.00398	99	75 - 111
Dissolved Zinc	0.236	mg/L	1	0.250	<0.00300	94	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	0.192	mg/L	1	0.250	<0.000577	77	75 - 112	2	20
Dissolved Chromium	0.0870	mg/L	1	0.100	<0.00357	87	75 - 121	6	20
Dissolved Copper	0.117	mg/L	1	0.125	0.003	91	81.5 - 125	1	20
Dissolved Lead	0.486	mg/L	1	0.500	<0.00398	97	75 - 111	2	20
Dissolved Zinc	0.227	mg/L	1	0.250	<0.00300	91	80.4 - 120	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: 111876

QC Batch: 33005 Date Analyzed: 2006-12-15 Analyzed By: WB
Prep Batch: 28665 QC Preparation: 2006-12-15 Prepared By: WB

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide		265	mg/L	100	250	<4.29	106	95.4 - 114
Chloride		1610	mg/L	100	1250	405	96	10 - 6384
Fluoride		262	mg/L	100	250	6.08	102	73.4 - 119
Nitrite-N		264	mg/L	100	250	<1.28	106	58.3 - 151
Nitrate-N	[3]	374	mg/L	100	250	4.05	148	85.7 - 123
Sulfate		3870	mg/L	100	1250	2590	102	86.2 - 117

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

[2] MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[3] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromide	[4]	287	mg/L	100	250	<4.29	115	95.4 - 114	8	20
Chloride		1450	mg/L	100	1250	405	84	10 - 6384	10	20
Fluoride	[5]	322	mg/L	100	250	6.08	126	73.4 - 119	20	20
Nitrite-N		298	mg/L	100	250	<1.28	119	58.3 - 151	12	20
Nitrate-N		290	mg/L	100	250	4.05	114	85.7 - 123	25	20
Sulfate	[6]	4160	mg/L	100	1250	2590	126	86.2 - 117	7	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

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

continued . . .

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

matrix spikes continued . . .

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
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: 111614

QC Batch: 33035 Date Analyzed: 2006-12-21 Analyzed By: RR
Prep Batch: 28613 QC Preparation: 2006-12-18 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Sodium	2040	mg/L	1	50.0	2000	80	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	2040	mg/L	1	50.0	2000	80	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: 111874

QC Batch: 33094 Date Analyzed: 2006-12-21 Analyzed By: JG
Prep Batch: 28770 QC Preparation: 2006-12-21 Prepared By: JG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	52.7	µg/L	1	50.0	5.43	105	78.7 - 119
Benzene	48.0	µg/L	1	50.0	<0.0495	96	75.8 - 125
Trichloroethene (TCE)	46.4	µg/L	1	50.0	<0.0495	93	83.6 - 112
Toluene	43.0	µg/L	1	50.0	<0.0736	86	81.6 - 115
Chlorobenzene	45.6	µg/L	1	50.0	<0.0217	91	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	[7]	n/a	µg/L	1	50.0	5.43	0	78.7 - 119	200	20
Benzene	[8]	n/a	µg/L	1	50.0	<0.0495	0	75.8 - 125	200	20
Trichloroethene (TCE)	[9]	n/a	µg/L	1	50.0	<0.0495	0	83.6 - 112	200	20
Toluene	[10]	n/a	µg/L	1	50.0	<0.0736	0	81.6 - 115	200	20
Chlorobenzene	[11]	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.

[7] RPD is out of range because a matrix spike duplicate was not prepared.
[8] RPD is out of range because a matrix spike duplicate was not prepared.
[9] RPD is out of range because a matrix spike duplicate was not prepared.
[10] RPD is out of range because a matrix spike duplicate was not prepared.
[11] RPD is out of range because a matrix spike duplicate was not prepared.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	[12]	49.3	n/a	µg/L	1	50	99	0	86.6 - 114
Toluene-d8	[13]	49.0	n/a	µg/L	1	50	98	0	91 - 109
4-Bromofluorobenzene (4-BFB)	[14]	48.0	n/a	µg/L	1	50	96	0	87.2 - 113

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

[12]RPD is out of range because a matrix spike duplicate was not prepared.
[13]RPD is out of range because a matrix spike duplicate was not prepared.
[14]RPD is out of range because a matrix spike duplicate was not prepared.

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	[15]	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	[16]	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.

Standard (CCV-1)

QC Batch: 32860 Date Analyzed: 2006-12-15 Analyzed By: SP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	263	105	85 - 115	2006-12-15

Standard (CCV-2)

QC Batch: 32860 Date Analyzed: 2006-12-15 Analyzed By: SP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	237	95	85 - 115	2006-12-15

Standard (ICV-1)

QC Batch: 32868 Date Analyzed: 2006-12-15 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	0.979	98	85 - 115	2006-12-15

Standard (CCV-1)

QC Batch: 32868 Date Analyzed: 2006-12-15 Analyzed By: KB

[15]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[16]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
GRO		mg/L	1.00	1.00	100	85 - 115	2006-12-15

Standard (ICV-1)

QC Batch: 32906 Date Analyzed: 2006-12-14 Analyzed By: JR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.96	99	98.8 - 101	2006-12-14

Standard (CCV-1)

QC Batch: 32906 Date Analyzed: 2006-12-14 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.97	100	98.8 - 101	2006-12-14

Standard (ICV-1)

QC Batch: 32994 Date Analyzed: 2006-12-20 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	0.122	98	90 - 110	2006-12-20
Dissolved Cadmium		mg/L	1.00	0.954	95	95 - 105	2006-12-20
Dissolved Chromium		mg/L	1.00	0.954	95	90 - 110	2006-12-20
Dissolved Copper		mg/L	1.00	0.976	98	90 - 110	2006-12-20
Dissolved Lead		mg/L	1.00	1.00	100	90 - 110	2006-12-20
Dissolved Zinc		mg/L	1.00	1.00	100	90 - 110	2006-12-20

Standard (CCV-1)

QC Batch: 32994 Date Analyzed: 2006-12-20 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	0.121	97	90 - 110	2006-12-20
Dissolved Cadmium		mg/L	1.00	0.928	93	90 - 110	2006-12-20
Dissolved Chromium		mg/L	1.00	0.923	92	90 - 110	2006-12-20
Dissolved Copper		mg/L	1.00	0.952	95	90 - 110	2006-12-20
Dissolved Lead		mg/L	1.00	0.966	97	90 - 110	2006-12-20
Dissolved Zinc		mg/L	1.00	0.982	98	90 - 110	2006-12-20

Standard (ICV-1)

QC Batch: 33005 Date Analyzed: 2006-12-15 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	2.31	92	90 - 110	2006-12-15
Chloride		mg/L	12.5	12.5	100	90 - 110	2006-12-15
Fluoride		mg/L	2.50	2.71	108	90 - 110	2006-12-15
Nitrite-N		mg/L	2.50	2.66	106	90 - 110	2006-12-15
Nitrate-N		mg/L	2.50	2.63	105	90 - 110	2006-12-15
Sulfate		mg/L	12.5	12.9	103	90 - 110	2006-12-15

Standard (CCV-1)

QC Batch: 33005 Date Analyzed: 2006-12-15 Analyzed By: WB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.69	108	90 - 110	2006-12-15
Chloride		mg/L	12.5	13.0	104	90 - 110	2006-12-15
Fluoride		mg/L	2.50	2.74	110	90 - 110	2006-12-15
Nitrite-N		mg/L	2.50	2.73	109	90 - 110	2006-12-15
Nitrate-N		mg/L	2.50	2.72	109	90 - 110	2006-12-15
Sulfate		mg/L	12.5	13.7	110	90 - 110	2006-12-15

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
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: 33035 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
Dissolved Sodium		mg/L	50.0	52.0	104	90 - 110	2006-12-21

Standard (CCV-1)

QC Batch: 33035 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
Dissolved Sodium		mg/L	50.0	54.0	108	90 - 110	2006-12-21

Standard (ICV-1)

QC Batch: 33065 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: 33065 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: 33074 Date Analyzed: 2006-12-19 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	1010	101	94.4 - 106	2006-12-19

Standard (CCV-1)

QC Batch: 33074 Date Analyzed: 2006-12-19 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	995	100	94.4 - 106	2006-12-19

Standard (ICV-1)

QC Batch: 33076 Date Analyzed: 2006-12-22 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	2006-12-22
Carbonate Alkalinity		mg/L as CaCo3	0.00	224		0 - 105	2006-12-22
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	14.0		0 - 105	2006-12-22
Total Alkalinity		mg/L as CaCo3	250	238	95	93.7 - 99.9	2006-12-22

Standard (CCV-1)

QC Batch: 33076 Date Analyzed: 2006-12-22 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	2006-12-22
Carbonate Alkalinity		mg/L as CaCo3	0.00	220		0 - 105	2006-12-22
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	28.0		0 - 105	2006-12-22
Total Alkalinity		mg/L as CaCo3	250	248	99	93.7 - 99.9	2006-12-22

Standard (CCV-1)

QC Batch: 33094 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
Vinyl Chloride		µg/L	50.0	46.8	94	80 - 120	2006-12-21
1,1-Dichloroethene		µg/L	50.0	52.0	104	80 - 120	2006-12-21
Chloroform		µg/L	50.0	48.9	98	80 - 120	2006-12-21
1,2-Dichloropropane		µg/L	50.0	50.4	101	80 - 120	2006-12-21
Toluene		µg/L	50.0	47.9	96	80 - 120	2006-12-21
Chlorobenzene		µg/L	50.0	50.1	100	80 - 120	2006-12-21
Ethylbenzene		µg/L	50.0	52.6	105	80 - 120	2006-12-21

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	[17]	73.1	mg/L	1	60.0	122	80 - 120
2-Fluorobiphenyl		60.5	mg/L	1	60.0	101	80 - 120

continued . . .

[17]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.

standard continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
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

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 (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