Analytical and Quality Control Report

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Report Date: January 30, 2007

Work Order: 7011219

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
113774	HLSF-0085-HMW-065-0107	water	2007-01-11	08:50	2007-01-11
113775	HLSF-0085-TB-775-0107	water	2007-01-11	08:50	2007-01-11

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 35 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: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	34056	Date Analyzed:	2007-01-24	Analyzed By:	JG
Prep Batch:	29556	Sample Preparation:	2007-01-24	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		**210**	mg/L as CaCo3	1	4.00
Total Alkalinity		**210**	mg/L as CaCo3	1	4.00

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	33857	Date Analyzed:	2007-01-22	Analyzed By:	SM
Prep Batch:	29393	Sample Preparation:	2007-01-22	Prepared By:	SM

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

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	33615	Date Analyzed:	2007-01-12	Analyzed By:	DR
Prep Batch:	29209	Sample Preparation:	2007-01-12	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		**13800**	μMHOS/cm	1	0.00

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Dissolved Metals	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	33988	Date Analyzed:	2007-01-26	Analyzed By:	RR
Prep Batch:	29250	Sample Preparation:	2007-01-16	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: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	33914	Date Analyzed:	2007-01-16	Analyzed By:	JR
Prep Batch:	29454	Sample Preparation:	2007-01-16	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		**1620**	mg/L	100	2.00
Fluoride		**2.07**	mg/L	5	0.200
Sulfate		**6560**	mg/L	500	1.00

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Nitrate and Nitrite as N	Analytical Method:	E 353.3	Prep Method:	N/A
QC Batch:	33961	Date Analyzed:	2007-01-24	Analyzed By:	JS
Prep Batch:	29492	Sample Preparation:	2007-01-24	Prepared By:	JS

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate and Nitrite as N		**44.5**	mg/L	200	0.100

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	33698	Date Analyzed:	2007-01-12	Analyzed By:	DR
Prep Batch:	29271	Sample Preparation:	2007-01-12	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
pH		**7.52**	s.u.	1	0.00

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Salts, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	33910	Date Analyzed:	2007-01-23	Analyzed By:	TP
Prep Batch:	29250	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Sodium		**2720**	mg/L	100	0.500

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Salts, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	33917	Date Analyzed:	2007-01-24	Analyzed By:	TP
Prep Batch:	29246	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Sodium		**3020**	mg/L	100	0.500

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Semivolatiles WTS	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	33661	Date Analyzed:	2007-01-15	Analyzed By:	DS
Prep Batch:	29243	Sample Preparation:	2007-01-15	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

continued . . .

sample 113774 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
2,4,5-Trichlorophenol		<0.00500	mg/L	1	0.00500
2-Chloronaphthalene		<0.00500	mg/L	1	0.00500
1-Chloronaphthalene		<0.00500	mg/L	1	0.00500
2-Nitroaniline		<0.00500	mg/L	1	0.00500
Dimethylphthalate		<0.00500	mg/L	1	0.00500
Acenaphthylene		<0.00500	mg/L	1	0.00500
2,6-Dinitrotoluene		<0.00500	mg/L	1	0.00500
3-Nitroaniline		<0.00500	mg/L	1	0.00500
Acenaphthene		<0.00500	mg/L	1	0.00500
2,4-Dinitrophenol		<0.00500	mg/L	1	0.00500
Dibenzofuran		<0.00500	mg/L	1	0.00500
Pentachlorobenzene		<0.00500	mg/L	1	0.00500
4-Nitrophenol		<0.0250	mg/L	1	0.0250
1-Naphthylamine		<0.00500	mg/L	1	0.00500
2,4-Dinitrotoluene		<0.00500	mg/L	1	0.00500
2-Naphthylamine		<0.00500	mg/L	1	0.00500
2,3,4,6-Tetrachlorophenol		<0.0100	mg/L	1	0.0100
Fluorene		<0.00500	mg/L	1	0.00500
Diethylphthalate		<0.00500	mg/L	1	0.00500
4-Chlorophenyl-phenylether		<0.00500	mg/L	1	0.00500
4-Nitroaniline		<0.00500	mg/L	1	0.00500
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

continued . . .

sample 113774 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
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		0.0243	mg/L	1	0.0800	30	10 - 75.1
Phenol-d5		0.0195	mg/L	1	0.0800	24	10 - 56.2
Nitrobenzene-d5		0.0521	mg/L	1	0.0800	65	18.1 - 108
2-Fluorobiphenyl		0.0528	mg/L	1	0.0800	66	20 - 112
2,4,6-Tribromophenol		0.0356	mg/L	1	0.0800	44	10 - 135
Terphenyl-d14	[1]	0.116	mg/L	1	0.0800	145	28.2 - 134

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	33818	Date Analyzed:	2007-01-17	Analyzed By:	JG
Prep Batch:	29374	Sample Preparation:	2007-01-17	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**13300**	mg/L	1	5.00

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	TOC	Analytical Method:	E 415.1	Prep Method:	N/A
QC Batch:	34108	Date Analyzed:	2007-01-30	Analyzed By:	KV
Prep Batch:	29605	Sample Preparation:		Prepared By:	KV

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Total Metals	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	33927	Date Analyzed:	2007-01-24	Analyzed By:	RR
Prep Batch:	29246	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00200	mg/L	1	0.00200
Total Cadmium		**0.00300**	mg/L	1	0.00100
Total Chromium		<0.00500	mg/L	1	0.00500

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

continued . . .

sample 113774 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
Total Copper		<0.00500	mg/L	1	0.00500
Total Phosphorous		**0.0520**	mg/L	1	0.0500
Total Lead		<0.00500	mg/L	1	0.00500
Total Zinc		<0.00500	mg/L	1	0.00500

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	33676	Date Analyzed:	2007-01-16	Analyzed By:	SP
Prep Batch:	29255	Sample Preparation:	2007-01-16	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		18.0	mg/L	1	15.0	120	57 - 132.3

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	33608	Date Analyzed:	2007-01-12	Analyzed By:	KB
Prep Batch:	29202	Sample Preparation:	2007-01-12	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)		0.0909	mg/L	1	0.100	91	72.5 - 108
4-Bromofluorobenzene (4-BFB)		0.0892	mg/L	1	0.100	89	68.5 - 114

Sample: 113774 - HLSF-0085-HMW-065-0107

Analysis:	Volatiles WTS	Analytical Method:	S 8260B	Prep Method:	S 3510C
QC Batch:	33876	Date Analyzed:	2007-01-19	Analyzed By:	JG
Prep Batch:	29424	Sample Preparation:	2007-01-19	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

continued . . .

sample 113774 continued . . .

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

continued . . .

sample 113774 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
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		56.2	µg/L	1	50.0	112	82.4 - 115
Toluene-d8		52.0	µg/L	1	50.0	104	89.7 - 108
4-Bromofluorobenzene (4-BFB)		45.5	µg/L	1	50.0	91	84.6 - 114

Sample: 113775 - HLSF-0085-TB-775-0107

Analysis:	Volatiles WTS	Analytical Method:	S 8260B	Prep Method:	S 3510C
QC Batch:	33876	Date Analyzed:	2007-01-19	Analyzed By:	JG
Prep Batch:	29424	Sample Preparation:	2007-01-19	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

continued . . .

sample 113775 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
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	**7.10**	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene		<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
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

continued . . .

sample 113775 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
n-Butylbenzene		<1.00	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00
Isopropyl Alcohol		<5.00	µg/L	1	5.00
Tert-butyl Alcohol		<5.00	µg/L	1	5.00
1,4-Dioxane		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		55.5	µg/L	1	50.0	111	82.4 - 115
Toluene-d8		51.9	µg/L	1	50.0	104	89.7 - 108
4-Bromofluorobenzene (4-BFB)		46.2	µg/L	1	50.0	92	84.6 - 114

Method Blank (1) QC Batch: 33608

QC Batch: 33608 Date Analyzed: 2007-01-12 Analyzed By: KB
Prep Batch: 29202 QC Preparation: 2007-01-12 Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
GRO		<0.0288	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.100	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0986	mg/L	1	0.100	99	70 - 130

Method Blank (1) QC Batch: 33615

QC Batch: 33615 Date Analyzed: 2007-01-12 Analyzed By: DR
Prep Batch: 29209 QC Preparation: 2007-01-12 Prepared By: DR

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

Method Blank (1) QC Batch: 33661

QC Batch: 33661 Date Analyzed: 2007-01-15 Analyzed By: DS
Prep Batch: 29243 QC Preparation: 2007-01-15 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
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		0.0245	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		0.0256	mg/L	1	0.0800	32	15.6 - 49.6
Phenol-d5		0.0196	mg/L	1	0.0800	24	10.2 - 33.6
Nitrobenzene-d5		0.0586	mg/L	1	0.0800	73	46.7 - 112
2-Fluorobiphenyl		0.0617	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		0.0391	mg/L	1	0.0800	49	24.9 - 147
Terphenyl-d14		0.0960	mg/L	1	0.0800	120	25.6 - 143

Method Blank (1) QC Batch: 33676

QC Batch: 33676 Date Analyzed: 2007-01-16 Analyzed By: SP
Prep Batch: 29255 QC Preparation: 2007-01-16 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		15.3	mg/L	1	15.0	102	57 - 132.3

Method Blank (1) QC Batch: 33818

QC Batch: 33818 Date Analyzed: 2007-01-17 Analyzed By: JG
Prep Batch: 29374 QC Preparation: 2007-01-17 Prepared By: JG

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

Method Blank (1) QC Batch: 33857

QC Batch: 33857 Date Analyzed: 2007-01-22 Analyzed By: SM
Prep Batch: 29393 QC Preparation: 2007-01-22 Prepared By: SM

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

Method Blank (1) QC Batch: 33876

QC Batch: 33876 Date Analyzed: 2007-01-19 Analyzed By: JG
Prep Batch: 29424 QC Preparation: 2007-01-19 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

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
Bromomethane (methyl bromide)		<0.740	µg/L	5
Chloroethane		<0.195	µg/L	1
Trichlorofluoromethane		<0.160	µg/L	1
Acetone		2.34	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		7.05	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		0.200	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

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
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		1.45	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		52.0	µg/L	1	50.0	104	82.4 - 115
Toluene-d8		51.8	µg/L	1	50.0	104	89.7 - 108
4-Bromofluorobenzene (4-BFB)		47.0	µg/L	1	50.0	94	84.6 - 114

Method Blank (1) QC Batch: 33910

QC Batch: 33910 Date Analyzed: 2007-01-23 Analyzed By: TP
Prep Batch: 29250 QC Preparation: 2007-01-16 Prepared By: TS

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

Method Blank (1) QC Batch: 33914

QC Batch: 33914 Date Analyzed: 2007-01-16 Analyzed By: JR
Prep Batch: 29454 QC Preparation: 2007-01-16 Prepared By: JR

Parameter	Flag	MDL Result	Units	RL
Bromide		<0.0217	mg/L	0.2
Chloride		<0.0257	mg/L	2
Fluoride		<0.0168	mg/L	0.2
Sulfate		<0.0598	mg/L	1

Method Blank (1) QC Batch: 33917

QC Batch: 33917 Date Analyzed: 2007-01-24 Analyzed By: TP
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Total Sodium		2.41	mg/L	0.5

Method Blank (1) QC Batch: 33927

QC Batch: 33927 Date Analyzed: 2007-01-24 Analyzed By: RR
Prep Batch: 29246 QC Preparation: 2007-01-16 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: 33961

QC Batch: 33961 Date Analyzed: 2007-01-24 Analyzed By: JS
Prep Batch: 29492 QC Preparation: 2007-01-24 Prepared By: JS

Parameter	Flag	MDL Result	Units	RL
Nitrate and Nitrite as N		<0.0223	mg/L	0.1

Method Blank (1) QC Batch: 33988

QC Batch: 33988 Date Analyzed: 2007-01-26 Analyzed By: RR
Prep Batch: 29250 QC Preparation: 2007-01-16 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: 34056

QC Batch: 34056 Date Analyzed: 2007-01-24 Analyzed By: JG
Prep Batch: 29556 QC Preparation: 2007-01-24 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: 34108

QC Batch: 34108 Date Analyzed: 2007-01-30 Analyzed By: KV
Prep Batch: 29605 QC Preparation: 2007-01-30 Prepared By: KV

Parameter	Flag	MDL Result	Units	RL
Total Organic Carbon		<0.382	mg/L	1

Duplicates (1)

QC Batch: 33615 Date Analyzed: 2007-01-12 Analyzed By: DR
Prep Batch: 29209 QC Preparation: 2007-01-12 Prepared By: DR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	16300	16500	μMHOS/cm	1	1	6.7

Duplicates (1)

QC Batch: 33698 Date Analyzed: 2007-01-12 Analyzed By: DR
Prep Batch: 29271 QC Preparation: 2007-01-12 Prepared By: DR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.52	7.52	s.u.	1	0	20

Duplicates (1)

QC Batch: 33818 Date Analyzed: 2007-01-17 Analyzed By: JG
Prep Batch: 29374 QC Preparation: 2007-01-17 Prepared By: JG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	27100	27500	mg/L	1	2	20

Duplicates (1)

QC Batch: 34056 | Date Analyzed: 2007-01-24 | Analyzed By: JG
Prep Batch: 29556 | QC Preparation: 2007-01-24 | 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	104	102	mg/L as CaCo3	1	2	6.3
Total Alkalinity	104	102	mg/L as CaCo3	1	2	6.3

Laboratory Control Spike (LCS-1)

QC Batch: 33608 | Date Analyzed: 2007-01-12 | Analyzed By: KB
Prep Batch: 29202 | QC Preparation: 2007-01-12 | Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.947	mg/L	1	1.00	<0.0288	95	69.7 - 132

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	0.952	mg/L	1	1.00	<0.0288	95	69.7 - 132	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.112	0.110	mg/L	1	0.100	112	110	74.4 - 114
4-Bromofluorobenzene (4-BFB)	0.106	0.103	mg/L	1	0.100	106	103	81.1 - 112

Laboratory Control Spike (LCS-1)

QC Batch: 33661 | Date Analyzed: 2007-01-15 | Analyzed By: DS
Prep Batch: 29243 | QC Preparation: 2007-01-15 | Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Phenol	0.0183	mg/L	1	0.0800	<0.000590	23	10 - 51.1
2-Chlorophenol	0.0452	mg/L	1	0.0800	<0.00279	56	10 - 116
1,4-Dichlorobenzene (para)	0.0446	mg/L	1	0.0800	<0.000817	56	10.7 - 109
n-Nitrosodi-n-propylamine	0.0667	mg/L	1	0.0800	<0.00117	83	16.9 - 125
1,2,4-Trichlorobenzene	0.0508	mg/L	1	0.0800	<0.00108	64	13.9 - 134
4-Chloro-3-methylphenol	0.0472	mg/L	1	0.0800	<0.00102	59	13.3 - 141
Acenaphthene	0.0507	mg/L	1	0.0800	<0.000990	63	34 - 120
4-Nitrophenol [2]	<0.00914	mg/L	1	0.0800	<0.00914	0	12.8 - 106
2,4-Dinitrotoluene	0.0386	mg/L	1	0.0800	<0.000729	48	40.5 - 142
Pentachlorophenol	0.0321	mg/L	1	0.0800	<0.00539	40	10 - 152

continued . . .

[2] 4-Nitrophenol out of control limits for LCS/LCSD due to erratic performance of analyte. •

control spikes continued . . .

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyrene	0.0810	mg/L	1	0.0800	<0.00101	101	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	0.0159	mg/L	1	0.0800	<0.000590	20	10 - 51.1	14	20
2-Chlorophenol	0.0392	mg/L	1	0.0800	<0.00279	49	10 - 116	14	20
1,4-Dichlorobenzene (para)	0.0409	mg/L	1	0.0800	<0.000817	51	10.7 - 109	9	20
n-Nitrosodi-n-propylamine	0.0493	mg/L	1	0.0800	<0.00117	62	16.9 - 125	30	20
1,2,4-Trichlorobenzene	0.0478	mg/L	1	0.0800	<0.00108	60	13.9 - 134	6	20
4-Chloro-3-methylphenol	0.0389	mg/L	1	0.0800	<0.00102	49	13.3 - 141	19	20
Acenaphthene	0.0480	mg/L	1	0.0800	<0.000990	60	34 - 120	6	20
4-Nitrophenol [3]	<0.00914	mg/L	1	0.0800	<0.00914	0	12.8 - 106	0	20
2,4-Dinitrotoluene	0.0380	mg/L	1	0.0800	<0.000729	48	40.5 - 142	2	20
Pentachlorophenol	0.0330	mg/L	1	0.0800	<0.00539	41	10 - 152	3	20
Pyrene	0.0748	mg/L	1	0.0800	<0.00101	94	47.2 - 151	8	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	0.0252	0.0229	mg/L	1	0.0800	32	29	10 - 77.8
Phenol-d5	0.0196	0.0170	mg/L	1	0.0800	24	21	10 - 47
Nitrobenzene-d5	0.0567	0.0528	mg/L	1	0.0800	71	66	10 - 170
2-Fluorobiphenyl	0.0636	0.0597	mg/L	1	0.0800	80	75	10 - 200
2,4,6-Tribromophenol	0.0405	0.0371	mg/L	1	0.0800	51	46	29 - 99.9
Terphenyl-d14	0.0949	0.0873	mg/L	1	0.0800	119	109	10 - 179

Laboratory Control Spike (LCS-1)

QC Batch: 33676 Date Analyzed: 2007-01-16 Analyzed By: SP
Prep Batch: 29255 QC Preparation: 2007-01-16 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	26.9	mg/L	1	25.0	<1.19	108	73.2 - 123	2	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	15.4	15.4	mg/L	1	15.0	103	103	57 - 132.3

[3] 4-Nitrophenol out of control limits for LCS/LCSD due to erratic performance of analyte. •

Laboratory Control Spike (LCS-1)

QC Batch: 33857 Date Analyzed: 2007-01-22 Analyzed By: SM
Prep Batch: 29393 QC Preparation: 2007-01-22 Prepared By: SM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ammonia-N	4.48	mg/L	1	5.00	<0.820	90	68.5 - 111

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Ammonia-N	4.65	mg/L	1	5.00	<0.820	93	68.5 - 111	4	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 33876 Date Analyzed: 2007-01-19 Analyzed By: JG
Prep Batch: 29424 QC Preparation: 2007-01-19 Prepared By: JG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	52.8	µg/L	1	50.0	<0.0736	106	83.4 - 114
Benzene	52.8	µg/L	1	50.0	<0.0495	106	83.5 - 115
Trichloroethene (TCE)	49.9	µg/L	1	50.0	<0.0495	100	91.3 - 111
Toluene	48.4	µg/L	1	50.0	<0.0736	97	82 - 110
Chlorobenzene	50.2	µg/L	1	50.0	<0.0217	100	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	52.8	µg/L	1	50.0	<0.0736	106	83.4 - 114	0	20
Benzene	52.7	µg/L	1	50.0	<0.0495	105	83.5 - 115	0	20
Trichloroethene (TCE)	50.5	µg/L	1	50.0	<0.0495	101	91.3 - 111	1	20
Toluene	49.0	µg/L	1	50.0	<0.0736	98	82 - 110	1	20
Chlorobenzene	50.2	µg/L	1	50.0	<0.0217	100	87.9 - 109	0	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	51.7	52.2	µg/L	1	50.0	103	104	82.4 - 115
Toluene-d8	50.7	50.3	µg/L	1	50.0	101	101	89.7 - 108
4-Bromofluorobenzene (4-BFB)	50.6	48.9	µg/L	1	50.0	101	98	84.6 - 114

Laboratory Control Spike (LCS-1)

QC Batch: 33910 Date Analyzed: 2007-01-23 Analyzed By: TP
Prep Batch: 29250 QC Preparation: 2007-01-16 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	79.4 - 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
Dissolved Sodium	50.8	mg/L	1	50.0	<0.0309	102	79.4 - 123	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: 33914 Date Analyzed: 2007-01-16 Analyzed By: JR
Prep Batch: 29454 QC Preparation: 2007-01-16 Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	2.44	mg/L	1	2.50	<0.0217	98	90 - 110
Chloride	12.0	mg/L	1	12.5	<0.0257	96	90 - 110
Fluoride	2.47	mg/L	1	2.50	<0.0168	99	88.6 - 107
Sulfate	12.5	mg/L	1	12.5	<0.0598	100	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromide	2.44	mg/L	1	2.50	<0.0217	98	90 - 110	0	20
Chloride	12.0	mg/L	1	12.5	<0.0257	96	90 - 110	0	20
Fluoride	2.47	mg/L	1	2.50	<0.0168	99	88.6 - 107	0	20
Sulfate	12.4	mg/L	1	12.5	<0.0598	99	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: 33917 Date Analyzed: 2007-01-24 Analyzed By: TP
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Sodium	51.9	mg/L	1	50.0	<0.0309	104	87.3 - 124

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	51.1	mg/L	1	50.0	<0.0309	102	87.3 - 124	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: 33927 Date Analyzed: 2007-01-24 Analyzed By: RR
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.124	mg/L	1	0.125	<0.000274	99	87.9 - 111
Total Cadmium	0.252	mg/L	1	0.250	<0.000268	101	86.8 - 110
Total Chromium	0.106	mg/L	1	0.100	<0.00357	106	86.5 - 115
Total Copper	0.130	mg/L	1	0.125	<0.00127	104	83.4 - 117
Total Phosphorous	0.515	mg/L	1	0.500	<0.0229	103	87.3 - 114
Total Lead	0.516	mg/L	1	0.500	<0.00310	103	83 - 109
Total Zinc	0.242	mg/L	1	0.250	<0.000666	97	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	0.122	mg/L	1	0.125	<0.000274	98	87.9 - 111	2	20
Total Cadmium	0.249	mg/L	1	0.250	<0.000268	100	86.8 - 110	1	20
Total Chromium	0.106	mg/L	1	0.100	<0.00357	106	86.5 - 115	0	20
Total Copper	0.131	mg/L	1	0.125	<0.00127	105	83.4 - 117	1	20
Total Phosphorous	0.517	mg/L	1	0.500	<0.0229	103	87.3 - 114	0	20
Total Lead	0.510	mg/L	1	0.500	<0.00310	102	83 - 109	1	20
Total Zinc	0.242	mg/L	1	0.250	<0.000666	97	82.9 - 109	0	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 33961 Date Analyzed: 2007-01-24 Analyzed By: JS
Prep Batch: 29492 QC Preparation: 2007-01-24 Prepared By: JS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate and Nitrite as N	0.157	mg/L	1	0.160	<0.0223	98	77 - 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
Nitrate and Nitrite as N	0.168	mg/L	1	0.160	<0.0223	105	77 - 122	7	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: 33988 Date Analyzed: 2007-01-26 Analyzed By: RR
Prep Batch: 29250 QC Preparation: 2007-01-16 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.119	mg/L	1	0.125	<0.000199	95	86.2 - 116
Dissolved Cadmium	0.231	mg/L	1	0.250	<0.000577	92	83.3 - 113
Dissolved Chromium	0.101	mg/L	1	0.100	<0.00357	101	83 - 112
Dissolved Copper	0.124	mg/L	1	0.125	<0.00127	99	84.3 - 114
Dissolved Lead	0.506	mg/L	1	0.500	<0.00398	101	81.1 - 111
Dissolved Zinc	0.228	mg/L	1	0.250	<0.00300	91	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	0.121	mg/L	1	0.125	<0.000199	97	86.2 - 116	2	20
Dissolved Cadmium	0.231	mg/L	1	0.250	<0.000577	92	83.3 - 113	0	20
Dissolved Chromium	0.0980	mg/L	1	0.100	<0.00357	98	83 - 112	3	20
Dissolved Copper	0.132	mg/L	1	0.125	<0.00127	106	84.3 - 114	6	20
Dissolved Lead	0.509	mg/L	1	0.500	<0.00398	102	81.1 - 111	1	20
Dissolved Zinc	0.231	mg/L	1	0.250	<0.00300	92	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: 34108 Date Analyzed: 2007-01-30 Analyzed By: KV
Prep Batch: 29605 QC Preparation: 2007-01-30 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Organic Carbon	4.44	mg/L	1	5.00	<0.382	89	70 - 130

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 Organic Carbon	4.74	mg/L	1	5.00	<0.382	95	70 - 130	6	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: 113421

QC Batch: 33608 Date Analyzed: 2007-01-12 Analyzed By: KB
Prep Batch: 29202 QC Preparation: 2007-01-12 Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.708	mg/L	1	1.00	<0.0288	71	53.5 - 132

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	0.860	mg/L	1	1.00	<0.0288	86	53.5 - 132	19	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)	[4]	0.0732	0.0962	mg/L	1	0.1	73	96	75.6 - 108
4-Bromofluorobenzene (4-BFB)	[5]	0.0728	0.0999	mg/L	1	0.1	73	100	78.9 - 109

[4]Surrogate recovery out of control on MS/MSD due to matrix interference. LCS/LCSD show method to be in control.
[5]Surrogate recovery out of control on MS/MSD due to matrix interference. LCS/LCSD show method to be in control.

Matrix Spike (MS-1) Spiked Sample: 113763

QC Batch: 33676 Date Analyzed: 2007-01-16 Analyzed By: SP
Prep Batch: 29255 QC Preparation: 2007-01-16 Prepared By: SP

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	24.0	mg/L	1	25.0	<1.19	96	77.8 - 112

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	23.7	mg/L	1	25.0	<1.19	95	77.8 - 112	1	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	16.7	16.7	mg/L	1	15	111	111	57 - 132.3

Matrix Spike (MS-1) Spiked Sample: 114014

QC Batch: 33857 Date Analyzed: 2007-01-22 Analyzed By: SM
Prep Batch: 29393 QC Preparation: 2007-01-22 Prepared By: SM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ammonia-N	4.65	mg/L	1	5.00	<0.820	93	55.4 - 124

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	4.59	mg/L	1	5.00	<0.820	92	55.4 - 124	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: 113759

QC Batch: 33876 Date Analyzed: 2007-01-19 Analyzed By: JG
Prep Batch: 29424 QC Preparation: 2007-01-19 Prepared By: JG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	53.2	µg/L	1	50.0	<0.0736	106	78.7 - 119
Benzene	56.3	µg/L	1	50.0	<0.0495	113	75.8 - 125
Trichloroethene (TCE)	51.4	µg/L	1	50.0	<0.0495	103	83.6 - 112
Toluene	51.9	µg/L	1	50.0	<0.0736	104	81.6 - 115
Chlorobenzene	52.6	µg/L	1	50.0	<0.0217	105	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	52.0	µg/L	1	50.0	<0.0736	104	78.7 - 119	2	20
Benzene	54.3	µg/L	1	50.0	<0.0495	109	75.8 - 125	4	20
Trichloroethene (TCE)	49.8	µg/L	1	50.0	<0.0495	100	83.6 - 112	3	20
Toluene	50.1	µg/L	1	50.0	<0.0736	100	81.6 - 115	4	20
Chlorobenzene	50.8	µg/L	1	50.0	<0.0217	102	83.9 - 113	4	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	52.8	52.4	µg/L	1	50	106	105	86.6 - 114
Toluene-d8	50.5	50.2	µg/L	1	50	101	100	91 - 109
4-Bromofluorobenzene (4-BFB)	49.9	48.9	µg/L	1	50	100	98	87.2 - 113

Matrix Spike (MS-1) Spiked Sample: 113770

QC Batch: 33910 Date Analyzed: 2007-01-23 Analyzed By: TP
Prep Batch: 29250 QC Preparation: 2007-01-16 Prepared By: TS

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Sodium	[6]	2660	mg/L	100	5000	2663	0	84.2 - 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 Sodium	[7]	2640	mg/L	100	5000	2663	0	84.2 - 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: 113774

QC Batch: 33914 Date Analyzed: 2007-01-16 Analyzed By: JR
Prep Batch: 29454 QC Preparation: 2007-01-16 Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	1230	mg/L	500	1250	<10.8	98	90 - 110
Chloride	7580	mg/L	500	6250	1820	92	90 - 110
Fluoride	1240	mg/L	500	1250	<8.40	99	89.9 - 104
Sulfate	12500	mg/L	500	6250	6560	95	90 - 110

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromide	1220	mg/L	500	1250	<10.8	98	90 - 110	1	20
Chloride	7570	mg/L	500	6250	1820	92	90 - 110	0	20
Fluoride	1240	mg/L	500	1250	<8.40	99	89.9 - 104	0	20

continued . . .

[6]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recoveries out of control limits due to matrix spike being diluted out. 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
Sulfate	12500	mg/L	500	6250	6560	95	90 - 110	0	20

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

Matrix Spike (MS-1) Spiked Sample: 113770

QC Batch: 33917 Date Analyzed: 2007-01-24 Analyzed By: TP
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Sodium [8]	2810	mg/L	100	5000	2760	1	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 [9]	2940	mg/L	100	5000	2760	4	75 - 125	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: 113770

QC Batch: 33927 Date Analyzed: 2007-01-24 Analyzed By: RR
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.124	mg/L	1	0.125	<0.000274	99	88.2 - 114
Total Cadmium	0.213	mg/L	1	0.250	<0.000268	85	66.5 - 121
Total Chromium	0.122	mg/L	1	0.100	0.027	95	69.2 - 129
Total Copper	0.129	mg/L	1	0.125	<0.00127	103	83.8 - 118
Total Phosphorous	0.573	mg/L	1	0.500	0.038	107	70.1 - 115
Total Lead	0.419	mg/L	1	0.500	<0.00310	84	71.9 - 115
Total Zinc	0.232	mg/L	1	0.250	<0.000666	93	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	0.130	mg/L	1	0.125	<0.000274	104	88.2 - 114	5	20
Total Cadmium	0.220	mg/L	1	0.250	<0.000268	88	66.5 - 121	3	20
Total Chromium	0.124	mg/L	1	0.100	0.027	97	69.2 - 129	2	20
Total Copper	0.130	mg/L	1	0.125	<0.00127	104	83.8 - 118	1	20
Total Phosphorous	0.580	mg/L	1	0.500	0.038	108	70.1 - 115	1	20
Total Lead	0.447	mg/L	1	0.500	<0.00310	89	71.9 - 115	6	20
Total Zinc	0.239	mg/L	1	0.250	<0.000666	96	75.5 - 113	3	20

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

[8] Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[9] Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.

Matrix Spike (MS-1) Spiked Sample: 113774

QC Batch: 33961 | Date Analyzed: 2007-01-24 | Analyzed By: JS
Prep Batch: 29492 | QC Preparation: 2007-01-24 | Prepared By: JS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate and Nitrite as N [10]	44.7	mg/L	200	32.0	44.5	1	10 - 208

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate and Nitrite as N [11]	39.5	mg/L	200	32.0	44.5	-14	10 - 208	12	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: 113770

QC Batch: 33988 | Date Analyzed: 2007-01-26 | Analyzed By: RR
Prep Batch: 29250 | QC Preparation: 2007-01-16 | 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	0.248	mg/L	1	0.250	<0.000577	99	75 - 112
Dissolved Chromium	0.0950	mg/L	1	0.100	<0.00357	95	75 - 121
Dissolved Copper	0.119	mg/L	1	0.125	<0.00127	95	81.5 - 125
Dissolved Lead	0.460	mg/L	1	0.500	<0.00398	92	75 - 111
Dissolved Zinc	0.246	mg/L	1	0.250	<0.00300	98	80.4 - 120

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Silver	0.118	mg/L	1	0.125	<0.000199	94	90.1 - 120	3	20
Dissolved Cadmium	0.224	mg/L	1	0.250	<0.000577	90	75 - 112	10	20
Dissolved Chromium	0.100	mg/L	1	0.100	<0.00357	100	75 - 121	5	20
Dissolved Copper	0.117	mg/L	1	0.125	<0.00127	94	81.5 - 125	2	20
Dissolved Lead	0.481	mg/L	1	0.500	<0.00398	96	75 - 111	4	20
Dissolved Zinc	0.239	mg/L	1	0.250	<0.00300	96	80.4 - 120	3	20

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

Matrix Spike (MS-1) Spiked Sample: 114008

QC Batch: 34108 | Date Analyzed: 2007-01-30 | Analyzed By: KV
Prep Batch: 29605 | QC Preparation: 2007-01-30 | Prepared By: KV

continued . . .

[10] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[11] 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
Total Organic Carbon	4.53	mg/L	1	5.00	<0.382	91	70 - 130

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 Organic Carbon	5.01	mg/L	1	5.00	<0.382	100	70 - 130	10	20

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

Standard (ICV-1)

QC Batch: 33608 Date Analyzed: 2007-01-12 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	0.968	97	85 - 115	2007-01-12

Standard (CCV-1)

QC Batch: 33608 Date Analyzed: 2007-01-12 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.917	92	85 - 115	2007-01-12

Standard (ICV-1)

QC Batch: 33615 Date Analyzed: 2007-01-12 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	2007-01-12

Standard (CCV-1)

QC Batch: 33615 Date Analyzed: 2007-01-12 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	1410	100	96.7 - 108	2007-01-12

Standard (CCV-1)

QC Batch: 33661 Date Analyzed: 2007-01-15 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	60.1	100	80 - 120	2007-01-15
1,4-Dichlorobenzene (para)		mg/L	60.0	61.2	102	80 - 120	2007-01-15
2-Nitrophenol		mg/L	60.0	48.8	81	80 - 120	2007-01-15
2,4-Dichlorophenol		mg/L	60.0	55.0	92	80 - 120	2007-01-15
Hexachlorobutadiene		mg/L	60.0	64.8	108	80 - 120	2007-01-15
4-Chloro-3-methylphenol		mg/L	60.0	52.6	88	80 - 120	2007-01-15
2,4,6-Trichlorophenol		mg/L	60.0	56.6	94	80 - 120	2007-01-15
Acenaphthene		mg/L	60.0	59.4	99	80 - 120	2007-01-15
Diphenylamine		mg/L	60.0	57.5	96	80 - 120	2007-01-15
Pentachlorophenol		mg/L	60.0	48.8	81	80 - 120	2007-01-15
Fluoranthene		mg/L	60.0	65.2	109	80 - 120	2007-01-15
Di-n-octylphthalate		mg/L	60.0	55.9	93	80 - 120	2007-01-15
Benzo(a)pyrene		mg/L	60.0	63.1	105	80 - 120	2007-01-15

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		61.6	mg/L	1	60.0	103	80 - 120
Phenol-d5		59.8	mg/L	1	60.0	100	80 - 120
Nitrobenzene-d5		66.7	mg/L	1	60.0	111	80 - 120
2-Fluorobiphenyl		69.6	mg/L	1	60.0	116	80 - 120
2,4,6-Tribromophenol		48.2	mg/L	1	60.0	80	80 - 120
Terphenyl-d14		65.6	mg/L	1	60.0	109	80 - 120

Standard (CCV-1)

QC Batch: 33676 Date Analyzed: 2007-01-16 Analyzed By: SP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	270	108	85 - 115	2007-01-16

Standard (CCV-2)

QC Batch: 33676 Date Analyzed: 2007-01-16 Analyzed By: SP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	273	109	85 - 115	2007-01-16

Standard (ICV-1)

QC Batch: 33698 Date Analyzed: 2007-01-12 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	6.97	100	98.8 - 101	2007-01-12

Standard (CCV-1)

QC Batch: 33698 Date Analyzed: 2007-01-12 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	7.00	100	98.8 - 101	2007-01-12

Standard (ICV-1)

QC Batch: 33818 Date Analyzed: 2007-01-17 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	983	98	94.4 - 106	2007-01-17

Standard (CCV-1)

QC Batch: 33818 Date Analyzed: 2007-01-17 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	981	98	94.4 - 106	2007-01-17

Standard (ICV-1)

QC Batch: 33857 Date Analyzed: 2007-01-22 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	4.98	100	85 - 115	2007-01-22

Standard (CCV-1)

QC Batch: 33857 Date Analyzed: 2007-01-22 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	4.82	96	85 - 115	2007-01-22

Standard (CCV-2)

QC Batch: 33876 Date Analyzed: 2007-01-19 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	60.1	120	80 - 120	2007-01-19
1,1-Dichloroethene		µg/L	50.0	53.9	108	80 - 120	2007-01-19
Chloroform		µg/L	50.0	54.7	109	80 - 120	2007-01-19
1,2-Dichloropropane		µg/L	50.0	54.5	109	80 - 120	2007-01-19
Toluene		µg/L	50.0	50.2	100	80 - 120	2007-01-19
Chlorobenzene		µg/L	50.0	51.4	103	80 - 120	2007-01-19
Ethylbenzene		µg/L	50.0	54.6	109	80 - 120	2007-01-19

Standard (ICV-1)

QC Batch: 33910 Date Analyzed: 2007-01-23 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	50.7	101	90 - 110	2007-01-23

Standard (CCV-1)

QC Batch: 33910 Date Analyzed: 2007-01-23 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	49.0	98	90 - 110	2007-01-23

Standard (ICV-1)

QC Batch: 33914 Date Analyzed: 2007-01-16 Analyzed By: JR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.44	98	93.2 - 98.5	2007-01-16
Chloride		mg/L	12.5	11.8	94	90 - 110	2007-01-16
Fluoride		mg/L	2.50	2.43	97	90 - 110	2007-01-16
Sulfate		mg/L	12.5	11.8	94	90 - 110	2007-01-16

Standard (CCV-1)

QC Batch: 33914 Date Analyzed: 2007-01-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.44	98	93.2 - 98.5	2007-01-16
Chloride		mg/L	12.5	11.9	95	90 - 110	2007-01-16
Fluoride		mg/L	2.50	2.44	98	90 - 110	2007-01-16
Sulfate		mg/L	12.5	11.8	94	90 - 110	2007-01-16

Standard (ICV-1)

QC Batch: 33917 Date Analyzed: 2007-01-24 Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Sodium		mg/L	50.0	50.1	100	90 - 110	2007-01-24

Standard (CCV-1)

QC Batch: 33917 Date Analyzed: 2007-01-24 Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Sodium		mg/L	50.0	51.6	103	90 - 110	2007-01-24

Standard (ICV-1)

QC Batch: 33927 Date Analyzed: 2007-01-24 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	0.127	102	90 - 110	2007-01-24
Total Cadmium		mg/L	1.00	0.971	97	90 - 110	2007-01-24
Total Chromium		mg/L	1.00	0.978	98	90 - 110	2007-01-24
Total Copper		mg/L	1.00	0.988	99	90 - 110	2007-01-24
Total Phosphorous		mg/L	5.00	4.77	95	90 - 110	2007-01-24
Total Lead		mg/L	1.00	1.01	101	90 - 110	2007-01-24
Total Zinc		mg/L	1.00	1.05	105	90 - 110	2007-01-24

Standard (CCV-1)

QC Batch: 33927 Date Analyzed: 2007-01-24 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	0.122	98	90 - 110	2007-01-24
Total Cadmium		mg/L	1.00	0.971	97	90 - 110	2007-01-24
Total Chromium		mg/L	1.00	0.953	95	90 - 110	2007-01-24

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standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		mg/L	1.00	0.977	98	90 - 110	2007-01-24
Total Phosphorous		mg/L	5.00	4.76	95	90 - 110	2007-01-24
Total Lead		mg/L	1.00	0.966	97	90 - 110	2007-01-24
Total Zinc		mg/L	1.00	1.01	101	90 - 110	2007-01-24

Standard (ICV-1)

QC Batch: 33961 Date Analyzed: 2007-01-24 Analyzed By: JS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate and Nitrite as N		mg/L	0.160	0.172	108	85 - 115	2007-01-24

Standard (CCV-1)

QC Batch: 33961 Date Analyzed: 2007-01-24 Analyzed By: JS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate and Nitrite as N		mg/L	0.160	0.153	96	85 - 115	2007-01-24

Standard (ICV-1)

QC Batch: 33988 Date Analyzed: 2007-01-26 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	0.125	100	90 - 110	2007-01-26
Dissolved Cadmium		mg/L	1.00	0.966	97	95 - 105	2007-01-26
Dissolved Chromium		mg/L	1.00	0.956	96	90 - 110	2007-01-26
Dissolved Copper		mg/L	1.00	0.976	98	90 - 110	2007-01-26
Dissolved Lead		mg/L	1.00	0.998	100	90 - 110	2007-01-26
Dissolved Zinc		mg/L	1.00	1.02	102	90 - 110	2007-01-26

Standard (CCV-1)

QC Batch: 33988 Date Analyzed: 2007-01-26 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	0.126	101	90 - 110	2007-01-26
Dissolved Cadmium		mg/L	1.00	1.04	104	90 - 110	2007-01-26
Dissolved Chromium		mg/L	1.00	1.05	105	90 - 110	2007-01-26

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Copper		mg/L	1.00	1.06	106	90 - 110	2007-01-26
Dissolved Lead		mg/L	1.00	1.04	104	90 - 110	2007-01-26
Dissolved Zinc		mg/L	1.00	1.08	108	90 - 110	2007-01-26

Standard (ICV-1)

QC Batch: 34056 Date Analyzed: 2007-01-24 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	2007-01-24
Carbonate Alkalinity		mg/L as CaCo3	0.00	240		0 - 105	2007-01-24
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	8.00		0 - 105	2007-01-24
Total Alkalinity		mg/L as CaCo3	250	248	99	93.7 - 99.9	2007-01-24

Standard (CCV-1)

QC Batch: 34056 Date Analyzed: 2007-01-24 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	2007-01-24
Carbonate Alkalinity		mg/L as CaCo3	0.00	236		0 - 105	2007-01-24
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	12.0		0 - 105	2007-01-24
Total Alkalinity		mg/L as CaCo3	250	248	99	93.7 - 99.9	2007-01-24

Standard (ICV-1)

QC Batch: 34108 Date Analyzed: 2007-01-30 Analyzed By: KV

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.15	83	80 - 120	2007-01-30

Standard (CCV-1)

QC Batch: 34108 Date Analyzed: 2007-01-30 Analyzed By: KV

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.52	90	80 - 120	2007-01-30