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Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

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Report Date: May 6, 2009

Work Order: 9041321

Project Name: HELSTF Diesel Spill Groundwater

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
192904	HLSF-0154-DRW-002-0409	water	2009-04-09	14:35	2009-04-09

Comment(s)

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

Notes:

For inorganic analyses, the term MQL should actually read PQL.

Standard Flags

U - Not detected. The analyte is not detected above the SDL.
J - Estimated. The analyte is positively identified and the value is approximated between the SDL and MQL.
B - The sample contains less than ten times the concentration found in the method blank.
JB - The analyte is positively identified and the value is approximated between the SDL and MQL.
The sample contains less than ten times the concentration found in the method blank.
The result should be considered non-detect to the SDL.

Dr. Blair Leftwich, Director

Case Narrative

Samples for project HELSTF Diesel Spill Groundwater were received by TraceAnalysis, Inc. on 2009-04-09 and assigned to work order 9041321. Samples for work order 9041321 were received intact without headspace and at a temperature of 11.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Ag, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Alkalinity	SM 2320B	50159	2009-04-14 at 10:00	58762	2009-04-14 at 10:00
Al, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Ammonia	SM 4500-NH3 B,C	50102	2009-04-16 at 13:00	58694	2009-04-16 at 14:00
As, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Ba, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Be, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Bromide (IC)	E 300.0	50331	2009-04-16 at 04:18	58966	2009-04-16 at 04:18
Ca, Total	S 6010B	49975	2009-04-14 at 11:52	58667	2009-04-17 at 10:57
Cd, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Chloride (IC)	E 300.0	50331	2009-04-16 at 04:18	58966	2009-04-16 at 04:18
Chromium, Hexavalent	SM 3500-Cr B	50088	2009-04-10 at 09:32	58672	2009-04-10 at 09:32
Co, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Cr, Dissolved	S 6010B	50044	2009-04-16 at 11:11	58656	2009-04-17 at 09:30
Cr, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Cu, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Explosives (8330)	S 8330-C18	50476	2009-04-14 at 15:00	59150	2009-04-27 at 19:54
Fe, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Fluoride (IC)	E 300.0	50331	2009-04-16 at 04:18	58966	2009-04-16 at 04:18
Hg, Total	S 7470A	50149	2009-04-20 at 15:55	58752	2009-04-20 at 17:51
K, Total	S 6010B	49975	2009-04-14 at 11:52	58667	2009-04-17 at 10:57
Mg, Total	S 6010B	49975	2009-04-14 at 11:52	58667	2009-04-17 at 10:57
Mn, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Mo, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Na, Total	S 6010B	49975	2009-04-14 at 11:52	58667	2009-04-17 at 10:57
Ni, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Nitrate and Nitrite as N	SM 4500-NO3 E	50167	2009-04-17 at 14:00	58776	2009-04-17 at 17:00
O/G	E 1664	50291	2009-04-23 at 14:00	58921	2009-04-24 at 15:30
Pb, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
pH	SM 4500-H+	49958	2009-04-10 at 10:00	58513	2009-04-10 at 10:00
P, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Sb, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Semivolatiles	S 8270C	50042	2009-04-13 at 15:00	58615	2009-04-16 at 09:44
Se, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
SO4 (IC)	E 300.0	50331	2009-04-16 at 04:18	58966	2009-04-16 at 04:18
TDS	SM 2540C	50067	2009-04-14 at 19:05	58649	2009-04-16 at 18:18
TKN	E 351.3	50105	2009-04-17 at 15:00	58769	2009-04-20 at 11:00
Tl, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
TOC	SM 5310C	50124	2009-04-20 at 09:50	58713	2009-04-20 at 09:50
Total Cyanide	SM 4500-CN C,E	50107	2009-04-17 at 10:30	58704	2009-04-17 at 16:00
TPH DRO	Mod. 8015B	49961	2009-04-13 at 15:00	58516	2009-04-13 at 17:00

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH GRO	S 8015B	50027	2009-04-15 at 14:23	58597	2009-04-15 at 14:23
V, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30
Zn, Total	S 6010B	49975	2009-04-14 at 11:52	58610	2009-04-15 at 16:30

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9041321 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Silver	U	<0.00111	<0.00500	<0.00111	mg/L	1	0.00111	0.005	0.00111

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Al, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Aluminum	J	**0.0150**	<0.0500	<0.00301	mg/L	1	0.00301	0.05	0.00301

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	El Paso				
Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	58762	Date Analyzed:	2009-04-14	Analyzed By:	JG
Prep Batch:	50159	Sample Preparation:	2009-04-14	Prepared By:	JR

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Hydroxide Alkalinity	U	<1.00	<1.00	<1.00	mg/L as CaCo3	1	1.00	1	1
Carbonate Alkalinity	U	<1.00	<1.00	<1.00	mg/L as CaCo3	1	1.00	1	1
Bicarbonate Alkalinity		**2660**	**2660**	<4.00	mg/L as CaCo3	1	4.00	4	4
Total Alkalinity		**2660**	**2660**	<4.00	mg/L as CaCo3	1	4.00	4	4

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Ammonia	Analytical Method:	SM 4500-NH3 B,C	Prep Method:	N/A
QC Batch:	58694	Date Analyzed:	2009-04-16	Analyzed By:	AH
Prep Batch:	50102	Sample Preparation:		Prepared By:	AH

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Ammonia-N	U	<0.353	<1.00	<0.353	mg/L	1	0.353	1	0.353

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	As, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Arsenic	U	<0.00448	<0.0100	<0.00448	mg/L	1	0.00448	0.01	0.00448

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Ba, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Barium		**0.0410**	**0.0410**	<0.00105	mg/L	1	0.00105	0.005	0.00105

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Beryllium	U	<0.000450	<0.00200	<0.000450	mg/L	1	0.000450	0.002	0.00045

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	El Paso				
Analysis:	Bromide (IC)	Analytical Method:	E 300.0	Prep Method:	N/A

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 Sample Preparation: 2009-04-16 Prepared By: JR

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Bromide	U	<0.197	<1.35	<0.197	mg/L	5	0.197	0.27	0.0394

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Ca, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Calcium		**160**	**160**	<0.117	mg/L	1	0.117	1	0.117

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Cd, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cadmium	U	<0.000303	<0.00200	<0.000303	mg/L	1	0.000303	0.002	0.000303

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: El Paso
Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 Sample Preparation: 2009-04-16 Prepared By: JR

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		**505**	**505**	<32.0	mg/L	50	32.0	1.22	0.6404

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: El Paso
Analysis: Chromium, Hexavalent Analytical Method: SM 3500-Cr B Prep Method: N/A
QC Batch: 58672 Date Analyzed: 2009-04-10 Analyzed By: MD
Prep Batch: 50088 Sample Preparation: 2009-04-10 Prepared By: JR

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Hexavalent Chromium	U	<0.00594	<0.0125	<0.00594	mg/L	1	0.00594	0.0125	0.00594

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Co, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cobalt	U	<0.000822	<0.00200	<0.000822	mg/L	1	0.000822	0.002	0.000822

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Cr, Dissolved Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 58656 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 50044 Sample Preparation: 2009-04-16 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Dissolved Chromium		**0.109**	**0.109**	<0.000583	mg/L	1	0.000583	0.001	0.000583

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Chromium		**0.185**	**0.185**	<0.000583	mg/L	1	0.000583	0.005	0.000583

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Copper	U	<0.000843	<0.00500	<0.000843	mg/L	1	0.000843	0.005	0.000843

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Explosives (8330)	Analytical Method:	S 8330-C18	Prep Method:	S 3535A
QC Batch:	59150	Date Analyzed:	2009-04-27	Analyzed By:	DS
Prep Batch:	50476	Sample Preparation:	2009-04-14	Prepared By:	DS

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
HMX		**66.4**	**66.4**	<2.46	μg/L	20	2.46	0.5	0.123
RDX	U	<5.96	<10.0	<5.96	μg/L	20	5.96	0.5	0.298
1,3,5-Trinitrobenzene	U	<6.78	<10.0	<6.78	μg/L	20	6.78	0.5	0.339
1,3-Dinitrobenzene	U	<7.78	<10.0	<7.78	μg/L	20	7.78	0.5	0.389
Nitrobenzene	U	<7.58	<10.0	<7.58	μg/L	20	7.58	0.5	0.379
Tetryl	U	<8.26	<10.0	<8.26	μg/L	20	8.26	0.5	0.413
TNT	U	<9.28	<10.0	<9.28	μg/L	20	9.28	0.5	0.464
4-Amino-DNT	U	<6.38	<10.0	<6.38	μg/L	20	6.38	0.5	0.319
2-Amino-DNT	U	<7.82	<10.0	<7.82	μg/L	20	7.82	0.5	0.391
2,6-DNT	U	<6.46	<10.0	<6.46	μg/L	20	6.46	0.5	0.323
2,4-DNT	U	<7.32	<10.0	<7.32	μg/L	20	7.32	0.5	0.366
2-NT	U	<7.58	<10.0	<7.58	μg/L	20	7.58	0.5	0.379
4-NT	U	<7.96	<10.0	<7.96	μg/L	20	7.96	0.5	0.398
3-NT	U	<6.92	<10.0	<6.92	μg/L	20	6.92	0.5	0.346

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene	[1]	7.00	μg/L	20	2.50	280	19.8 - 160

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Fe, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

[1] High surrogate recovery due to peak interference.

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Iron		**0.945**	**0.945**	<0.000872	mg/L	1	0.000872	0.01	0.000872

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	El Paso				
Analysis:	Fluoride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	58966	Date Analyzed:	2009-04-16	Analyzed By:	JR
Prep Batch:	50331	Sample Preparation:	2009-04-16	Prepared By:	JR

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Fluoride	U	<0.217	<0.850	<0.217	mg/L	5	0.217	0.17	0.0434

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	58752	Date Analyzed:	2009-04-20	Analyzed By:	TP
Prep Batch:	50149	Sample Preparation:	2009-04-20	Prepared By:	TP

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Mercury	U	<0.0000329	<0.000200	<0.0000329	mg/L	1	0.0000329	0.0002	3.29e-05

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	K, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58667	Date Analyzed:	2009-04-17	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Potassium		**63.4**	**63.4**	<0.172	mg/L	1	0.172	1	0.172

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Mg, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Magnesium		**348**	**348**	<1.60	mg/L	10	1.60	1	0.16

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Mn, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Manganese		**0.232**	**0.232**	<0.000305	mg/L	1	0.000305	0.0025	0.000305

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Mo, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Molybdenum	J	**0.00700**	<0.0100	<0.00119	mg/L	1	0.00119	0.01	0.00119

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Na, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Sodium		**2000**	**2000**	<0.500	mg/L	10	0.500	1	0.05

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Nickel		**0.0250**	**0.0250**	<0.00121	mg/L	1	0.00121	0.005	0.00121

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: Nitrate and Nitrite as N Analytical Method: SM 4500-NO3 E Prep Method: N/A
QC Batch: 58776 Date Analyzed: 2009-04-17 Analyzed By: KV
Prep Batch: 50167 Sample Preparation: 2009-04-17 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate and Nitrite as N	U	<0.0350	<0.100	<0.0350	mg/L	1	0.0350	0.1	0.035

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: O/G Analytical Method: E 1664 Prep Method: N/A
QC Batch: 58921 Date Analyzed: 2009-04-24 Analyzed By: AH
Prep Batch: 50291 Sample Preparation: Prepared By: AH

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Oil and Grease		**1410**	**1410**	<3.46	mg/L	1	3.46	5	3.459

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: P, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Phosphorous		**0.124**	**0.124**	<0.00289	mg/L	1	0.00289	0.025	0.00289

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Pb, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Lead	U	<0.00326	<0.00500	<0.00326	mg/L	1	0.00326	0.005	0.00326

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	El Paso				
Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	58513	Date Analyzed:	2009-04-10	Analyzed By:	JG
Prep Batch:	49958	Sample Preparation:	2009-04-10	Prepared By:	MD

Parameter	Flag	RL Result	Units	Dilution	RL
pH		6.89	s.u.	1	

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Antimony	U	<0.00440	<0.0200	<0.00440	mg/L	1	0.00440	0.02	0.0044

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Selenium	U	<0.00508	<0.0200	<0.00508	mg/L	1	0.00508	0.02	0.00508

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Semivolatiles	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	58615	Date Analyzed:	2009-04-16	Analyzed By:	MN
Prep Batch:	50042	Sample Preparation:	2009-04-13	Prepared By:	MN

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Pyridine	U	<0.00637	<0.0249	<0.00637	mg/L	4.975	0.00637	0.005	0.001281
N-Nitrosodimethylamine	U	<0.00954	<0.0249	<0.00954	mg/L	4.975	0.00954	0.005	0.001918
2-Picoline	U	<0.00657	<0.0249	<0.00657	mg/L	4.975	0.00657	0.005	0.001321
Methyl methanesulfonate	U	<0.00869	<0.0249	<0.00869	mg/L	4.975	0.00869	0.005	0.001747
Ethyl methanesulfonate	U	<0.00606	<0.0249	<0.00606	mg/L	4.975	0.00606	0.005	0.001218
Phenol	U	<0.00820	<0.0249	<0.00820	mg/L	4.975	0.00820	0.005	0.001649
Aniline	U	<0.00686	<0.0249	<0.00686	mg/L	4.975	0.00686	0.005	0.001378
bis(2-chloroethyl)ether	U	<0.0108	<0.0249	<0.0108	mg/L	4.975	0.0108	0.005	0.002172
2-Chlorophenol	U	<0.00745	<0.0249	<0.00745	mg/L	4.975	0.00745	0.005	0.001498
1,3-Dichlorobenzene (meta)	U	<0.00827	<0.0249	<0.00827	mg/L	4.975	0.00827	0.005	0.001663
1,4-Dichlorobenzene (para)	U	<0.00777	<0.0249	<0.00777	mg/L	4.975	0.00777	0.005	0.001562
Benzyl alcohol	U	<0.00500	<0.0249	<0.00500	mg/L	4.975	0.00500	0.005	0.001005
1,2-Dichlorobenzene (ortho)	U	<0.00816	<0.0249	<0.00816	mg/L	4.975	0.00816	0.005	0.00164
2-Methylphenol	U	<0.00786	<0.0249	<0.00786	mg/L	4.975	0.00786	0.005	0.001581
bis(2-chloroisopropyl)ether	U	<0.00412	<0.0249	<0.00412	mg/L	4.975	0.00412	0.005	0.000828
4-Methylphenol / 3-Methylphenol	U	<0.00619	<0.0249	<0.00619	mg/L	4.975	0.00619	0.005	0.001245
N-Nitrosodi-n-propylamine	U	<0.00632	<0.0249	<0.00632	mg/L	4.975	0.00632	0.005	0.00127
Hexachloroethane	U	<0.00986	<0.0249	<0.00986	mg/L	4.975	0.00986	0.005	0.001981
Acetophenone		**0.376**	**0.376**	<0.00633	mg/L	4.975	0.00633	0.005	0.001273
Nitrobenzene	U	<0.00959	<0.0249	<0.00959	mg/L	4.975	0.00959	0.005	0.001928
N-Nitrosopiperidine	U	<0.00599	<0.0249	<0.00599	mg/L	4.975	0.00599	0.005	0.001205
Isophorone	U	<0.00967	<0.0249	<0.00967	mg/L	4.975	0.00967	0.005	0.001943
2-Nitrophenol	U	<0.00696	<0.0249	<0.00696	mg/L	4.975	0.00696	0.005	0.0014
2,4-Dimethylphenol	U	<0.00543	<0.0249	<0.00543	mg/L	4.975	0.00543	0.005	0.001092
bis(2-chloroethoxy)methane	U	<0.00618	<0.0249	<0.00618	mg/L	4.975	0.00618	0.005	0.001242
2,4-Dichlorophenol	U	<0.00666	<0.0249	<0.00666	mg/L	4.975	0.00666	0.005	0.001338
1,2,4-Trichlorobenzene	U	<0.00962	<0.0249	<0.00962	mg/L	4.975	0.00962	0.005	0.001934
Benzoic acid	U	<0.0151	<0.0249	<0.0151	mg/L	4.975	0.0151	0.005	0.003042
Naphthalene	2	**0.514**	**0.514**	<0.00821	mg/L	4.975	0.00821	0.005	0.00165
a,a-Dimethylphenethylamine	U	<0.00377	<0.0249	<0.00377	mg/L	4.975	0.00377	0.005	0.000758
4-Chloroaniline	U	<0.00573	<0.0249	<0.00573	mg/L	4.975	0.00573	0.005	0.001152
2,6-Dichlorophenol	U	<0.00596	<0.0498	<0.00596	mg/L	4.975	0.00596	0.01	0.001198
Hexachlorobutadiene	U	<0.00914	<0.0249	<0.00914	mg/L	4.975	0.00914	0.005	0.001838
N-Nitroso-di-n-butylamine	U	<0.00839	<0.0249	<0.00839	mg/L	4.975	0.00839	0.005	0.001687
4-Chloro-3-methylphenol	U	<0.00596	<0.0249	<0.00596	mg/L	4.975	0.00596	0.005	0.001199
2-Methylnaphthalene	3	**2.13**	**2.13**	<0.00722	mg/L	4.975	0.00722	0.005	0.001451
1-Methylnaphthalene	4	**1.78**	**1.78**	<0.00771	mg/L	4.975	0.00771	0.005	0.00155
1,2,4,5-Tetrachlorobenzene	U	<0.0102	<0.0249	<0.0102	mg/L	4.975	0.0102	0.005	0.00205

continued ...

[2] Estimated concentration value greater than standard range.
[3] Estimated concentration value greater than standard range.
[4] Estimated concentration value greater than standard range.

sample 192904 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Hexachlorocyclopentadiene	U	<0.0192	<0.0249	<0.0192	mg/L	4.975	0.0192	0.005	0.00385
2,4,6-Trichlorophenol	U	<0.00758	<0.0498	<0.00758	mg/L	4.975	0.00758	0.01	0.001523
2,4,5-Trichlorophenol	U	<0.0159	<0.0249	<0.0159	mg/L	4.975	0.0159	0.005	0.003202
2-Chloronaphthalene	U	<0.00837	<0.0249	<0.00837	mg/L	4.975	0.00837	0.005	0.001683
1-Chloronaphthalene	U	<0.00899	<0.0249	<0.00899	mg/L	4.975	0.00899	0.005	0.001808
2-Nitroaniline	U	<0.00841	<0.0249	<0.00841	mg/L	4.975	0.00841	0.005	0.00169
Dimethylphthalate	U	<0.00888	<0.0249	<0.00888	mg/L	4.975	0.00888	0.005	0.001784
Acenaphthylene	U	<0.00675	<0.0249	<0.00675	mg/L	4.975	0.00675	0.005	0.001356
2,6-Dinitrotoluene	U	<0.00692	<0.0249	<0.00692	mg/L	4.975	0.00692	0.005	0.001392
3-Nitroaniline	U	<0.00615	<0.0249	<0.00615	mg/L	4.975	0.00615	0.005	0.001236
Acenaphthene	U	<0.00657	<0.0249	<0.00657	mg/L	4.975	0.00657	0.005	0.00132
2,4-Dinitrophenol	U	<0.0195	<0.0249	<0.0195	mg/L	4.975	0.0195	0.005	0.003916
Dibenzofuran		**0.278**	**0.278**	<0.00802	mg/L	4.975	0.00802	0.005	0.001613
Pentachlorobenzene	U	<0.0120	<0.0249	<0.0120	mg/L	4.975	0.0120	0.005	0.002422
4-Nitrophenol	U	<0.00633	<0.124	<0.00633	mg/L	4.975	0.00633	0.025	0.001272
2,4-Dinitrotoluene	U	<0.00690	<0.0249	<0.00690	mg/L	4.975	0.00690	0.005	0.001388
1-Naphthylamine	U	<0.00637	<0.0249	<0.00637	mg/L	4.975	0.00637	0.005	0.001281
2,3,4,6-Tetrachlorophenol	U	<0.00645	<0.0498	<0.00645	mg/L	4.975	0.00645	0.01	0.001297
2-Naphthylamine	U	<0.00766	<0.0249	<0.00766	mg/L	4.975	0.00766	0.005	0.00154
Fluorene		**0.330**	**0.330**	<0.00644	mg/L	4.975	0.00644	0.005	0.001295
4-Chlorophenyl-phenylether	U	<0.00860	<0.0249	<0.00860	mg/L	4.975	0.00860	0.005	0.001729
Diethylphthalate	U	<0.00801	<0.0249	<0.00801	mg/L	4.975	0.00801	0.005	0.00161
4-Nitroaniline	U	<0.00502	<0.0249	<0.00502	mg/L	4.975	0.00502	0.005	0.001009
Diphenylhydrazine	U	<0.00622	<0.0249	<0.00622	mg/L	4.975	0.00622	0.005	0.00125
4,6-Dinitro-2-methylphenol	U	<0.00670	<0.0249	<0.00670	mg/L	4.975	0.00670	0.005	0.001346
Diphenylamine	U	<0.00790	<0.0249	<0.00790	mg/L	4.975	0.00790	0.005	0.001589
4-Bromophenyl-phenylether	U	<0.00930	<0.0249	<0.00930	mg/L	4.975	0.00930	0.005	0.001869
Phenacetin	U	<0.00692	<0.0249	<0.00692	mg/L	4.975	0.00692	0.005	0.001391
Hexachlorobenzene	U	<0.0118	<0.0249	<0.0118	mg/L	4.975	0.0118	0.005	0.002375
4-Aminobiphenyl		**0.384**	**0.384**	<0.00669	mg/L	4.975	0.00669	0.005	0.001345
Pentachlorophenol	U	<0.00314	<0.0498	<0.00314	mg/L	4.975	0.00314	0.01	0.000632
Anthracene	U	<0.00757	<0.0249	<0.00757	mg/L	4.975	0.00757	0.005	0.001522
Pentachloronitrobenzene	U	<0.0153	<0.0249	<0.0153	mg/L	4.975	0.0153	0.005	0.003074
Pronamide	U	<0.00790	<0.0249	<0.00790	mg/L	4.975	0.00790	0.005	0.001589
Phenanthrene	[5]	**0.647**	**0.647**	<0.00718	mg/L	4.975	0.00718	0.005	0.001443
Di-n-butylphthalate	U	<0.00622	<0.0249	<0.00622	mg/L	4.975	0.00622	0.005	0.001251
Fluoranthene	U	<0.00790	<0.0249	<0.00790	mg/L	4.975	0.00790	0.005	0.001588
Benzidine	U	<0.00420	<0.124	<0.00420	mg/L	4.975	0.00420	0.025	0.000845
Pyrene		**0.0697**	**0.0697**	<0.00672	mg/L	4.975	0.00672	0.005	0.00135
p-Dimethylaminoazobenzene	U	<0.00482	<0.0249	<0.00482	mg/L	4.975	0.00482	0.005	0.000969
Butylbenzylphthalate	U	<0.00545	<0.0249	<0.00545	mg/L	4.975	0.00545	0.005	0.001096
Benzo(a)anthracene	U	<0.00684	<0.0249	<0.00684	mg/L	4.975	0.00684	0.005	0.001375
3,3-Dichlorobenzidine	U	<0.00647	<0.0249	<0.00647	mg/L	4.975	0.00647	0.005	0.0013
Chrysene	U	<0.00728	<0.0249	<0.00728	mg/L	4.975	0.00728	0.005	0.001463

continued ...

[5] Estimated concentration value greater than standard range.

sample 192904 continued ...

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
bis(2-ethylhexyl)phthalate		**0.197**	**0.197**	<0.00536	mg/L	4.975	0.00536	0.005	0.001078
Di-n-octylphthalate	U	<0.00444	<0.0249	<0.00444	mg/L	4.975	0.00444	0.005	0.000892
Benzo(b)fluoranthene	U	<0.00627	<0.0249	<0.00627	mg/L	4.975	0.00627	0.005	0.001261
Benzo(k)fluoranthene	U	<0.00742	<0.0249	<0.00742	mg/L	4.975	0.00742	0.005	0.001492
7,12-Dimethylbenz(a)anthracene	U	<0.00669	<0.0249	<0.00669	mg/L	4.975	0.00669	0.005	0.001344
Benzo(a)pyrene	U	<0.00772	<0.0249	<0.00772	mg/L	4.975	0.00772	0.005	0.001552
3-Methylcholanthrene	U	<0.00824	<0.0249	<0.00824	mg/L	4.975	0.00824	0.005	0.001656
Dibenzo(a,j)acridine	U	<0.00998	<0.0249	<0.00998	mg/L	4.975	0.00998	0.005	0.002007
Indeno(1,2,3-cd)pyrene	U	<0.00969	<0.0249	<0.00969	mg/L	4.975	0.00969	0.005	0.001948
Dibenzo(a,h)anthracene	U	<0.0104	<0.0249	<0.0104	mg/L	4.975	0.0104	0.005	0.002096
Benzo(g,h,i)perylene	U	<0.0103	<0.0249	<0.0103	mg/L	4.975	0.0103	0.005	0.002066

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0303	mg/L	4.975	0.0800	38	10 - 64.2
Phenol-d5		0.0272	mg/L	4.975	0.0800	34	10 - 45.3
Nitrobenzene-d5		0.0595	mg/L	4.975	0.0800	74	23.4 - 95.9
2-Fluorobiphenyl		0.0767	mg/L	4.975	0.0800	96	20 - 96.4
2,4,6-Tribromophenol		0.0676	mg/L	4.975	0.0800	84	23.8 - 85.7
Terphenyl-d14		0.0767	mg/L	4.975	0.0800	96	45.8 - 115

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	El Paso				
Analysis:	SO4 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	58966	Date Analyzed:	2009-04-16	Analyzed By:	JR
Prep Batch:	50331	Sample Preparation:	2009-04-16	Prepared By:	JR

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Sulfate		**2410**	**2410**	<50.4	mg/L	100	50.4	1.33	0.5038

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	58649	Date Analyzed:	2009-04-16	Analyzed By:	RD
Prep Batch:	50067	Sample Preparation:	2009-04-14	Prepared By:	RD

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		**6695**	**6695**	<25.00	mg/L	5	25.00	10	5

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	TKN	Analytical Method:	E 351.3	Prep Method:	N/A
QC Batch:	58769	Date Analyzed:	2009-04-20	Analyzed By:	AH
Prep Batch:	50105	Sample Preparation:		Prepared By:	AH

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	**3.78**	<10.0	<2.45	mg/L	1	2.45	10	2.45

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Thallium	U	<0.00488	<0.0500	<0.00488	mg/L	1	0.00488	0.05	0.00488

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	TOC	Analytical Method:	SM 5310C	Prep Method:	N/A
QC Batch:	58713	Date Analyzed:	2009-04-20	Analyzed By:	KV
Prep Batch:	50124	Sample Preparation:	2009-04-20	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Organic Carbon		**33.9**	**33.9**	<0.401	mg/L	1	0.401	1	0.401

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Total Cyanide	Analytical Method:	SM 4500-CN C,E	Prep Method:	N/A

QC Batch: 58704 Date Analyzed: 2009-04-17 Analyzed By: AH
Prep Batch: 50107 Sample Preparation: Prepared By: AH

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Cyanide	U	<0.0110	<0.0150	<0.0110	mg/L	1	0.0110	0.015	0.011

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 58516 Date Analyzed: 2009-04-13 Analyzed By:
Prep Batch: 49961 Sample Preparation: 2009-04-13 Prepared By:

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
DRO		**420**	**420**	<0.876	mg/L	1	0.876	5	0.876

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.3	mg/L	1	10.0	153	34.4 - 185

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 58597 Date Analyzed: 2009-04-15 Analyzed By: ER
Prep Batch: 50027 Sample Preparation: 2009-04-15 Prepared By: ER

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
GRO		**1.31**	**1.31**	<0.760	mg/L	5	0.760	0.2	0.152

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.469	mg/L	5	0.500	94	75.6 - 110
4-Bromofluorobenzene (4-BFB)		0.517	mg/L	5	0.500	103	63.6 - 117

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory: Lubbock
Analysis: V, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 Sample Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Vanadium		**0.00900**	**0.00900**	<0.000426	mg/L	1	0.000426	0.005	0.000426

Sample: 192904 - HLSF-0154-DRW-002-0409

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	58610	Date Analyzed:	2009-04-15	Analyzed By:	RR
Prep Batch:	49975	Sample Preparation:	2009-04-14	Prepared By:	KV

Parameter	Flag	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Zinc		**0.171**	**0.171**	<0.000465	mg/L	1	0.000465	0.005	0.000465

Method Blank (1)

QC Batch:	58516	Date Analyzed:	2009-04-13	Analyzed By:	
Prep Batch:	49961	QC Preparation:	2009-04-13	Prepared By:	

Parameter	Flag	Result	Units	Reporting Limits
DRO		<0.876	mg/L	0.876

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		11.3	mg/L	1	10.0	113	34.4 - 185

Method Blank (1)

QC Batch:	58597	Date Analyzed:	2009-04-15	Analyzed By:	ER
Prep Batch:	50027	QC Preparation:	2009-04-15	Prepared By:	ER

Parameter	Flag	Result	Units	Reporting Limits
GRO		<0.152	mg/L	0.152

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0916	mg/L	1	0.100	92	75.6 - 110
4-Bromofluorobenzene (4-BFB)		0.0958	mg/L	1	0.100	96	63.6 - 117

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Silver		<0.00111	mg/L	0.00111

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Aluminum		<0.00301	mg/L	0.00301

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Arsenic		<0.00448	mg/L	0.00448

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Barium		<0.00105	mg/L	0.00105

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Beryllium		<0.000450	mg/L	0.00045

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Cadmium		<0.000303	mg/L	0.000303

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Cobalt		<0.000822	mg/L	0.000822

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Chromium		<0.000583	mg/L	0.000583

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Copper		<0.000843	mg/L	0.000843

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Iron		<0.000872	mg/L	0.000872

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Manganese		<0.000305	mg/L	0.000305

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Molybdenum		<0.00119	mg/L	0.00119

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Nickel		<0.00121	mg/L	0.00121

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Phosphorous		<0.00289	mg/L	0.00289

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Lead		<0.00326	mg/L	0.00326

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Antimony		<0.00440	mg/L	0.0044

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Selenium		<0.00508	mg/L	0.00508

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Thallium		<0.00488	mg/L	0.00488

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Vanadium		<0.000426	mg/L	0.000426

Method Blank (1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Zinc		<0.000465	mg/L	0.000465

Method Blank (1)

QC Batch:	58615	Date Analyzed:	2009-04-16	Analyzed By:	MN
Prep Batch:	50042	QC Preparation:	2009-04-13	Prepared By:	MN

Parameter	Flag	Result	Units	Reporting Limits
Pyridine		<0.00128	mg/L	0.001281
N-Nitrosodimethylamine		<0.00192	mg/L	0.001918
2-Picoline		<0.00132	mg/L	0.001321
Methyl methanesulfonate		<0.00175	mg/L	0.001747
Ethyl methanesulfonate		<0.00122	mg/L	0.001218
Phenol		<0.00165	mg/L	0.001649
Aniline		<0.00138	mg/L	0.001378
bis(2-chloroethyl)ether		<0.00217	mg/L	0.002172
2-Chlorophenol		<0.00150	mg/L	0.001498
1,3-Dichlorobenzene (meta)		<0.00166	mg/L	0.001663
1,4-Dichlorobenzene (para)		<0.00156	mg/L	0.001562
Benzyl alcohol		<0.00100	mg/L	0.001005
1,2-Dichlorobenzene (ortho)		<0.00164	mg/L	0.00164
2-Methylphenol		<0.00158	mg/L	0.001581
bis(2-chloroisopropyl)ether		<0.000828	mg/L	0.000828
4-Methylphenol / 3-Methylphenol		<0.00124	mg/L	0.001245
N-Nitrosodi-n-propylamine		<0.00127	mg/L	0.00127
Hexachloroethane		<0.00198	mg/L	0.001981
Acetophenone		<0.00127	mg/L	0.001273
Nitrobenzene		<0.00193	mg/L	0.001928
N-Nitrosopiperidine		<0.00120	mg/L	0.001205
Isophorone		<0.00194	mg/L	0.001943
2-Nitrophenol		<0.00140	mg/L	0.0014
2,4-Dimethylphenol		<0.00109	mg/L	0.001092
bis(2-chloroethoxy)methane		<0.00124	mg/L	0.001242
2,4-Dichlorophenol		<0.00134	mg/L	0.001338
1,2,4-Trichlorobenzene		<0.00193	mg/L	0.001934
Benzoic acid		<0.00304	mg/L	0.003042
Naphthalene		<0.00165	mg/L	0.00165
a,a-Dimethylphenethylamine		<0.000758	mg/L	0.000758
4-Chloroaniline		<0.00115	mg/L	0.001152
2,6-Dichlorophenol		<0.00120	mg/L	0.001198
Hexachlorobutadiene		<0.00184	mg/L	0.001838
N-Nitroso-di-n-butylamine		<0.00169	mg/L	0.001687
4-Chloro-3-methylphenol		<0.00120	mg/L	0.001199
2-Methylnaphthalene		<0.00145	mg/L	0.001451
1-Methylnaphthalene		<0.00155	mg/L	0.00155
1,2,4,5-Tetrachlorobenzene		<0.00205	mg/L	0.00205
Hexachlorocyclopentadiene		<0.00385	mg/L	0.00385
2,4,6-Trichlorophenol		<0.00152	mg/L	0.001523
2,4,5-Trichlorophenol		<0.00320	mg/L	0.003202
2-Chloronaphthalene		<0.00168	mg/L	0.001683
1-Chloronaphthalene		<0.00181	mg/L	0.001808
2-Nitroaniline		<0.00169	mg/L	0.00169

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Parameter	Flag	Result	Units	Reporting Limits
Dimethylphthalate		<0.00178	mg/L	0.001784
Acenaphthylene		<0.00136	mg/L	0.001356
2,6-Dinitrotoluene		<0.00139	mg/L	0.001392
3-Nitroaniline		<0.00124	mg/L	0.001236
Acenaphthene		<0.00132	mg/L	0.00132
2,4-Dinitrophenol		<0.00392	mg/L	0.003916
Dibenzofuran		<0.00161	mg/L	0.001613
Pentachlorobenzene		<0.00242	mg/L	0.002422
4-Nitrophenol		<0.00127	mg/L	0.001272
2,4-Dinitrotoluene		<0.00139	mg/L	0.001388
1-Naphthylamine		<0.00128	mg/L	0.001281
2,3,4,6-Tetrachlorophenol		<0.00130	mg/L	0.001297
2-Naphthylamine		<0.00154	mg/L	0.00154
Fluorene		<0.00130	mg/L	0.001295
4-Chlorophenyl-phenylether		<0.00173	mg/L	0.001729
Diethylphthalate		<0.00161	mg/L	0.00161
4-Nitroaniline		<0.00101	mg/L	0.001009
Diphenylhydrazine		<0.00125	mg/L	0.00125
4,6-Dinitro-2-methylphenol		<0.00135	mg/L	0.001346
Diphenylamine		<0.00159	mg/L	0.001589
4-Bromophenyl-phenylether		<0.00187	mg/L	0.001869
Phenacetin		<0.00139	mg/L	0.001391
Hexachlorobenzene		<0.00238	mg/L	0.002375
4-Aminobiphenyl		<0.00134	mg/L	0.001345
Pentachlorophenol		<0.000632	mg/L	0.000632
Anthracene		<0.00152	mg/L	0.001522
Pentachloronitrobenzene		<0.00307	mg/L	0.003074
Pronamide		<0.00159	mg/L	0.001589
Phenanthrene		<0.00144	mg/L	0.001443
Di-n-butylphthalate		<0.00125	mg/L	0.001251
Fluoranthene		<0.00159	mg/L	0.001588
Benzidine		<0.000845	mg/L	0.000845
Pyrene		<0.00135	mg/L	0.00135
p-Dimethylaminoazobenzene		<0.000969	mg/L	0.000969
Butylbenzylphthalate		<0.00110	mg/L	0.001096
Benzo(a)anthracene		<0.00138	mg/L	0.001375
3,3-Dichlorobenzidine		<0.00130	mg/L	0.0013
Chrysene		<0.00146	mg/L	0.001463
bis(2-ethylhexyl)phthalate		<0.00108	mg/L	0.001078
Di-n-octylphthalate		<0.000892	mg/L	0.000892
Benzo(b)fluoranthene		<0.00126	mg/L	0.001261
Benzo(k)fluoranthene		<0.00149	mg/L	0.001492
7,12-Dimethylbenz(a)anthracene		<0.00134	mg/L	0.001344
Benzo(a)pyrene		<0.00155	mg/L	0.001552
3-Methylcholanthrene		<0.00166	mg/L	0.001656
Dibenzo(a,j)acridine		<0.00201	mg/L	0.002007
Indeno(1,2,3-cd)pyrene		<0.00195	mg/L	0.001948

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Parameter	Flag	Result	Units	Reporting Limits
Dibenzo(a,h)anthracene		<0.00210	mg/L	0.002096
Benzo(g,h,i)perylene		<0.00207	mg/L	0.002066

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0209	mg/L	1	0.0800	26	10 - 64.2
Phenol-d5		0.0176	mg/L	1	0.0800	22	10 - 45.3
Nitrobenzene-d5		0.0473	mg/L	1	0.0800	59	23.4 - 95.9
2-Fluorobiphenyl		0.0597	mg/L	1	0.0800	75	20 - 96.4
2,4,6-Tribromophenol		0.0572	mg/L	1	0.0800	72	23.8 - 85.7
Terphenyl-d14		0.0776	mg/L	1	0.0800	97	45.8 - 115

Method Blank (1)

QC Batch: 58649 Date Analyzed: 2009-04-16 Analyzed By: RD
Prep Batch: 50067 QC Preparation: 2009-04-14 Prepared By: RD

Parameter	Flag	Result	Units	Reporting Limits
Total Dissolved Solids		<5.000	mg/L	5

Method Blank (1)

QC Batch: 58656 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 50044 QC Preparation: 2009-04-16 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Dissolved Chromium		<0.000583	mg/L	0.000583

Method Blank (1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Calcium		<0.117	mg/L	0.117

Method Blank (1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Potassium		<0.172	mg/L	0.172

Method Blank (1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Magnesium		<0.160	mg/L	0.16

Method Blank (1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Sodium		<0.0500	mg/L	0.05

Method Blank (1)

QC Batch: 58672 Date Analyzed: 2009-04-10 Analyzed By: MD
Prep Batch: 50088 QC Preparation: 2009-04-10 Prepared By: MD

Parameter	Flag	Result	Units	Reporting Limits
Hexavalent Chromium		<0.0119	mg/L	0.00594

Method Blank (1)

QC Batch: 58694 Date Analyzed: 2009-04-16 Analyzed By: AH
Prep Batch: 50102 QC Preparation: 2009-04-16 Prepared By: AH

Parameter	Flag	Result	Units	Reporting Limits
Ammonia-N		<0.353	mg/L	0.353

Method Blank (1)

QC Batch: 58704 Date Analyzed: 2009-04-17 Analyzed By: AH
Prep Batch: 50107 QC Preparation: 2009-04-17 Prepared By: AH

Parameter	Flag	Result	Units	Reporting Limits
Total Cyanide		<0.0110	mg/L	0.011

Method Blank (1)

QC Batch: 58713 Date Analyzed: 2009-04-20 Analyzed By: KV
Prep Batch: 50124 QC Preparation: 2009-04-20 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Total Organic Carbon		0.819	mg/L	0.401

Method Blank (1)

QC Batch: 58752 Date Analyzed: 2009-04-20 Analyzed By: TP
Prep Batch: 50149 QC Preparation: 2009-04-20 Prepared By: TP

Parameter	Flag	Result	Units	Reporting Limits
Total Mercury		<0.0000329	mg/L	3.29e-05

Method Blank (1)

QC Batch: 58762 Date Analyzed: 2009-04-14 Analyzed By: JG
Prep Batch: 50159 QC Preparation: 2009-04-14 Prepared By: JG

Parameter	Flag	Result	Units	Reporting Limits
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		<4.00	mg/L as CaCo3	4

Method Blank (1)

QC Batch: 58769 Date Analyzed: 2009-04-20 Analyzed By: AH
Prep Batch: 50105 QC Preparation: 2009-04-17 Prepared By: AH

Parameter	Flag	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		<2.45	mg/L	2.45

Method Blank (1)

QC Batch: 58776 Date Analyzed: 2009-04-17 Analyzed By: KV
Prep Batch: 50167 QC Preparation: 2009-04-17 Prepared By: KV

Parameter	Flag	Result	Units	Reporting Limits
Nitrate and Nitrite as N		.<0.0305	mg/L	0.035

Method Blank (1)

QC Batch: 58921 Date Analyzed: 2009-04-24 Analyzed By: AH
Prep Batch: 50291 QC Preparation: 2009-04-23 Prepared By: AH

Parameter	Flag	Result	Units	Reporting Limits
Oil and Grease		<3.46	mg/L	3.459

Method Blank (1)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Parameter	Flag	Result	Units	Reporting Limits
Bromide		<0.500	mg/L	0.0394

Method Blank (1)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Parameter	Flag	Result	Units	Reporting Limits
Chloride		<2.50	mg/L	0.6404

Method Blank (1)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Parameter	Flag	Result	Units	Reporting Limits
Fluoride		<0.500	mg/L	0.0434

Method Blank (1)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Parameter	Flag	Result	Units	Reporting Limits
Sulfate		<2.50	mg/L	0.5038

Method Blank (1)

QC Batch: 59150 Date Analyzed: 2009-04-27 Analyzed By: DS
Prep Batch: 50476 QC Preparation: 2009-04-14 Prepared By: DS

Parameter	Flag	Result	Units	Reporting Limits
HMX		<0.123	µg/L	0.123
RDX		<0.298	µg/L	0.298
1,3,5-Trinitrobenzene		<0.339	µg/L	0.339
1,3-Dinitrobenzene		<0.389	µg/L	0.389
Nitrobenzene		<0.379	µg/L	0.379
Tetryl		<0.413	µg/L	0.413
TNT		<0.464	µg/L	0.464
4-Amino-DNT		<0.319	µg/L	0.319
2-Amino-DNT		<0.391	µg/L	0.391
2,6-DNT		<0.323	µg/L	0.323
2,4-DNT		<0.366	µg/L	0.366
2-NT		<0.379	µg/L	0.379
4-NT		<0.398	µg/L	0.398
3-NT		<0.346	µg/L	0.346

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-Dinitrobenzene		2.40	µg/L	1	2.50	96	19.8 - 160

Duplicate (1) Duplicated Sample: 192901

QC Batch: 58513 Date Analyzed: 2009-04-10 Analyzed By: JG
Prep Batch: 49958 QC Preparation: 2009-04-10 Prepared By: JG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.29	7.27	s.u.	1	0	1.1

Duplicate (1) Duplicated Sample: 192972

QC Batch: 58649 Date Analyzed: 2009-04-16 Analyzed By: RD
Prep Batch: 50067 QC Preparation: 2009-04-14 Prepared By: RD

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	2536	2386	mg/L	2	6	10

Duplicate (1) Duplicated Sample: 193136

QC Batch: 58762 Date Analyzed: 2009-04-14 Analyzed By: JG
Prep Batch: 50159 QC Preparation: 2009-04-14 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	20
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	2480	2480	mg/L as CaCo3	1	0	20
Total Alkalinity	2480	2480	mg/L as CaCo3	1	0	20

Laboratory Control Spike (LCS-1)

QC Batch: 58516 Date Analyzed: 2009-04-13 Analyzed By:
Prep Batch: 49961 QC Preparation: 2009-04-13 Prepared By:

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	35.1	mg/L	1	25.0	<0.876	140	74.3 - 158

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	33.4	mg/L	1	25.0	<0.876	134	74.3 - 158	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
n-Triacontane	12.2	11.8	mg/L	1	10.0	122	118	34.4 - 149

Laboratory Control Spike (LCS-1)

QC Batch: 58597 Date Analyzed: 2009-04-15 Analyzed By: ER
Prep Batch: 50027 QC Preparation: 2009-04-15 Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.911	mg/L	1	1.00	<0.152	91	78.6 - 123

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	0.909	mg/L	1	1.00	<0.152	91	78.6 - 123	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)	0.0934	0.0983	mg/L	1	0.100	93	98	79.3 - 124
4-Bromofluorobenzene (4-BFB)	0.0954	0.100	mg/L	1	0.100	95	100	80.9 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.119	mg/L	1	0.125	<0.00111	95	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
Total Silver	0.119	mg/L	1	0.125	<0.00111	95	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Aluminum	0.928	mg/L	1	1.00	<0.00301	93	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
Total Aluminum	0.934	mg/L	1	1.00	<0.00301	93	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Arsenic	0.479	mg/L	1	0.500	<0.00448	96	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
Total Arsenic	0.474	mg/L	1	0.500	<0.00448	95	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Barium	1.03	mg/L	1	1.00	<0.00105	103	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
Total Barium	1.03	mg/L	1	1.00	<0.00105	103	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Beryllium	0.0230	mg/L	1	0.0250	<0.000450	92	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
Total Beryllium	0.0230	mg/L	1	0.0250	<0.000450	92	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cadmium	0.246	mg/L	1	0.250	<0.000303	98	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
Total Cadmium	0.246	mg/L	1	0.250	<0.000303	98	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cobalt	0.243	mg/L	1	0.250	<0.000822	97	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
Total Cobalt	0.243	mg/L	1	0.250	<0.000822	97	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.0940	mg/L	1	0.100	<0.000583	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
Total Chromium	0.0940	mg/L	1	0.100	<0.000583	94	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper	0.121	mg/L	1	0.125	<0.000843	97	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
Total Copper	0.121	mg/L	1	0.125	<0.000843	97	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Iron	0.493	mg/L	1	0.500	<0.000872	99	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
Total Iron	0.491	mg/L	1	0.500	<0.000872	98	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Manganese	0.242	mg/L	1	0.250	<0.000305	97	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
Total Manganese	0.242	mg/L	1	0.250	<0.000305	97	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Molybdenum	0.510	mg/L	1	0.500	<0.00119	102	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
Total Molybdenum	0.506	mg/L	1	0.500	<0.00119	101	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Nickel	0.239	mg/L	1	0.250	<0.00121	96	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
Total Nickel	0.239	mg/L	1	0.250	<0.00121	96	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Phosphorous	0.457	mg/L	1	0.500	<0.00289	91	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
Total Phosphorous	0.451	mg/L	1	0.500	<0.00289	90	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Lead	0.519	mg/L	1	0.500	<0.00326	104	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Lead	0.515	mg/L	1	0.500	<0.00326	103	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Antimony	0.233	mg/L	1	0.250	<0.00440	93	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
Total Antimony	0.234	mg/L	1	0.250	<0.00440	94	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Selenium	0.437	mg/L	1	0.500	<0.00508	87	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
Total Selenium	0.438	mg/L	1	0.500	<0.00508	88	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Thallium	0.496	mg/L	1	0.500	<0.00488	99	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
Total Thallium	0.496	mg/L	1	0.500	<0.00488	99	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Vanadium	0.243	mg/L	1	0.250	<0.000426	97	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
Total Vanadium	0.243	mg/L	1	0.250	<0.000426	97	85 - 115	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: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc	0.238	mg/L	1	0.250	<0.000465	95	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
Total Zinc	0.236	mg/L	1	0.250	<0.000465	94	85 - 115	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: 58615 Date Analyzed: 2009-04-16 Analyzed By: MN
Prep Batch: 50042 QC Preparation: 2009-04-13 Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Phenol	0.0221	mg/L	1	0.0800	<0.00165	28	10 - 37.6
2-Chlorophenol	0.0488	mg/L	1	0.0800	<0.00150	61	27.4 - 88.1
1,4-Dichlorobenzene (para)	0.0424	mg/L	1	0.0800	<0.00156	53	22.2 - 85.4
N-Nitrosodi-n-propylamine	0.0580	mg/L	1	0.0800	<0.00127	72	15.8 - 119
1,2,4-Trichlorobenzene	0.0527	mg/L	1	0.0800	<0.00193	66	25 - 99.5
Naphthalene	0.0588	mg/L	1	0.0800	<0.00165	74	24.8 - 93.1
4-Chloro-3-methylphenol	0.0604	mg/L	1	0.0800	<0.00120	76	28.4 - 110
Acenaphthylene	0.0562	mg/L	1	0.0800	<0.00136	70	33.3 - 110
Acenaphthene	0.0551	mg/L	1	0.0800	<0.00132	69	31.5 - 107
4-Nitrophenol	0.0160	mg/L	1	0.0800	<0.00127	20	10 - 48.8
2,4-Dinitrotoluene	0.0561	mg/L	1	0.0800	<0.00139	70	27.8 - 126
Fluorene	0.0548	mg/L	1	0.0800	<0.00130	68	25.5 - 124
Pentachlorophenol	0.0479	mg/L	1	0.0800	<0.000632	60	10 - 119
Anthracene	0.0687	mg/L	1	0.0800	<0.00152	86	39.5 - 119
Phenanthrene	0.0704	mg/L	1	0.0800	<0.00144	88	41 - 119
Fluoranthene	0.0701	mg/L	1	0.0800	<0.00159	88	35.8 - 143
Pyrene	0.0734	mg/L	1	0.0800	<0.00135	92	35.8 - 132
Benzo(a)anthracene	0.0712	mg/L	1	0.0800	<0.00138	89	40.1 - 128
Chrysene	0.0666	mg/L	1	0.0800	<0.00146	83	40.5 - 128
Benzo(b)fluoranthene	0.0689	mg/L	1	0.0800	<0.00126	86	32 - 134
Benzo(k)fluoranthene	0.0801	mg/L	1	0.0800	<0.00149	100	43.5 - 131
Benzo(a)pyrene	0.0772	mg/L	1	0.0800	<0.00155	96	43.5 - 140
Indeno(1,2,3-cd)pyrene	0.0735	mg/L	1	0.0800	<0.00195	92	39.7 - 159
Dibenzo(a,h)anthracene	0.0691	mg/L	1	0.0800	<0.0210	86	39.2 - 154
Benzo(g,h,i)perylene	0.0731	mg/L	1	0.0800	<0.00207	91	38 - 157

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	0.0206	mg/L	1	0.0800	<0.00165	26	10 - 37.6	7	20
2-Chlorophenol	0.0454	mg/L	1	0.0800	<0.00150	57	27.4 - 88.1	7	20
1,4-Dichlorobenzene (para)	0.0394	mg/L	1	0.0800	<0.00156	49	22.2 - 85.4	7	20
N-Nitrosodi-n-propylamine	0.0510	mg/L	1	0.0800	<0.00127	64	15.8 - 119	13	20
1,2,4-Trichlorobenzene	0.0493	mg/L	1	0.0800	<0.00193	62	25 - 99.5	7	20
Naphthalene	0.0545	mg/L	1	0.0800	<0.00165	68	24.8 - 93.1	8	20
4-Chloro-3-methylphenol	0.0556	mg/L	1	0.0800	<0.00120	70	28.4 - 110	8	20

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Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Acenaphthylene	0.0529	mg/L	1	0.0800	<0.00136	66	33.3 - 110	6	20
Acenaphthene	0.0513	mg/L	1	0.0800	<0.00132	64	31.5 - 107	7	20
4-Nitrophenol	0.0157	mg/L	1	0.0800	<0.00127	20	10 - 48.8	2	20
2,4-Dinitrotoluene	0.0539	mg/L	1	0.0800	<0.00139	67	27.8 - 126	4	20
Fluorene	0.0524	mg/L	1	0.0800	<0.00130	66	25.5 - 124	4	20
Pentachlorophenol	0.0460	mg/L	1	0.0800	<0.000632	58	10 - 119	4	20
Anthracene	0.0646	mg/L	1	0.0800	<0.00152	81	39.5 - 119	6	20
Phenanthrene	0.0659	mg/L	1	0.0800	<0.00144	82	41 - 119	7	20
Fluoranthene	0.0644	mg/L	1	0.0800	<0.00159	80	35.8 - 143	8	20
Pyrene	0.0685	mg/L	1	0.0800	<0.00135	86	35.8 - 132	7	20
Benzo(a)anthracene	0.0659	mg/L	1	0.0800	<0.00138	82	40.1 - 128	8	20
Chrysene	0.0631	mg/L	1	0.0800	<0.00146	79	40.5 - 128	5	20
Benzo(b)fluoranthene	0.0659	mg/L	1	0.0800	<0.00126	82	32 - 134	4	20
Benzo(k)fluoranthene	0.0725	mg/L	1	0.0800	<0.00149	91	43.5 - 131	10	20
Benzo(a)pyrene	0.0725	mg/L	1	0.0800	<0.00155	91	43.5 - 140	6	20
Indeno(1,2,3-cd)pyrene	0.0683	mg/L	1	0.0800	<0.00195	85	39.7 - 159	7	20
Dibenzo(a,h)anthracene	0.0669	mg/L	1	0.0800	<0.0210	84	39.2 - 154	3	20
Benzo(g,h,i)perylene	0.0687	mg/L	1	0.0800	<0.00207	86	38 - 157	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
2-Fluorophenol		0.0452	0.0439	mg/L	1	0.0800	56	55	10 - 60.8
Phenol-d5		0.0298	0.0294	mg/L	1	0.0800	37	37	10 - 42.2
Nitrobenzene-d5	[6,7]	0.0922	0.0920	mg/L	1	0.0800	115	115	29.8 - 107
2-Fluorobiphenyl		0.0741	0.0711	mg/L	1	0.0800	93	89	26.2 - 121
2,4,6-Tribromophenol		0.0730	0.0722	mg/L	1	0.0800	91	90	31.5 - 130
Terphenyl-d14		0.106	0.0974	mg/L	1	0.0800	132	122	41.7 - 140

Laboratory Control Spike (LCS-1)

QC Batch: 58656 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 50044 QC Preparation: 2009-04-16 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Chromium	0.0970	mg/L	1	0.100	<0.000583	97	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 Chromium	0.0940	mg/L	1	0.100	<0.000583	94	85 - 115	3	20

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

[6] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.
[7] 8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

Laboratory Control Spike (LCS-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Calcium	51.9	mg/L	1	50.0	<0.117	104	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Calcium	53.0	mg/L	1	50.0	<0.117	106	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Potassium	49.5	mg/L	1	50.0	<0.172	99	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
Total Potassium	50.3	mg/L	1	50.0	<0.172	101	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Magnesium	52.0	mg/L	1	50.0	<0.160	104	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Magnesium	52.8	mg/L	1	50.0	<0.160	106	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Sodium	50.9	mg/L	1	50.0	<0.0500	102	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
Total Sodium	51.6	mg/L	1	50.0	<0.0500	103	85 - 115	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: 58672 Date Analyzed: 2009-04-10 Analyzed By: MD
Prep Batch: 50088 QC Preparation: 2009-04-10 Prepared By: MD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Hexavalent Chromium	0.479	mg/L	1	0.500	<0.00594	96	95.4 - 105

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
Hexavalent Chromium	0.491	mg/L	1	0.500	<0.00594	98	95.4 - 105	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: 58713 Date Analyzed: 2009-04-20 Analyzed By: KV
Prep Batch: 50124 QC Preparation: 2009-04-20 Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Organic Carbon	49.1	mg/L	1	50.0	<0.401	98	80 - 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 Organic Carbon	50.0	mg/L	1	50.0	<0.401	100	80 - 120	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 58752 Date Analyzed: 2009-04-20 Analyzed By: TP
Prep Batch: 50149 QC Preparation: 2009-04-20 Prepared By: TP

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury	0.000997	mg/L	1	0.00100	<0.0000329	100	88.3 - 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
Total Mercury	0.00101	mg/L	1	0.00100	<0.0000329	101	88.3 - 111	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: 58921 Date Analyzed: 2009-04-24 Analyzed By: AH
Prep Batch: 50291 QC Preparation: 2009-04-23 Prepared By: AH

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Oil and Grease	34.3	mg/L	1	40.0	<3.46	86	78 - 114

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Oil and Grease	35.0	mg/L	1	40.0	<3.46	88	78 - 114	2	18

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: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	9.94	mg/L	1	10.0	<0.0394	99	94.2 - 105

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	9.85	mg/L	1	10.0	<0.0394	98	94.2 - 105	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: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	49.1	mg/L	1	50.0	<0.640	98	93.1 - 99.9

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	48.6	mg/L	1	50.0	<0.640	97	93.1 - 99.9	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: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Fluoride	10.0	mg/L	1	10.0	<0.0434	100	93.1 - 103

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Fluoride	9.94	mg/L	1	10.0	<0.0434	99	93.1 - 103	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: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Sulfate	48.3	mg/L	1	50.0	<0.504	97	92.6 - 104

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
Sulfate	47.8	mg/L	1	50.0	<0.504	96	92.6 - 104	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: 59150 Date Analyzed: 2009-04-27 Analyzed By: DS
Prep Batch: 50476 QC Preparation: 2009-04-14 Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
HMX	2.29	μg/L	1	2.50	<0.123	92	63.5 - 125
RDX	2.44	μg/L	1	2.50	<0.298	98	74.5 - 124
1,3,5-Trinitrobenzene	2.43	μg/L	1	2.50	<0.339	97	54.1 - 131
1,3-Dinitrobenzene	2.44	μg/L	1	2.50	<0.389	98	72 - 112
Nitrobenzene	2.40	μg/L	1	2.50	<0.379	96	72.5 - 126
Tetryl	2.26	μg/L	1	2.50	<0.413	90	35.9 - 149
TNT	2.50	μg/L	1	2.50	<0.464	100	40.7 - 129
4-Amino-DNT	2.54	μg/L	1	2.50	<0.319	102	80 - 120
2-Amino-DNT	2.58	μg/L	1	2.50	<0.391	103	80 - 120
2,6-DNT	2.30	μg/L	1	2.50	<0.323	92	80 - 120
2,4-DNT	2.46	μg/L	1	2.50	<0.366	98	80 - 120
2-NT	2.45	μg/L	1	2.50	<0.379	98	49.8 - 139
4-NT	2.31	μg/L	1	2.50	<0.398	92	56.3 - 141
3-NT	2.43	μg/L	1	2.50	<0.346	97	66.2 - 129

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
HMX	2.04	μg/L	1	2.50	<0.123	82	63.5 - 125	12	20
RDX	2.40	μg/L	1	2.50	<0.298	96	74.5 - 124	2	20
1,3,5-Trinitrobenzene	2.32	μg/L	1	2.50	<0.339	93	54.1 - 131	5	20
1,3-Dinitrobenzene	2.40	μg/L	1	2.50	<0.389	96	72 - 112	2	20
Nitrobenzene	2.46	μg/L	1	2.50	<0.379	98	72.5 - 126	2	20
Tetryl	2.14	μg/L	1	2.50	<0.413	86	35.9 - 149	5	20
TNT	2.52	μg/L	1	2.50	<0.464	101	40.7 - 129	1	20
4-Amino-DNT	2.71	μg/L	1	2.50	<0.319	108	80 - 120	6	20
2-Amino-DNT	2.59	μg/L	1	2.50	<0.391	104	80 - 120	0	20
2,6-DNT	2.55	μg/L	1	2.50	<0.323	102	80 - 120	10	20
2,4-DNT	2.62	μg/L	1	2.50	<0.366	105	80 - 120	6	20
2-NT	2.42	μg/L	1	2.50	<0.379	97	49.8 - 139	1	20
4-NT	2.31	μg/L	1	2.50	<0.398	92	56.3 - 141	0	20
3-NT	2.33	μg/L	1	2.50	<0.346	93	66.2 - 129	4	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
1,2-Dinitrobenzene	2.29	2.33	μg/L	1	2.50	92	93	53 - 134

Matrix Spike (MS-1) Spiked Sample: 192904

QC Batch: 58516 Date Analyzed: 2009-04-13 Analyzed By:
Prep Batch: 49961 QC Preparation: 2009-04-13 Prepared By:

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO [8]	313	mg/L	1	25.0	420	-428	29.8 - 181

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 [9]	334	mg/L	1	25.0	420	-344	29.8 - 181	6	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	13.7	14.2	mg/L	1	10	137	142	34.4 - 185

Matrix Spike (MS-1) Spiked Sample: 192903

QC Batch: 58597 Date Analyzed: 2009-04-15 Analyzed By: ER
Prep Batch: 50027 QC Preparation: 2009-04-15 Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	5.82	mg/L	5	5.00	1.45	87	44.6 - 142

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	5.94	mg/L	5	5.00	1.45	90	44.6 - 142	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.488	0.484	mg/L	5	0.5	98	97	57.8 - 132
4-Bromofluorobenzene (4-BFB)	0.516	0.518	mg/L	5	0.5	103	104	69.4 - 128

Matrix Spike (MS-1) Spiked Sample: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.126	mg/L	1	0.125	<0.00111	101	75 - 125

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

[8] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[9] 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
Total Silver	0.129	mg/L	1	0.125	<0.00111	103	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Aluminum	0.874	mg/L	1	1.00	<0.00301	87	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 Aluminum	0.896	mg/L	1	1.00	<0.00301	90	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Arsenic	0.599	mg/L	1	0.500	0.081	104	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 Arsenic	0.619	mg/L	1	0.500	0.081	108	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Barium	0.988	mg/L	1	1.00	0.026	96	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 Barium	1.01	mg/L	1	1.00	0.026	98	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Beryllium	0.0230	mg/L	1	0.0250	<0.000450	92	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 Beryllium	0.0230	mg/L	1	0.0250	<0.000450	92	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cadmium	0.227	mg/L	1	0.250	<0.000303	91	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 Cadmium	0.234	mg/L	1	0.250	<0.000303	94	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cobalt	0.226	mg/L	1	0.250	0.006	88	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 Cobalt	0.233	mg/L	1	0.250	0.006	91	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.0920	mg/L	1	0.100	0.003	89	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 Chromium	0.0940	mg/L	1	0.100	0.003	91	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper	0.125	mg/L	1	0.125	<0.000843	100	75 - 125

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Copper	0.130	mg/L	1	0.125	<0.000843	104	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Iron	5.10	mg/L	1	0.500	4.66	88	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 Iron	5.11	mg/L	1	0.500	4.66	90	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Manganese	0.457	mg/L	1	0.250	0.257	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
Total Manganese	0.476	mg/L	1	0.250	0.257	88	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Molybdenum	0.507	mg/L	1	0.500	0.024	97	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 Molybdenum	0.521	mg/L	1	0.500	0.024	99	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Nickel	0.305	mg/L	1	0.250	0.095	84	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 Nickel	0.314	mg/L	1	0.250	0.095	88	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Phosphorous	0.546	mg/L	1	0.500	0.052	99	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 Phosphorous	0.561	mg/L	1	0.500	0.052	102	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Lead	0.465	mg/L	1	0.500	<0.00326	93	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 Lead	0.479	mg/L	1	0.500	<0.00326	96	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Antimony	0.227	mg/L	1	0.250	<0.00440	91	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 Antimony	0.222	mg/L	1	0.250	<0.00440	89	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Selenium	0.441	mg/L	1	0.500	<0.00508	88	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 Selenium	0.453	mg/L	1	0.500	<0.00508	91	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Thallium	0.427	mg/L	1	0.500	<0.00488	85	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 Thallium	0.440	mg/L	1	0.500	<0.00488	88	75 - 125	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: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Vanadium	0.245	mg/L	1	0.250	0.004	96	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 Vanadium	0.250	mg/L	1	0.250	0.004	98	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 192903

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc	0.247	mg/L	1	0.250	0.007	96	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 Zinc	0.247	mg/L	1	0.250	0.007	96	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: 192889

QC Batch: 58656 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 50044 QC Preparation: 2009-04-16 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Chromium	0.0960	mg/L	1	0.100	<0.000583	96	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 Chromium	0.0930	mg/L	1	0.100	<0.000583	93	75 - 125	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: 192903

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Calcium	182	mg/L	1	50.0	126	112	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 Calcium	181	mg/L	1	50.0	126	110	75 - 125	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: 192903

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Potassium	85.0	mg/L	1	50.0	30.5	109	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 Potassium	80.2	mg/L	1	50.0	30.5	99	75 - 125	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: 192903

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Magnesium	251	mg/L	1	50.0	200	102	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 Magnesium	253	mg/L	1	50.0	200	106	75 - 125	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: 192903

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR
Prep Batch: 49975 QC Preparation: 2009-04-14 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Sodium	1200	mg/L	1	50.0	1140	120	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	1200	mg/L	1	50.0	1140	120	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: 192903

QC Batch: 58672 Date Analyzed: 2009-04-10 Analyzed By: MD
Prep Batch: 50088 QC Preparation: 2009-04-10 Prepared By: MD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Hexavalent Chromium	0.632	mg/L	1.11	0.556	0.049	105	80.1 - 118

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Hexavalent Chromium	0.634	mg/L	1.11	0.556	0.049	105	80.1 - 118	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: 193081

QC Batch: 58694 Date Analyzed: 2009-04-16 Analyzed By: AH
Prep Batch: 50102 QC Preparation: 2009-04-16 Prepared By: AH

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ammonia-N	4.87	mg/L	1	5.00	<0.353	97	30.7 - 141

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	4.93	mg/L	1	5.00	<0.353	99	30.7 - 141	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: 193121

QC Batch: 58704 Date Analyzed: 2009-04-17 Analyzed By: AH
Prep Batch: 50107 QC Preparation: 2009-04-17 Prepared By: AH

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cyanide	0.107	mg/L	1	0.120	<0.0110	89	51.9 - 142

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 Cyanide	0.111	mg/L	1	0.120	<0.0110	92	51.9 - 142	4	20

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

Matrix Spike (xMS-1) Spiked Sample:

QC Batch: 58713 Date Analyzed: 2009-04-20 Analyzed By: KV
Prep Batch: 50124 QC Preparation: 2009-04-20 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Organic Carbon [10]	175	mg/L	1	50.0	130	90	80 - 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
Total Organic Carbon [11]	176	mg/L	1	50.0	130	92	80 - 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: 192903

QC Batch: 58752 Date Analyzed: 2009-04-20 Analyzed By: TP
Prep Batch: 50149 QC Preparation: 2009-04-20 Prepared By: TP

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury	0.000861	mg/L	1	0.00100	<0.0000329	86	75 - 121

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury	0.000848	mg/L	1	0.00100	<0.0000329	85	75 - 121	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: 193082

QC Batch: 58769 Date Analyzed: 2009-04-20 Analyzed By: AH
Prep Batch: 50105 QC Preparation: 2009-04-17 Prepared By: AH

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N	51.5	mg/L	1	50.0	<2.45	103	53.5 - 129

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

[10] RE-RUNNING MS/MSD BECAUSE SAMPLE WAS OVER CURVE •
[11] RE-RUNNING MS/MSD BECAUSE SAMPLE WAS OVER CURVE •

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N	47.9	mg/L	1	50.0	<2.45	96	53.5 - 129	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: 193136

QC Batch: 58776 Date Analyzed: 2009-04-17 Analyzed By: KV
Prep Batch: 50167 QC Preparation: 2009-04-17 Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate and Nitrite as N [12]	0.380	mg/L	1	0.200	0.345	18	80 - 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
Nitrate and Nitrite as N [13]	0.388	mg/L	1	0.200	0.345	22	80 - 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: 192905

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	5500	mg/L	556	5560	<21.9	99	92.8 - 106

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	5490	mg/L	556	5560	<21.9	99	92.8 - 106	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: 192905

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	28400	mg/L	556	27800	490	100	87.3 - 103

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

[12] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[13] 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
Chloride	28300	mg/L	556	27800	490	100	87.3 - 103	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: 192905

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Fluoride	5570	mg/L	556	5560	<24.1	100	92.3 - 102

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
Fluoride	5540	mg/L	556	5560	<24.1	100	92.3 - 102	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: 192905

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR
Prep Batch: 50331 QC Preparation: 2009-04-16 Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Sulfate	31400	mg/L	556	27800	2160	105	86.4 - 101

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
Sulfate	31200	mg/L	556	27800	2160	104	86.4 - 101	1	20

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

Standard (ICV-1)

QC Batch: 58513 Date Analyzed: 2009-04-10 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.96	99	98 - 102	2009-04-10

Standard (CCV-1)

QC Batch: 58513 Date Analyzed: 2009-04-10 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.98	100	98 - 102	2009-04-10

Standard (CCV-1)

QC Batch: 58516 Date Analyzed: 2009-04-13 Analyzed By:

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	294	118	80 - 120	2009-04-13

Standard (CCV-2)

QC Batch: 58516 Date Analyzed: 2009-04-13 Analyzed By:

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	291	116	80 - 120	2009-04-13

Standard (CCV-1)

QC Batch: 58597 Date Analyzed: 2009-04-15 Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.942	94	80 - 120	2009-04-15

Standard (CCV-2)

QC Batch: 58597 Date Analyzed: 2009-04-15 Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.914	91	80 - 120	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 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	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	1.00	0.984	98	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1.00	0.979	98	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Barium		mg/L	1.00	1.02	102	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Beryllium		mg/L	1.00	0.966	97	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cadmium		mg/L	1.00	0.976	98	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cobalt		mg/L	1.00	0.982	98	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	0.990	99	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		mg/L	1.00	0.973	97	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		mg/L	1.00	1.01	101	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		mg/L	1.00	0.948	95	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Molybdenum		mg/L	1.00	0.937	94	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Nickel		mg/L	1.00	0.962	96	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Phosphorous		mg/L	5.00	4.74	95	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Lead		mg/L	1.00	1.00	100	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Antimony		mg/L	1.00	0.956	96	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Selenium		mg/L	1.00	0.973	97	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Thallium		mg/L	1.00	0.978	98	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Vanadium		mg/L	1.00	0.994	99	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	1.03	103	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 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	0.123	98	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		mg/L	1.00	0.967	97	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1.00	0.976	98	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Barium		mg/L	1.00	1.04	104	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Beryllium		mg/L	1.00	0.969	97	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cadmium		mg/L	1.00	0.968	97	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cobalt		mg/L	1.00	0.977	98	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	0.989	99	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		mg/L	1.00	0.976	98	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		mg/L	1.00	1.01	101	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		mg/L	1.00	0.966	97	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Molybdenum		mg/L	1.00	0.935	94	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Nickel		mg/L	1.00	0.955	96	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Phosphorous		mg/L	5.00	4.71	94	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Lead		mg/L	1.00	0.990	99	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Antimony		mg/L	1.00	0.959	96	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Selenium		mg/L	1.00	0.998	100	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Thallium		mg/L	1.00	0.978	98	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Vanadium		mg/L	1.00	0.999	100	90 - 110	2009-04-15

Standard (CCV-2)

QC Batch: 58610 Date Analyzed: 2009-04-15 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	1.02	102	90 - 110	2009-04-15

Standard (CCV-1)

QC Batch: 58615 Date Analyzed: 2009-04-16 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	63.8	106	80 - 120	2009-04-16
1,4-Dichlorobenzene (para)		mg/L	60.0	60.2	100	80 - 120	2009-04-16
2-Nitrophenol		mg/L	60.0	70.7	118	80 - 120	2009-04-16
2,4-Dichlorophenol		mg/L	60.0	57.6	96	80 - 120	2009-04-16
Hexachlorobutadiene		mg/L	60.0	56.6	94	80 - 120	2009-04-16
4-Chloro-3-methylphenol		mg/L	60.0	59.6	99	80 - 120	2009-04-16
2,4,6-Trichlorophenol		mg/L	60.0	63.0	105	80 - 120	2009-04-16
Acenaphthene		mg/L	60.0	60.3	100	80 - 120	2009-04-16
Diphenylamine		mg/L	60.0	60.8	101	80 - 120	2009-04-16
Pentachlorophenol		mg/L	60.0	55.8	93	80 - 120	2009-04-16
Fluoranthene		mg/L	60.0	57.4	96	80 - 120	2009-04-16
Di-n-octylphthalate		mg/L	60.0	57.2	95	80 - 120	2009-04-16
Benzo(a)pyrene		mg/L	60.0	60.2	100	80 - 120	2009-04-16

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		62.5	mg/L	1	60.0	104	80 - 120
Phenol-d5		61.2	mg/L	1	60.0	102	80 - 120
Nitrobenzene-d5		63.1	mg/L	1	60.0	105	80 - 120
2-Fluorobiphenyl		56.9	mg/L	1	60.0	95	80 - 120
2,4,6-Tribromophenol		56.2	mg/L	1	60.0	94	80 - 120
Terphenyl-d14		57.6	mg/L	1	60.0	96	80 - 120

Standard (ICV-1)

QC Batch: 58649 Date Analyzed: 2009-04-16 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	977.0	98	90 - 110	2009-04-16

Standard (CCV-1)

QC Batch: 58649 Date Analyzed: 2009-04-16 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	972.0	97	90 - 110	2009-04-16

Standard (ICV-1)

QC Batch: 58656 Date Analyzed: 2009-04-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Chromium		mg/L	1.00	1.02	102	90 - 110	2009-04-17

Standard (CCV-1)

QC Batch: 58656 Date Analyzed: 2009-04-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Chromium		mg/L	1.00	1.04	104	90 - 110	2009-04-17

Standard (ICV-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Calcium		mg/L	50.0	52.5	105	90 - 110	2009-04-17

Standard (ICV-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Potassium		mg/L	50.0	50.3	101	90 - 110	2009-04-17

Standard (ICV-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Magnesium		mg/L	50.0	52.6	105	90 - 110	2009-04-17

Standard (ICV-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 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	50.8	102	90 - 110	2009-04-17

Standard (CCV-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Calcium		mg/L	50.0	50.0	100	90 - 110	2009-04-17

Standard (CCV-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Potassium		mg/L	50.0	53.7	107	90 - 110	2009-04-17

Standard (CCV-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Magnesium		mg/L	50.0	49.7	99	90 - 110	2009-04-17

Standard (CCV-1)

QC Batch: 58667 Date Analyzed: 2009-04-17 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	54.5	109	90 - 110	2009-04-17

Standard (CCV-1)

QC Batch: 58672 Date Analyzed: 2009-04-10 Analyzed By: MD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.501	100	90 - 110	2009-04-10

Standard (CCV-2)

QC Batch: 58672 Date Analyzed: 2009-04-10 Analyzed By: MD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.496	99	90 - 110	2009-04-10

Standard (ICV-1)

QC Batch: 58694 Date Analyzed: 2009-04-16 Analyzed By: AH

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	4.87	97	85 - 115	2009-04-16

Standard (CCV-1)

QC Batch: 58694 Date Analyzed: 2009-04-16 Analyzed By: AH

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5.00	5.10	102	85 - 115	2009-04-16

Standard (ICV-1)

QC Batch: 58704 Date Analyzed: 2009-04-17 Analyzed By: AH

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.113	94	85 - 115	2009-04-17

Standard (CCV-1)

QC Batch: 58704 Date Analyzed: 2009-04-17 Analyzed By: AH

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.120	0.116	97	85 - 115	2009-04-17

Standard (CCV-1)

QC Batch: 58713 Date Analyzed: 2009-04-20 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	50.0	48.8	98	80 - 120	2009-04-20

Standard (CCV-2)

QC Batch: 58713 Date Analyzed: 2009-04-20 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	50.0	48.3	97	80 - 120	2009-04-20

Standard (ICV-1)

QC Batch: 58752 Date Analyzed: 2009-04-20 Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00102	102	90 - 110	2009-04-20

Standard (CCV-1)

QC Batch: 58752 Date Analyzed: 2009-04-20 Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000955	96	90 - 110	2009-04-20

Standard (ICV-1)

QC Batch: 58762 Date Analyzed: 2009-04-14 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		90 - 110	2009-04-14
Carbonate Alkalinity		mg/L as CaCo3	0.00	244		90 - 110	2009-04-14
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	6.00		90 - 110	2009-04-14
Total Alkalinity		mg/L as CaCo3	250	250	100	90 - 110	2009-04-14

Standard (CCV-1)

QC Batch: 58762 Date Analyzed: 2009-04-14 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		90 - 110	2009-04-14
Carbonate Alkalinity		mg/L as CaCo3	0.00	236		90 - 110	2009-04-14
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	8.00		90 - 110	2009-04-14
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 110	2009-04-14

Standard (ICV-1)

QC Batch: 58769 Date Analyzed: 2009-04-20 Analyzed By: AH

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.87	97	85 - 115	2009-04-20

Standard (CCV-1)

QC Batch: 58769 Date Analyzed: 2009-04-20 Analyzed By: AH

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5.00	4.93	99	85 - 115	2009-04-20

Standard (ICV-1)

QC Batch: 58776 Date Analyzed: 2009-04-17 Analyzed By: KV

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate and Nitrite as N		mg/L	0.200	0.194	97	85 - 115	2009-04-17

Standard (CCV-1)

QC Batch: 58776 Date Analyzed: 2009-04-17 Analyzed By: KV

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate and Nitrite as N		mg/L	0.200	0.211	106	85 - 115	2009-04-17

Standard (CCV-1)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	5.00	4.88	98	90 - 110	2009-04-16

Standard (CCV-1)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	25.0	24.2	97	90 - 110	2009-04-16

Standard (CCV-1)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	5.00	4.93	99	90 - 110	2009-04-16

Standard (CCV-1)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Sulfate		mg/L	25.0	23.8	95	90 - 110	2009-04-16

Standard (CCV-2)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	5.00	4.90	98	90 - 110	2009-04-16

Standard (CCV-2)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	25.0	24.3	97	90 - 110	2009-04-16

Standard (CCV-2)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	5.00	4.96	99	90 - 110	2009-04-16

Standard (CCV-2)

QC Batch: 58966 Date Analyzed: 2009-04-16 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Sulfate		mg/L	25.0	23.9	96	90 - 110	2009-04-16

Standard (ICV-1)

QC Batch: 59150 Date Analyzed: 2009-04-27 Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	494	99	85 - 115	2009-04-27
RDX		µg/L	500	493	99	85 - 115	2009-04-27
1,3,5-Trinitrobenzene		µg/L	500	510	102	85 - 115	2009-04-27
1,3-Dinitrobenzene		µg/L	500	508	102	85 - 115	2009-04-27
Nitrobenzene		µg/L	500	499	100	85 - 115	2009-04-27
Tetryl		µg/L	500	475	95	85 - 115	2009-04-27
TNT		µg/L	500	502	100	85 - 115	2009-04-27
4-Amino-DNT		µg/L	500	477	95	85 - 115	2009-04-27
2-Amino-DNT		µg/L	500	491	98	85 - 115	2009-04-27

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
2,6-DNT		µg/L	500	456	91	85 - 115	2009-04-27
2,4-DNT		µg/L	500	479	96	85 - 115	2009-04-27
2-NT		µg/L	500	551	110	85 - 115	2009-04-27
4-NT		µg/L	500	495	99	85 - 115	2009-04-27
3-NT		µg/L	500	440	88	85 - 115	2009-04-27

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		478	µg/L	1	500	96	85 - 115

Standard (CCV-1)

QC Batch: 59150 Date Analyzed: 2009-04-27 Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	451	90	85 - 115	2009-04-27
RDX		µg/L	500	529	106	85 - 115	2009-04-27
1,3,5-Trinitrobenzene		µg/L	500	448	90	85 - 115	2009-04-27
1,3-Dinitrobenzene		µg/L	500	483	97	85 - 115	2009-04-27
Nitrobenzene		µg/L	500	511	102	85 - 115	2009-04-27
Tetryl		µg/L	500	429	86	85 - 115	2009-04-27
TNT		µg/L	500	527	105	85 - 115	2009-04-27
4-Amino-DNT		µg/L	500	512	102	85 - 115	2009-04-27
2-Amino-DNT		µg/L	500	523	105	85 - 115	2009-04-27
2,6-DNT		µg/L	500	441	88	85 - 115	2009-04-27
2,4-DNT		µg/L	500	512	102	85 - 115	2009-04-27
2-NT		µg/L	500	486	97	85 - 115	2009-04-27
4-NT		µg/L	500	444	89	85 - 115	2009-04-27
3-NT		µg/L	500	538	108	85 - 115	2009-04-27

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
1,2-Dinitrobenzene		491	µg/L	1	500	98	85 - 115

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9041321

015

CHAIN OF CUSTODY RECORD

PROJECT NO.

PROJECT NAME: HELSTF Diesel Spill Groundwater

SAMPLER'S SIGNATURE

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC	DRO	GRO	TOC	SVOC	Explosives	TRPH	Water Quality	Total Cyanide	Nutrients	REMARKS
4-8-09	1435	HLSF-0154-DRW-002 04 09	WATER	192904	18	X	X	X	X	X	X	X	X	X	X	
		~~HLSF 0154 TB 09 015~~	WATER			X										NOTE: 24 HR. HOLD TIME ON HEX. CHROME

PROJECT INFORMATION					
PROJECT MANAGER: Brad Davis	SAMPLES RECEIVED		1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
	TOTAL NO. OF CONTAINERS		(PRINTED NAME)	(PRINTED NAME)	(PRINTED NAME) Mark Nix
SHIPPING ID NO. 4 3123717	CHAIN OF CUSTODY SEALS		RECEIVED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	(COMPANY) Trace Analysis
VIA: Lab Courier	GOOD CONDITION/COOLED	10/11	(TIME/DATE) 1605 4/9/09	(TIME/DATE) 1710 4-9-09	(TIME/DATE) 11:00 4/11/09
	CONFORMS TO RECORD	NA	SPECIAL INSTRUCTIONS/COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		

PLEASE USE BALL POINT PEN

DISTRIBUTION: WHITE - PROJECT FILES; YELLOW - LAB; PINK - FIELD COPY

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Las Cruces, NM 88011
575-532-1526 u
575-532-1587 f

90X11321

015

CHAIN OF CUSTODY RECORD

PROJECT NO.

PROJECT NAME: HELSTF Diesel Spill Groundwater

SAMPLER'S SIGNATURE: [signature]

DATE	TIME	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Total Metals	Diss. Metals	Diss. Ions								REMARKS
4-9-09	1435	HLSF-0154-DRW-002-0909	WATER	192904	18	X	X	X								
																NOTE: 24 HR. HOLD TIME ON HEX. CHROME

PROJECT INFORMATION	SAMPLES RECEIVED		1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER: Brad Davis	TOTAL NO. OF CONTAINERS		(PRINTED NAME) GABRIEL GARCIA	(PRINTED NAME) [illegible]	(PRINTED NAME) Mark Nix
SHIPPING ID NO. 4312377	CHAIN OF CUSTODY SEALS		RECEIVED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	(COMPANY) Trace Analysis
VIA: Lab Courier	GOOD CONDITION/COLD (BY FED)	10/16 ice	(TIME/DATE) 1605 4/9/09	(TIME/DATE) 1710 4-9-09	(TIME/DATE) 11:00 4/11/09
	CONFORMS TO RECORD	MK	SPECIAL INSTRUCTIONS / COMMENTS: PLEASE SEE ATTACHED ANALYTE LIST FOR DETAILS		

PLEASE USE BALL POINT PEN

DISTRIBUTION: WHITE - PROJECT FILES; YELLOW - LAB; PINK - FIELD COPY