ADVANCED GeoServices Engineering P.C.
Engineering for the Environment. Planning for People.™
1055 Andrew Drive, Suite A
West Chester, PA 19380-4293
tel 610-840-9100 fax 610-840-9199
www.advancedgeoservices.com

FEB 26 09

February 16, 2009 NY95-219-04

Gould Electronics Inc.
34929 Curtis Blvd.
Eastlake, OH 44095

Attention: James F. Cronmiller

SAMPLING EVENT REPORT
YEAR THIRTEEN – JULY/NOVEMBER, 2008
LONG TERM MONITORING PROGRAM
MARATHON REMEDIATION SITE

Gentlemen:

Enclosed is the report of the sampling event conducted during Year13 of the Long Term Monitoring Program for the Marathon Remediation Site. This report covers the November, 2008 sampling of sediment in East Foundry Cove and the July sampling (two wells) of the Plant Area groundwater.

If you have any questions concerning the contents of this report, please contact me at (610) 840-9142.

Very truly yours,

ADVANCED GEOSERVICES ENGINEERING, P.C.

Paul F. Marano, P.E.
Senior Project Consultant

PFM:car

cc: P. Tames, USEPA
W. Mizerak, NYSDEC
E. Lind, Audubon Society
R. Shaheen, Scenic Hudson, Inc.

INTRODUCTION

This Sampling Event Report covers the Year 13 sampling event of the long term monitoring program for the Marathon Remediation Site. This work was conducted in July and November 2008 in accordance with Advanced GeoServices' recommendations for future monitoring presented in the "Five Year Review, Long Term Monitoring Program, Marathon Remediation Site" dated May 2, 2001. The sampling procedures and analytical protocols are described in the December 20, 1995 "Long Term Monitoring Plan for the Marathon Remediation Site" and the Supplemental Long Term Monitoring Plan issued February 21, 1996.

SAMPLING EVENT

The Year 13 event included sampling and analyses of two wells (7S and MB-3) within the Plant Ground area (Area II) and sediment from East Foundry Cove (Area III). The groundwater sampling was conducted in July as detailed in the December 20, 1995 Long Term Monitoring Plan. The East Foundry Cove sediment samples were collected with a hand auger in November (in accordance with the Supplemental Long Term Monitoring Plan of February 21, 1996).

ANALYTICAL RESULTS

Laboratory analyses of the samples were conducted by Severn Trent Laboratories (STL) of Edison, NJ (NY Certification # 11452). Validation of the analytical data was performed by Advanced GeoServices. The validation report for the sediment and groundwater samples is included as Appendix A. Summaries of the analytical data are included in the validation reports in the Appendices and the results are also presented on the following tables.

East Foundry Cove Sediments

Table A shows the cadmium levels detected in the sediment samples obtained from East Foundry Cove during this sampling event. For comparison purposes, the pre-remediation and post-remediation cadmium levels reported by others and the results from the previous Long Term Monitoring Program sampling events are also included in the table. The analytical results are within the range of variation experienced during previous sampling events.

Plant Ground Area Groundwater

Tables B, C, and D present the Plant Ground Area groundwater sample analyses of the two wells (7S and MB-3) from this sampling event. These tables show the concentrations of trichloroethene (TCE), 1,1,1-trichloroethane (TCA), and tetrachloroethene (PCE), respectively. For comparison purposes, these tables also include the results from past groundwater sampling events (all wells)

performed by Advanced GeoServices and others, as well as the results of the previous Long Term Monitoring Program sampling events. The TCE, TCA, and PCE concentrations in Wells MB-3 and 7S are consistent with previous results.

FUTURE SAMPLING

The next sampling event is scheduled for the summer of 2009. The planned sampling will include the sediment in East Foundry Cove. The groundwater sampling for 2009 will be performed as part of the Groundwater Protectiveness Determination Study; the work plan for this study is presently under review by EPA.

TABLES

TABLE A

CADMIUM CONCENTRATIONS (mg/kg)
AREA III SEDIMENT SAMPLES

SAMPLE LOCATION	RE-REMED.(1)	POST-REMED.(2)	LTM SAMPLING EVENT												
			11/95	3/96	6/96	4/97	4/98	4/99	4/00	8/01	10/02	11/03	11/04	09/06	08/07	11/08
EFC-1S	171	15.7	16J(52J)	7.08	6.91	0.386	14.2J	20.8	14.2J(13.5J)	10.5(14.1)	16.7J	6.3J	17.1	22.9	13.5(12)	4.9
EFC-2S	873	19.4	85	14.4J(29.0J)	7.76	46.4	46.3J	58.7	96.9J	19.8	58.1J(145J)	31.7J	50.5	22.5	130.0	79.4 (62.3)
EFC-3S	127	4.0	6	1.55	3.15	21.5(16.0)	7J	0.34	0.83J	12.7	0.31J	0.16U	20.4	6	0.22U	0.32
EFC-4S	998	12.9	190	0.959	50.6	104	2.9J	67.1	277J	69.8	58.3J	50J(50.3J)	35 (32.7)	0.35J(0.55J)	16.1	31.4
ERC-5S	43.1	6.3	42	21.2	9.69J(4.01J)	0.454	75J	9.4	100J	57.3	3.5	20.8J	36.8	18.6	0.3U	8.6
EFP-1S	14.2	6.0	130	15.9	5.7	5.56	106J	38.8	3.9J							
EFP-2S	722	6.6	60	25.2	28.1	2.07	27.4J	74	0.4J							
CSPA-1S	221	11.0	0.28U	34.9	7.17	2.66	2.6	2.6	1.5J							
CSPA-2S	11.6	24.9	3.4	994	4.26	22.8	4.9	3.3	42.7J							
CONTROL	4.8	---	24	7.1	6.34	103	1.5	8.3	2J							
WFC-1S		---	17	12.7	7.41	6.25	5.3J	63.6	1.3J		18.1J		3.1	27.4		
WFC-2S	89 samples	---	11	11.7	20	5.48	6.9J	83.5	92.5J		50		2.6 (2.4)	28.7		
WFC-3S	1.1 to 569	---	77	21.7	10.4	11.8	8.9J	143	10.8J		67.2J		4	0.3J		
WFC-4S	43.9 mean	---	27	14.5	4.54	19.8	17.9J	49.5	1.4J		10.8(15.1)		6.8	11.6(9.8)		
WFC-5S		---	85	16.4	61.4	31.2	55.7J	137	52.8J		150J		14.6	144		

NOTES:

(1) Samples obtained by Malcolm-Pirnie and others prior to the Remedial Action. These are the reported data closest to the present LTM sampling location.

(2) Average value of either the two closest post-remediation sample node locations or the analytical results of the various testing agencies (Sevenson, IQAT, and USCOE) for the same node location.

Values shown in parenthesis are field duplicates

TABLE B

TRICHLOROETHENE (TCE) CONCENTRATIONS (ug/l)
AREA II (PLANT GROUNDS) GROUNDWATER

WELL	SAMPLING EVENTS																					
	8/85[1]	**88(#1)[1]**	**88(#2)[1]**	**11/93[2]**	**2/94[2]**	**10/94[2]**	**11/95[3]**	**6/96**	**10/96**	**4/97**	**10/97**	**4/98**	**11/98**	**4/99**	**11/99**	**4/00**	**10/00**	**8/01**	**9/03**	**11/04**	**09/06**	**07/07 [10]**	**07/08**
2S	[4]	ND[5]	4J	ND		ND	[6]	ND	0.4U	0.4U	0.4U(0.4U)	1U	1U	0.3U	1U	0.2U	1U						
4I		ND	ND	ND	ND	ND	3.3U	ND	0.4U	0.4U	16	4.5(4.3)	2.4J	0.3U	2.1J	0.2U	6		1U				
4D		ND	ND	ND	ND	ND	12	2	0.4U	0.7	32	3.9	6.3J	2.3	0.8J	0.2U	1U		1U				
5S		ND	1J	ND	ND	ND	5.6	ND	0.4U	0.4U	23	1U	1U	0.3U	1.1J	0.2U	1U						
5I		ND	ND	ND	ND	ND	22	4	0.4U	0.4U	35	7.7	15J	8.1	2J	0.2U	1U						
6I		ND	ND	ND	ND	ND	7.3(5.3)	ND	0.4U	0.4U	1.6	1U	3.4J	1	1U	0.2U	1U						
6D				ND	ND	ND	10	3.5(4.0)	1.4	0.4U	4.7	1U	34J	0.7	1U	0.2U	1J						
7S		100	82	110J	100(100)	100	80	82	89	99(86)	99	100	94J	84	82J(71J)[9]	77(75)	82(81)[5]	74	74	76	79(74)	73	68
7D				ND	4.3J	ND	4.4J	ND	0.4U	0.4U	0.4U	1U	1U	0.7	1U	0.2U	1U						
V5		ND	ND	ND		ND	22	ND	0.4U	0.4U	190	1U(1U)	1U	0.3U	1U	0.2U	1U		1U				
MB-1			2J	ND	ND	ND	4.3J	2.8	2.5(2.1)	0.4U	0.4U	[8]	0.9J	1	1.6J	0.9	0.9J						
MB-2				ND			6.2	ND	0.4U	0.4U	0.4U	1U	1U	0.3U	1U	0.2U	1U						
MB-3	170		65	76J	73	110	51	120	70	61	64	78	23J	62	25J	33	46	47(46)	50	43(45)	47	44	37

NOTES:

(1) Sampling performed by others.
(2) Sampling performed by Advanced GeoServices Corp. during the Remedial Action.
(3) First long term monitoring sampling event.
(4) Blank spaces indicate the well was not sampled.
(5) ND=Not detected (detection limit=5 µg/l) for 1985 through 1995 samples, and 2 µg/l from 1996 to the present).
(6) Well casing was bent; no sample was obtained.
(7) MB-1 duplicate was a blind duplicate listed as MB-100 for analysis.
(8) Well dry during sampling event.
(9) 7S duplicate was a blind duplicate listed as 71 for analysis.
(10) Samples collected as part of in-situ bioremediation program

Values shown in parenthesis are field duplicates

TABLE C

1,1,1-TRICHLOROETHANE (TCA) CONCENTRATIONS (UG/L)
AREA II (PLANT GROUNDS) GROUNDWATER

WELL[1]	SAMPLING EVENTS																			
	11/93[2]	2/94[2]	10/94[2]	11/95[3]	6/96	10/96	4/97	10/97	4/98	11/98	4/99	11/99	4/00	10/00	8/01	10/02	9/03	11/04	09/06	07/07[7]	07/08
7S	3.2J	5U	ND[4]	2.7J	ND	5.8	ND	0.4U	2	3.8J	3	2.1J(1.6J)[6]	1.4(1.2)	2.3J(2.2J)[5]	2.1	1.4J(1.5J)	1.2	0.9	0.7	0.6	0.4
7D	ND	4.8J	ND	ND	ND	0.4U	ND	0.4U	1U	5U	1.3U	5U	0.2U	5U							
MB-2	2J	[5]		ND	ND	0.4U	ND	0.4U	1.3	1.2J	1J	0.8J	0.8	0.7J							
MB-3	3J	7.9	6	2.7J	7	7.4	3	0.4U	4.3	5U	3.7	1.2J	1.9	2.1J	2.2(2.1)	1.7J	2.4	2.1 (2.3)	1.6	1.4	1.2
4D	ND	ND	ND	ND	ND	5.6	ND	0.4U	1U	5U	1.3U	5U	0.2U	5U							
4I																5U					
V5																5U					

NOTES:

(1) All other wells had non-detect results for all sampling events.
(2) Sampling performed by Advanced GeoServices Corp. during the Remedial Action.
(3) First long term monitoring sampling event.
(4) ND=Not detected (detection limit=5 µg/l) for 1993 through 1995 samples, and 2 µg/l from 1996 to the present).
(5) Blank spaces indicate the well was not sampled.
(6) 7S duplicate was a blind duplicate listed as 71 for analysis.
(7) Samples collected as part of in-situ bioremediation program.

Values shown in parenthesis are field duplicates

TABLE D

TETRACHLOROETHENE (PCE) CONCENTRATIONS (mg/l)
AREA II (PLANT GROUNDS) GROUNDWATER

WELL[1]	SAMPLING EVENTS																			
	11/93[2]	**2/94[2]**	**10/94[2]**	**11/95[3]**	**6/96**	**10/96**	**4/97**	**10/97**	**4/98**	**11/98**	**4/99**	**11/99**	**4/00**	**10/00**	**8/01**	**10/02**	**9/03**	**11/04**	**09/06**	**07/07[6]**	**07/08**
7S	1.2J	5.2	ND(4)	7.7	3	1.3	0.4UJ(7.2J)	3.1	4.5	5.6J	6.3	4.8J(4.3J)[5]	4.0(3.6)	5.4(5.2)[5]	3.8	3.3(3.2)	3.5	3.5	4.2(4)	4.5	4.8
MB-3	ND	ND	ND	3.2J	3	0.4U	ND	3.6	2.6	2.2J	2.7	2.2J	3.3	2.7	4.8(4.9)	4	4.2	2.3 (2.5)	1.8	2	1.4
4I																1U					
V5																1U					

NOTES:

(1) All other wells had non-detect results for all sampling events.
(2) Sampling performed by Advanced GeoServices Corp. during the Remedial Action.
(3) First long term monitoring sampling event.
(4) ND=Not detected (detection limit=5 µg/l) for 1993 through 1995 samples, and 2 µg/l from 1996 to the present).
(5) 7S duplicate was a blind duplicate listed as 7I for analysis.
(6) Samples collected as part of in-situ bioremediation program

Values shown in parenthesis are field duplicates

DATA VALIDATION REPORT

OF

GROUNDWATER SAMPLES

COLLECTED ON JUNE 17-18, 2008

FOR

ORGANIC AND CONVENTIONAL ANALYSES

Laboratory Case Number X193

PREPARED FOR:

GOULD ELECTRONICS INC.
MARATHON SITE
COLD SPRING, NEW YORK

PREPARED BY:

ADVANCED GEOSERVICES CORP.
WEST CHESTER, PENNSYLVANIA

August 27, 2008
Project Number NY 95-219-03

DATA VALIDATION REPORT
ORGANIC COMPOUNDS

INTRODUCTION

This data validation report addresses the organic results from the groundwater samples collected from the Marathon Site monitoring wells on June 17-18, 2008, in Cold Spring, New York. Samples were analyzed by Test America in Edison, NJ (TA). The samples were analyzed for volatile organic compounds (VOCs) by USEPA *Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (SW-846) Method 8260B. The sample results were reported under TA Case Numbers X193.

The qualified analytical results are presented on the data summary table. The data summary table lists both non-detected and detected results. Support documentation summarizing the specifics of this review is presented at the end of this report.

VOLATILE ORGANIC COMPOUNDS AND DISSOLVED GASSES

Three monitoring well groundwater samples, one field duplicate sample, one equipment blank, and one trip blank sample were collected and analyzed for VOCs by USEPA SW-846 Method 8260B.

This organic review has been performed with guidance from the USEPA "Contract Laboratory Program National Functional Guidelines for Organic Data Review, February 1994. The findings presented in this report are based upon a review of all data supplied by the laboratory(s). The information examined consists of sample results, analytical holding times, initial and continuing calibrations, gas chromatographic/mass spectrometric (GC/MS) tunes, blank analysis results, matrix spike/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), surrogate spike recoveries, standard areas and retention times.

Holding times were met for all samples. All GC/MS tunes for the target analytes were within the method criteria. All analytes and system monitoring compounds, except those addressed in the "QUALIFIER" section of this report, were within the method-required limits for the initial and continuing calibrations with average relative response factors (RRF) greater than or equal to 0.05. In some cases, the correlation coefficient (r) was calculated instead of the RRF, the correlation coefficients were greater than 0.995. All analytes and system monitoring compounds were within the method-required limits for the initial and continuing calibrations with percent relative standard deviations (% RSD) or percent differences (%D) less than 15 percent or 20 percent, respectively. The laboratory, equipment, and trip blanks were free of contamination. All volatile system monitoring compound recoveries and internal standard areas were within acceptance limits. All detected compounds met the relative retention time and mass spectral identification criteria. Samples MW-7S and MW-7SD were field duplicates. Field duplicate results were precise. The percent recoveries for the MS and MSD were acceptable.

QUALIFIERS

The volatile initial calibration for X193 reported relative response factors (RRFs) for acetone below the criteria of 0.05. All MB-3, MW-4, MW-7S, MW-7SD, EB-1-071808, and TB-1-071708 sample results and reporting limits for acetone were qualified as estimated (J) if detected and rejected (R) if undetected.

SUMMARY

The results are acceptable as qualified.

DATA VALIDATION REPORT
CONVENTIONALS

INTRODUCTION

This data validation report addresses the conventional analysis results from the groundwater samples collected from the Marathon Site monitoring wells on June 17-18, 2008, in Cold Spring, New York. All samples were analyzed by Test America in Edison, NJ (TA). Groundwater samples were analyzed for total organic carbon (TOC). The conventional parameters were analyzed by USEPA *Methods of Chemical Analysis of Water and Wastes*. The sample results were reported under TA Case Number X193.

The qualified analytical results are presented on the data summary table. The data summary table lists both non-detected and detected results. Support documentation summarizing the specifics of this review is presented at the end of this report.

CONVENTIONAL PARAMETERS

Three monitoring well groundwater samples, one field duplicate sample and one equipment blank sample were collected and analyzed for conventional analyses by USEPA *Methods of Chemical Analysis of Water and Wastes*.

This conventional data review has been performed with guidance from the USEPA "Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", July, 2002. The findings presented in this report are based upon a review of all data supplied by the laboratory. The information examined consists of sample results, analytical holding times, initial and continuing calibration standard recoveries, calibration curves, blank analysis results, matrix spike (MS) recoveries, matrix spike duplicate (MSD) recoveries, laboratory and field duplicate relative percent differences (RPD), and laboratory control sample results.

Holding times were met for TOC. Initial and continuing calibration standard sample results were accurate. Calibration curves had correlation coefficients within QC limits. The laboratory and equipment blanks were free of contamination except for those addressed in the "QUALIFIERS" section of this report. Field duplicate results were precise. Laboratory control sample, laboratory duplicates, MS, and MSD percent recoveries were acceptable. Samples MW-7S and MW-7SD were field duplicates. Field duplicate results were precise.

QUALIFIERS

The continuing calibration blank for TOC had a detection of 0.325 mg/L. Sample results and reporting limits for TOC for samples MB-3, MW-7S, and MW-7SD were qualified as undetected (U) due to blank contamination

SUMMARY

The results are acceptable as qualified or reported.

QUALIFIER CODES

U - Denotes the compound or analyte was not detected at or above the associated detection limit.

J - Denotes an estimated value or the result is below the quantitation limit.

UJ - Denotes an estimated detection or quantitation limit.

R - Denotes a rejected result. The analyte may or may not be present.

Data review was performed by an experienced quality assurance scientist independent of the analytical laboratory.

This is to certify that I have examined the analytical data and based on the information provided to me by the laboratory, in my professional judgment the data are acceptable for use except where qualified with qualifiers that modify the usefulness of those individual values.

Erica N Nichols — 8.29.08

Quality Assurance Scientist — Date

Jay M Stay — 8/29/2008

Quality Assurance Manager — Date

TABLES

MARATHON
7/2008 Groundwater, 7/17-7/18/2008
STL Edison# X193 Project# NY-95-219

Sample Location		MB-3			MW-4			MW-7S			MW-7SD			EB-1-071808		
Lab ID		936640			936641			936642			936643			936644		
Sample Date		7/17/2008			7/18/2008			7/18/2008			7/18/2008			7/18/2008		
Matrix		Groundwater			Groundwater			Groundwater			Groundwater			Aqueous		
Remarks											FD of MW-7S			Equipment Blank		
Parameter	**Units**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Volatiles																
1,1,1-Trichloroethane	ug/L	1.2	J	5	1.4	J	5	0.4	J	5	0.3	J	5		U	5
1,1,2,2-Tetrachloroethane	ug/L		U	1		U	1		U	1		U	1		U	1
1,1,2-Trichloroethane	ug/L		U	3		U	3		U	3		U	3		U	3
1,1-Dichloroethane	ug/L		U	5		U	5		U	5		U	5		U	5
1,1-Dichloroethene	ug/L		U	2		U	2		U	2		U	2		U	2
1,2-Dichloroethane	ug/L		U	2		U	2		U	2		U	2		U	2
1,2-Dichloropropane	ug/L		U	1		U	1		U	1		U	1		U	1
2-Butanone	ug/L		U	5		U	5		U	5		U	5		U	5
2-Hexanone	ug/L		U	5		U	5		U	5		U	5		U	5
4-Methyl-2-Pentanone	ug/L		U	5		U	5		U	5		U	5		U	5
Acetone	ug/L		R	5		R	5		R	5		R	5	5.6	J	5
Benzene	ug/L		U	1		U	1		U	1		U	1		U	1
Bromodichloromethane	ug/L		U	1		U	1		U	1		U	1		U	1
Bromoform	ug/L		U	4		U	4		U	4		U	4		U	4
Bromomethane	ug/L		U	5		U	5		U	5		U	5		U	5
Carbon Disulfide	ug/L		U	5		U	5		U	5		U	5		U	5
Carbon Tetrachloride	ug/L		U	2		U	2		U	2		U	2		U	2
Chlorobenzene	ug/L		U	5		U	5		U	5		U	5		U	5
Chloroethane	ug/L		U	5		U	5		U	5		U	5		U	5
Chloroform	ug/L	0.7	J	5	0.8	J	5	0.6	J	5	0.6	J	5		U	5
Chloromethane	ug/L		U	5		U	5		U	5		U	5		U	5
cis-1,2-Dichloroethene	ug/L	0.1	J	5	0.2	J	5	2.4	J	5	2.4	J	5		U	5
cis-1,3-Dichloropropene	ug/L		U	5		U	5		U	5		U	5		U	5
Dibromochloromethane	ug/L		U	5		U	5		U	5		U	5		U	5
Ethylbenzene	ug/L		U	4		U	4		U	4		U	4		U	4
Methylene Chloride	ug/L		U	3		U	3		U	3		U	3		U	3
Styrene	ug/L		U	5		U	5		U	5		U	5		U	5
Tetrachloroethene	ug/L	1.4		1	2		1	4.8		1	5		1		U	1
Toluene	ug/L		U	5		U	5		U	5		U	5	0.3	J	5
trans-1,2-Dichloroethene	ug/L		U	5		U	5		U	5		U	5		U	5
trans-1,3-Dichloropropene	ug/L		U	5		U	5		U	5		U	5		U	5
Trichloroethene	ug/L	37		1	56		1	68		1	69		1		U	1
Vinyl Chloride	ug/L		U	5		U	5		U	5		U	5		U	5
Xylene (Total)	ug/L		U	5		U	5		U	5		U	5		U	5
Conventionals																
Total Organic Carbon	mg/l	1.1	U	1		U	1	1.3	U	1	1.4	U	1		U	1

QA Scientist _____ Date 8/28/2008

MARATHON
7/2008 Groundwater, 7/17-7/18/2008
STL Edison# X193 Project# NY-95-219

Sample Location		TB-1-071708		
Lab ID		936645		
Sample Date		7/17/2008		
Matrix		Aqueous		
Remarks		Trip Blank		
Parameter	**Units**	**Result**	**Q**	**RL**
Volatiles				
1,1,1-Trichloroethane	ug/L		U	5
1,1,2,2-Tetrachloroethane	ug/L		U	1
1,1,2-Trichloroethane	ug/L		U	3
1,1-Dichloroethane	ug/L		U	5
1,1-Dichloroethene	ug/L		U	2
1,2-Dichloroethane	ug/L		U	2
1,2-Dichloropropane	ug/L		U	1
2-Butanone	ug/L		U	5
2-Hexanone	ug/L		U	5
4-Methyl-2-Pentanone	ug/L		U	5
Acetone	ug/L		R	5
Benzene	ug/L		U	1
Bromodichloromethane	ug/L		U	1
Bromoform	ug/L		U	4
Bromomethane	ug/L		U	5
Carbon Disulfide	ug/L		U	5
Carbon Tetrachloride	ug/L		U	2
Chlorobenzene	ug/L		U	5
Chloroethane	ug/L		U	5
Chloroform	ug/L		U	5
Chloromethane	ug/L		U	5
cis-1,2-Dichloroethene	ug/L		U	5
cis-1,3-Dichloropropene	ug/L		U	5
Dibromochloromethane	ug/L		U	5
Ethylbenzene	ug/L		U	4
Methylene Chloride	ug/L		U	3
Styrene	ug/L		U	5
Tetrachloroethene	ug/L		U	1
Toluene	ug/L		U	5
trans-1,2-Dichloroethene	ug/L		U	5
trans-1,3-Dichloropropene	ug/L		U	5
Trichloroethene	ug/L		U	1
Vinyl Chloride	ug/L		U	5
Xylene (Total)	ug/L		U	5
Conventionals				
Total Organic Carbon	mg/l		NA	

QA Scientist _____ Date 8/28/2008

SUPPORT DOCUMENTATION
ORGANICS

VOLATILE DATA VALIDATION SUMMARY

Site Name: Marathon
Project Number: NY95-219-02
Sampling Date(s): 7.17 - 7.18.08

Laboratory: Test America - Edison
Case/Order No.: X193

Compound List: [✓] TCL [ ] Priority Pollutant [ ] Appendix IX [ ] Other _____

Method: [ ] CLP SOW 3/90 [ ] 40 CFR 136 [✓] SW-846 Method 8260B [ ] Other _____

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	Accept	FYI	Qualify	Comments
Holding Times	✓			DA = 6-7
GC/MS Tuning	✓			
Initial Calibrations			✓	
Continuing Calibrations		✓		
Blank Analysis Results		✓		
System Monitoring/Surrogate Results	✓			
MS/MSD Results	✓			
Field Duplicate Results	✓			MW-7S MW-7SD
Internal Standard Areas/RT	✓			
Laboratory Control Sample Results	✓			
Target Compound Identification	✓			
TIC Identification				NA
Quantitation/Detection Limits	✓			
System Performance	✓			
Overall Assessment of Data	✓			
Other:				

General Comments: _____

Accept - No qualification required.
FYI - For your information only, no qualification necessary.
Qualify - Qualify as rejected, estimated or biased.
NR - Not Reviewed
NA - Not Applicable

QA Scientist Erica Nicholson
Date 8.12.08

Client ID: **MB-3**
Site: Marathon

Lab Sample No: **936640**
Lab Job No: X193

Date Sampled: 07/17/08
Date Received: 07/18/08
Date Analyzed: 07/24/08
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: c28899.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	5.0
Carbon Disulfide	ND	5.0
1,1-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	0.1J	5.0
Chloroform	0.7J	5.0
1,2-Dichloroethane	ND	2.0
2-Butanone	ND	5.0
1,1,1-Trichloroethane	1.2J	5.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	37	1.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	3.0
Benzene	ND	1.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	4.0
4-Methyl-2-Pentanone	ND	5.0
2-Hexanone	ND	5.0
Tetrachloroethene	1.4	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	4.0
Styrene	ND	5.0
Xylene (Total)	ND	5.0

8.12.08

Client ID: **MW-4**
Site: Marathon

Lab Sample No: **936641**
Lab Job No: X193

Date Sampled: 07/18/08
Date Received: 07/18/08
Date Analyzed: 07/24/08
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: c28900.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	5.0
Carbon Disulfide	ND	5.0
1,1-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	0.2J	5.0
Chloroform	0.8J	5.0
1,2-Dichloroethane	ND	2.0
2-Butanone	ND	5.0
1,1,1-Trichloroethane	1.4J	5.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	56	1.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	3.0
Benzene	ND	1.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	4.0
4-Methyl-2-Pentanone	ND	5.0
2-Hexanone	ND	5.0
Tetrachloroethene	2.0	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	4.0
Styrene	ND	5.0
Xylene (Total)	ND	5.0

Client ID: **MW-7S**
Site: Marathon

Lab Sample No: **936642**
Lab Job No: X193

Date Sampled: 07/18/08
Date Received: 07/18/08
Date Analyzed: 07/25/08
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: c28924.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	5.0
Carbon Disulfide	ND	5.0
1,1-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	2.4J	5.0
Chloroform	0.6J	5.0
1,2-Dichloroethane	ND	2.0
2-Butanone	ND	5.0
1,1,1-Trichloroethane	0.4J	5.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	68	1.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	3.0
Benzene	ND	1.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	4.0
4-Methyl-2-Pentanone	ND	5.0
2-Hexanone	ND	5.0
Tetrachloroethene	4.8	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	4.0
Styrene	ND	5.0
Xylene (Total)	ND	5.0

Client ID: **MW-7SD**
Site: Marathon

Lab Sample No: **936643**
Lab Job No: X193

Date Sampled: 07/18/08
Date Received: 07/18/08
Date Analyzed: 07/25/08
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: c28925.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	5.0
Carbon Disulfide	ND	5.0
1,1-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	2.4J	5.0
Chloroform	0.6J	5.0
1,2-Dichloroethane	ND	2.0
2-Butanone	ND	5.0
1,1,1-Trichloroethane	0.3J	5.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	69	1.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	3.0
Benzene	ND	1.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	4.0
4-Methyl-2-Pentanone	ND	5.0
2-Hexanone	ND	5.0
Tetrachloroethene	5.0	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	4.0
Styrene	ND	5.0
Xylene (Total)	ND	5.0

CHN 8.12.08

Client ID: **EB-1-071808**
Site: Marathon

Lab Sample No: **936644**
Lab Job No: X193

Date Sampled: 07/18/08
Date Received: 07/18/08
Date Analyzed: 07/24/08
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: c28898.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	3.0
Acetone	5.6 J	5.0
Carbon Disulfide	ND	5.0
1,1-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,2-Dichloroethane	ND	2.0
2-Butanone	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	1.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	3.0
Benzene	ND	1.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	4.0
4-Methyl-2-Pentanone	ND	5.0
2-Hexanone	ND	5.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Toluene	0.3J	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	4.0
Styrene	ND	5.0
Xylene (Total)	ND	5.0

FYI: Acetone and toluene were ND in all samples, No qualifiers assigned

YHN 8.12.08

Client ID: **TB-1-071808**
Site: Marathon

Lab Sample No: **936645**
Lab Job No: X193

Date Sampled: 07/17/08
Date Received: 07/18/08
Date Analyzed: 07/25/08
GC Column: Rtx-VMS
Instrument ID: VOAMS3.i
Lab File ID: c28933.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	3.0
Acetone	~~ND~~ R	5.0
Carbon Disulfide	ND	5.0
1,1-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,2-Dichloroethane	ND	2.0
2-Butanone	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	1.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	3.0
Benzene	ND	1.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	4.0
4-Methyl-2-Pentanone	ND	5.0
2-Hexanone	ND	5.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	4.0
Styrene	ND	5.0
Xylene (Total)	ND	5.0

VOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 8260B

Instrument ID: VOAMS3 Calibration Date(s): 07/23/08 07/23/08

Heated Purge: (Y/N) N Calibration Time(s): 0946 1136

LAB FILE ID: RRF5: C28839 RRF10: C28840 RRF20: C28841
RRF50: C28842 RRF100: C28843

	COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100
	Chloromethane	0.370	0.392	0.419	0.407	0.426
	Bromomethane	0.248	0.232	0.258	0.276	0.308
	Vinyl Chloride	0.306	0.369	0.417	0.404	0.422
	Chloroethane	0.186	0.184	0.208	0.198	0.208
	Methylene Chloride	0.433	0.397	0.393	0.399	0.388
*	Acetone	0.079	0.058	0.043	0.039	0.037
	Carbon Disulfide	0.550	0.635	0.723	0.751	0.845
	Trichlorofluoromethane	0.506	0.537	0.605	0.599	0.663
	1,1-Dichloroethene	0.408	0.351	0.338	0.355	0.356
	1,1-Dichloroethane	0.654	0.665	0.640	0.660	0.663
	trans-1,2-Dichloroethene	0.406	0.384	0.384	0.392	0.399
	cis-1,2-Dichloroethene	0.391	0.379	0.365	0.376	0.374
	Chloroform	0.557	0.570	0.552	0.577	0.576
	1,2-Dichloroethane	0.485	0.453	0.414	0.440	0.438
	2-Butanone	0.076	0.067	0.064	0.061	0.063
	1,1,1-Trichloroethane	0.429	0.473	0.458	0.490	0.502
	Carbon Tetrachloride	0.323	0.334	0.344	0.378	0.398
	Bromodichloromethane	0.377	0.342	0.351	0.392	0.410
	1,2-Dichloropropane	0.354	0.341	0.330	0.343	0.341
	cis-1,3-Dichloropropene	0.456	0.461	0.454	0.507	0.518
	Trichloroethene	0.380	0.336	0.319	0.343	0.342
	Dibromochloromethane	0.227	0.270	0.271	0.330	0.344
	1,1,2-Trichloroethane	0.262	0.276	0.260	0.274	0.273
	Benzene	1.557	1.419	1.359	1.405	1.376
	trans-1,3-Dichloropropene	0.419	0.456	0.422	0.507	0.515
	2-Chloroethyl Vinyl Ether	0.074	0.098	0.094	0.088	0.098
	Bromoform	0.143	0.170	0.166	0.212	0.236
	4-Methyl-2-Pentanone	0.291	0.407	0.315	0.304	0.323
	2-Hexanone	0.272	0.404	0.279	0.261	0.270
	Tetrachloroethene	0.498	0.447	0.422	0.431	0.438
	1,1,2,2-Tetrachloroethane	0.977	0.819	0.749	0.774	0.762
	Toluene	1.625	1.681	1.589	1.639	1.602
	Chlorobenzene	1.088	1.100	1.015	1.039	1.039
	Ethylbenzene	0.564	0.548	0.536	0.565	0.568
	Styrene	0.999	1.064	1.007	1.065	1.080
	Xylene (Total)	0.628	0.676	0.636	0.681	0.682
	Ethyl Ether	0.284	0.351	0.314	0.310	0.321
	Acrolein	0.083	0.083	0.082	0.080	0.082
	Freon TF	0.288	0.400	0.411	0.389	0.420

* = All samples associated

LHM 8.12.08

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS3 Calibration Date(s): 07/23/08 07/23/08

Heated Purge: (Y/N) N Calibration Time(s): 0946 1136

LAB FILE ID: RRF5: C28839 RRF10: C28840 RRF20: C28841
RRF50: C28842 RRF100: C28843

	COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100
NR	Isopropanol	0.024	0.023	0.022	0.022	0.022
NR	Acetonitrile	0.047	0.048	0.043	0.041	0.042
NR	TBA	0.044	0.065	0.041	0.039	0.040
	Acrylonitrile	0.139	0.146	0.141	0.139	0.144
	MTBE	1.108	1.221	1.194	1.143	1.194
	Hexane	0.324	0.267	0.280	0.308	0.324
	DIPE	0.979	1.118	1.117	1.072	1.092
NR	Ethyl Acetate	0.036	0.046	0.042	0.040	0.042
	Vinyl Acetate	0.509	0.526	0.548	0.528	0.556
	Tetrahydrofuran	0.160	0.154	0.147	0.142	0.150
	Cyclohexane	0.448	0.593	0.634	0.598	0.630
	Isobutanol					
	Isopropyl Acetate	0.572	0.687	0.636	0.616	0.640
	n-Heptane	0.484	0.404	0.426	0.464	0.468
	n-Butanol					
	Propyl Acetate	0.456	0.565	0.484	0.456	0.480
	Butyl Acetate	0.490	0.724	0.564	0.556	0.579
	1,2-Dibromoethane	0.326	0.333	0.310	0.327	0.328
	1,3-Dichlorobenzene	1.550	1.526	1.418	1.432	1.453
	1,4-Dichlorobenzene	1.656	1.558	1.460	1.497	1.490
	1,2-Dichlorobenzene	1.495	1.441	1.375	1.412	1.390
	Naphthalene	3.062	2.648	2.380	2.388	2.320
	Methylnaphthalene (total)					
	Dimethylnaphthalene (total)					
	Dichlorodifluoromethane	0.265	0.276	0.324	0.308	0.330
	1,1-Dichloropropene	0.450	0.469	0.452	0.470	0.474
	1,2,4-Trichlorobenzene	0.950	0.864	0.781	0.830	0.852
	Hexachlorobutadiene	0.376	0.228	0.210	0.211	0.224
NR	1,4-Dioxane	0.005	0.005	0.004	0.004	0.004
	Methyl Acrylate					
	1,1,1,2-Tetrachloroethane	0.273	0.297	0.294	0.329	0.345
	1,2,3-Trichlorobenzene	0.911	0.799	0.752	0.765	0.766
	1,2,3-Trichloropropane	0.250	0.274	0.254	0.248	0.246
	1,2,4-Trimethylbenzene	2.386	2.307	2.238	2.273	2.255
	1,3,5-Trimethylbenzene	2.221	2.330	2.232	2.329	2.292
	1,3-Dichloropropane	0.587	0.605	0.553	0.580	0.581
	2,2-Dichloropropane	0.428	0.426	0.423	0.460	0.450
	2-Chlorotoluene	2.117	2.126	2.040	2.043	1.992
	4-Chlorotoluene	2.262	2.206	2.119	2.154	2.131

NR = Not Reported

EHN 8.12.08

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS3 Calibration Date(s): 07/23/08 07/23/08

Heated Purge: (Y/N) N Calibration Time(s): 0946 1136

LAB FILE ID: RRF5: C28839 RRF10: C28840 RRF20: C28841
RRF50: C28842 RRF100: C28843

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100
Bromobenzene	0.882	0.866	0.824	0.840	0.826
Bromochloromethane	0.189	0.181	0.185	0.185	0.186
Dibromomethane	0.193	0.198	0.189	0.199	0.197
Isopropylbenzene	1.544	1.588	1.527	1.599	1.583
n-Butylbenzene	0.559	0.480	0.470	0.471	0.505
n-Propylbenzene	3.386	3.446	3.351	3.389	3.316
p-Isopropyltoluene	2.193	2.150	2.093	2.214	2.239
sec-Butylbenzene	2.706	2.396	2.318	2.382	2.405
tert-Butylbenzene	1.917	1.830	1.793	1.857	1.874
Allyl chloride					
Benzyl chloride	0.140	0.257	0.224	0.264	0.310
NR Epichlorohydrin	0.030	0.037	0.029	0.027	0.028
Isoprene	0.368	0.506	0.521	0.497	0.541
Methyl methacrylate	0.246	0.299	0.261	0.256	0.270
n-Pentane	0.063	0.070	0.071	0.067	0.070
Allyl alcohol					
2-Octanol					
2-Octanone					
Ethyl Acrylate					
Butyl Acrylate					
Butyl Methacrylate					
Ethyl methacrylate					
NR Ethanol	0.005	0.004	0.004	0.004	0.004
Methyl Acetate	0.112	0.101	0.098	0.095	0.099
Methyl cyclohexane	0.434	0.600	0.649	0.625	0.658
Cyclohexanone					
p-Ethyltoluene					
1,4-Diethylbenzene					
1,2,4,5-Tetramethylbenzene					
Propylene Oxide					
Camphene (total)					
Camphor					
Amyl Acetate					
2-Methylnaphthalene					
1-Chlorohexane					
Chlorotrifluoromethane					
Chlorodifluoromethane					
tert-Amylmethyl Ether					
Iodomethane					

NR = Not Reported

YTH 8.12.08

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS3 Calibration Date(s): 07/23/08 07/23/08

Heated Purge: (Y/N) N Calibration Time(s): 0946 1136

LAB FILE ID: RRF5: C28839 RRF10: C28840 RRF20: C28841
RRF50: C28842 RRF100: C28843

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100
trans-1,4-Dichloro-2-butene					
1,2-Dibromo-3-chloropropane	0.114	0.118	0.120	0.130	0.138
1,3,5-Trichlorobenzene					
1,2-Dichlorotrifluoroethane					
1-Bromo-2-chloroethane					
4-Chlorobenzotrifluoride					
2-Chloropropene					
tert-Butyl ethyl ether					
1,3-Butadiene					
n-Propanol	0.003	0.002	0.002	0.002	0.003
Acetaldehyde					
1,2-Dichloroethane-d4 (SUR)	0.382	0.358	0.344	0.384	0.400
Toluene-d8 (SUR)	1.325	1.243	1.249	1.285	1.332
Bromofluorobenzene (SUR)	0.929	0.826	0.822	0.832	0.869

NR

NR = Not Reported

CTM 8.12.08

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS3 Calibration Date(s): 07/23/08 07/23/08

Heated Purge: (Y/N) N Calibration Time(s): 0946 1136

RRF200: C28844

	COMPOUND	RRF200
	Chloromethane	0.429
	Bromomethane	0.325
	Vinyl Chloride	0.420
	Chloroethane	0.205
	Methylene Chloride	0.411
*	Acetone	0.038
	Carbon Disulfide	0.872
	Trichlorofluoromethane	0.657
	1,1-Dichloroethene	0.383
	1,1-Dichloroethane	0.696
	trans-1,2-Dichloroethene	0.424
	cis-1,2-Dichloroethene	0.402
	Chloroform	0.618
	1,2-Dichloroethane	0.458
	2-Butanone	0.066
	1,1,1-Trichloroethane	0.543
	Carbon Tetrachloride	0.438
	Bromodichloromethane	0.449
	1,2-Dichloropropane	0.364
	cis-1,3-Dichloropropene	0.554
	Trichloroethene	0.376
	Dibromochloromethane	0.378
	1,1,2-Trichloroethane	0.285
	Benzene	1.425
	trans-1,3-Dichloropropene	0.548
	2-Chloroethyl Vinyl Ether	
	Bromoform	0.272
	4-Methyl-2-Pentanone	0.324
	2-Hexanone	0.261
	Tetrachloroethene	0.479
	1,1,2,2-Tetrachloroethane	0.787
	Toluene	1.646
	Chlorobenzene	1.083
	Ethylbenzene	0.610
	Styrene	1.129
	Xylene (Total)	0.713
	Ethyl Ether	0.314
	Acrolein	0.083
	Freon TF	0.424

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

* = All samples associated

EHN 8.12.08

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS3 Calibration Date(s): 07/23/08 07/23/08

Heated Purge: (Y/N) N Calibration Time(s): 0946 1136

RRF200: C28844

	COMPOUND	RRF200
NR	Isopropanol	0.022
NR	Acetonitrile	0.040
NR	TBA	0.040
	Acrylonitrile	0.141
	MTBE	1.166
	Hexane	0.329
	DIPE	1.061
NR	Ethyl Acetate	0.041
	Vinyl Acetate	0.527
	Tetrahydrofuran	0.148
	Cyclohexane	0.638
	Isobutanol	
	Isopropyl Acetate	0.620
	n-Heptane	0.478
	n-Butanol	
	Propyl Acetate	0.467
	Butyl Acetate	0.553
	1,2-Dibromoethane	0.338
	1,3-Dichlorobenzene	1.545
	1,4-Dichlorobenzene	1.560
	1,2-Dichlorobenzene	1.458
	Naphthalene	2.290
	Methylnaphthalene (total)	
	Dimethylnaphthalene (total)	
	Dichlorodifluoromethane	0.339
	1,1-Dichloropropene	0.510
	1,2,4-Trichlorobenzene	0.937
	Hexachlorobutadiene	0.255
NR	1,4-Dioxane	0.004
	Methyl Acrylate	
	1,1,1,2-Tetrachloroethane	0.373
	1,2,3-Trichlorobenzene	0.827
	1,2,3-Trichloropropane	0.256
	1,2,4-Trimethylbenzene	2.333
	1,3,5-Trimethylbenzene	2.384
	1,3-Dichloropropane	0.598
	2,2-Dichloropropane	0.489
	2-Chlorotoluene	2.044
	4-Chlorotoluene	2.176

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

NR = Not Reported

8.12.08

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS3 Calibration Date(s): 07/23/08 07/23/08

Heated Purge: (Y/N) N Calibration Time(s): 0946 1136

RRF200: C28844

	COMPOUND	RRF200
	Bromobenzene	0.880
	Bromochloromethane	0.203
	Dibromomethane	0.214
	Isopropylbenzene	
	n-Butylbenzene	0.557
	n-Propylbenzene	3.307
	p-Isopropyltoluene	2.408
	sec-Butylbenzene	2.538
	tert-Butylbenzene	2.016
	Allyl chloride	
	Benzyl chloride	0.330
NR	Epichlorohydrin	0.024
	Isoprene	0.538
	Methyl methacrylate	0.270
	n-Pentane	0.072
	Allyl alcohol	
	2-Octanol	
	2-Octanone	
	Ethyl Acrylate	
	Butyl Acrylate	
	Butyl Methacrylate	
	Ethyl methacrylate	
NR	Ethanol	0.004
	Methyl Acetate	0.097
	Methyl cyclohexane	0.674
	Cyclohexanone	
	p-Ethyltoluene	
	1,4-Diethylbenzene	
	1,2,4,5-Tetramethylbenzene	
	Propylene Oxide	
	Camphene (total)	
	Camphor	
	Amyl Acetate	
	2-Methylnaphthalene	
	1-Chlorohexane	
	Chlorotrifluoromethane	
	Chlorodifluoromethane	
	tert-Amylmethyl Ether	
	Iodomethane	

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

NR = Not Reported

LJH 8.12.08

FORM 7B
VOLATILE CONTINUING CALIBRATION CHECK

Instrument ID: VOAMS3 Calibration Date: 07/24/08 Time: 0843

Lab File ID: C28880 Init. Calib. Date(s): 07/23/08 07/23/08

Init. Calib. Times: 0946 1136

	COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
	Chloromethane	0.4070000	0.4003556	0.4003556	0.1	1.63	50.00	AVRG
	Bromomethane	0.2740000	0.2386647	0.2386647		12.90	50.00	AVRG
	Vinyl Chloride	0.3900000	0.4135860	0.4135860		-6.05	20.00	AVRG
	Chloroethane	0.1980000	0.2346631	0.2346631		-18.52	50.00	AVRG
	Methylene Chloride	0.4040000	0.4058105	0.4058105		-0.45	50.00	AVRG
*	Acetone	50.293517	50.000000	0.0380697		-0.59	50.00	LINR
	Carbon Disulfide	43.085434	50.000000	0.7418586		13.83	50.00	LINR
	Trichlorofluoromethane	0.5940000	0.6411412	0.6411412		-7.94	50.00	AVRG
	1,1-Dichloroethene	0.3650000	0.3680205	0.3680205		-0.83	20.00	AVRG
	1,1-Dichloroethane	0.6630000	0.6534485	0.6534485	0.1	1.44	50.00	AVRG
	trans-1,2-Dichloroethene	0.3980000	0.4068290	0.4068290		-2.22	50.00	AVRG
	cis-1,2-Dichloroethene	0.3810000	0.3828846	0.3828846		-0.49	50.00	AVRG
	Chloroform	0.5750000	0.6160029	0.6160029		-7.13	20.00	AVRG
	1,2-Dichloroethane	0.4480000	0.4702719	0.4702719		-4.97	50.00	AVRG
	2-Butanone	0.0660000	0.0624844	0.0624844		5.33	50.00	AVRG
	1,1,1-Trichloroethane	0.4820000	0.5357130	0.5357130		-11.14	50.00	AVRG
	Carbon Tetrachloride	0.3690000	0.4127497	0.4127497		-11.86	50.00	AVRG
	Bromodichloromethane	0.3870000	0.4221046	0.4221046		-9.07	50.00	AVRG
	1,2-Dichloropropane	0.3460000	0.3462082	0.3462082		-0.06	20.00	AVRG
	cis-1,3-Dichloropropene	0.4920000	0.5263942	0.5263942		-6.99	50.00	AVRG
	Trichloroethene	0.3490000	0.3542813	0.3542813		-1.51	50.00	AVRG
	Dibromochloromethane	45.273211	50.000000	0.3341295		9.45	50.00	LINR
	1,1,2-Trichloroethane	0.2720000	0.2699820	0.2699820		0.74	50.00	AVRG
	Benzene	1.4240000	1.4237428	1.4237428		0.02	50.00	AVRG
	trans-1,3-Dichloropropene	0.4780000	0.5126930	0.5126930		-7.26	50.00	AVRG
NR	2-Chloroethyl Vinyl Ether	0.0900000	0.0633408	0.0633408		29.62	50.00	AVRG
	Bromoform	51.154153	50.000000	0.2227028	0.1	-2.31	50.00	2RDR
	4-Methyl-2-Pentanone	0.3270000	0.3022097	0.3022097		7.58	50.00	AVRG
	2-Hexanone	45.781251	50.000000	0.2411800		8.44	50.00	LINR
	Tetrachloroethene	0.4520000	0.4594747	0.4594747		-1.65	50.00	AVRG
	1,1,2,2-Tetrachloroethane	0.8110000	0.7451153	0.7451153	0.3	8.12	50.00	AVRG
	Toluene	1.6300000	1.6482611	1.6482611		-1.12	20.00	AVRG
	Chlorobenzene	1.0610000	1.0744637	1.0744637	0.3	-1.27	50.00	AVRG
	Ethylbenzene	0.5650000	0.5824043	0.5824043		-3.08	20.00	AVRG
	Styrene	1.0570000	1.0840689	1.0840689		-2.56	50.00	AVRG
	Xylene (Total)	0.6690000	0.7039293	0.7039293		-5.22	50.00	AVRG
	Ethyl Ether	0.3160000	0.2956479	0.2956479		6.44	50.00	AVRG
	Acrolein	0.0820000	0.0801370	0.0801370		2.27	99.00	AVRG
	Freon TF	0.3890000	0.3971277	0.3971277		-2.09	50.00	AVRG
NR	Isopropanol	0.0220000	0.0238496	0.0238496		-8.41	50.00	AVRG
NR	Acetonitrile	0.0440000	0.0407634	0.0407634		7.36	50.00	AVRG
NR	TBA	1008.3025	1000.0000	0.0400546		-0.83	50.00	LINR

NR = Not Reported

* = Up to 2 RRF's &/or %D's may fail, No qualifiers assigned

GHN 8.12.08

FORM 7B
VOLATILE CONTINUING CALIBRATION CHECK

Instrument ID: VOAMS3 Calibration Date: 07/24/08 Time: 0843

Lab File ID: C28880 Init. Calib. Date(s): 07/23/08 07/23/08

Init. Calib. Times: 0946 1136

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Acrylonitrile	0.1420000	0.1341197	0.1341197		5.55	50.00	AVRG
MTBE	1.1710000	1.0905357	1.0905357		6.87	50.00	AVRG
Hexane	0.3050000	0.3095960	0.3095960		-1.51	50.00	AVRG
DIPE	1.0730000	1.0105476	1.0105476		5.82	50.00	AVRG
Ethyl Acetate	0.0410000	0.0394742	0.0394742		3.72	50.00	AVRG
Vinyl Acetate	0.5320000	0.4869081	0.4869081		8.48	50.00	AVRG
Tetrahydrofuran	0.1500000	0.1413575	0.1413575		5.76	50.00	AVRG
Cyclohexane	0.5900000	0.5739756	0.5739756		2.72	50.00	AVRG
Isobutanol	0.0000000				0.00	50.00	AVRG
Isopropyl Acetate	0.6280000	0.5856169	0.5856169		6.75	50.00	AVRG
n-Heptane	0.4540000	0.4548722	0.4548722		-0.19	50.00	AVRG
n-Butanol	0.0000000				0.00	50.00	AVRG
Propyl Acetate	0.4850000	0.4499087	0.4499087		7.24	50.00	AVRG
Butyl Acetate	0.5780000	0.5102992	0.5102992		11.71	50.00	AVRG
1,2-Dibromoethane	0.3270000	0.3424026	0.3424026		-4.71	50.00	AVRG
1,3-Dichlorobenzene	1.4870000	1.4266321	1.4266321		4.06	50.00	AVRG
1,4-Dichlorobenzene	1.5370000	1.4674121	1.4674121		4.53	50.00	AVRG
1,2-Dichlorobenzene	1.4280000	1.3770424	1.3770424		3.57	50.00	AVRG
Naphthalene	2.5150000	2.3216920	2.3216920		7.69	50.00	AVRG
Methylnaphthalene (total)	0.0000000				0.00	50.00	AVRG
Dimethylnaphthalene (total)	0.0000000				0.00	50.00	AVRG
Dichlorodifluoromethane	0.3070000	0.3393965	0.3393965		-10.55	50.00	AVRG
1,1-Dichloropropene	0.4710000	0.4991004	0.4991004		-5.97	50.00	AVRG
1,2,4-Trichlorobenzene	0.8690000	0.8209712	0.8209712		5.53	50.00	AVRG
Hexachlorobutadiene	46.799228	50.000000	0.2317018		6.40	50.00	LINR
1,4-Dioxane	0.0040000	0.0050434	0.0050434		-26.08	50.00	AVRG
Methyl Acrylate	0.0000000				0.00	50.00	AVRG
1,1,1,2-Tetrachloroethane	0.3180000	0.3371089	0.3371089		-6.01	50.00	AVRG
1,2,3-Trichlorobenzene	0.8030000	0.7488855	0.7488855		6.74	50.00	AVRG
1,2,3-Trichloropropane	0.2550000	0.2419866	0.2419866		5.10	50.00	AVRG
1,2,4-Trimethylbenzene	2.2990000	2.2513978	2.2513978		2.07	50.00	AVRG
1,3,5-Trimethylbenzene	2.2980000	2.3211177	2.3211177		-1.00	50.00	AVRG
1,3-Dichloropropane	0.5840000	0.5779771	0.5779771		1.03	50.00	AVRG
2,2-Dichloropropane	0.4460000	0.4931607	0.4931607		-10.57	50.00	AVRG
2-Chlorotoluene	2.0600000	1.9961888	1.9961888		3.10	50.00	AVRG
4-Chlorotoluene	2.1750000	2.0952149	2.0952149		3.67	50.00	AVRG
Bromobenzene	0.8530000	0.8038570	0.8038570		5.76	50.00	AVRG
Bromochloromethane	0.1880000	0.1914759	0.1914759		-1.85	50.00	AVRG
Dibromomethane	0.1980000	0.2074993	0.2074993		-4.80	50.00	AVRG
Isopropylbenzene	1.5680000	1.6750925	1.6750925		-6.83	50.00	AVRG
n-Butylbenzene	0.5070000	0.5008215	0.5008215		1.22	50.00	AVRG
n-Propylbenzene	3.3660000	3.3718708	3.3718708		-0.17	50.00	AVRG

NR

NR

NR = Not Reported

GTH 8.12.08

FORM 7B
VOLATILE CONTINUING CALIBRATION CHECK

Instrument ID: VOAMS3 Calibration Date: 07/24/08 Time: 0843

Lab File ID: C28880 Init. Calib. Date(s): 07/23/08 07/23/08

Init. Calib. Times: 0946 1136

	COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
	p-Isopropyltoluene	2.2160000	2.2336587	2.2336587		-0.80	50.00	AVRG
	sec-Butylbenzene	2.4580000	2.4350412	2.4350412		0.93	50.00	AVRG
	tert-Butylbenzene	1.8810000	1.8323993	1.8323993		2.58	50.00	AVRG
	Allyl chloride	0.0000000				0.00	50.00	AVRG
NR	Benzyl chloride	37.451587	50.000000	0.2423350		25.10	50.00	LINR
NR	Epichlorohydrin	0.0290000	0.0263562	0.0263562		9.12	50.00	AVRG
	Isoprene	0.4950000	0.4858172	0.4858172		1.86	50.00	AVRG
	Methyl methacrylate	0.2670000	0.2425411	0.2425411		9.16	50.00	AVRG
	n-Pentane	0.0690000	0.0645657	0.0645657		6.43	50.00	AVRG
	Allyl alcohol	0.0000000				0.00	50.00	AVRG
	2-Octanol	0.0000000				0.00	50.00	AVRG
	2-Octanone	0.0000000				0.00	50.00	AVRG
	Ethyl Acrylate	0.0000000				0.00	50.00	AVRG
	Butyl Acrylate	0.0000000				0.00	50.00	AVRG
	Butyl Methacrylate	0.0000000				0.00	50.00	AVRG
	Ethyl methacrylate	0.0000000				0.00	50.00	AVRG
NR	Ethanol	0.0040000	0.0045141	0.0045141		-12.85	50.00	AVRG
	Methyl Acetate	0.1000000	0.0933650	0.0933650		6.64	50.00	AVRG
	Methyl cyclohexane	0.6070000	0.6340616	0.6340616		-4.46	50.00	AVRG
	Cyclohexanone	0.0000000				0.00	50.00	AVRG
	p-Ethyltoluene	0.0000000				0.00	50.00	AVRG
	1,4-Diethylbenzene	0.0000000				0.00	50.00	AVRG
	1,2,4,5-Tetramethylbenzene	0.0000000				0.00	50.00	AVRG
	Propylene Oxide	0.0000000				0.00	50.00	AVRG
	Camphene (total)	0.0000000				0.00	50.00	AVRG
	Camphor	0.0000000				0.00	50.00	AVRG
	Amyl Acetate	0.0000000				0.00	50.00	AVRG
	2-Methylnaphthalene	0.0000000				0.00	50.00	AVRG
	1-Chlorohexane	0.0000000				0.00	50.00	AVRG
	Chlorotrifluoromethane	0.0000000				0.00	50.00	AVRG
	Chlorodifluoromethane	0.0000000				0.00	50.00	AVRG
	tert-Amylmethyl Ether	0.0000000				0.00	50.00	AVRG
	Iodomethane	0.0000000				0.00	50.00	AVRG
	trans-1,4-Dichloro-2-butene	0.0000000				0.00	50.00	AVRG
	1,2-Dibromo-3-chloropropane	0.1280000	0.1337953	0.1337953		-4.53	50.00	AVRG
	1,3,5-Trichlorobenzene	0.0000000				0.00	50.00	AVRG
	1,2-Dichlorotrifluoroethane	0.0000000				0.00	50.00	AVRG
	1-Bromo-2-chloroethane	0.0000000				0.00	50.00	AVRG
	4-Chlorobenzotrifluoride	0.0000000				0.00	50.00	AVRG
	2-Chloropropene	0.0000000				0.00	50.00	AVRG
	tert-Butyl ethyl ether	0.0000000			0.01	0.00	50.00	AVRG
	1,3-Butadiene	0.0000000			0.01	0.00	50.00	AVRG

NR = Not Reported

8.12.08

FORM 7B
VOLATILE CONTINUING CALIBRATION CHECK

Instrument ID: VOAMS3 Calibration Date: 07/24/08 Time: 0843

Lab File ID: C28880 Init. Calib. Date(s): 07/23/08 07/23/08

Init. Calib. Times: 0946 1136

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
n-Propanol	0.0020000	0.0027114	0.0027114		-35.57	50.00	AVRG
Acetaldehyde	0.0000000				0.00	50.00	AVRG
1,2-Dichloroethane-d4 (SUR)	0.3800000	0.4064178	0.4064178		-6.95	50.00	AVRG
Toluene-d8 (SUR)	1.2950000	1.2835418	1.2835418		0.88	50.00	AVRG
Bromofluorobenzene (SUR)	0.8610000	0.8051597	0.8051597		6.48	50.00	AVRG

NR

NR= Not Reported

8.12.08

FORM 7B
VOLATILE CONTINUING CALIBRATION CHECK

Instrument ID: VOAMS3 Calibration Date: 07/24/08 Time: 2110

Lab File ID: C28913 Init. Calib. Date(s): 07/23/08 07/23/08

Init. Calib. Times: 0946 1136

	COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
	Chloromethane	0.4070000	0.4117557	0.4117557	0.1	-1.17	50.00	AVRG
	Bromomethane	0.2740000	0.3012183	0.3012183		-9.93	50.00	AVRG
	Vinyl Chloride	0.3900000	0.4075592	0.4075592		-4.50	20.00	AVRG
*	Chloroethane	0.1980000	0.2444183	0.2444183		-23.44	50.00	AVRG
	Methylene Chloride	0.4040000	0.3870606	0.3870606		4.19	50.00	AVRG
*	Acetone	48.236436	50.000000	0.0365126		3.53	50.00	LINR
	Carbon Disulfide	40.504623	50.000000	0.6974214		18.99	50.00	LINR
	Trichlorofluoromethane	0.5940000	0.6359819	0.6359819		-7.07	50.00	AVRG
	1,1-Dichloroethene	0.3650000	0.3565065	0.3565065		2.33	20.00	AVRG
	1,1-Dichloroethane	0.6630000	0.6538879	0.6538879	0.1	1.37	50.00	AVRG
	trans-1,2-Dichloroethene	0.3980000	0.4001397	0.4001397		-0.54	50.00	AVRG
	cis-1,2-Dichloroethene	0.3810000	0.3938703	0.3938703		-3.38	50.00	AVRG
	Chloroform	0.5750000	0.6033529	0.6033529		-4.93	20.00	AVRG
	1,2-Dichloroethane	0.4480000	0.4611991	0.4611991		-2.95	50.00	AVRG
	2-Butanone	0.0660000	0.0603251	0.0603251		8.60	50.00	AVRG
	1,1,1-Trichloroethane	0.4820000	0.5194839	0.5194839		-7.78	50.00	AVRG
	Carbon Tetrachloride	0.3690000	0.4083465	0.4083465		-10.66	50.00	AVRG
	Bromodichloromethane	0.3870000	0.4065011	0.4065011		-5.04	50.00	AVRG
	1,2-Dichloropropane	0.3460000	0.3433494	0.3433494		0.77	20.00	AVRG
	cis-1,3-Dichloropropene	0.4920000	0.5183197	0.5183197		-5.35	50.00	AVRG
	Trichloroethene	0.3490000	0.3579209	0.3579209		-2.56	50.00	AVRG
	Dibromochloromethane	44.593104	50.000000	0.3291101		10.81	50.00	LINR
	1,1,2-Trichloroethane	0.2720000	0.2641556	0.2641556		2.88	50.00	AVRG
	Benzene	1.4240000	1.4106619	1.4106619		0.94	50.00	AVRG
	trans-1,3-Dichloropropene	0.4780000	0.4998047	0.4998047		-4.56	50.00	AVRG
	2-Chloroethyl Vinyl Ether	0.0900000	0.0926552	0.0926552		-2.95	50.00	AVRG
	Bromoform	49.235243	50.000000	0.2139096	0.1	1.53	50.00	2RDR
	4-Methyl-2-Pentanone	0.3270000	0.2886861	0.2886861		11.72	50.00	AVRG
	2-Hexanone	43.185619	50.000000	0.2275060		13.63	50.00	LINR
	Tetrachloroethene	0.4520000	0.4565592	0.4565592		-1.01	50.00	AVRG
	1,1,2,2-Tetrachloroethane	0.8110000	0.7210014	0.7210014	0.3	11.10	50.00	AVRG
	Toluene	1.6300000	1.6136421	1.6136421		1.00	20.00	AVRG
	Chlorobenzene	1.0610000	1.0692641	1.0692641	0.3	-0.78	50.00	AVRG
	Ethylbenzene	0.5650000	0.5829866	0.5829866		-3.18	20.00	AVRG
	Styrene	1.0570000	1.0797802	1.0797802		-2.16	50.00	AVRG
	Xylene (Total)	0.6690000	0.6950888	0.6950888		-3.90	50.00	AVRG
	Ethyl Ether	0.3160000	0.2967142	0.2967142		6.10	50.00	AVRG
	Acrolein	0.0820000	0.0724615	0.0724615		11.63	99.00	AVRG
	Freon TF	0.3890000	0.3757705	0.3757705		3.40	50.00	AVRG
NR	Isopropanol	0.0220000	0.0194123	0.0194123		11.76	50.00	AVRG
NR	Acetonitrile	0.0440000	0.0371138	0.0371138		15.65	50.00	AVRG
NR	TBA	873.03571	1000.0000	0.0346811		12.70	50.00	LINR

NR = Not Reported

* = Up to 2 RRF's &/or %D's may fail,
No qualifiers assigned

8.12.08

FORM 7B
VOLATILE CONTINUING CALIBRATION CHECK

Instrument ID: VOAMS3 Calibration Date: 07/24/08 Time: 2110

Lab File ID: C28913 Init. Calib. Date(s): 07/23/08 07/23/08

Init. Calib. Times: 0946 1136

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Acrylonitrile	0.1420000	0.1288023	0.1288023		9.29	50.00	AVRG
MTBE	1.1710000	1.0857545	1.0857545		7.28	50.00	AVRG
Hexane	0.3050000	0.3324330	0.3324330		-8.99	50.00	AVRG
DIPE	1.0730000	1.0196387	1.0196387		4.97	50.00	AVRG
Ethyl Acetate	0.0410000	0.0375631	0.0375631		8.38	50.00	AVRG
Vinyl Acetate	0.5320000	0.4507635	0.4507635		15.27	50.00	AVRG
Tetrahydrofuran	0.1500000	0.1329236	0.1329236		11.38	50.00	AVRG
Cyclohexane	0.5900000	0.5638047	0.5638047		4.44	50.00	AVRG
Isobutanol	0.0000000				0.00	50.00	AVRG
Isopropyl Acetate	0.6280000	0.5761003	0.5761003		8.26	50.00	AVRG
n-Heptane	0.4540000	0.4325023	0.4325023		4.74	50.00	AVRG
n-Butanol	0.0000000				0.00	50.00	AVRG
Propyl Acetate	0.4850000	0.4298230	0.4298230		11.38	50.00	AVRG
Butyl Acetate	0.5780000	0.4988763	0.4988763		13.69	50.00	AVRG
1,2-Dibromoethane	0.3270000	0.3239570	0.3239570		0.93	50.00	AVRG
1,3-Dichlorobenzene	1.4870000	1.4633558	1.4633558		1.59	50.00	AVRG
1,4-Dichlorobenzene	1.5370000	1.5078086	1.5078086		1.90	50.00	AVRG
1,2-Dichlorobenzene	1.4280000	1.4194653	1.4194653		0.60	50.00	AVRG
Naphthalene	2.5150000	2.3773215	2.3773215		5.47	50.00	AVRG
Methylnaphthalene (total)	0.0000000				0.00	50.00	AVRG
Dimethylnaphthalene (total)	0.0000000				0.00	50.00	AVRG
Dichlorodifluoromethane	0.3070000	0.3307847	0.3307847		-7.75	50.00	AVRG
1,1-Dichloropropene	0.4710000	0.4854664	0.4854664		-3.07	50.00	AVRG
1,2,4-Trichlorobenzene	0.8690000	0.8646856	0.8646856		0.50	50.00	AVRG
Hexachlorobutadiene	49.555607	50.000000	0.2453485		0.89	50.00	LINR
1,4-Dioxane	0.0040000	0.0039593	0.0039593		1.02	50.00	AVRG
Methyl Acrylate	0.0000000				0.00	50.00	AVRG
1,1,1,2-Tetrachloroethane	0.3180000	0.3349494	0.3349494		-5.33	50.00	AVRG
1,2,3-Trichlorobenzene	0.8030000	0.7916217	0.7916217		1.42	50.00	AVRG
1,2,3-Trichloropropane	0.2550000	0.2407628	0.2407628		5.58	50.00	AVRG
1,2,4-Trimethylbenzene	2.2990000	2.2843583	2.2843583		0.64	50.00	AVRG
1,3,5-Trimethylbenzene	2.2980000	2.3331402	2.3331402		-1.53	50.00	AVRG
1,3-Dichloropropane	0.5840000	0.5711274	0.5711274		2.20	50.00	AVRG
2,2-Dichloropropane	0.4460000	0.4793335	0.4793335		-7.47	50.00	AVRG
2-Chlorotoluene	2.0600000	2.0151746	2.0151746		2.18	50.00	AVRG
4-Chlorotoluene	2.1750000	2.1330055	2.1330055		1.93	50.00	AVRG
Bromobenzene	0.8530000	0.8315806	0.8315806		2.51	50.00	AVRG
Bromochloromethane	0.1880000	0.1880439	0.1880439		-0.02	50.00	AVRG
Dibromomethane	0.1980000	0.2046752	0.2046752		-3.37	50.00	AVRG
Isopropylbenzene	1.5680000	1.6554765	1.6554765		-5.58	50.00	AVRG
n-Butylbenzene	0.5070000	0.5215273	0.5215273		-2.86	50.00	AVRG
n-Propylbenzene	3.3660000	3.3907323	3.3907323		-0.73	50.00	AVRG

page 2 of 4

NR = Not Reported

8.12.08

FORM 7B
VOLATILE CONTINUING CALIBRATION CHECK

Instrument ID: VOAMS3 Calibration Date: 07/24/08 Time: 2110

Lab File ID: C28913 Init. Calib. Date(s): 07/23/08 07/23/08

Init. Calib. Times: 0946 1136

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
p-Isopropyltoluene	2.2160000	2.2709752	2.2709752		-2.48	50.00	AVRG
sec-Butylbenzene	2.4580000	2.4078267	2.4078267		2.04	50.00	AVRG
tert-Butylbenzene	1.8810000	1.8757704	1.8757704		0.28	50.00	AVRG
Allyl chloride	0.0000000				0.00	50.00	AVRG
Benzyl chloride	37.489448	50.000000	0.2425800		25.02	50.00	LINR
Epichlorohydrin	0.0290000	0.0265345	0.0265345		8.50	50.00	AVRG
Isoprene	0.4950000	0.4633401	0.4633401		6.40	50.00	AVRG
Methyl methacrylate	0.2670000	0.2441606	0.2441606		8.55	50.00	AVRG
n-Pentane	0.0690000	0.0595324	0.0595324		13.72	50.00	AVRG
Allyl alcohol	0.0000000				0.00	50.00	AVRG
2-Octanol	0.0000000				0.00	50.00	AVRG
2-Octanone	0.0000000				0.00	50.00	AVRG
Ethyl Acrylate	0.0000000				0.00	50.00	AVRG
Butyl Acrylate	0.0000000				0.00	50.00	AVRG
Butyl Methacrylate	0.0000000				0.00	50.00	AVRG
Ethyl methacrylate	0.0000000				0.00	50.00	AVRG
Ethanol	0.0040000	0.0036224	0.0036224		9.44	50.00	AVRG
Methyl Acetate	0.1000000	0.0866285	0.0866285		13.37	50.00	AVRG
Methyl cyclohexane	0.6070000	0.6061751	0.6061751		0.14	50.00	AVRG
Cyclohexanone	0.0000000				0.00	50.00	AVRG
p-Ethyltoluene	0.0000000				0.00	50.00	AVRG
1,4-Diethylbenzene	0.0000000				0.00	50.00	AVRG
1,2,4,5-Tetramethylbenzene	0.0000000				0.00	50.00	AVRG
Propylene Oxide	0.0000000				0.00	50.00	AVRG
Camphene (total)	0.0000000				0.00	50.00	AVRG
Camphor	0.0000000				0.00	50.00	AVRG
Amyl Acetate	0.0000000				0.00	50.00	AVRG
2-Methylnaphthalene	0.0000000				0.00	50.00	AVRG
1-Chlorohexane	0.0000000				0.00	50.00	AVRG
Chlorotrifluoromethane	0.0000000				0.00	50.00	AVRG
Chlorodifluoromethane	0.0000000				0.00	50.00	AVRG
tert-Amylmethyl Ether	0.0000000				0.00	50.00	AVRG
Iodomethane	0.0000000				0.00	50.00	AVRG
trans-1,4-Dichloro-2-butene	0.0000000				0.00	50.00	AVRG
1,2-Dibromo-3-chloropropane	0.1280000	0.1279537	0.1279537		0.04	50.00	AVRG
1,3,5-Trichlorobenzene	0.0000000				0.00	50.00	AVRG
1,2-Dichlorotrifluoroethane	0.0000000				0.00	50.00	AVRG
1-Bromo-2-chloroethane	0.0000000				0.00	50.00	AVRG
4-Chlorobenzotrifluoride	0.0000000				0.00	50.00	AVRG
2-Chloropropene	0.0000000				0.00	50.00	AVRG
tert-Butyl ethyl ether	0.0000000			0.01	0.00	50.00	AVRG
1,3-Butadiene	0.0000000			0.01	0.00	50.00	AVRG

NR
NR
NR

NR = Not Reported

8.12.09

FORM 7B
VOLATILE CONTINUING CALIBRATION CHECK

Instrument ID: VOAMS3 Calibration Date: 07/24/08 Time: 2110

Lab File ID: C28913 Init. Calib. Date(s): 07/23/08 07/23/08

Init. Calib. Times: 0946 1136

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
n-Propanol	0.0020000	0.0023132	0.0023132		-15.66	50.00	AVRG
Acetaldehyde	0.0000000				0.00	50.00	AVRG
1,2-Dichloroethane-d4 (SUR)	0.3800000	0.3886233	0.3886233		-2.27	50.00	AVRG
Toluene-d8 (SUR)	1.2950000	1.2149970	1.2149970		6.18	50.00	AVRG
Bromofluorobenzene (SUR)	0.8610000	0.8114504	0.8114504		5.75	50.00	AVRG

NR

NR = Not Reported

8.12.08

FD X193
VOCs

Site Name:	Marathon	**Laboratory:**	Test America - Edison
Project Number:	NY95-219	**Matrix:**	Groundwater

Field Duplicates

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify?
MW-7S	1,1,1-Trichloroethane	ug/L	0.4		5		
MW-7SD	1,1,1-Trichloroethane	ug/L	0.3		5	0.10	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify?
MW-7S	Chloroform	ug/L	0.6	J	5		
MW-7SD	Chloroform	ug/L	0.6	J	5	0.00	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify?
MW-7S	cis-1,2-Dichloroethene	ug/L	2.4	J	5		
MW-7SD	cis-1,2-Dichloroethene	ug/L	2.4	J	5	0.00	no

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify?
MW-7S	Tetrachloroethene	ug/L	4.8		1		
MW-7SD	Tetrachloroethene	ug/L	5		1	0.20	no

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify?
MW-7S	Trichloroethene	ug/L	68		1		
MW-7SD	Trichloroethene	ug/L	69		1	1.46	no

Duplicate Criteria: Aqueous matrices <30 % RPD or < ± 1*RL, Soil/Solid matrices <40 %RPD or < ± 2*RL.

*** - Denotes %RPD or difference outside criteria.**

NA - Duplicate relative percent difference or difference cannot be calculated.

U / ND - Not detected.

YHN
8.12.08

SUPPORT DOCUMENTATION
CONVENTIONALS

WET CHEMISTRY DATA VALIDATION SUMMARY

Site Name: Marathon
Project Number: NY95-219
Sampling Date(s): 7.17 - 7.18.08

Laboratory: Test America - Edison
Case /Order No.: X193

Parameter List: TOC

Method:

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	accept	FYI	qualify	Comments
Holding Times	✓			DA = 3-4
Calibration Curve	✓			
Initial Calibration	✓			
Continuing Calibration	✓			
Laboratory Control Sample Results	✓			
Blank Analysis Results	+ (MW)		✓	
Duplicate Analysis Results				NA
Field Duplicate Analysis Results	✓			MW-7S MW-7SD
Matrix Spike Analysis Results	✓			
Quantitation/Detection Limits	✓			
Overall Assessment of Data	✓			
Other:				

General Comments:

Accept - No qualification required.
FYI - For your information only, no qualification necessary.
Qualify - Qualify as rejected, estimated or biased
NA - Not applicable

QA Scientist Erica Nicholson

Date 8.12.08

Lab Job No: X193

Matrix: WATER

Site: Marathon

QA Batch: 3619

Total Organic Carbon

Lab ID	Client ID	Date Sampled	Date Analyzed	Percent Moisture	DF	Analytical Result Units: mg/l	Reporting Limit Units: mg/l
936640	MB-3	07/17/08	07/21/08	-	1.0	1.1 u	1.00*
936641	MW-4	07/18/08	07/21/08	-	1.0	ND	1.00*
936642	MW-7S	07/18/08	07/21/08	-	1.0	1.3 u	1.00*
936643	MW-7SD	07/18/08	07/21/08	-	1.0	1.4 u	1.00*
936644	EB-1-071808	07/18/08	07/21/08	-	1.0	ND	1.00*

* Reported RL is adjusted for Dilution Factor and/or Percent Moisture.

** The unadjusted RL for Total Organic Carbon = 1.0 mg/l.

BLANKS
Conventionals

Blank ID	Analyte	Blank Conc	Units	Blank*10 or Blank*5	Units	Samples	Sample Conc	Units	Qualify?
Initial calibration blank	Total Organic Carbon	0.233	mg/l	1.165	mg/l	MB-3	1.1	mg/l	*
Initial calibration blank	Total Organic Carbon	0.233	mg/l	1.165	mg/l	MB-4	ND	mg/l	
Initial calibration blank	Total Organic Carbon	0.233	mg/l	1.165	mg/l	MW-7S	1.3	mg/l	
Initial calibration blank	Total Organic Carbon	0.233	mg/l	1.165	mg/l	MW-7SD	1.4	mg/l	
Initial calibration blank	Total Organic Carbon	0.233	mg/l	1.165	mg/l	EB-1-071808	ND	mg/l	
Continuing calibration blank	Total Organic Carbon	0.325	mg/l	1.625	mg/l	MB-3	1.1	mg/l	*
Continuing calibration blank	Total Organic Carbon	0.325	mg/l	1.625	mg/l	MB-4	ND	mg/l	
Continuing calibration blank	Total Organic Carbon	0.325	mg/l	1.625	mg/l	MW-7S	1.3	mg/l	*
Continuing calibration blank	Total Organic Carbon	0.325	mg/l	1.625	mg/l	MW-7SD	1.4	mg/l	*
Continuing calibration blank	Total Organic Carbon	0.325	mg/l	1.625	mg/l	EB-1-071808	ND	mg/l	

* Sample Concentration is < 10X (or 5X) blank concentration, Qualified as "U"

8.12.08

		Sample Name	Sample ID	Origin	Dilut	Result	Status	Date / Time	Vial
	1	ICV	ICV	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:48.13	Completed	7/21/2008 11:44:	1
*	2	ICB	ICB	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.233	Completed	7/21/2008 12:03:	2
	3	PB	PB	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.204	Completed	7/21/2008 12:22:	3
	4	LCS(P151-516)	LCS(P151-516)	C:\TOC3201\Methods\method 5310b.	2.00	NPOC:88.33	Completed	7/21/2008 1:11:	4
	5	W943	934807B	C:\TOC3201\Methods\method 5310b.	5.00	NPOC:113.9	Completed	7/21/2008 2:17:	5
	6	W943	934808B	C:\TOC3201\Methods\method 5310b.	5.00	NPOC:111.9	Completed	7/21/2008 2:37:	6
	7	X037	935551C	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.882	Completed	7/21/2008 2:57:	7
	8	X037	935553C	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:4.618	Completed	7/21/2008 3:16:	8
	9	X067	935750A	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:24.81	Completed	7/21/2008 3:36:	9
	10	X078	935845H	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:1.512	Completed	7/21/2008 3:55:	10
	11	X078	935846H	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:56.79	Completed	7/21/2008 4:15:	11
	12	X078	935847H	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.534	Completed	7/21/2008 4:34:	12
	13	CCV	CCV	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:48.18	Completed	7/21/2008 4:55:	13
*	14	CCB	CCB	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.325	Completed	7/21/2008 5:14:	14
	15	X103	936028C	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.817	Completed	7/21/2008 5:33:	15
	16	X193	936640J	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:1.112	Completed	7/21/2008 5:52:	16
	17	X193	936640J MS	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:50.73	Completed	7/21/2008 6:12:	17
	18	X193	936640J MSD	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:50.58	Completed	7/21/2008 6:32:	18
	19	X193	936641D	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.819	Completed	7/21/2008 6:52:	19
	20	X193	936642D	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:1.255	Completed	7/21/2008 7:11:	20
	21	X193	936643D	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:1.362	Completed	7/21/2008 7:30:	21
	22	X193	936644D	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.324	Completed	7/21/2008 7:49:	22
	23	CCV	CCV	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:46.69	Completed	7/21/2008 8:09:	23
NA	24	CCB	CCB	C:\TOC3201\Methods\method 5310b.	1.00	NPOC:0.205	Completed	7/21/2008 8:28:	24

DATE : 7/21/08 (5310B) HV

JOB : W943, X037, X067

X078, X103, X193

BATCH : 3618, 3619

T(0993-0997)-08

B-0926-08: TOC 2,000ppm 1° STOCK

B-0927-08: TOC 2,000 ppm SECONDARY SOURCE

LCS (P151-516) : 90.6 (83.8 - 106)

NA - No associated samples

* = All samples associated

Site Name:	**Marathon**	**Laboratory:**	**Test America - Edison**
Project Number:	**NY95-219**	**Matrix:**	**Groundwater**

Field Duplicates

Sample ID	Analyte	Units	Result	Q	RL	Difference	Qualify?
MW-7S	Total Organic Carbon	mg/L	1.3		1		
MW-7SD	Total Organic Carbon	mg/L	1.4		1	0.10	no

Duplicate Criteria: Aqueous matrices <30 % RPD or < ± 1*RL, Soil/Solid matrices <40 %RPD or < ± 2*RL.

*** - Denotes %RPD or difference outside criteria.**

NA - Duplicate relative percent difference or difference cannot be calculated.

U / ND - Not detected.

8.12.08

DATA VALIDATION REPORT

OF

SEDIMENT SAMPLES

COLLECTED ON NOVEMBER 11, 2008

FOR

INORGANIC AND CONVENTIONAL ANALYSES

Laboratory Case Number B772 and C945

PREPARED FOR:

GOULD ELECTRONICS INC.
MARATHON SITE
COLD SPRING, NEW YORK

PREPARED BY:

ADVANCED GEOSERVICES CORP
WEST CHESTER, PENNSYLVANIA

February 9, 2009
Project Number NY 95-219-03

DATA VALIDATION REPORT
INORGANIC COMPOUNDS

INTRODUCTION

This data validation report addresses the organic results from the sediment samples collected from the Marathon Site on November 11, 2008, in Cold Spring, New York. Samples were analyzed by Test America in Edison, NJ (TA-Edison) by USEPA SW-846 methods. The data were reported by TA-Edison under sample delivery groups (SDG) B772 and C945.

The qualified analytical results are presented on the data summary table. The data summary table lists both non-detected and detected results. Support documentation summarizing the specifics of this review is presented at the end of this report.

INORGANIC COMPOUNDS

Six sediment samples, and one equipment blank sample were collected and analyzed for cadmium by USEPA SW-846 Method 6010B.

This review has been performed with guidance from the USEPA's *National Functional Guideline for Inorganic Data Review* (July 2002), and USEPA Region V *Standard Operating Procedure for Validation of CLP Inorganic Data* (1993). The findings presented in this report are based upon a review of all data supplied by the laboratory. The information examined consists of sample results, analytical holding times, initial and continuing calibrations, blank analysis results, ICP interference check sample recoveries, duplicate results, matrix spike/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs, serial dilution, laboratory control samples results, and field duplicates.

Holding times were met for all samples. All analytes and system monitoring compounds were within the method-required limits for the initial and continuing calibrations (90-110%). No equipment blank contamination was present. Sample EFC-6S was the field duplicate of EFC-1S. Field duplicate results were precise. The percent recoveries for the MS and MSD, and LCS were acceptable. Laboratory duplicates and serial dilutions were acceptable.

QUALIFIERS

No qualification was required.

SUMMARY

The results are acceptable as reported.

DATA VALIDATION REPORT
CONVENTIONALS

INTRODUCTION

This data validation report addresses the conventional analysis results from the sediment samples collected from the Marathon Site on November 11, 2008, in Cold Spring, New York. All samples were analyzed by Test America in Edison, NJ (TA-Edison). Sediment samples were analyzed for total organic carbon (TOC) by USEPA *Methods of Chemical Analysis of Water and Wastes*. The sample results were reported under TA-Edison sample delivery groups (SDG) B772 and C945.

The qualified analytical results are presented on the data summary table. The data summary table lists both non-detected and detected results. Support documentation summarizing the specifics of this review is presented at the end of this report.

CONVENTIONAL PARAMETERS, METABOLIC ACIDS AND HYDROGEN GAS

Six sediment samples, and one equipment blank sample were collected and analyzed for TOC by USEPA *Methods of Chemical Analysis of Water and Wastes*.

This conventional data review has been performed with guidance from the USEPA "Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", July, 2002. The findings presented in this report are based upon a review of all data supplied by the laboratory. The information examined consists of sample results, analytical holding times, initial and continuing calibration standard recoveries, calibration curves, blank analysis results, matrix spike (MS) recoveries, matrix spike duplicate (MSD) recoveries, laboratory and field duplicate relative percent differences (RPD), and laboratory control sample results.

Holding times were met for all parameters, except those listed below. Initial and continuing calibration standard sample results were accurate. Calibration curves had correlation coefficients within QC limits. The laboratory and equipment blanks were free of contamination. Sample EFC-6S was the field duplicate of EFC-1S. Field duplicate results were precise. Laboratory control sample, laboratory duplicates, MS, and MSD percent recoveries were acceptable.

QUALIFIERS

The holding time (28 days) for TOC was exceeded by 6 days. Sample results TOC for samples EB-1 were qualified as estimated (UJ).

SUMMARY

The results are acceptable as reported.

QUALIFIER CODES

U - Denotes the compound or analyte was not detected at or above the associated detection limit.

J - Denotes an estimated value or the result is below the quantitation limit.

UJ - Denotes an estimated detection or quantitation limit.

R - Denotes a rejected result. The analyte may or may not be present.

Data review was performed by an experienced quality assurance scientist independent of the analytical laboratory.

This is to certify that I have examined the analytical data and based on the information provided to me by the laboratory, in my professional judgment the data are acceptable for use except where qualified with qualifiers that modify the usefulness of those individual values.

Erica Nicholson — Quality Assurance Scientist — 2.9.09 — Date

Quality Assurance Manager — 2/9/2009 — Date

TABLES

MARATHON
Sediment Sampling, 11/7/2008
TestAmerica# B772, C945 Project# NY-95219

Sample Location		EFC-1S			EFC-2S			EFC-6S			EFC-5S			EFC-4S			EFC-3S			EB-1		
Lab ID		965570			965571			965572			965573			965574			965575			965576 / 972715		
Sample Date		11/7/2008			11/7/2008			11/7/2008			11/7/2008			11/7/2008			11/7/2008			11/7/2008		
Matrix		Sediment			Sediment			Sediment			Sediment			Sediment			Sediment			Aqueous		
Remarks								FD of EFC-2S												Equipment Blank		
Parameter	**Units**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Total Metals																						
Cadmium	mg/kg	4.9		0.33	79.4		0.39	62.3		0.37	8.6		0.19	31.4		0.37	0.32	J	0.22		U	0.6
Conventionals																						
Total Organic Carbon	mg/kg	36500		100	46300		100	48700		100	34200		100	51100		100	24600		100		UJ	1

QA Scientist _____ Date 2/9/2009

\\Gaea\sys\OFICEAGC\COMMON\QA\MARATHON\DATAVAL\2008\11-2008 Sediment\B772, C945

SUPPORT DOCUMENTATION
INORGANICS

INORGANIC DATA VALIDATION SUMMARY

Site Name: Marathon
Project Number: NY95-219
Sampling Date(s): 11.7.08

Laboratory: Test America - Edison
Case /Order No.: B772

Compound List: ☐ TAL ☐ Priority Pollutant ☐ Appendix IX ☑ Other Cd

Method: ☐ CLP SOW ILMO4. ☐ 40 CFR 136 ☑ SW-846 Method 6010B ☐ Other _____

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	accept	FYI	qualify	Comments
Holding Times	✓			DA-8
Initial Calibrations	✓			
Continuing Calibrations	✓			
CRDL Standards				NA
Blank Analysis Results		✓		
ICP Interference Check Sample Recoveries	✓			
Duplicate Results	✓			
Field Duplicate Results	✓			EFC-25 EFC-45
Spike Analysis Recoveries	✓			
Serial Dilution Results	✓			
Laboratory Control Sample Results	✓			
Furnace AA QC Analysis				NA
Quantitation/Detection Limits	✓			
Overall Assessment of Data	✓			
Other:				

General Comments: _____

Accept - No qualification required.
FYI - For your information only, no qualification necessary.
Qualify - Qualify as rejected, estimated or biased
NA - Not applicable.
NR - Not reviewed.

QA Scientist Erica Nicholson
Date 2-3-09

Client ID: **EFC-2S**
Site: **Marathon**

Lab Sample No: 965571
Lab Job No: B772

Date Sampled: 11/07/08
Date Received: 11/11/08

Matrix: SOLID
Level: LOW
% Moisture: 69.0

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Cadmium	79.4	0.39		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

GHW 2.3.09

Client ID: **EFC-6S**
Site: **Marathon**

Lab Sample No: 965572
Lab Job No: B772

Date Sampled: 11/07/08
Date Received: 11/11/08

Matrix: SOLID
Level: LOW
% Moisture: 67.4

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Cadmium	62.3	0.37		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

LHP 2.3.09

Client ID: **EFC-5S**
Site: **Marathon**

Lab Sample No: 965573
Lab Job No: B772

Date Sampled: 11/07/08
Date Received: 11/11/08

Matrix: SOLID
Level: LOW
% Moisture: 37.2

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Cadmium	8.6	0.19		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

Client ID: **EFC-4S**
Site: **Marathon**

Lab Sample No: 965574
Lab Job No: B772

Date Sampled: 11/07/08
Date Received: 11/11/08

Matrix: SOLID
Level: LOW
% Moisture: 67.5

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Cadmium	31.4	0.37		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

Client ID: **EFC-3S**
Site: **Marathon**

Lab Sample No: 965575
Lab Job No: B772

Date Sampled: 11/07/08
Date Received: 11/11/08

Matrix: SOLID
Level: LOW
% Moisture: 46.6

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Cadmium	0.32	0.22	~~B~~ J	P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

EHD 2-3-09

Client ID: EB-1
Site: **Marathon**

Lab Sample No: 965576
Lab Job No: B772

Date Sampled: 11/07/08
Date Received: 11/11/08

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	Qual	M
Cadmium	ND	0.60		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

LHW 2-3-09

BLANKS

Lab Name: TESTAMERICA_____

Lab Code: 12028_ Lab Job No.: _B772 _____ Batch No.: 25488_

Preparation Blank Matrix (soil/water): SOIL_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony	-6.4	B	6.2	U	6.2	U	6.2	U	0.620	U	P
Arsenic	4.7	U	4.7	U	4.7	U	4.7	U	0.470	U	P
Barium											NR
Beryllium											NR
Cadmium	0.6	U	0.6	U	0.6	U	0.6	U	0.060	U	P
Calcium											NR
Chromium											NR
Cobalt											NR
Copper	4.8	U	4.8	U	4.8	U	4.8	U	0.480	U	P
Iron											NR
Lead	2.8	B	2.7	U	2.7	U	2.7	U	0.270	U	P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel	2.4	U	2.4	U	2.4	U	2.4	U	0.240	U	P
Potassium											NR
Selenium											NR
Silver	2.5	U	2.5	U	2.5	U	2.5	U	0.250	U	P
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Molybdenu											NR

NR = Not Reported

FD B772
Metals

Site Name:	Marathon	Laboratory:	Test America - Edison
Project Number:	NY-95-219	Matrix:	Sediment

Field Duplicates

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify?
EFC-2S	Cadmium	mg/Kg	79.4		0.39		
EFC-6S	Cadmium	mg/Kg	62.3		0.37	24.14	no

Duplicate Criteria: Aqueous matrices <30 % RPD or < ± 1*RL, Soil/Solid matrices <40 %RPD or < ± 2*RL.

* - Denotes %RPD or difference outside criteria.

NA - Duplicate relative percent difference or difference cannot be calculated.

U / ND - Not detected.

EHW 2.3.09

SUPPORT DOCUMENTATION
CONVENTIONALS

WET CHEMISTRY DATA VALIDATION SUMMARY

Site Name: Marathon
Project Number: NY95-219
Sampling Date(s): 11-7-08

Laboratory: Test America - Edison
Case /Order No.: B772, C945

Parameter List: TOC
Method:

The following table indicates the data validation criteria examined, any problems identified, and the QA action applied.

Data Validation Criteria:	accept	FYI	qualify	Comments
Holding Times			✓	EB-1 ran 6 days beyond hold time
Calibration Curve	✓			
Initial Calibration	✓			
Continuing Calibration	✓			
Laboratory Control Sample Results	✓			
Blank Analysis Results	✓			
Duplicate Analysis Results	✓			
Field Duplicate Analysis Results	✓			EFC-25 EFC-LS
Matrix Spike Analysis Results	✓			
Quantitation/Detection Limits	✓			
Overall Assessment of Data	✓			
Other:				

General Comments:

Accept - No qualification required.
FYI - For your information only, no qualification necessary.
Qualify - Qualify as rejected, estimated or biased
NA - Not applicable

QA Scientist Jessica Nicholson JMS
Date 2-3-09

'.ab Job No: B772

Matrix: SOIL

Site: Marathon

QA Batch: 3704

Total Organic Carbon

Lab ID	Client ID	Date Sampled	Date Analyzed	Percent Moisture	DF	Analytical Result Units: mg/kg	Reporting Limit Units: mg/kg
965570	EFC-1S	11/07/08	11/23/08	63.1	1.0	36500	271.00*
965571	EFC-2S	11/07/08	11/23/08	69.0	1.0	46300	322.58*
965572	EFC-6S	11/07/08	11/23/08	67.4	1.0	48700	306.75*
965573	EFC-5S	11/07/08	11/23/08	37.2	1.0	34200	159.24*
965574	EFC-4S	11/07/08	11/23/08	67.5	1.0	51100	307.69*
965575	EFC-3S	11/07/08	11/23/08	46.6	1.0	24600	187.27*

* Reported RL is adjusted for Dilution Factor and/or Percent Moisture.

** The unadjusted RL for Total Organic Carbon = 100 mg/kg.

CHD 2.3.09

Lab Job No: C945

Matrix: WATER

Site: Marathon

QA Batch: 3719

Total Organic Carbon

Lab ID	Client ID	Date Sampled	Date Analyzed	Percent Moisture	DF	Analytical Result Units: mg/l	Reporting Limit Units: mg/l
972715	EB-1	11/07/08	12/11/08	-	1.0	~~ND~~ UJ	1.00*

* Reported RL is adjusted for Dilution Factor and/or Percent Moisture.

** The unadjusted RL for Total Organic Carbon = 1.0 mg/l.

LHW 2.3.09

FD B772
Conventionals

Site Name:	Marathon	Laboratory:	Test America - Edison
Project Number:	NY-95-219	Matrix:	Sediment

Field Duplicates

Sample ID	Analyte	Units	Result	Q	RL	RPD	Qualify?
EFC-2S	Total Organic Carbon	mg/Kg	46300		100		
EFC-6S	Total Organic Carbon	mg/Kg	48700		100	5.05	no

Duplicate Criteria: Aqueous matrices <30 % RPD or < ± 1*RL, Soil/Solid matrices <40 %RPD or < ± 2*RL.

* - Denotes %RPD or difference outside criteria.

NA - Duplicate relative percent difference or difference cannot be calculated.

U / ND - Not detected.

EHN 2-3-08