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June 15, 2012

Ms. Sarah Newell
Clough, Harbour, & Associates LLP
III Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
ALCO Maxon RI
May 2012 Sediment Sampling Event

Dear Ms. Newell:

The data usability summary reports (DUSRs) and data validation summaries are attached to this letter for ALOC Maxon RI, May 2012 sediment sampling event. The data for TestAmerica Buffalo job number 480-20167-1 were acceptable with some minor issues that are identified and discussed in the validation summaries. There were no data that were qualified as unusable (R) in the data packs.

There was an issue with the method blank for the semi-volatiles. Although the levels of detected compounds in the method blank were acceptable, the blank contained 22 detected compounds. Rather than flagging data as not detected ("U"), the validation criteria was modified to indicate that the corresponding concentrations reported in the samples were not significantly greater than those reported in the blank and flagged "B". This allows the user to evaluate whether the concentrations should be considered detected or not.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Clough, Harbour, & Associates LLP.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-20167-1

13 Sediment Samples,
2 Field Duplicates, and 2 Trip Blanks
Collected May 16 and 17, 2012

Prepared by: Donald Anné
June 15, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 13 sediment samples, 2 field duplicates, and 2 trip blanks analyzed for volatiles, and 13 sediment samples and 2 field duplicates analyzed semi-volatiles, PCB, TAL metals, and total organic carbon (TOC).

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile results for xylenes were flagged as "not detected" (U) in samples DUP-01, DUP-02, and SED-11 (6-12) DL because the results for xylenes were not significantly higher (five times) than the highest associated blank level.

- Positive volatile results for acetone were flagged as "estimated" (J) in samples SED-11 (0-6) and DUP-02 because relative percent difference for acetone was above the allowable maximum in sediment field duplicate pair SED-11 (0-6)/DUP-02.

- The volatile result for cis-1,2-dichloroethene in sample SED-11 (6-12) was quantited using data that was extrapolated beyond the highest calibration and flagged "E" by the laboratory. The result for cis-1,2-dichloroethen marked "E" in the undiluted sample SED-11 (6-12) was qualified as estimated (J).

- Positive semi-volatile results for fluoranthene and pyrene were flagged as "estimated" (J) in samples SED-10 (0-6) and DUP-01 because relative percent differences for fluoranthene and pyrene were above the allowable maximum in the associated sediment field duplicate pair SED-10 (0-6)/DUP-01.

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- Positive semi-volatile results for benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene were flagged as "estimated" (J) in samples SED-11 (0-6) and DUP-02 because relative percent differences for benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene were above the allowable maximum in the associated sediment field duplicate pair SED-11 (0-6)/DUP-02.

- Positive semi-volatile results for 6 compounds in samples SED-11 (0-6), SED-11 (6-12), and SED-13 (6-12); 7 compounds in sample SED-10 (0-6), SED-12 (0-6), and SED-13 (0-6); and 12 compounds in sample SED-10 (6-12) were flagged as "not significantly above the level of the method blank" (B) because the levels in the samples were less than 10 times the method blank level for phthalate esters and 5 times the method blank level for all other compounds.

- Positive metals results for aluminum were flagged as "estimated" (J) in all 13 sediment samples and 2 field duplicates because 2 of 2 percent recoveries for aluminum were above control limits, but were not above 250% in the associated sediment MS/MSD sample.

- Positive metal results for mercury were flagged as "estimated" (J) in samples SED-11 (0-6) and DUP-02 because relative percent difference for mercury was above the allowable maximum in sediment field duplicate pair SED-11 (0-6)/DUP-02.

- Positive results for TOC were flagged as "estimated" (J) in samples SED-10 (0-6) and DUP-01 because relative percent difference for TOC was above the allowable maximum in sediment field duplicate pair SED-10 (0-6)/DUP-01.

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-20167-1

13 Sediment Samples, 2 Field Duplicates,
and 2 Trip Blanks
Collected May 16 and 17, 2012

Prepared by: Donald Anné
June 15, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for 1,1-dichloroethane, carbon tetrachloride, bromodichloromethane, and 1,2-dibromo-3-chloropropane were above the allowable maximum (25%) on 05-18-12 (G11894.D). The %Ds for carbon disulfide and bromoform were above the allowable maximum (25%) on 05-19-12 (S14265.D). The %D for dichlorodifluoromethane was above the allowable maximum (25%) on 05-20-12 (F9219.D). The %D for dichlorodifluoromethane was above the allowable maximum (25%) on 05-21-12 (F9276.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-65268/7 contained a trace of toluene (0.674 ug/kg). Method blank MB 480-65414/7 contained traces of 4-methyl-2-pentanone (1.63 ug/kg), ethylbenzene (0.450 ug/kg), toluene (1.04 ug/kg), and xylenes (1.67 ug/kg). Positive results for 4-methyl-2-pentanone, ethylbenzene, toluene, and xylenes that are less than the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

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Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximum, but 19 of 26 percent recoveries (%Rs) were below QC limits for sediment MS/MSD sample SED-04 (6-12). The RPDs for spike compounds were below the allowable maximum, but 12 of 26 %Rs were below QC limits for soil MS/MSD sample SED-12 (0-6). No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for the following aqueous and soil samples.

LCS 480-65011/4	LCS 480-65120/4	LCS 480-65169/4
LCS 480-65238/6	LCS 480-65268/6	LCS 480-65414/6

Field Duplicates: The relative percent difference (RPD) for acetone was below the allowable maximum (35%) for sediment field duplicate pair SED-10 (0-6)/DUP-01 (attached table), as required.

The RPD for acetone was above the allowable maximum (35%) for sediment field duplicate pair SED-11 (0-6)/DUP-02 (attached table). Results for acetone should be considered estimated (J) in samples SED-11 (0-6) and DUP-02.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

There was a volatile result for cis-1,2-dichloroethene in sample SED-11 (6-12) that was quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The sample was diluted by the laboratory and re-analyzed; therefore, the result for cis-1,2-dichloroethene that is flagged as 'E' in the undiluted sample should be considered estimated (J) and the use of the diluted result for cis-1,2-dichloroethene is recommended. It is recommended that the undiluted results be used for all other compounds.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-20167-1

S1= SED-10 (0-6) **S2=** DUP-01

Analyte	S1	S2	RPD (%)	
2-butanone	**11**	**9.5**	NC	
acetone	**42**	41	2%	
xylenes, total	**2.7**	**1.4**	NC	

S1= SED-11 (0-6) **S2=** DUP-02

Analyte	S1	S2	RPD (%)	
2-butanone	**16**	**9.7**	NC	
acetone	64	38	51%	*
cis-1,2-dichloroethene	**6.1**	**5.4**	NC	
methylene chloride	ND	**2.8**	NC	
vinyl chloride	ND	**3.8**	NC	
xylenes, total	**3.6**	**1.3**	NC	

* RPD is above the allowable maximum (35%)

All results are in ug/kg

Bold numbers were values that below the CRQL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F9207.D

Lab ID: 480-20167-5 MS Client ID: SED-04 (6-12) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	68.9	ND	56.5	82	79-126	
1,1-Dichloroethene	68.9	ND	44.2	64	65-153	F
1,2-Dichlorobenzene	68.9	ND	19.3	28	75-120	F
1,2-Dichloroethane	68.9	ND	50.7	74	77-122	F
Benzene	68.9	ND	52.8	77	79-127	F
Chlorobenzene	68.9	ND	33.4	48	76-124	F
cis-1,2-Dichloroethene	68.9	ND	48.4	70	81-117	F
Ethylbenzene	68.9	ND	35.3	51	80-120	F
Methyl tert-butyl ether	68.9	ND	58.7	85	63-125	
Tetrachloroethene	68.9	ND	34.2	50	74-122	F
Toluene	68.9	1.2 J	45.8	65	74-128	F
trans-1,2-Dichloroethene	68.9	ND	43.7	63	78-126	F
Trichloroethene	68.9	ND	39.7	58	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F9208.D

Lab ID: 480-20167-5 MSD Client ID: SED-04 (6-12) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	75.3	68.2	91	19	30	79-126	
1,1-Dichloroethene	75.3	55.9	74	23	30	65-153	
1,2-Dichlorobenzene	75.3	24.1	32	22	30	75-120	F
1,2-Dichloroethane	75.3	61.0	81	18	30	77-122	
Benzene	75.3	63.2	84	18	30	79-127	
Chlorobenzene	75.3	41.1	55	21	30	76-124	F
cis-1,2-Dichloroethene	75.3	59.2	79	20	30	81-117	F
Ethylbenzene	75.3	42.6	57	19	30	80-120	F
Methyl tert-butyl ether	75.3	67.5	90	14	30	63-125	
Tetrachloroethene	75.3	42.9	57	23	30	74-122	F
Toluene	75.3	54.7	71	18	30	74-128	F
trans-1,2-Dichloroethene	75.3	55.4	74	24	30	78-126	F
Trichloroethene	75.3	49.5	66	22	30	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F9291.D

Lab ID: 480-20232-8 MS Client ID: SED-12 (0-6) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	74.8	ND	67.3	90	79-126	
1,1-Dichloroethene	74.8	ND	52.8	71	65-153	
1,2-Dichlorobenzene	74.8	ND	34.3	46	75-120	F
1,2-Dichloroethane	74.8	ND	62.8	84	77-122	
Benzene	74.8	ND	62.1	83	79-127	
Chlorobenzene	74.8	ND	46.8	63	76-124	F
cis-1,2-Dichloroethene	74.8	ND	59.2	79	81-117	F
Ethylbenzene	74.8	ND	51.3	69	80-120	F
Methyl tert-butyl ether	74.8	ND	60.7	81	63-125	
Tetrachloroethene	74.8	ND	51.8	69	74-122	F
Toluene	74.8	ND	56.2	75	74-128	
trans-1,2-Dichloroethene	74.8	ND	57.4	77	78-126	F
Trichloroethene	74.8	ND	51.5	69	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F9292.D

Lab ID: 480-20232-8 MSD Client ID: SED-12 (0-6) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	73.1	68.4	94	2	30	79-126	
1,1-Dichloroethene	73.1	53.9	74	2	30	65-153	
1,2-Dichlorobenzene	73.1	35.8	49	4	30	75-120	F
1,2-Dichloroethane	73.1	61.2	84	3	30	77-122	
Benzene	73.1	63.3	87	2	30	79-127	
Chlorobenzene	73.1	48.2	66	3	30	76-124	F
cis-1,2-Dichloroethene	73.1	60.5	83	2	30	81-117	
Ethylbenzene	73.1	52.8	72	3	30	80-120	F
Methyl tert-butyl ether	73.1	62.4	85	3	30	63-125	
Tetrachloroethene	73.1	53.2	73	3	30	74-122	F
Toluene	73.1	57.1	78	2	30	74-128	
trans-1,2-Dichloroethene	73.1	58.0	79	1	30	78-126	
Trichloroethene	73.1	53.3	73	4	30	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-65268/7

Matrix: Solid Lab File ID: F9252.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 05/21/2012 11:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 65268 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		5.0	1.1
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
591-78-6	2-Hexanone	ND		25	2.5
78-93-3	2-Butanone (MEK)	ND		25	1.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-65268/7

Matrix: Solid Lab File ID: F9252.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 05/21/2012 11:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 65268 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5.0	0.93
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	ND		5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	0.674	J	5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	ND		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		64-126
2037-26-5	Toluene-d8 (Surr)	99		71-125
460-00-4	4-Bromofluorobenzene (Surr)	101		72-126

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-65414/7

Matrix: Solid Lab File ID: F9279.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 05/21/2012 23:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 65414 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
591-78-6	2-Hexanone	ND		25	2.5
78-93-3	2-Butanone (MEK)	ND		25	1.8
108-10-1	4-Methyl-2-pentanone (MIBK)	1.63	J	25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	0.450	J	5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-65414/7

Matrix: Solid Lab File ID: F9279.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 05/21/2012 23:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 65414 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5.0	0.93
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	ND		5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	1.04	J	5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	1.67	J	10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		64-126
2037-26-5	Toluene-d8 (Surr)	98		71-125
460-00-4	4-Bromofluorobenzene (Surr)	99		72-126

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65238/4 Calibration Date: 05/20/2012 10:26

Instrument ID: HP5973F Calib Start Date: 05/11/2012 02:34

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 05/11/2012 04:41

Lab File ID: F9219.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2526	0.1876		37.1	50.0	-25.7	50.0
Chloromethane	Ave	0.2826	0.2540	0.1000	44.9	50.0	-10.1	50.0
Vinyl chloride	Ave	0.2229	0.2037		45.7	50.0	-8.6	20.0
Bromomethane	Ave	0.0852	0.0930		54.6	50.0	9.1	50.0
Chloroethane	Ave	0.0906	0.0995		54.9	50.0	9.8	50.0
Trichlorofluoromethane	Ave	0.2408	0.2590		53.8	50.0	7.6	50.0
Acrolein	Ave	0.0224	0.0190		849	1000	-15.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2348	0.2041		43.5	50.0	-13.1	50.0
1,1-Dichloroethene	Ave	0.2508	0.2320	0.1000	46.3	50.0	-7.5	20.0
Acetone	Ave	0.1024	0.0981		240	250	-4.2	50.0
Iodomethane	Ave	0.3810	0.3552		46.6	50.0	-6.8	50.0
Carbon disulfide	Ave	0.6833	0.5518		40.4	50.0	-19.3	50.0
Methyl acetate	Ave	0.4525	0.4270		47.2	50.0	-5.6	50.0
Acetonitrile	Ave	0.0229	0.0218		1900	2000	-4.8	50.0
Methylene Chloride	Ave	0.2868	0.2763		48.2	50.0	-3.7	50.0
Methyl tert-butyl ether	Ave	0.8089	0.7714		47.7	50.0	-4.6	50.0
trans-1,2-Dichloroethene	Ave	0.2786	0.2722		48.9	50.0	-2.3	50.0
Acrylonitrile	Ave	0.1147	0.1068		233	250	-6.9	50.0
Vinyl acetate	Ave	0.5620	0.5422		241	250	-3.5	50.0
1,1-Dichloroethane	Ave	0.4808	0.4686		48.7	50.0	-2.5	50.0
2-Butanone (MEK)	Ave	0.1669	0.1551		232	250	-7.1	50.0
2,2-Dichloropropane	Ave	0.3495	0.3562		51.0	50.0	1.9	50.0
cis-1,2-Dichloroethene	Ave	0.3089	0.3076		49.8	50.0	-0.4	50.0
Bromochloromethane	Ave	0.1568	0.1580		50.4	50.0	0.8	50.0
Tetrahydrofuran	Ave	0.1149	0.1068		232	250	-7.1	50.0
Chloroform	Ave	0.4389	0.4430		50.5	50.0	0.9	20.0
1,1,1-Trichloroethane	Ave	0.3833	0.3834		50.0	50.0	0.0	50.0
Cyclohexane	Ave	0.5066	0.4256		42.0	50.0	-16.0	50.0
1,1-Dichloropropene	Ave	0.3476	0.3354		48.2	50.0	-3.5	50.0
Carbon tetrachloride	Ave	0.3303	0.3296		49.9	50.0	-0.2	50.0
Benzene	Ave	1.028	0.9902		48.2	50.0	-3.7	50.0
1,2-Dichloroethane	Ave	0.3634	0.3826		52.6	50.0	5.3	50.0
Trichloroethene	Ave	0.2815	0.2707		48.1	50.0	-3.8	50.0
Methylcyclohexane	Ave	0.4709	0.4008		42.6	50.0	-14.9	50.0
1,2-Dichloropropane	Ave	0.2797	0.2700		48.3	50.0	-3.4	20.0
Dibromomethane	Ave	0.1611	0.1602		49.7	50.0	-0.6	50.0
Bromodichloromethane	Ave	0.2992	0.3086		51.6	50.0	3.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1830	0.1759		240	250	-3.9	50.0
cis-1,3-Dichloropropene	Ave	0.3984	0.3947		49.5	50.0	-0.9	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8181	0.7742		237	250	-5.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65238/4 Calibration Date: 05/20/2012 10:26

Instrument ID: HP5973F Calib Start Date: 05/11/2012 02:34

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 05/11/2012 04:41

Lab File ID: F9219.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.683	1.644		48.8	50.0	-2.3	20.0
Ethyl methacrylate	Ave	0.8004	0.7708		48.2	50.0	-3.7	50.0
trans-1,3-Dichloropropene	Ave	0.8504	0.8692		51.1	50.0	2.2	50.0
1,1,2-Trichloroethane	Ave	0.4475	0.4373		48.9	50.0	-2.3	50.0
Tetrachloroethene	Ave	0.7307	0.7231		49.5	50.0	-1.0	50.0
1,3-Dichloropropane	Ave	0.9240	0.9226		49.9	50.0	-0.2	50.0
2-Hexanone	Ave	0.5787	0.5472		236	250	-5.5	50.0
Dibromochloromethane	Ave	0.5890	0.6384		54.2	50.0	8.4	50.0
1,2-Dibromoethane	Ave	0.6022	0.6039		50.1	50.0	0.3	50.0
Chlorobenzene	Ave	1.964	1.996	0.3000	50.8	50.0	1.6	50.0
Ethylbenzene	Ave	3.054	3.047		49.9	50.0	-0.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6187	0.6503		52.6	50.0	5.1	50.0
m,p-Xylene	Ave	1.213	1.213		100	100	-0.0	50.0
o-Xylene	Ave	1.203	1.212		50.4	50.0	0.8	50.0
Styrene	Ave	1.890	1.905		50.4	50.0	0.8	50.0
Bromoform	Lin1		0.3672	0.1000	48.2	50.0	-3.6	50.0
Isopropylbenzene	Ave	2.839	2.723		48.0	50.0	-4.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6673	0.6132	0.3000	45.9	50.0	-8.1	50.0
Bromobenzene	Ave	0.7360	0.7250		49.3	50.0	-1.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2325	0.2236		240	250	-3.8	50.0
N-Propylbenzene	Ave	3.355	3.213		47.9	50.0	-4.3	50.0
1,2,3-Trichloropropane	Ave	0.2193	0.2136		48.7	50.0	-2.6	50.0
2-Chlorotoluene	Ave	0.7264	0.6964		47.9	50.0	-4.1	50.0
1,3,5-Trimethylbenzene	Ave	2.406	2.314		48.1	50.0	-3.8	50.0
4-Chlorotoluene	Ave	0.7581	0.7247		47.8	50.0	-4.4	50.0
tert-Butylbenzene	Ave	0.5458	0.5288		48.4	50.0	-3.1	50.0
1,2,4-Trimethylbenzene	Ave	2.478	2.358		47.6	50.0	-4.9	50.0
sec-Butylbenzene	Ave	3.059	2.903		47.4	50.0	-5.1	50.0
4-Isopropyltoluene	Ave	2.703	2.621		48.5	50.0	-3.0	50.0
1,3-Dichlorobenzene	Ave	1.455	1.420		48.8	50.0	-2.4	50.0
1,4-Dichlorobenzene	Ave	1.487	1.449		48.7	50.0	-2.6	50.0
n-Butylbenzene	Ave	2.345	2.216		47.2	50.0	-5.5	50.0
1,2-Dichlorobenzene	Ave	1.413	1.363		48.2	50.0	-3.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1179	0.1097		46.5	50.0	-6.9	50.0
1,2,4-Trichlorobenzene	Ave	0.9342	0.9298		49.8	50.0	-0.5	50.0
Hexachlorobutadiene	Ave	0.4386	0.4303		49.0	50.0	-1.9	50.0
Naphthalene	Ave	2.687	2.446		45.5	50.0	-9.0	50.0
1,2,3-Trichlorobenzene	Ave	0.8301	0.8175		49.2	50.0	-1.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1361	0.1270		46.7	50.0	-6.7	50.0
Toluene-d8 (Surr)	Ave	2.284	2.223		48.7	50.0	-2.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7427	0.7674		51.7	50.0	3.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65414/4 Calibration Date: 05/21/2012 21:58

Instrument ID: HP5973F Calib Start Date: 05/11/2012 02:34

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 05/11/2012 04:41

Lab File ID: F9276.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2526	0.1876		37.1	50.0	-25.8	50.0
Chloromethane	Ave	0.2826	0.2630	0.1000	46.5	50.0	-6.9	50.0
Vinyl chloride	Ave	0.2229	0.2200		49.3	50.0	-1.3	20.0
Bromomethane	Ave	0.0852	0.0906		53.2	50.0	6.3	50.0
Chloroethane	Ave	0.0906	0.1013		55.9	50.0	11.8	50.0
Trichlorofluoromethane	Ave	0.2408	0.2530		52.5	50.0	5.1	50.0
Acrolein	Ave	0.0224	0.0218		972	1000	-2.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2348	0.2211		47.1	50.0	-5.9	50.0
1,1-Dichloroethene	Ave	0.2508	0.2672	0.1000	53.3	50.0	6.6	20.0
Acetone	Ave	0.1024	0.1092		266	250	6.6	50.0
Iodomethane	Ave	0.3810	0.3681		48.3	50.0	-3.4	50.0
Carbon disulfide	Ave	0.6833	0.6270		45.9	50.0	-8.2	50.0
Methyl acetate	Ave	0.4525	0.4975		55.0	50.0	9.9	50.0
Acetonitrile	Ave	0.0229	0.0247		2160	2000	8.2	50.0
Methylene Chloride	Ave	0.2868	0.2959		51.6	50.0	3.2	50.0
Methyl tert-butyl ether	Ave	0.8089	0.8693		53.7	50.0	7.5	50.0
trans-1,2-Dichloroethene	Ave	0.2786	0.3000		53.8	50.0	7.7	50.0
Acrylonitrile	Ave	0.1147	0.1212		264	250	5.7	50.0
Vinyl acetate	Ave	0.5620	0.6198		276	250	10.3	50.0
1,1-Dichloroethane	Ave	0.4808	0.5294		55.0	50.0	10.1	50.0
2-Butanone (MEK)	Ave	0.1669	0.1817		272	250	8.9	50.0
2,2-Dichloropropane	Ave	0.3495	0.4029		57.7	50.0	15.3	50.0
cis-1,2-Dichloroethene	Ave	0.3089	0.3345		54.1	50.0	8.3	50.0
Bromochloromethane	Ave	0.1568	0.1736		55.3	50.0	10.7	50.0
Tetrahydrofuran	Ave	0.1149	0.1236		269	250	7.6	50.0
Chloroform	Ave	0.4389	0.4702		53.6	50.0	7.1	20.0
1,1,1-Trichloroethane	Ave	0.3833	0.4180		54.5	50.0	9.1	50.0
Cyclohexane	Ave	0.5066	0.5004		49.4	50.0	-1.2	50.0
1,1-Dichloropropene	Ave	0.3476	0.3737		53.7	50.0	7.5	50.0
Carbon tetrachloride	Ave	0.3303	0.3664		55.5	50.0	10.9	50.0
Benzene	Ave	1.028	1.118		54.4	50.0	8.8	50.0
1,2-Dichloroethane	Ave	0.3634	0.4027		55.4	50.0	10.8	50.0
Trichloroethene	Ave	0.2815	0.3043		54.0	50.0	8.1	50.0
Methylcyclohexane	Ave	0.4709	0.4637		49.2	50.0	-1.5	50.0
1,2-Dichloropropane	Ave	0.2797	0.3065		54.8	50.0	9.6	20.0
Dibromomethane	Ave	0.1611	0.1738		53.9	50.0	7.9	50.0
Bromodichloromethane	Ave	0.2992	0.3399		56.8	50.0	13.6	50.0
2-Chloroethyl vinyl ether	Ave	0.1830	0.2050		280	250	12.0	50.0
cis-1,3-Dichloropropene	Ave	0.3984	0.4532		56.9	50.0	13.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8181	0.9800		300	250	19.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65414/4 Calibration Date: 05/21/2012 21:58

Instrument ID: HP5973F Calib Start Date: 05/11/2012 02:34

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 05/11/2012 04:41

Lab File ID: F9276.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.683	1.841		54.7	50.0	9.4	20.0
Ethyl methacrylate	Ave	0.8004	0.8631		53.9	50.0	7.8	50.0
trans-1,3-Dichloropropene	Ave	0.8504	0.9750		57.3	50.0	14.7	50.0
1,1,2-Trichloroethane	Ave	0.4475	0.4761		53.2	50.0	6.4	50.0
Tetrachloroethene	Ave	0.7307	0.7877		53.9	50.0	7.8	50.0
1,3-Dichloropropane	Ave	0.9240	1.021		55.2	50.0	10.4	50.0
2-Hexanone	Ave	0.5787	0.6242		270	250	7.8	50.0
Dibromochloromethane	Ave	0.5890	0.6943		58.9	50.0	17.9	50.0
1,2-Dibromoethane	Ave	0.6022	0.6585		54.7	50.0	9.3	50.0
Chlorobenzene	Ave	1.964	2.146	0.3000	54.6	50.0	9.2	50.0
Ethylbenzene	Ave	3.054	3.390		55.5	50.0	11.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6187	0.7070		57.1	50.0	14.3	50.0
m,p-Xylene	Ave	1.213	1.385		114	100	14.1	50.0
o-Xylene	Ave	1.203	1.333		55.4	50.0	10.8	50.0
Styrene	Ave	1.890	2.115		56.0	50.0	11.9	50.0
Bromoform	Lin1		0.4070	0.1000	53.2	50.0	6.4	50.0
Isopropylbenzene	Ave	2.839	3.043		53.6	50.0	7.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6673	0.6978	0.3000	52.3	50.0	4.6	50.0
Bromobenzene	Ave	0.7360	0.7865		53.4	50.0	6.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2325	0.2497		269	250	7.4	50.0
N-Propylbenzene	Ave	3.355	3.627		54.1	50.0	8.1	50.0
1,2,3-Trichloropropane	Ave	0.2193	0.2314		52.8	50.0	5.6	50.0
2-Chlorotoluene	Ave	0.7264	0.7810		53.8	50.0	7.5	50.0
1,3,5-Trimethylbenzene	Ave	2.406	2.626		54.6	50.0	9.1	50.0
4-Chlorotoluene	Ave	0.7581	0.8196		54.1	50.0	8.1	50.0
tert-Butylbenzene	Ave	0.5458	0.5891		54.0	50.0	7.9	50.0
1,2,4-Trimethylbenzene	Ave	2.478	2.746		55.4	50.0	10.8	50.0
sec-Butylbenzene	Ave	3.059	3.311		54.1	50.0	8.2	50.0
4-Isopropyltoluene	Ave	2.703	2.949		54.5	50.0	9.1	50.0
1,3-Dichlorobenzene	Ave	1.455	1.569		53.9	50.0	7.9	50.0
1,4-Dichlorobenzene	Ave	1.487	1.595		53.6	50.0	7.3	50.0
n-Butylbenzene	Ave	2.345	2.529		53.9	50.0	7.8	50.0
1,2-Dichlorobenzene	Ave	1.413	1.514		53.6	50.0	7.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1179	0.1273		54.0	50.0	8.0	50.0
1,2,4-Trichlorobenzene	Ave	0.9342	1.010		54.0	50.0	8.1	50.0
Hexachlorobutadiene	Ave	0.4386	0.4742		54.1	50.0	8.1	50.0
Naphthalene	Ave	2.687	2.892		53.8	50.0	7.6	50.0
1,2,3-Trichlorobenzene	Ave	0.8301	0.9090		54.8	50.0	9.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1361	0.1268		46.6	50.0	-6.8	50.0
Toluene-d8 (Surr)	Ave	2.284	2.231		48.8	50.0	-2.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7427	0.7531		50.7	50.0	1.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65011/2 Calibration Date: 05/18/2012 12:25

Instrument ID: HP5973G Calib Start Date: 05/03/2012 15:31

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 05/03/2012 16:40

Lab File ID: G11894.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4451	0.4352		24.4	25.0	-2.2	50.0
Chloromethane	Ave	0.3778	0.4000	0.1000	26.5	25.0	5.9	50.0
Vinyl chloride	Ave	0.4578	0.4243		23.2	25.0	-7.3	20.0
Bromomethane	Ave	0.1140	0.1203		26.4	25.0	5.5	50.0
Chloroethane	Lin		0.2210		23.5	25.0	-6.0	50.0
Trichlorofluoromethane	Lin1		0.4890		24.4	25.0	-2.4	50.0
Acrolein	Lin1		0.0428		505	500	1.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3640	0.4224		29.0	25.0	16.0	50.0
1,1-Dichloroethene	Ave	0.4532	0.4181	0.1000	23.1	25.0	-7.8	20.0
Acetone	Ave	0.1980	0.2019		128	125	2.0	50.0
Iodomethane	Ave	0.4842	0.5680		29.3	25.0	17.3	50.0
Carbon disulfide	Ave	1.190	1.380		29.0	25.0	15.9	50.0
Acetonitrile	Ave	0.0412	0.0462		1120	1000	12.1	50.0
Methyl acetate	Ave	0.7939	0.8467		26.7	25.0	6.7	50.0
Methylene Chloride	Ave	0.5766	0.4984		21.6	25.0	-13.6	50.0
Methyl tert-butyl ether	Ave	1.596	1.604		25.1	25.0	0.5	50.0
Acrylonitrile	Ave	0.2137	0.2423		142	125	13.4	50.0
trans-1,2-Dichloroethene	Ave	0.4933	0.4469		22.6	25.0	-9.4	50.0
1,1-Dichloroethane	Ave	0.6001	0.4436		18.5	25.0	-26.1	50.0
Vinyl acetate	Ave	0.7903	0.8578		136	125	8.5	50.0
2,2-Dichloropropane	Ave	0.3168	0.2298		18.1	25.0	-27.5	50.0
cis-1,2-Dichloroethene	Ave	0.4542	0.3765		20.7	25.0	-17.1	50.0
2-Butanone (MEK)	Ave	0.3265	0.3578		137	125	9.6	50.0
Bromochloromethane	Ave	0.1954	0.1774		22.7	25.0	-9.2	50.0
Tetrahydrofuran	Ave	0.2193	0.2416		138	125	10.2	50.0
Chloroform	Ave	0.4811	0.3930		20.4	25.0	-18.3	20.0
1,1,1-Trichloroethane	Ave	0.4590	0.4270		23.3	25.0	-7.0	50.0
Cyclohexane	Ave	0.6867	0.8046		29.3	25.0	17.2	50.0
Carbon tetrachloride	Ave	0.5334	0.3741		17.5	25.0	-29.9	50.0
1,1-Dichloropropene	Ave	0.5878	0.4844		20.6	25.0	-17.6	50.0
Benzene	Ave	1.768	1.531		21.7	25.0	-13.4	50.0
1,2-Dichloroethane	Ave	0.6482	0.4913		18.9	25.0	-24.2	50.0
Trichloroethene	Ave	0.4354	0.3746		21.5	25.0	-14.0	50.0
Methylcyclohexane	Ave	0.7372	0.8618		29.2	25.0	16.9	50.0
1,2-Dichloropropane	Ave	0.3935	0.3440		21.9	25.0	-12.6	20.0
Dibromomethane	Ave	0.2752	0.2288		20.8	25.0	-16.9	50.0
Bromodichloromethane	Ave	0.5585	0.4180		18.7	25.0	-25.2	50.0
2-Chloroethyl vinyl ether	Ave	0.3204	0.3767		147	125	17.6	50.0
cis-1,3-Dichloropropene	Ave	0.7082	0.5848		20.6	25.0	-17.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	1.070	1.274		149	125	19.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65011/2 Calibration Date: 05/18/2012 12:25

Instrument ID: HP5973G Calib Start Date: 05/03/2012 15:31

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 05/03/2012 16:40

Lab File ID: G11894.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	2.079	1.966		23.6	25.0	-5.4	20.0
trans-1,3-Dichloropropene	Ave	1.262	1.068		21.2	25.0	-15.4	50.0
Ethyl methacrylate	Ave	1.251	1.473		29.4	25.0	17.8	50.0
1,1,2-Trichloroethane	Ave	0.6167	0.5794		23.5	25.0	-6.1	50.0
Tetrachloroethene	Ave	0.7317	0.7519		25.7	25.0	2.8	50.0
1,3-Dichloropropane	Ave	1.373	1.284		23.4	25.0	-6.5	50.0
2-Hexanone	Ave	0.8264	0.999		151	125	20.8	50.0
Dibromochloromethane	Ave	0.6854	0.5720		20.9	25.0	-16.5	50.0
1,2-Dibromoethane	Ave	0.7755	0.7433		24.0	25.0	-4.2	50.0
Chlorobenzene	Ave	2.235	2.165	0.3000	24.2	25.0	-3.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.6755	0.6060		22.4	25.0	-10.3	50.0
Ethylbenzene	Ave	3.912	3.739		23.9	25.0	-4.4	20.0
m,p-Xylene	Ave	1.501	1.491		49.7	50.0	-0.7	50.0
o-Xylene	Ave	1.469	1.451		24.7	25.0	-1.2	50.0
Styrene	Ave	2.344	2.329		24.8	25.0	-0.6	50.0
Bromoform	Ave	0.4567	0.3789	0.1000	20.7	25.0	-17.0	50.0
Isopropylbenzene	Ave	4.300	3.839		22.3	25.0	-10.7	50.0
Bromobenzene	Ave	0.9936	0.9398		23.6	25.0	-5.4	50.0
1,1,2,2-Tetrachloroethane	Ave	1.350	1.186	0.3000	22.0	25.0	-12.2	50.0
1,2,3-Trichloropropane	Ave	0.4756	0.4123		21.7	25.0	-13.3	50.0
N-Propylbenzene	Ave	5.403	4.874		22.6	25.0	-9.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.4433	0.3763		106	125	-15.1	50.0
2-Chlorotoluene	Ave	0.9493	0.8668		22.8	25.0	-8.7	50.0
1,3,5-Trimethylbenzene	Ave	3.758	3.356		22.3	25.0	-10.7	50.0
4-Chlorotoluene	Ave	1.005	0.9281		23.1	25.0	-7.7	50.0
tert-Butylbenzene	Ave	0.7518	0.6776		22.5	25.0	-9.9	50.0
1,2,4-Trimethylbenzene	Ave	3.853	3.442		22.3	25.0	-10.7	50.0
sec-Butylbenzene	Ave	4.670	4.131		22.1	25.0	-11.5	50.0
1,3-Dichlorobenzene	Ave	1.984	1.876		23.6	25.0	-5.4	50.0
4-Isopropyltoluene	Ave	3.787	3.441		22.7	25.0	-9.1	50.0
1,4-Dichlorobenzene	Ave	2.093	1.947		23.3	25.0	-7.0	50.0
n-Butylbenzene	Ave	3.733	3.213		21.5	25.0	-13.9	50.0
1,2-Dichlorobenzene	Ave	2.008	1.849		23.0	25.0	-7.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.3872	0.2642		17.1	25.0	-31.7	50.0
1,2,4-Trichlorobenzene	Ave	1.478	1.281		21.7	25.0	-13.3	50.0
Hexachlorobutadiene	Ave	0.6445	0.5168		20.0	25.0	-19.8	50.0
Naphthalene	Ave	4.852	4.181		21.5	25.0	-13.8	50.0
1,2,3-Trichlorobenzene	Linl		1.147		25.0	25.0	0.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2229	0.2018		22.6	25.0	-9.5	50.0
Toluene-d8 (Surr)	Ave	2.273	2.689		29.6	25.0	18.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7430	0.7942		26.7	25.0	6.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65169/2 Calibration Date: 05/19/2012 09:45

Instrument ID: HP5973S Calib Start Date: 04/28/2012 12:26

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 04/28/2012 14:13

Lab File ID: S14265.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2016	0.2325		28.8	25.0	15.3	50.0
Chloromethane	Ave	0.2602	0.2656	0.1000	25.5	25.0	2.1	50.0
Vinyl chloride	Ave	0.2749	0.2815		25.6	25.0	2.4	20.0
Bromomethane	Ave	0.0689	0.0671		24.3	25.0	-2.6	50.0
Chloroethane	Ave	0.1076	0.0994		23.1	25.0	-7.6	50.0
Trichlorofluoromethane	Lin1F		0.2267		25.1	25.0	0.4	50.0
Acrolein	Ave	0.0257	0.0231		450	500	-10.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2194	0.2050		23.4	25.0	-6.5	50.0
1,1-Dichloroethene	Ave	0.2586	0.2639	0.1000	25.5	25.0	2.0	20.0
Acetone	LinF		0.1084		126	125	0.8	50.0
Iodomethane	Ave	0.2984	0.2699		22.6	25.0	-9.5	50.0
Carbon disulfide	Ave	0.5947	0.3687		15.5	25.0	-38.0	50.0
Methyl acetate	Ave	0.3776	0.4272		28.3	25.0	13.1	50.0
Acetonitrile	Ave	0.0219	0.0232		1060	1000	6.0	50.0
Methylene Chloride	Ave	0.3315	0.3006		22.7	25.0	-9.3	50.0
Methyl tert-butyl ether	Ave	1.030	0.8672		21.0	25.0	-15.8	50.0
trans-1,2-Dichloroethene	Ave	0.2821	0.2206		19.6	25.0	-21.8	50.0
Acrylonitrile	Ave	0.1219	0.1172		120	125	-3.9	50.0
1,1-Dichloroethane	Ave	0.5115	0.4687		22.9	25.0	-8.4	50.0
Vinyl acetate	Ave	0.6313	0.4973		98.5	125	-21.2	50.0
2,2-Dichloropropane	Ave	0.2539	0.1895		18.7	25.0	-25.3	50.0
cis-1,2-Dichloroethene	Ave	0.3127	0.2934		23.5	25.0	-6.2	50.0
2-Butanone (MEK)	Ave	0.1773	0.1637		115	125	-7.7	50.0
Bromochloromethane	Ave	0.1387	0.1322		23.8	25.0	-4.7	50.0
Tetrahydrofuran	Lin1F		0.1081		124	125	-0.6	50.0
Chloroform	Ave	0.5094	0.4631		22.7	25.0	-9.1	20.0
1,1,1-Trichloroethane	Ave	0.3738	0.2999		20.1	25.0	-19.8	50.0
Cyclohexane	Ave	0.4883	0.3951		20.2	25.0	-19.1	50.0
Carbon tetrachloride	Ave	0.2783	0.2558		23.0	25.0	-8.1	50.0
1,1-Dichloropropene	Ave	0.3910	0.3652		23.3	25.0	-6.6	50.0
Benzene	Ave	1.191	1.113		23.4	25.0	-6.6	50.0
1,2-Dichloroethane	Ave	0.4284	0.4015		23.4	25.0	-6.3	50.0
Trichloroethene	Ave	0.3002	0.2774		23.1	25.0	-7.6	50.0
Methylcyclohexane	Ave	0.4910	0.4180		21.3	25.0	-14.9	50.0
1,2-Dichloropropane	Ave	0.2974	0.2663		22.4	25.0	-10.5	20.0
Dibromomethane	Ave	0.1781	0.1690		23.7	25.0	-5.1	50.0
Bromodichloromethane	Ave	0.3513	0.2935		20.9	25.0	-16.4	50.0
2-Chloroethyl vinyl ether	Ave	0.2276	0.2091		115	125	-8.1	50.0
cis-1,3-Dichloropropene	Ave	0.4645	0.3887		20.9	25.0	-16.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6684	0.6356		119	125	-4.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65169/2 Calibration Date: 05/19/2012 09:45

Instrument ID: HP5973S Calib Start Date: 04/28/2012 12:26

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 04/28/2012 14:13

Lab File ID: S14265.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.489	1.375		23.1	25.0	-7.6	20.0
trans-1,3-Dichloropropene	Ave	0.8429	0.6744		20.0	25.0	-20.0	50.0
Ethyl methacrylate	Ave	0.8938	0.7595		21.2	25.0	-15.0	50.0
1,1,2-Trichloroethane	Ave	0.4371	0.4107		23.5	25.0	-6.0	50.0
Tetrachloroethene	Ave	0.5334	0.5084		23.8	25.0	-4.7	50.0
1,3-Dichloropropane	Ave	0.9496	0.8856		23.3	25.0	-6.7	50.0
2-Hexanone	Ave	0.4829	0.4626		120	125	-4.2	50.0
Dibromochloromethane	Ave	0.4466	0.3666		20.5	25.0	-17.9	50.0
1,2-Dibromoethane	Ave	0.5100	0.4823		23.6	25.0	-5.4	50.0
Chlorobenzene	Ave	1.545	1.439	0.3000	23.3	25.0	-6.9	50.0
Ethylbenzene	Ave	2.778	2.580		23.2	25.0	-7.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4814	0.4027		20.9	25.0	-16.4	50.0
m,p-Xylene	Ave	1.022	0.9647		47.2	50.0	-5.6	50.0
o-Xylene	Ave	1.008	0.9317		23.1	25.0	-7.5	50.0
Styrene	Ave	1.644	1.525		23.2	25.0	-7.2	50.0
Bromoform	LinF		0.2001	0.1000	16.4	25.0	-34.4	50.0
Isopropylbenzene	Ave	2.888	2.700		23.4	25.0	-6.5	50.0
Bromobenzene	Ave	0.6924	0.6578		23.7	25.0	-5.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8148	0.7599	0.3000	23.3	25.0	-6.7	50.0
N-Propylbenzene	Ave	3.745	3.483		23.2	25.0	-7.0	50.0
1,2,3-Trichloropropane	Ave	0.2460	0.2444		24.8	25.0	-0.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2575	0.2128		103	125	-17.4	50.0
2-Chlorotoluene	Ave	0.6767	0.6402		23.7	25.0	-5.4	50.0
1,3,5-Trimethylbenzene	Ave	2.493	2.315		23.2	25.0	-7.1	50.0
4-Chlorotoluene	Ave	0.7175	0.6672		23.2	25.0	-7.0	50.0
tert-Butylbenzene	Ave	0.5371	0.4928		22.9	25.0	-8.3	50.0
1,2,4-Trimethylbenzene	Ave	2.556	2.368		23.2	25.0	-7.4	50.0
sec-Butylbenzene	Ave	3.119	2.914		23.4	25.0	-6.6	50.0
1,3-Dichlorobenzene	Ave	1.361	1.282		23.6	25.0	-5.8	50.0
4-Isopropyltoluene	Ave	2.631	2.435		23.1	25.0	-7.4	50.0
1,4-Dichlorobenzene	Ave	1.438	1.346		23.4	25.0	-6.4	50.0
n-Butylbenzene	Ave	2.596	2.394		23.1	25.0	-7.8	50.0
1,2-Dichlorobenzene	Ave	1.359	1.257		23.1	25.0	-7.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1599	0.1214		19.0	25.0	-24.1	50.0
1,2,4-Trichlorobenzene	Ave	1.024	0.8633		21.1	25.0	-15.7	50.0
Hexachlorobutadiene	Ave	0.2131	0.1852		21.7	25.0	-13.1	50.0
Naphthalene	Ave	1.362	1.149		21.1	25.0	-15.6	50.0
1,2,3-Trichlorobenzene	Ave	0.4510	0.3595		19.9	25.0	-20.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1799	0.1905		26.5	25.0	5.9	50.0
Toluene-d8 (Surr)	Ave	2.046	2.218		27.1	25.0	8.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5773	0.6168		26.7	25.0	6.8	50.0

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QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-20167-1

13 Sediment Samples and 2 Field Duplicates Collected May 16 and 17, 2012

Prepared by: Donald Anné
June 15, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %D for bis(2-ethylhexyl)phthalate was above the allowable maximum (25%) on 05-23-12 (W16047.D). The %D for 2,4-dinitrophenol was above the allowable maximum (25%) on 05-29-12 (W16145.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-65304/1-A contained traces of 22 compounds. Positive results for phthalates that are less than ten times the method blank level were flagged as not significantly above the blank level (B) in associated samples. Positive results for non-phthalates that are less than five times the method blank level were flagged as not significantly above the blank level (B) in associated samples. The end user should determine whether detected compounds are usable or not. Although this blank fulfils the requirements for a method, the samples should have been re-extracted with a "cleaner" blank.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

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Surrogate Recovery: One of three acid extractable surrogates for samples SED-01 (0-9.5), SED-02 (0-6), SED-04 (0-6), and SED-04 (6-12) was diluted beyond detection limits. No action is taken on surrogates diluted beyond detection limits.

One of three acid extractable surrogate recoveries for sample SED-02 (6-12) was below control limits, but was not below 10%. No action is taken on one surrogate per fraction outside control limits, provided the recovery is not less than 10%.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries were within QC limits for sediment MS/MSD sample SED-12 (0-6).

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for soil samples LCS 480-64995/2-A, LCS 480-65304/2-A, and LCS 480-65363/2-A.

Field Duplicates: The relative percent differences (RPDs) for fluoranthene and pyrene were above the allowable maximum (35%) for sediment field duplicate pair SED-10 (0-6)/DUP-01 (attached table). Results for fluoranthene and pyrene should be considered estimated (J) in samples SED-10 (0-6) and DUP-01.

The RPDs for benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene were above the allowable maximum (35%) for sediment field duplicate pair SED-11 (0-6)/DUP-02 (attached table). Results for benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene should be considered estimated (J) in samples SED-11 (0-6) and DUP-02.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-20167-1

S1= SED-10 (0-6) **S2=** DUP-01

Analyte	S1	S2	RPD (%)	
2-methylnaphthalene	**64**	**100**	NC	
acenaphthene	ND	**160**	NC	
acenaphthylene	**72**	**130**	NC	
anthracene	**230**	400	NC	
benzo(a)anthracene	660	850	25%	
benzo(a)pyrene	950	780	20%	
benzo(b)fluoranthene	1200	1000	18%	
benzo(g,h,i)perylene	340	360	6%	
benzo(k)fluoranthene	540	410	27%	
biphenyl	**23**	**39**	NC	
carbazole	**45**	**64**	NC	
chrysene	700	950	30%	
dibenz(a,h)anthracene	**140**	ND	NC	
dibenzofuran	**46**	**28**	NC	
fluoranthene	1100	1600	37%	*
fluorene	**130**	**130**	0%	
indeno(1,2,3-cd)pyrene	300	320	6%	
naphthalene	51	**72**	NC	
phenanthrene	630	900	35%	
pyrene	1200	2100	55%	*

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-20167-1

	S1= SED-11 (0-6)	**S2=** DUP-02		
Analyte	**S1**	**S2**	**RPD (%)**	
2-methylnaphthalene	ND	**51**	NC	
4-methylphenol	ND	**37**	NC	
acenaphthylene	**76**	**80**	NC	
anthracene	**120**	**110**	NC	
benzo(a)anthracene	440	310	35%	
benzo(a)pyrene	740	340	74%	*
benzo(b)fluoranthene	1000	540	60%	*
benzo(g,h,i)perylene	280	**180**	NC	
benzo(k)fluoranthene	540	230	81%	*
chrysene	510	380	29%	
dibenz(a,h)anthracene	**130**	ND	NC	
fluoranthene	740	630	16%	
indeno(1,2,3-cd)pyrene	270	**180**	NC	
naphthalene	43	**43**	NC	
phenanthrene	**240**	**170**	NC	
pyrene	760	790	4%	

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
SED-01 (0-9.5)	480-20167-1	52	65	62	98	DL 0 X	122
SED-02 (0-6)	480-20167-2	55	66	67	97	DL 0 X	121
SED-02 (6-12)	480-20167-3	64	75	73	106	22 X	121
SED-04 (0-6)	480-20167-4	59	71	67	99	DL 0 X	121
SED-04 (6-12)	480-20167-5	57	70	70	99	DL 0 X	123
SED-09 (0-6)	480-20232-1	46	57	56	75	95	100
SED-10 (0-6)	480-20232-2	70	77	78	85	108	98
SED-10 (6-12)	480-20232-3	64	75	67	89	110	108
DUP-01	480-20232-4	51	60	62	77	87	98
SED-11 (0-6)	480-20232-5	68	76	77	84	106	95
SED-11 (6-12)	480-20232-6	66	74	71	83	106	89
DUP-02	480-20232-7	52	57	61	71	78	86
SED-12 (0-6)	480-20232-8	65	77	69	88	113	102
SED-13 (0-6)	480-20232-10	63	74	71	82	106	95
SED-13 (6-12)	480-20232-11	61	71	73	87	110	100
	MB 480-64995/1-A	72	78	83	91	85	102
	MB 480-65304/1-A	77	80	76	84	105	109
	MB 480-65363/1-A	46	34	82	91	98	108
	LCS 480-64995/2-A	76	79	88	94	111	105
	LCS 480-65304/2-A	67	71	80	76	95	97
	LCS 480-65363/2-A	70	74	80	86	102	99
SED-12 (0-6) MS	480-20232-8 MS	86	92	89	94	124	115
SED-12 (0-6) MSD	480-20232-8 MSD	83	86	92	95	125	110

DL - surrogate diluted beyond detection limits

	QC LIMITS
2FP = 2-Fluorophenol	18-120
PHL = Phenol-d5	11-120
NBZ = Nitrobenzene-d5	34-132
FBP = 2-Fluorobiphenyl	37-120
TBP = 2,4,6-Tribromophenol	39-146
TPH = p-Terphenyl-d14	65-153

Column to be used to flag recovery values

FORM II 8270C

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65712/2 Calibration Date: 05/23/2012 13:02

Instrument ID: HP5973W Calib Start Date: 05/14/2012 11:20

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 05/14/2012 13:23

Lab File ID: W16047.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.6351	0.5178	0.0100	40800	50000	-18.5	25.0
Pyridine	Ave	1.162	1.015	0.0100	43700	50000	-12.7	100.0
Phenol	Ave	2.144	1.916	0.0100	44700	50000	-10.7	20.0
Aniline	Ave	2.426	2.177	0.0100	44900	50000	-10.3	100.0
Bis(2-chloroethyl)ether	Ave	1.615	1.432	0.0100	44300	50000	-11.3	25.0
2-Chlorophenol	Ave	1.498	1.384	0.0100	46200	50000	-7.6	25.0
1,3-Dichlorobenzene	Ave	1.494	1.396	0.0100	46700	50000	-6.6	25.0
1,4-Dichlorobenzene	Ave	1.498	1.411	0.0100	47100	50000	-5.8	20.0
Benzyl alcohol	Ave	0.9921	0.9243	0.0100	46600	50000	-6.8	100.0
1,2-Dichlorobenzene	Ave	1.408	1.320	0.0100	46900	50000	-6.2	25.0
2-Methylphenol	Ave	1.368	1.239	0.0100	45300	50000	-9.4	25.0
bis (2-chloroisopropyl) ether	Ave	2.042	1.753	0.0100	42900	50000	-14.1	25.0
N-Nitrosodi-n-propylamine	Ave	0.9778	0.8755	0.0500	44800	50000	-10.5	25.0
4-Methylphenol	Ave	1.426	1.301	0.0100	45600	50000	-8.8	25.0
Hexachloroethane	Ave	0.5337	0.4957	0.0100	46400	50000	-7.1	25.0
Nitrobenzene	Ave	0.3608	0.3265	0.0100	45300	50000	-9.5	25.0
Isophorone	Ave	0.6874	0.6233	0.0100	45300	50000	-9.3	25.0
2-Nitrophenol	Ave	0.1769	0.1837	0.0100	51900	50000	3.8	20.0
2,4-Dimethylphenol	Ave	0.3470	0.3198	0.0100	46100	50000	-7.8	25.0
Tetraethyl lead	Ave	0.0941	0.0962	0.0100	51200	50000	2.3	40.0
Bis(2-chloroethoxy)methane	Ave	0.4451	0.4003	0.0100	45000	50000	-10.1	25.0
Benzoic acid	Ave	0.2558	0.2193	0.0100	129000	150000	-14.3	25.0
2,4-Dichlorophenol	Ave	0.2706	0.2582	0.0100	47700	50000	-4.6	20.0
1,2,4-Trichlorobenzene	Ave	0.2802	0.2750	0.0100	49100	50000	-1.9	25.0
Naphthalene	Ave	1.014	0.9692	0.0100	47800	50000	-4.4	25.0
4-Chloroaniline	Ave	0.4451	0.4104	0.0100	46100	50000	-7.8	25.0
Hexachlorobutadiene	Ave	0.1512	0.1488	0.0100	49200	50000	-1.6	20.0
4-Chloro-3-methylphenol	Ave	0.2991	0.2772	0.0100	46300	50000	-7.3	20.0
2-Methylnaphthalene	Ave	0.6341	0.6002	0.0100	47300	50000	-5.4	25.0
Hexachlorocyclopentadiene	Ave	0.2752	0.2695	0.0500	49000	50000	-2.1	25.0
2,4,6-Trichlorophenol	Ave	0.3184	0.3180	0.0100	49900	50000	-0.1	20.0
2,4,5-Trichlorophenol	Ave	0.3452	0.3409	0.0100	49400	50000	-1.2	25.0
2-Chloronaphthalene	Ave	1.038	0.9833	0.0100	47300	50000	-5.3	25.0
2-Nitroaniline	Ave	0.3140	0.2890	0.0100	46000	50000	-8.0	25.0
Dimethyl phthalate	Ave	1.205	1.128	0.0100	46800	50000	-6.4	25.0
2,6-Dinitrotoluene	Ave	0.2628	0.2643	0.0100	50300	50000	0.6	25.0
Acenaphthylene	Ave	1.742	1.676	0.0100	48100	50000	-3.8	25.0
3-Nitroaniline	Ave	0.3451	0.3228	0.0100	46800	50000	-6.5	25.0
Acenaphthene	Ave	1.057	0.996	0.0100	47100	50000	-5.8	20.0
2,4-Dinitrophenol	Lin1		0.1057	0.0500	37500	50000	-25.0	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-65712/2 Calibration Date: 05/23/2012 13:02

Instrument ID: HP5973W Calib Start Date: 05/14/2012 11:20

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 05/14/2012 13:23

Lab File ID: W16047.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Lin1		0.1128	0.0500	42600	50000	-14.8	25.0
2,4-Dinitrotoluene	Ave	0.3352	0.3402	0.0100	50700	50000	1.5	25.0
Dibenzofuran	Qua		1.420	0.0100	45400	50000	-9.2	25.0
Diethyl phthalate	Ave	1.179	1.130	0.0100	48000	50000	-4.1	25.0
Fluorene	Qua		1.099	0.0100	45400	50000	-9.2	25.0
4-Chlorophenyl phenyl ether	Qua		0.5194	0.0100	46500	50000	-7.0	25.0
4-Nitroaniline	Ave	0.3571	0.3252	0.0100	45500	50000	-8.9	25.0
4,6-Dinitro-2-methylphenol	Lin1		0.1193	0.0100	46800	50000	-6.4	25.0
N-Nitrosodiphenylamine	Ave	0.4970	0.4807	0.0100	48400	50000	-3.3	20.0
1,2-Diphenylhydrazine	Ave	1.261	1.126	0.0100	44700	50000	-10.7	25.0
4-Bromophenyl phenyl ether	Ave	0.1776	0.1755	0.0100	49400	50000	-1.2	25.0
Hexachlorobenzene	Ave	0.1773	0.1676	0.0100	47300	50000	-5.4	25.0
Pentachlorophenol	Lin1		0.1024	0.0100	49400	50000	-1.2	20.0
Phenanthrene	Qua		0.9466	0.0100	44700	50000	-10.6	25.0
Anthracene	Ave	1.017	0.9605	0.0100	47200	50000	-5.6	25.0
Carbazole	Ave	1.022	0.9363	0.0100	45800	50000	-8.4	25.0
Di-n-butyl phthalate	Ave	1.124	1.151	0.0100	51200	50000	2.5	25.0
Fluoranthene	Ave	1.099	1.063	0.0100	48300	50000	-3.3	20.0
Benzidine	Ave	0.6741	0.6806	0.0100	50500	50000	1.0	25.0
Pyrene	Ave	1.288	1.207	0.0100	46900	50000	-6.3	25.0
Butyl benzyl phthalate	Ave	0.5055	0.5511	0.0100	54500	50000	9.0	25.0
3,3'-Dichlorobenzidine	Ave	0.3869	0.4113	0.0100	53200	50000	6.3	25.0
Bis(2-ethylhexyl) phthalate	Ave	0.6221	0.7973	0.0100	64100	50000	28.2*	25.0
Benzo(a)anthracene	Ave	1.157	1.085	0.0100	46900	50000	6.2	25.0
Chrysene	Ave	1.176	1.060	0.0100	45100	50000	-9.8	25.0
Di-n-octyl phthalate	Lin1		1.442	0.0100	55100	50000	10.2	20.0
Benzo(b)fluoranthene	Ave	0.9862	0.9589	0.0100	48600	50000	-2.8	25.0
Benzo(k)fluoranthene	Ave	1.139	1.068	0.0100	46900	50000	-6.3	25.0
Benzo(a)pyrene	Ave	0.9254	0.8956	0.0100	48400	50000	-3.2	20.0
Dibenz(a,h)anthracene	Ave	0.8732	0.8067	0.0100	46200	50000	-7.6	25.0
Indeno(1,2,3-cd)pyrene	Ave	1.037	0.9744	0.0100	47000	50000	-6.0	25.0
Benzo(g,h,i)perylene	Ave	0.9457	0.9053	0.0100	47900	50000	-4.3	25.0
2-Fluorophenol	Ave	1.489	1.377	0.0100	46200	50000	-7.5	25.0
Phenol-d5	Ave	1.873	1.728	0.0100	46100	50000	-7.8	25.0
Nitrobenzene-d5	Ave	0.3425	0.3171	0.0100	46300	50000	-7.4	25.0
2-Fluorobiphenyl	Ave	1.172	1.139	0.0100	48600	50000	-2.8	25.0
2,4,6-Tribromophenol	Ave	0.0734	0.0804	0.0100	54700	50000	9.5	25.0
p-Terphenyl-d14	Ave	0.7907	0.7313	0.0100	46200	50000	-7.5	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-66271/2 Calibration Date: 05/29/2012 13:41

Instrument ID: HP5973W Calib Start Date: 05/14/2012 11:20

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 05/14/2012 13:23

Lab File ID: W16145.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.6351	0.4989	0.0100	39300	50000	-21.4	25.0
Pyridine	Ave	1.162	0.9845	0.0100	42400	50000	-15.3	100.0
Phenol	Ave	2.144	1.865	0.0100	43500	50000	-13.0	20.0
Aniline	Ave	2.426	2.022	0.0100	41700	50000	-16.7	100.0
Bis(2-chloroethyl)ether	Ave	1.615	1.362	0.0100	42200	50000	-15.7	25.0
2-Chlorophenol	Ave	1.498	1.338	0.0100	44700	50000	-10.6	25.0
1,3-Dichlorobenzene	Ave	1.494	1.364	0.0100	45600	50000	-8.7	25.0
1,4-Dichlorobenzene	Ave	1.498	1.375	0.0100	45900	50000	-8.2	20.0
Benzyl alcohol	Ave	0.9921	0.8929	0.0100	45000	50000	-10.0	100.0
1,2-Dichlorobenzene	Ave	1.408	1.300	0.0100	46200	50000	-7.7	25.0
2-Methylphenol	Ave	1.368	1.185	0.0100	43300	50000	-13.4	25.0
bis (2-chloroisopropyl) ether	Ave	2.042	1.709	0.0100	41800	50000	-16.3	25.0
N-Nitrosodi-n-propylamine	Ave	0.9778	0.8511	0.0500	43500	50000	-13.0	25.0
4-Methylphenol	Ave	1.426	1.254	0.0100	44000	50000	-12.0	25.0
Hexachloroethane	Ave	0.5337	0.4911	0.0100	46000	50000	-8.0	25.0
Nitrobenzene	Ave	0.3608	0.3182	0.0100	44100	50000	-11.8	25.0
Isophorone	Ave	0.6874	0.6152	0.0100	44700	50000	-10.5	25.0
2-Nitrophenol	Ave	0.1769	0.1869	0.0100	52800	50000	5.7	20.0
2,4-Dimethylphenol	Ave	0.3470	0.3120	0.0100	45000	50000	-10.1	25.0
Tetraethyl lead	Ave	0.0941	0.0937	0.0100	49800	50000	-0.4	40.0
Bis(2-chloroethoxy)methane	Ave	0.4451	0.3913	0.0100	44000	50000	-12.1	25.0
Benzoic acid	Ave	0.2558	0.1891	0.0100	111000	150000	-26.1*	25.0
2,4-Dichlorophenol	Ave	0.2706	0.2605	0.0100	48100	50000	-3.7	20.0
1,2,4-Trichlorobenzene	Ave	0.2802	0.2842	0.0100	50700	50000	1.4	25.0
Naphthalene	Ave	1.014	0.9598	0.0100	47300	50000	-5.3	25.0
4-Chloroaniline	Ave	0.4451	0.4088	0.0100	45900	50000	-8.1	25.0
Hexachlorobutadiene	Ave	0.1512	0.1550	0.0100	51300	50000	2.5	20.0
4-Chloro-3-methylphenol	Ave	0.2991	0.2795	0.0100	46700	50000	-6.6	20.0
2-Methylnaphthalene	Ave	0.6341	0.6046	0.0100	47700	50000	-4.7	25.0
Hexachlorocyclopentadiene	Ave	0.2752	0.2761	0.0500	50200	50000	0.3	25.0
2,4,6-Trichlorophenol	Ave	0.3184	0.3195	0.0100	50200	50000	0.3	20.0
2,4,5-Trichlorophenol	Ave	0.3452	0.3482	0.0100	50400	50000	0.9	25.0
2-Chloronaphthalene	Ave	1.038	0.9894	0.0100	47600	50000	-4.7	25.0
2-Nitroaniline	Ave	0.3140	0.2832	0.0100	45100	50000	-9.8	25.0
Dimethyl phthalate	Ave	1.205	1.145	0.0100	47500	50000	-5.0	25.0
2,6-Dinitrotoluene	Ave	0.2628	0.2752	0.0100	52400	50000	4.7	25.0
Acenaphthylene	Ave	1.742	1.673	0.0100	48000	50000	-3.9	25.0
3-Nitroaniline	Ave	0.3451	0.3227	0.0100	46800	50000	-6.5	25.0
Acenaphthene	Ave	1.057	0.998	0.0100	47200	50000	-5.6	20.0
2,4-Dinitrophenol	Lin1		0.0962	0.0500	35000	50000	-30.0*	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCVIS 480-66271/2 Calibration Date: 05/29/2012 13:41

Instrument ID: HP5973W Calib Start Date: 05/14/2012 11:20

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 05/14/2012 13:23

Lab File ID: W16145.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Lin1		0.1092	0.0500	41400	50000	-17.2	25.0
2,4-Dinitrotoluene	Ave	0.3352	0.3460	0.0100	51600	50000	3.2	25.0
Dibenzofuran	Qua		1.407	0.0100	44900	50000	-10.2	25.0
Diethyl phthalate	Ave	1.179	1.150	0.0100	48800	50000	-2.5	25.0
4-Chlorophenyl phenyl ether	Qua		0.5375	0.0100	48500	50000	-3.0	25.0
Fluorene	Qua		1.117	0.0100	46200	50000	-7.6	25.0
4-Nitroaniline	Ave	0.3571	0.3214	0.0100	45000	50000	-10.0	25.0
4,6-Dinitro-2-methylphenol	Lin1		0.1292	0.0100	50200	50000	0.4	25.0
N-Nitrosodiphenylamine	Ave	0.4970	0.4604	0.0100	46300	50000	-7.4	20.0
1,2-Diphenylhydrazine	Ave	1.261	1.107	0.0100	43900	50000	-12.2	25.0
4-Bromophenyl phenyl ether	Ave	0.1776	0.1794	0.0100	50500	50000	1.0	25.0
Hexachlorobenzene	Ave	0.1773	0.1766	0.0100	49800	50000	-0.4	25.0
Pentachlorophenol	Lin1		0.0925	0.0100	45200	50000	-9.6	20.0
Phenanthrene	Qua		0.9558	0.0100	45200	50000	-9.6	25.0
Anthracene	Ave	1.017	0.9645	0.0100	47400	50000	-5.2	25.0
Carbazole	Ave	1.022	0.9458	0.0100	46300	50000	-7.4	25.0
Di-n-butyl phthalate	Ave	1.124	1.134	0.0100	50500	50000	0.9	25.0
Fluoranthene	Ave	1.099	1.078	0.0100	49100	50000	-1.9	20.0
Benzidine	Ave	0.6741	0.5019	0.0100	37200	50000	-25.5* MF	25.0
Pyrene	Ave	1.288	1.206	0.0100	46800	50000	-6.4	25.0
Butyl benzyl phthalate	Ave	0.5055	0.5425	0.0100	53700	50000	7.3	25.0
3,3'-Dichlorobenzidine	Ave	0.3869	0.3934	0.0100	50800	50000	1.7	25.0
Bis(2-ethylhexyl) phthalate	Ave	0.6221	0.7693	0.0100	61800	50000	23.7	25.0
Benzo(a)anthracene	Ave	1.157	1.085	0.0100	46900	50000	-6.3	25.0
Chrysene	Ave	1.176	1.092	0.0100	46400	50000	-7.1	25.0
Di-n-octyl phthalate	Lin1		1.425	0.0100	54500	50000	9.0	20.0
Benzo(b)fluoranthene	Ave	0.9862	0.9359	0.0100	47500	50000	-5.1	25.0
Benzo(k)fluoranthene	Ave	1.139	1.137	0.0100	49900	50000	-0.2	25.0
Benzo(a)pyrene	Ave	0.9254	0.9115	0.0100	49200	50000	-1.5	20.0
Dibenz(a,h)anthracene	Ave	0.8732	0.8808	0.0100	50400	50000	0.9	25.0
Indeno(1,2,3-cd)pyrene	Ave	1.037	1.048	0.0100	50500	50000	1.0	25.0
Benzo(g,h,i)perylene	Ave	0.9457	0.9625	0.0100	50900	50000	1.8	25.0
2-Fluorophenol	Ave	1.489	1.309	0.0100	44000	50000	-12.1	25.0
Phenol-d5	Ave	1.873	1.648	0.0100	44000	50000	-12.0	25.0
Nitrobenzene-d5	Ave	0.3425	0.3122	0.0100	45600	50000	-8.8	25.0
2-Fluorobiphenyl	Ave	1.172	1.142	0.0100	48700	50000	-2.5	25.0
2,4,6-Tribromophenol	Ave	0.0734	0.0779	0.0100	53100	50000	6.1	25.0
p-Terphenyl-d14	Ave	0.7907	0.7585	0.0100	48000	50000	-4.1	25.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-20167-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-65304/1-A

Matrix: Solid | Lab File ID: V0848.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3550B | Date Extracted: 05/21/2012 10:07

Sample wt/vol: +30.49(g) | Date Analyzed: 05/22/2012 11:14

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 65485 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		170	36
88-06-2	2,4,6-Trichlorophenol	ND		170	11
120-83-2	2,4-Dichlorophenol	ND		170	8.7
105-67-9	2,4-Dimethylphenol	ND		170	45
51-28-5	2,4-Dinitrophenol	ND		320	58
121-14-2	2,4-Dinitrotoluene	ND		170	26
606-20-2	2,6-Dinitrotoluene	ND		170	41
91-58-7	2-Chloronaphthalene	ND		170	11
95-57-8	2-Chlorophenol	ND		170	8.5
91-57-6	2-Methylnaphthalene	ND		170	2.0
95-48-7	2-Methylphenol	ND		170	5.1
88-74-4	2-Nitroaniline	ND		320	53
88-75-5	2-Nitrophenol	ND		170	7.6
91-94-1	3,3'-Dichlorobenzidine	ND		170	150
99-09-2	3-Nitroaniline	ND		320	38
534-52-1	4,6-Dinitro-2-methylphenol	ND		320	57
101-55-3	4-Bromophenyl phenyl ether	ND		170	53
59-50-7	4-Chloro-3-methylphenol	ND		170	6.8
106-47-8	4-Chloroaniline	ND		170	49
7005-72-3	4-Chlorophenyl phenyl ether	28.4	J	170	3.5
106-44-5	4-Methylphenol	ND		320	9.2
100-01-6	4-Nitroaniline	ND		320	19
100-02-7	4-Nitrophenol	ND		320	40
83-32-9	Acenaphthene	ND		170	2.0
208-96-8	Acenaphthylene	ND		170	1.4
98-86-2	Acetophenone	ND		170	8.5
120-12-7	Anthracene	30.0	J	170	4.3
1912-24-9	Atrazine	ND		170	7.4
100-52-7	Benzaldehyde	ND		170	18
56-55-3	Benzo(a)anthracene	55.4	J	170	2.9
50-32-8	Benzo(a)pyrene	74.5	J	170	4.0
205-99-2	Benzo(b)fluoranthene	106	J	170	3.2
191-24-2	Benzo(g,h,i)perylene	84.3	J	170	2.0
207-08-9	Benzo(k)fluoranthene	91.2	J	170	1.8

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-65304/1-A

Matrix: Solid Lab File ID: V0848.D

Analysis Method: 8270C Date Collected:

Extract. Method: 3550B Date Extracted: 05/21/2012 10:07

Sample wt/vol: +30.49(g) Date Analyzed: 05/22/2012 11:14

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 65485 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		170	10
108-60-1	bis (2-chloroisopropyl) ether	ND		170	17
111-91-1	Bis(2-chloroethoxy)methane	ND		170	9.0
111-44-4	Bis(2-chloroethyl)ether	ND		170	14
117-81-7	Bis(2-ethylhexyl) phthalate	79.4	J	170	54
85-68-7	Butyl benzyl phthalate	62.6	J	170	45
105-60-2	Caprolactam	ND		170	72
86-74-8	Carbazole	36.4	J	170	1.9
218-01-9	Chrysene	54.4	J	170	1.7
53-70-3	Dibenz(a,h)anthracene	76.4	J	170	2.0
132-64-9	Dibenzofuran	ND		170	1.7
84-66-2	Diethyl phthalate	38.0	J	170	5.0
131-11-3	Dimethyl phthalate	30.9	J	170	4.3
84-74-2	Di-n-butyl phthalate	57.1	J	170	57
117-84-0	Di-n-octyl phthalate	72.5	J	170	3.9
206-44-0	Fluoranthene	42.6	J	170	2.4
86-73-7	Fluorene	26.1	J	170	3.8
118-74-1	Hexachlorobenzene	40.0	J	170	8.3
87-68-3	Hexachlorobutadiene	ND		170	8.5
77-47-4	Hexachlorocyclopentadiene	ND		170	50
67-72-1	Hexachloroethane	ND		170	13
193-39-5	Indeno(1,2,3-cd)pyrene	88.6	J	170	4.6
78-59-1	Isophorone	ND		170	8.3
91-20-3	Naphthalene	ND		170	2.8
98-95-3	Nitrobenzene	ND		170	7.4
621-64-7	N-Nitrosodi-n-propylamine	ND		170	13
86-30-6	N-Nitrosodiphenylamine	ND		170	9.1
87-86-5	Pentachlorophenol	ND		320	57
85-01-8	Phenanthrene	36.4	J	170	3.5
108-95-2	Phenol	ND		170	17
129-00-0	Pyrene	43.0	J	170	1.1

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QA/QC Review of Method 8082 PCB Data for
TestAmerica Buffalo, Job No: 480-20167-1

13 Sediment Samples, and 2 Field Duplicates
Collected May 16 and 17, 2012

Prepared by: Donald Anné
June 15, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analyses of method blanks reported target PCBs as not detected.

Surrogate Recovery: The surrogates recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries were within QC limits for sediment MS/MSD sample SED-12 (0-6).

Laboratory Control Sample: The percent recoveries for PCB-1016 and PCB-1260 were within QC limits for soil samples LCS 480-64952/2-A and LCS 480-65377/2-A.

Field Duplicates: The analyses of soil field duplicate pairs /DUP-01 and /DUP-02 reported target PCBs as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pairs were acceptable.

Initial Calibration: The %RSDs for PCB-1016 and PCB-1260 were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 05-21-12 (CCV480-65262/2) for the ZB-35 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 05-22-12 (CCV480-65434/41) for the ZB-5 column. Positive results for PCB-1016 and PCB-1260 should be considered estimated in associated samples.

PCB Identification Summary for Multicomponent Analytes: The checked surrogates were within GC quantitation limits. The analyses of sediment samples in this data pack reported target PCBs as not detected.

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FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCV 480-65262/2 Calibration Date: 05/21/2012 05:51

Instrument ID: HP6890-7 Calib Start Date: 05/07/2012 17:04

GC Column: ZB-35 ID: 0.53(mm) Calib End Date: 05/07/2012 18:40

Lab File ID: 7_221_264.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	20022882	23426052		0.585	0.500	17.0*	15.0
PCB-1016 Peak 2	Ave	7308259	8750670		0.599	0.500	19.7*	15.0
PCB-1016 Peak 3	Ave	4452279	5804798		0.652	0.500	30.4*	15.0
PCB-1260 Peak 1	Ave	5525262	7584462		0.686	0.500	37.3*	15.0
PCB-1260 Peak 2	Ave	12238909	17301608		0.707	0.500	41.4*	15.0
PCB-1260 Peak 3	Ave	7495039	10172088		0.679	0.500	35.7*	15.0
Tetrachloro-m-xylene	Lin		378263167		0.0352	0.0300	17.3*	15.0
DCB Decachlorobiphenyl	Lin		120073333		0.0400	0.0300	33.3*	15.0

average %D PCB-1016 = 22.4%

average %D PCB-1260 = 38.1%

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Lab Sample ID: CCV 480-65434/41 Calibration Date: 05/22/2012 09:45

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_171_175.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	267470		0.586	0.500	17.2*	15.0
PCB-1016 Peak 2	Ave	119908	150384		0.627	0.500	25.4*	15.0
PCB-1016 Peak 3	Ave	331581	399610		0.603	0.500	20.5*	15.0
PCB-1016 Peak 4	Ave	133756	179108		0.670	0.500	33.9*	15.0
PCB-1260 Peak 1	Ave	272257	339226		0.623	0.500	24.6*	15.0
PCB-1260 Peak 2	Ave	438611	444970		0.507	0.500	1.4	15.0
PCB-1260 Peak 3	Ave	177029	202386		0.572	0.500	14.3	15.0
PCB-1260 Peak 4	Ave	124111	97078		0.391	0.500	-21.8*	15.0
Tetrachloro-m-xylene	Lin1		4903400		0.0335	0.0300	11.7	15.0
DCB Decachlorobiphenyl	Ave	4617528	4478367		0.0291	0.0300	-3.0	15.0

average %D PCB-1016 = 24.3%

average %D PCB-1260 = 15.5%

ALPHA GEOSCIENCE

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QA/QC Review of TAL Metals Data for
TestAmerica Buffalo, Job No:480-20167-1

13 Sediment Samples, and 2 Field Duplicates
Collected May 16 and 17, 2012

Prepared by: Donald Anné
June 15, 2012

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRQL standard samples CRI 480-65469/7, CRI 480-65823/7, CRA 480-65360/3, and CRA 480-65728/3.

Blanks: The analyses of initial calibration and continuing calibrationblanks reported TAL metals as below the CRDLs, as required.

Method blank MB 480-65190/1-A contained iron (21.49 mg/kg) and manganese (0.215 mg/kg). Positive results for iron and manganese that are less than ten times the method blank level should be reported as unusable (R) in associated sediment samples.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries (%Rs) for aluminum were above control limits (75-125%), but were not above 250% for sediment MS/MSD sample SED-12 (0-6). Since aluminum is a naturally occurring metal, positive for aluminum should be considered estimated (J) in associated soil samples.

Laboratory Duplicates: The relative percent differences for TAL metals were below the allowable maximum (35%) in sediment MS/MSD sample SED-12 (0-6), as required.

Field Duplicates: The relative percent differences (RPDs) for applicable metals were below the allowable maximum (35%) for sediment field duplicate pair SED-10 (0-6) /DUP-01 (attached table), as required.

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The RPD for mercury was above the allowable maximum (35%) for sediment field duplicate pair SED-11 (0-6)/DUP-02 (attached table). Positive results for mercury should be considered estimated (J) in samples SED-11 (0-6) and DUP-02.

Laboratory Control Sample: The percent recoveries for TAL metals were within QC limits in the soil samples LCSSRM 480-65190/2-A, LCSSRM 480-65539/2-A, LCSSRM 480-65171/2-A, and LCSSRM 480-65643/2-A.

ICP Serial Dilution: The analyses of sediment serial dilution samples SED-09 (0-6) and SED-12 (0-6) were acceptable.

Instrument Detection Limits: The MDLs were at or below the RLs, as required.

Percent Solids: The % solids for soil samples were above 50%.

TAL Metals & TOC

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-20167-1

S1= SED-10 (0-6) **S2=** DUP-01

Analyte	S1	S2	RPD (%)	
aluminum	6810	8290	20%	
antimony	ND	ND	NC	
arsenic	6.7	8.0	18%	
barium	68.3	73.0	7%	
beryllium	0.47	0.57	19%	
cadmium	1.3	1.8	32%	
calcium	18300	24300	28%	
chromium	39.8	46.2	15%	
cobalt	7.2	8.7	19%	
copper	51.6	63.2	20%	
iron	17300	20100	15%	
lead	65.3	47.6	31%	
magnesium	6730	7360	9%	
manganese	296	351	17%	
mercury	0.28	0.33	16%	
nickel	17.2	20.1	16%	
potassium	981	1170	18%	
selenium	ND	ND	NC	
silver	ND	ND	NC	
sodium	**57.7**	**121**	NC	
thallium	ND	ND	NC	
vanadium	15.3	17.8	15%	
zinc	105	122	15%	
total organic carbon (TOC)	32000	16900	62%	*

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TAL Metals & TOC

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-20167-1

S1= SED-11 (0-6) **S2=** DUP-02

Analyte	S1	S2	RPD (%)	
aluminum	6500	7450	14%	
antimony	ND	ND	NC	
arsenic	9.5	11.5	19%	
barium	63.2	66.8	6%	
beryllium	0.46	0.51	10%	
cadmium	2.1	3.0	35%	
calcium	25400	20800	20%	
chromium	64.8	75.6	15%	
cobalt	7.3	8.1	10%	
copper	85.3	97.4	13%	
iron	18500	18900	2%	
lead	45.7	58.7	25%	
magnesium	6990	6680	5%	
manganese	289	297	3%	
mercury	0.94	2.0	72%	*
nickel	18.4	20.3	10%	
potassium	1050	1060	1%	
selenium	ND	**1.1**	NC	
silver	ND	ND	NC	
sodium	**101**	**120**	NC	
thallium	ND	ND	NC	
vanadium	15.2	16.3	7%	
zinc	111	131	17%	
total organic carbon (TOC)	21700	23800	9%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-20167-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-65190/1-A

Instrument Code: ICAP1 Batch No.: 65469

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010B
7440-36-0	Antimony	ND			6010B
7440-38-2	Arsenic	ND			6010B
7440-39-3	Barium	ND			6010B
7440-41-7	Beryllium	ND			6010B
7440-43-9	Cadmium	ND			6010B
7440-70-2	Calcium	7.43	J		6010B
7440-47-3	Chromium	ND			6010B
7440-48-4	Cobalt	ND			6010B
7440-50-8	Copper	ND			6010B
7439-89-6	Iron	21.49			6010B
7439-92-1	Lead	ND			6010B
7439-95-4	Magnesium	1.50	J		6010B
7439-96-5	Manganese	0.215			6010B
7440-02-0	Nickel	ND			6010B
7440-09-7	Potassium	ND			6010B
7782-49-2	Selenium	ND			6010B
7440-22-4	Silver	ND			6010B
7440-23-5	Sodium	ND			6010B
7440-28-0	Thallium	ND			6010B
7440-62-2	Vanadium	ND			6010B
7440-66-6	Zinc	0.156	J		6010B

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SED-12 (0-6) MS
Lab ID: 480-20232-8 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-20167-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 65.7

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	11670		6110		2700	206	75-125	F	6010B
Antimony	43.90		ND		53.9	81	75-125		6010B
Arsenic	53.72		4.2		53.9	92	75-125		6010B
Barium	113.4		52.8		53.9	112	75-125		6010B
Beryllium	55.15		0.43		53.9	102	75-125		6010B
Cadmium	49.83		0.35		53.9	92	75-125		6010B
Calcium	26520		17600		2690	NA 331	75-125	4	6010B
Chromium	72.13		16.1		53.9	104	75-125		6010B
Cobalt	60.29		6.8		53.9	99	75-125		6010B
Copper	74.21		20.9		53.9	99	75-125		6010B
Iron	19450		16400		2690	112	75-125	4	6010B
Lead	74.60		18.1		53.9	105	75-125		6010B
Magnesium	8980		6000		2690	111	75-125		6010B
Manganese	348.4		294		53.9	102	75-125	4	6010B
Nickel	71.49		16.9		53.9	101	75-125		6010B
Potassium	4120		842		2700	122	75-125		6010B
Selenium	50.08		ND		53.9	93	75-125		6010B
Silver	12.74		ND		13.5	95	75-125		6010B
Sodium	2500		40.0	J	2700	91	75-125		6010B
Thallium	51.42		ND		53.9	95	75-125		6010B
Vanadium	66.59		13.5		53.9	99	75-125		6010B
Zinc	132.2		73.6		53.9	109	75-125		6010B
Hg	0.655		0.23		0.521	82	75-125		7471A

SSR = Spiked Sample Result

NA - Not applicable, the sample concentration was greater than 4 times the spiking level therefore, valid percent recoveries could not be calculated.

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SED-12 (0-6) MSD
Lab ID: 480-20232-8 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-20167-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 65.7

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	12800		2990	223	75-125	9	20	F	6010B
Antimony	47.22		59.8	79	75-125	7	20		6010B
Arsenic	58.50		59.8	91	75-125	9	20		6010B
Barium	120.7		59.8	114	75-125	6	20		6010B
Beryllium	60.83		59.8	101	75-125	10	20		6010B
Cadmium	54.25		59.8	90	75-125	8	20		6010B
Calcium	22050		2990	NA 149	75-125	18	20	4	6010B
Chromium	79.21		59.8	105	75-125	9	20		6010B
Cobalt	66.04		59.8	99	75-125	9	20		6010B
Copper	79.87		59.8	99	75-125	7	20		6010B
Iron	21250		2990	NA 161	75-125	9	20	4	6010B
Lead	79.17		59.8	102	75-125	6	20		6010B
Magnesium	9626		2990	121	75-125	7	20		6010B
Manganese	368.5		59.8	125	75-125	6	20	4	6010B
Nickel	77.82		59.8	102	75-125	8	20		6010B
Potassium	4563		2990	124	75-125	10	20		6010B
Selenium	54.47		59.8	91	75-125	8	20		6010B
Silver	13.70		15.0	92	75-125	7	20		6010B
Sodium	2767		2990	91	75-125	10	20		6010B
Thallium	56.34		59.8	94	75-125	9	20		6010B
Vanadium	73.45		59.8	100	75-125	10	20		6010B
Zinc	135.8		59.8	104	75-125	3	20		6010B
Hg	0.598		0.485	76	75-125	9	20		7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

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QA/QC Review of Total Organic Carbon (TOC) Data
for TestAmerica Buffalo, Job No. 480-20167-1

13 Sediment Samples, and 2 Field Duplicates
Collected May 16 and 17, 2012

Prepared by: Donald Anné
June 15, 2012

Holding Times: The samples were analyzed within USEAP SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TOC were within control limits (85-115%).

Blanks: The analyses of initial calibration, continuing calibration, and method blanks reported TOC as not detected.

Spike Sample Recovery: The percent recoveries for TOC were within control limits (75-125%) for sediment MS/MSD sample SED-12 (0-6).

Laboratory Duplicates: The relative percent difference for TOC was below the allowable maximum (35%) for sediment MS/MSD sample SED-12 (0-6), as required.

Field Duplicates: The relative percent difference for TOC was below the allowable maximum (35%) for sediment field duplicate pair SED-11 (0-6) /DUP-02 (attached table), as required.

The RPD for TOC was above the allowable maximum (35%) for sediment field duplicate pair SED-10 (0-6)/DUP-01 (attached table). Positive results for TOC should be considered estimated (J) in samples SED-10 (0-6) and DUP-01.

Laboratory Control Sample: The percent recoveries for TOC were within laboratory QC limits (75-125%) for soil samples LCS 200-39328/4 and LCS 200-39417/4.

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May 10, 2012

Ms. Sarah Newell
Clough, Harbour, & Associates LLP
III Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
ALCO Maxon RI
April 2012 Ground Water, Soil, and Air Sampling Events

Dear Ms. Newell:

The data usability summary reports (DUSRs) and data validation summaries are attached to this letter for ALOC Maxon RI, April 2012 ground water, soil, and air sampling events. The data for TestAmerica Buffalo job numbers 480-18504-1 and 480-19021-1 and TestAmerica Burlington job number 200-10420-1 were acceptable with some minor issues that are identified and discussed in the validation summaries. There were no data that were qualified as unusable (R) in the data packs.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Clough, Harbour, & Associates LLP.

Sincerely,
Alpha Geoscience

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

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Data Usability Summary Report for
TestAmerica Burlington, Job No: 200-10420-1

18 Air Samples, 2 Field Duplicates,
and 1 Trip Blank
Collected April 16 and 17, 2012

Prepared by: Donald Anné
May 10, 2012

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appears legible and complete. The data pack contained the results of TO15 volatile analyses for 18 air samples, 2 field duplicates, and 1 trip blank.

The overall performances of the analyses are acceptable. TestAmerica Burlington did fulfill the requirements of the analytical method.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive results for 1,1,1-trichloroethane were flagged as "estimated" (J) in samples SV-A9 and CHA-6 because relative percent difference for 1,1,1-trichloroethane was above the allowable maximum in the associated soil field duplicate pair SV-A9/CHA-6.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of TO15 Volatiles Data for
TestAmerica Burlington, Job No: 200-10420-1

18 Air Samples, 2 Field Duplicates,
and 1 Trip Blank
Collected April 16 and 17, 2012

Prepared by: Donald Anné
May 10, 2012

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for target compounds were above the allowable minimum (0.010), as required.

The %RSD for 1,2,4-trichlorobenzene was below the allowable maximum (30%) for G.i on 04-05-12. Positive results for 1,2,4-trichlorobenzene should be considered estimated (J) in associated samples.

Continuing Calibration: The RRF10s for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (30%), as required.

Blanks: The analyses of method and trip blanks reported target compounds as not detected. The certification analyses of summa canisters reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits (70-130%) for sample LCS 200-37527/3.

The %R for naphthalene was above QC limits for sample LCS 200-37409/1. Positive results for naphthalene should be considered estimated (J) in associated samples.

Field Duplicates: The relative percent differences (RPDs) for applicable compounds were below the allowable maximum (50%) in field duplicate pair SV-A3/CHA-5 (attached table), as required.

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www.alphageoscience.com

The RPD for 1,1,1-trichloroethane was above the allowable maximum (35%) for soil field duplicate pair SV-A9/CHA-6 (attached table). Results for 1,1,1-trichloroethane should be considered estimated (J) in samples SV-A9 and CHA-6.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

TO15 Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 200-10420-1

S1= SV-A3 **S2=** CHA-5

Analyte	S1	S2	RPD (%)	
trichlorofluoromethane	49	54	10%	
acetone	660	1000	41%	

S1= SV-A9 **S2=** CHA-6

Analyte	S1	S2	RPD (%)	
acetone	340	240	34%	
1,1,1-trichloroethane	710	410	54%	*

* RPD is greater than 50%

Results are in units of bbpv.

Bold numbers are above quantitation limits

ND - Not detected.

NC - Not calculated, both results must be detected and above quantitation limits for valid RPDs to be calculated.

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-10420-1

SDG No.: 200-10420

Matrix: Air Level: Low Lab File ID: ggjn003.d

Lab ID: LCS 200-37409/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	11.6	116	70-130	
Freon 22	10.0	10.9	109	70-130	
1,2-Dichlorotetrafluoroethane	10.0	11.2	112	70-130	
Chloromethane	10.0	9.43	94	70-130	
n-Butane	10.0	9.26	93	70-130	
Vinyl chloride	10.0	10.1	101	70-130	
1,3-Butadiene	10.0	10.0	100	70-130	
Bromomethane	10.0	10.3	103	70-130	
Chloroethane	10.0	9.57	96	70-130	
Bromoethene(Vinyl Bromide)	10.0	10.6	106	70-130	
Trichlorofluoromethane	10.0	10.7	107	70-130	
Freon TF	10.0	11.4	114	70-130	
1,1-Dichloroethene	10.0	11.4	114	70-130	
Acetone	10.0	9.67	97	70-130	
Isopropyl alcohol	10.0	8.70	87	70-130	
Carbon disulfide	10.0	10.1	101	70-130	
3-Chloropropene	10.0	9.54	95	70-130	
Methylene Chloride	10.0	10.1	101	70-130	
tert-Butyl alcohol	10.0	9.43	94	70-130	
Methyl tert-butyl ether	10.0	9.56	96	70-130	
trans-1,2-Dichloroethene	10.0	10.1	101	70-130	
n-Hexane	10.0	9.18	92	70-130	
1,1-Dichloroethane	10.0	9.82	98	70-130	
Methyl Ethyl Ketone	10.0	9.62	96	70-130	
cis-1,2-Dichloroethene	10.0	10.5	105	70-130	
Chloroform	10.0	10.7	107	70-130	
Tetrahydrofuran	10.0	8.24	82	70-130	
1,1,1-Trichloroethane	10.0	11.1	111	70-130	
Cyclohexane	10.0	10.5	105	70-130	
Carbon tetrachloride	10.0	11.1	111	70-130	
2,2,4-Trimethylpentane	10.0	9.57	96	70-130	
Benzene	10.0	9.79	98	70-130	
1,2-Dichloroethane	10.0	10.5	105	70-130	
n-Heptane	10.0	8.64	86	70-130	
Trichloroethene	10.0	10.8	108	70-130	
Methyl methacrylate	10.0	9.56	96	70-130	
1,2-Dichloropropane	10.0	8.98	90	70-130	
1,4-Dioxane	10.0	9.29	93	70-130	
Bromodichloromethane	10.0	11.0	110	70-130	
cis-1,3-Dichloropropene	10.0	10.1	101	70-130	
methyl isobutyl ketone	10.0	9.64	96	70-130	
Toluene	10.0	9.60	96	70-130	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-10420-1

SDG No.: 200-10420

Matrix: Air Level: Low Lab File ID: ggjn003.d

Lab ID: LCS 200-37409/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	10.4	104	70-130	
1,1,2-Trichloroethane	10.0	9.49	95	70-130	
Tetrachloroethene	10.0	9.33	93	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.39	94	70-130	
Dibromochloromethane	10.0	10.8	109	70-130	
1,2-Dibromoethane	10.0	10.2	102	70-130	
Chlorobenzene	10.0	10.2	102	70-130	
Ethylbenzene	10.0	10.1	101	70-130	
m,p-Xylene	20.0	20.0	100	70-130	
Xylene, o-	10.0	9.54	95	70-130	
Styrene	10.0	10.7	107	70-130	
Bromoform	10.0	10.8	108	70-130	
Cumene	10.0	10.1	101	70-130	
1,1,2,2-Tetrachloroethane	10.0	9.45	95	70-130	
n-Propylbenzene	10.0	10.7	107	70-130	
4-Ethyltoluene	10.0	11.2	112	70-130	
1,3,5-Trimethylbenzene	10.0	10.3	103	70-130	
2-Chlorotoluene	10.0	10.8	108	70-130	
tert-Butylbenzene	10.0	10.4	104	70-130	
1,2,4-Trimethylbenzene	10.0	10.6	106	70-130	
sec-Butylbenzene	10.0	10.9	109	70-130	
4-Isopropyltoluene	10.0	11.2	112	70-130	
1,3-Dichlorobenzene	10.0	10.8	109	70-130	
1,4-Dichlorobenzene	10.0	10.9	109	70-130	
Benzyl chloride	10.0	12.4	124	70-130	
n-Butylbenzene	10.0	11.8	118	70-130	
1,2-Dichlorobenzene	10.0	10.7	107	70-130	
1,2,4-Trichlorobenzene	10.0	11.7	117	70-130	
Hexachlorobutadiene	10.0	10.3	103	70-130	
Naphthalene	10.0	13.4	134	70-130	*

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-10420-1 Analy Batch No.: 36363

SDG No.: 200-10420

Instrument ID: G.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2012 18:09 Calibration End Date: 04/06/2012 10:08 Calibration ID: 14455

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-36363/3	ggj003.d
Level 2	IC 200-36363/4	ggj004.d
Level 3	IC 200-36363/5	ggj005.d
Level 4	IC 200-36363/22	ggj022.d
Level 5	ICIS 200-36363/7	ggj007.d
Level 6	IC 200-36363/8	ggj008.d
Level 7	IC 200-36363/9	ggj009.d
Level 8	IC 200-36363/10	ggj010.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.2584	0.2532	0.2646 0.2428	0.2646	0.2605	Ave		0.2573				3.2		30.0			
Freon 22	+++++ 0.9173	0.9081	0.9583 0.8777	1.0195	0.9427	Ave		0.9372				5.2		30.0			
Chloromethane	+++++ 0.3674	0.3583	0.3995 0.3498	0.4073	0.3679	Ave		0.3751				6.2		30.0			
Dichlorodifluoromethane	+++++ 2.4462	2.3907	2.5155 2.3113	2.7004	2.4592	Ave		2.4705				5.3		30.0			
n-Butane	+++++ 0.5584	0.5626	0.6171 0.5449	0.6144	0.5734	Ave		0.5785				5.2		30.0			
1,3-Butadiene	+++++ 0.3346	0.3689 0.3236	0.3266 0.3149	0.3562	0.3231	Ave		0.3355				5.9		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.2557	2.1783 2.2020	2.3348 2.1278	2.5082	2.2689	Ave		2.2680				5.5		30.0			
Vinyl chloride	0.5873 0.5323	0.5210 0.5274	0.5441 0.5142	0.5836	0.5381	Ave		0.5435				5.1		30.0			
Chloroethane	+++++ 0.2576	0.2518	0.2633 0.2493	0.2527	0.2520	Ave		0.2545				2.0		30.0			
Isopentane	+++++ 0.4184	0.5129 0.4064	0.4526 0.4065	0.4366	0.4180	Ave		0.4354				8.7		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.8639	0.9023 0.8702	0.8420 0.8523	0.9030	0.8697	Ave		0.8719				2.7		30.0			
Bromomethane	+++++ 0.8070	0.8198 0.8019	0.7362 0.7817	0.8671	0.8049	Ave		0.8028				4.9		30.0			
n-Pentane	+++++ 0.6097	0.5960	0.5988 0.5905	0.6293	0.5932	Ave		0.6029				2.4		30.0			
Ethanol	+++++ 0.1112	0.1122	0.1149 0.1058	0.0773	0.1110	Ave		0.1054				13.3		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-10420-1 Analy Batch No.: 36363

SDG No.: 200-10420

Instrument ID: G.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2012 18:09 Calibration End Date: 04/06/2012 10:08 Calibration ID: 14455

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Acrolein	+++++ 0.1413	0.1380	0.1387	0.1109	0.1372	Ave		0.1332				9.4		30.0			
Ethyl ether	+++++ 0.3118	0.3346 0.3012	0.2922 0.2918	0.2667	0.2984	Ave		0.2995				6.9		30.0			
Trichlorofluoromethane	+++++ 2.7640	3.0510 2.7308	2.8305 2.6876	3.0145	2.7677	Ave		2.8351				5.0		30.0			
Freon TF	+++++ 1.7270	1.8048 1.7230	1.7407 1.6807	1.8341	1.7218	Ave		1.7475				3.0		30.0			
1,1-Dichloroethene	+++++ 0.6999	0.7268 0.7041	0.7200 0.6937	0.7517	0.6977	Ave		0.7134				2.9		30.0			
Acetonitrile	+++++ 0.2156	0.2092	0.1808	0.1707	0.1926	Ave		0.1938				9.7		30.0			
tert-Butyl alcohol	+++++ 0.8810	0.8562	0.8169	0.8373	0.8438	Ave		0.8470				2.8		30.0			
3-Chloropropene	+++++ 0.4600	0.4777 0.4559	0.4161 0.4396	0.4453	0.4681	Ave		0.4492				4.2		30.0			
Acetone	+++++ 0.6934	0.6543	0.6289	0.5925	0.6749	Ave		0.6488				6.1		30.0			
Acrylonitrile	+++++ 0.2635	0.2496	0.2461 0.2536	0.2122	0.2533	Ave		0.2464				7.2		30.0			
Methyl tert-butyl ether	+++++ 1.8582	1.8743 1.7936	1.7377 1.7298	1.5466	1.7747	Ave		1.7595				6.2		30.0			
Isopropyl alcohol	+++++ 0.4524	0.4391	0.4031	0.4249	0.4575	Ave		0.4354				5.1		30.0			
Carbon disulfide	+++++ 1.8442	1.8395	1.7808 1.8156	1.9784	1.8563	Ave		1.8525				3.6		30.0			
Vinyl acetate	+++++ 0.8814	0.8558	0.8498	0.6692	0.8352	Ave		0.8186				10.4		30.0			
1,1-Dichloroethane	+++++ 1.0521	1.1386 1.0328	1.1288 1.0322	1.0662	1.0598	Ave		1.0730				4.1		30.0			
Methylene Chloride	+++++ 0.5266	0.5183	0.6178 0.4994	0.5515	0.5344	Ave		0.5413				7.6		30.0			
Ethyl acetate	+++++ 0.0430	0.0422	0.0403	0.0333	0.0414	Ave		0.0400				9.7		30.0			
trans-1,2-Dichloroethene	+++++ 0.9053	0.8782 0.8902	0.8767 0.8731	0.9606	0.9117	Ave		0.8994				3.4		30.0			
Methyl Ethyl Ketone	+++++ 0.2257	0.2184	0.2332 0.2140	0.1778	0.2165	Ave		0.2143				8.9		30.0			
Tetrahydrofuran	+++++ 0.0867	0.0821	0.0817	0.0653	0.0790	Ave		0.0790				10.3		30.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-10420-1 Analy Batch No.: 36363

SDG No.: 200-10420

Instrument ID: G.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2012 18:09 Calibration End Date: 04/06/2012 10:08 Calibration ID: 14455

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Hexane	+++++ 0.6702	0.7848 0.6612	0.6572 0.6614	0.6903	0.6667	Ave		0.6851				6.6		30.0			
2,2,4-Trimethylpentane	+++++ 0.5753	0.5869 0.5592	0.5400 0.5803	0.5518	0.5573	Ave		0.5646				3.0		30.0			
1,2-Dichloroethane	+++++ 0.2517	0.2821 0.2353	0.2709 0.2537	0.2212	0.2431	Ave		0.2512				8.2		30.0			
n-Butanol	+++++ 0.0423	0.0419	0.0404	0.0383	0.0382	Ave		0.0402				4.8		30.0			
cis-1,2-Dichloroethene	+++++ 0.7875	0.8951 0.7742	0.8028 0.7770	0.7409	0.7906	Ave		0.7954				6.0		30.0			
Chloroform	+++++ 1.6544	1.7853 1.6081	1.6526 1.6178	1.5904	1.6450	Ave		1.6505				3.9		30.0			
1,4-Dioxane	+++++ 0.0641	0.0608	0.0570	0.0540	0.0618	Ave		0.0596				6.8		30.0			
1,1,1-Trichloroethane	+++++ 0.5654	0.6163 0.5535	0.5521 0.5658	0.5873	0.5536	Ave		0.5708				4.1		30.0			
Cyclohexane	+++++ 0.2325	0.2207 0.2274	0.2254 0.2336	0.2365	0.2199	Ave		0.2281				2.8		30.0			
Methyl methacrylate	+++++ 0.1215	0.1197	0.1095 0.1225	0.0837	0.1091	Ave		0.1110				13.2		30.0			
Carbon tetrachloride	0.6904 0.6701	0.6567 0.6630	0.6213 0.6774	0.6961	0.6555	Ave		0.6665				3.5		30.0			
Benzene	+++++ 0.4407	0.5038 0.4268	0.4871 0.4594	0.3843	0.4158	Ave		0.4455				9.3		30.0			
n-Heptane	+++++ 0.1549	0.1950 0.1517	0.1565 0.1628	0.1346	0.1489	Ave		0.1578				11.8		30.0			
methyl isobutyl ketone	+++++ 0.1940	0.1862	0.1737 0.1867	0.1494	0.1776	Ave		0.1780				8.8		30.0			
cis-1,3-Dichloropropene	+++++ 0.2217	0.2236 0.2035	0.2231 0.2126	0.1743	0.2055	Ave		0.2093				8.3		30.0			
Trichloroethene	0.2687 0.2351	0.2853 0.2175	0.2723 0.2349	0.2125	0.2385	Ave		0.2457				10.9		30.0			
n-Octane	+++++ 0.2082	0.2429 0.2004	0.2012 0.2192	0.1655	0.1873	Ave		0.2036				11.9		30.0			
1,2-Dichloropropane	+++++ 0.1286	0.1380 0.1227	0.1214 0.1303	0.1065	0.1175	Ave		0.1236				8.2		30.0			
Dibromomethane	+++++ 0.2705	0.3471 0.2545	0.3155 0.2756	0.2346	0.2722	Ave		0.2815				13.5		30.0			
Bromodichloromethane	+++++ 0.4140	0.4099 0.3919	0.4255 0.4196	0.3581	0.4004	Ave		0.4029				5.6		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-10420-1 Analy Batch No.: 36363

SDG No.: 200-10420

Instrument ID: G.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2012 18:09 Calibration End Date: 04/06/2012 10:08 Calibration ID: 14455

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.3649	0.3723 0.3493	0.3422 0.3616	0.2972	0.3068	Ave		0.3420				8.5		30.0			
n-Nonane	+++++ 0.2351	0.2296 0.2280	0.1956 0.2304	0.1806	0.1984	Ave		0.2140				10.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.2354	0.2260 0.2172	0.2121 0.2218	0.1748	0.2163	Ave		0.2149				9.0		30.0			
1,1,2-Trichloroethane	+++++ 0.1668	0.1599 0.1575	0.1641 0.1545	0.1417	0.1463	Ave		0.1558				5.9		30.0			
Tetrachloroethene	+++++ 0.4322	0.5337 0.4117	0.4847 0.4304	0.3888	0.3869	Ave		0.4384				12.2		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.1857	0.1816	0.1734 0.1699	0.1577	0.1634	Ave		0.1720				6.2		30.0			
n-Decane	+++++ 0.2630	0.2487	0.1895 0.2465	0.1855	0.2213	Ave		0.2258				14.4		30.0			
Dibromochloromethane	+++++ 0.5235	0.4869 0.4987	0.4913 0.5092	0.4312	0.4516	Ave		0.4846				6.7		30.0			
1,2-Dibromoethane	+++++ 0.3480	0.3523 0.3217	0.3530 0.3135	0.2888	0.3090	Ave		0.3266				7.7		30.0			
2-Chlorotoluene	+++++ 0.8275	0.7294 0.7851	0.6800 0.7894	0.6501	0.6943	Ave		0.7365				8.9		30.0			
n-Undecane	+++++ 0.2227	0.2140	0.2234	0.1642	0.1808	Ave		0.2010				13.4		30.0			
Chlorobenzene	+++++ 0.5180	0.5106 0.4883	0.5056 0.4994	0.4336	0.4430	Ave		0.4855				6.9		30.0			
Ethylbenzene	+++++ 0.8102	0.7180 0.7717	0.7112 0.7831	0.6265	0.6737	Ave		0.7278				8.9		30.0			
m,p-Xylene	+++++ 0.3355	0.2954 0.3243	0.2688 0.3365	0.2544	0.2786	Ave		0.2991				11.2		30.0			
Benzyl chloride	+++++ 0.4857	0.3014 0.4654	0.2801 0.4722	0.3253	0.3769	Ave		0.3867				22.6		30.0			
Xylene, o-	+++++ 0.3422	0.3050 0.3355	0.2892 0.3412	0.2669	0.2847	Ave		0.3092				9.9		30.0			
Styrene	+++++ 0.4660	0.3651 0.4455	0.3251 0.4559	0.3368	0.3823	Ave		0.3967				14.8		30.0			
Bromoform	+++++ 0.5115	0.4102 0.4862	0.3954 0.4905	0.3898	0.4294	Ave		0.4447				11.3		30.0			
Cumene	+++++ 1.0463	0.8790 1.0016	0.7988 1.0153	0.7825	0.8632	Ave		0.9124				11.8		30.0			
n-Dodecane	+++++ 0.1505	0.1401	0.1164	0.1243	0.1260	Ave		0.1314				10.4		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-10420-1 Analy Batch No.: 36363

SDG No.: 200-10420

Instrument ID: G.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2012 18:09 Calibration End Date: 04/06/2012 10:08 Calibration ID: 14455

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.4252	0.3794 0.4040	0.3431 0.3972	0.3394	0.3616	Ave		0.3786				8.5		30.0			
1,2,3-Trichloropropane	+++++ 0.3108	0.2931	0.2585 0.2862	0.2445	0.2595	Ave		0.2754				9.2		30.0			
n-Propylbenzene	+++++ 1.0246	0.8206 0.9875	0.7531 0.9794	0.7799	0.8511	Ave		0.8852				12.4		30.0			
4-Ethyltoluene	+++++ 0.9308	0.6899 0.8895	0.6761 0.9088	0.6877	0.7592	Ave		0.7917				14.4		30.0			
1,3,5-Trimethylbenzene	+++++ 0.8402	0.7144 0.7993	0.6400 0.8102	0.6225	0.6945	Ave		0.7316				11.8		30.0			
Alpha Methyl Styrene	+++++ 0.3939	0.2185 0.3797	0.2430 0.3876	0.2710	0.3137	Ave		0.3154				23.2		30.0			
tert-Butylbenzene	+++++ 0.8858	0.7266 0.8450	0.7119 0.8533	0.6687	0.7366	Ave		0.7754				10.8		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7947	0.6076 0.7614	0.5812 0.7660	0.5890	0.6527	Ave		0.6789				13.6		30.0			
sec-Butylbenzene	+++++ 1.1544	0.8943 1.1021	0.8553 1.1001	0.8662	0.9684	Ave		0.9916				12.7		30.0			
1,2,4-Trichlorobenzene	+++++ 0.2385	0.2342	0.1021 0.2518	0.1457	0.1723	Ave		0.1908				31.6		30.0			
4-Isopropyltoluene	+++++ 1.0474	0.7798 0.9907	0.7482 1.0014	0.7607	0.8651	Ave		0.8848				14.4		30.0			
1,3-Dichlorobenzene	+++++ 0.5439	0.4736 0.5211	0.3835 0.5338	0.3914	0.4388	Ave		0.4695				14.2		30.0			
1,4-Dichlorobenzene	+++++ 0.5012	0.4310 0.4826	0.3586 0.4979	0.3442	0.4040	Ave		0.4314				15.1		30.0			
n-Butylbenzene	+++++ 0.7157	0.4751 0.6745	0.4359 0.6720	0.4959	0.5767	Ave		0.5780				19.3		30.0			
1,2-Dichlorobenzene	+++++ 0.5527	0.4444 0.5283	0.3762 0.5376	0.4024	0.4506	Ave		0.4703				14.8		30.0			
1,2,3-Trichlorobenzene	+++++ 0.2322	0.1533 0.2256	0.1131 0.2328	0.1585	0.1699	Ave		0.1836				25.6		30.0			
Hexachlorobutadiene	+++++ 0.4212	0.3292 0.3872	0.3306 0.3693	0.3280	0.3473	Ave		0.3590				9.9		30.0			
Naphthalene	+++++ 0.4812	0.4626	0.2244 0.5055	0.3062	0.3425	Ave		0.3871				29.1		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-18504-1

7 Soil Samples,
1 Field Duplicate, and 2 Trip Blanks
Collected April 10-17, 2012

Prepared by: Donald Anné
May 10, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 7 soil samples, 1 field duplicate, and 1 trip blanks analyzed for volatiles, and 7 soil samples and 1 field duplicate analyzed semi-volatiles, PCB, and TAL metals.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive PCB result for PCB-1260 was flagged as "estimated" (J) in sample SS-A2 because the %D for PCB-1260 was above the allowable maximumin the associated continuing calibration.

- Positive metals results for aluminum were flagged as "estimated" (J) in all 7 soil samples and the field duplicate because 2 of 2 percent recoveries for aluminum were above control limits, but were not above 250% in the associated soil MS/MSD sample.

- Positive metal results for barium were flagged as "estimated" (J) in all 7 soil samples and the field duplicate because 2 of 2 percent recoveries for barium were above control limits, but only one was above 200% in the associated soil MS/MSD sample.

- Positive metal results for potassium were flagged as "estimated" (J) in all 7 soil samples and the field duplicate because 1 of 2 percent recoveries for potassium was above control limits, but was not above 200% in the associated soil MS/MSD sample.

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- Positive metal results for copper were flagged as "estimated" (J) in all 7 soil samples and the field duplicate because 2 of 2 percent recoveries for copper were below control limits, but were not below 10% in the associated soil MS/MSD sample.

- Positive metal results for calcium and magnesium were flagged as "estimated" (J) in all 7 soil samples and the field duplicate because relative percent differences for calcium and magnesium were above the allowable maximum in the associated soil MS/MSD sample.

- Positive metal results for arsenic, iron, and manganese were flagged as "estimated" (J) in samples SS-A1 and DUP-03 because relative percent differences for arsenic, iron and manganese were above the allowable maximum in the associated soil field duplicate pair SS-A1/DUP-03.

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

ALPHA GEOSCIENCE

Geology
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QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-18504-1

7 Soil Samples, 1 Field Duplicate,
and 2 Trip Blanks
Collected April 10-17, 2012

Prepared by: Donald Anné
May 10, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %D for dichlorodifluoromethane were above the allowable maximum (25%) on 04-15-12 (C18454.D). Positive results for dichlorodifluoromethane should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-60821/5 contained a trace of 2-hexanone (2.83 ug/kg). Positive results for 2-hexanone that are less than five times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximum, but 23 of 26 percent recoveries (%Rs) were below QC limits for soil MS/MSD sample SS-A3. The RPDs for spiked compounds were

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below the allowable maximum, but 24 of 26 %Rs were below QC limits for soil MS/MSD sample SS-A3 RA. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for the following aqueous and soil samples.

LCS 480-59670/5 LCS 480-59587/4 LCS 480-59671/6 LCS 480-59696/6
LCS 480-59974/6 LCS 480-60821/4 LCS 480-61401/4

Field Duplicates: The analyses of soil field duplicate pairs SS-A1/DUP-03 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8125.D

Lab ID: 480-18504-3 MS Client ID: SS-A3 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	54.2	ND	41.6	77	79-126	F
1,1-Dichloroethene	54.2	ND	30.2	56	65-153	F
1,2-Dichlorobenzene	54.2	ND	14.5	27	75-120	F
1,2-Dichloroethane	54.2	ND	39.3	72	77-122	F
Benzene	54.2	ND	38.3	71	79-127	F
Chlorobenzene	54.2	ND	28.1	52	76-124	F
cis-1,2-Dichloroethene	54.2	ND	37.2	69	81-117	F
Ethylbenzene	54.2	ND	29.2	54	80-120	F
Methyl tert-butyl ether	54.2	ND	39.8	73	63-125	
Tetrachloroethene	54.2	1.5 J	32.0	56	74-122	F
Toluene	54.2	ND	34.5	64	74-128	F
trans-1,2-Dichloroethene	54.2	ND	34.6	64	78-126	F
Trichloroethene	54.2	ND	30.7	57	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8126.D

Lab ID: 480-18504-3 MSD Client ID: SS-A3 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	54.2	43.4	80	4.08	30	79-126	
1,1-Dichloroethene	54.2	31.6	58	4.57	30	65-153	F
1,2-Dichlorobenzene	54.2	12.3	23	17.0	30	75-120	F
1,2-Dichloroethane	54.2	38.9	72	1.00	30	77-122	F
Benzene	54.2	38.5	71	1.00	30	79-127	F
Chlorobenzene	54.2	24.4	45	14.0	30	76-124	F
cis-1,2-Dichloroethene	54.2	35.1	65	5.70	30	81-117	F
Ethylbenzene	54.2	26.8	49	8.53	30	80-120	F
Methyl tert-butyl ether	54.2	42.3	78	6.08	30	63-125	
Tetrachloroethene	54.2	30.6	54	4.51	30	74-122	F
Toluene	54.2	32.9	61	4.83	30	74-128	F
trans-1,2-Dichloroethene	54.2	32.9	61	5.14	30	78-126	F
Trichloroethene	54.2	29.4	54	4.33	30	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8184.D

Lab ID: 480-18504-3 MS RA Client ID: SS-A3 MS RA

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	53.5	ND	29.8	56	79-126	F
1,1-Dichloroethene	53.5	ND	20.9	39	65-153	F
1,2-Dichlorobenzene	53.5	ND	13.4	25	75-120	F
1,2-Dichloroethane	53.5	ND	32.5	61	77-122	F
Benzene	53.5	ND	27.4	51	79-127	F
Chlorobenzene	53.5	ND	21.8	41	76-124	F
cis-1,2-Dichloroethene	53.5	ND	25.9	48	81-117	F
Ethylbenzene	53.5	ND	21.9	41	80-120	F
Methyl tert-butyl ether	53.5	ND	33.9	63	63-125	
Tetrachloroethene	53.5	ND	25.6	48	74-122	F
Toluene	53.5	ND	25.1	47	74-128	F
trans-1,2-Dichloroethene	53.5	ND	24.4	46	78-126	F
Trichloroethene	53.5	ND	22.8	43	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8185.D

Lab ID: 480-18504-3 MSD RA Client ID: SS-A3 MSD RA

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	49.8	27.2	55	9.21	30	79-126	F
1,1-Dichloroethene	49.8	18.4	37	12.3	30	65-153	F
1,2-Dichlorobenzene	49.8	10.3	21	26.2	30	75-120	F
1,2-Dichloroethane	49.8	31.5	63	3.17	30	77-122	F
Benzene	49.8	24.4	49	11.4	30	79-127	F
Chlorobenzene	49.8	17.7	36	20.6	30	76-124	F
cis-1,2-Dichloroethene	49.8	23.2	47	10.8	30	81-117	F
Ethylbenzene	49.8	17.8	36	20.5	30	80-120	F
Methyl tert-butyl ether	49.8	36.4	73	7.05	30	63-125	
Tetrachloroethene	49.8	20.3	41	22.8	30	74-122	F
Toluene	49.8	20.8	42	18.7	30	74-128	F
trans-1,2-Dichloroethene	49.8	21.0	42	14.8	30	78-126	F
Trichloroethene	49.8	18.9	38	18.4	30	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Lab Sample ID: CCVIS 480-59670/3 Calibration Date: 04/15/2012 09:57

Instrument ID: HP5973C Calib Start Date: 04/04/2012 15:34

GC Column: ZB-624 (30) ID: 0.53(mm) Calib End Date: 04/04/2012 19:16

Lab File ID: Ci8485.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2817	0.2033		18.0	25.0	-27.8	50.0
Chloromethane	Ave	0.3848	0.3146	0.1000	20.4	25.0	-18.2	50.0
Vinyl chloride	Ave	0.3693	0.3057		20.7	25.0	-17.2	20.0
Bromomethane	Ave	0.1837	0.1496		20.4	25.0	-18.6	50.0
Chloroethane	Ave	0.2090	0.1846		22.1	25.0	-11.7	50.0
Trichlorofluoromethane	Ave	0.4229	0.3844		22.7	25.0	-9.1	50.0
Acrolein	Ave	0.0354	0.0352		497	500	-0.6	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2441	0.2320		23.8	25.0	-5.0	50.0
1,1-Dichloroethene	Lin1F		0.2320	0.1000	23.8	25.0	-4.8	20.0
Acetone	Ave	0.1430	0.1575		138	125	10.1	50.0
Iodomethane	Ave	0.3363	0.3151		23.4	25.0	-6.3	50.0
Carbon disulfide	Lin1F		0.6699		22.6	25.0	-9.6	50.0
Methyl acetate	Ave	0.4798	0.4984		26.0	25.0	3.9	50.0
Acetonitrile	Ave	0.0357	0.0347		974	1000	-2.7	50.0
Methylene Chloride	Ave	0.3119	0.2861		22.9	25.0	-8.3	50.0
Methyl tert-butyl ether	Ave	0.9780	0.9643		24.7	25.0	-1.4	50.0
trans-1,2-Dichloroethene	Ave	0.3033	0.2643		21.8	25.0	-12.9	50.0
Acrylonitrile	Ave	0.1539	0.1609		131	125	4.6	50.0
Vinyl acetate	Ave	0.7445	0.7811		131	125	4.9	50.0
1,1-Dichloroethane	Ave	0.5607	0.5337		23.8	25.0	-4.8	50.0
2-Butanone (MEK)	Ave	0.2194	0.2290		131	125	4.4	50.0
2,2-Dichloropropane	Ave	0.4518	0.4159		23.0	25.0	-7.9	50.0
cis-1,2-Dichloroethene	Lin1F		0.3012		24.3	25.0	-2.8	50.0
Bromochloromethane	Ave	0.1584	0.1508		23.8	25.0	-4.8	50.0
Chloroform	Ave	0.5222	0.4921		23.6	25.0	-5.8	20.0
Tetrahydrofuran	Ave	0.1435	0.1502		131	125	4.7	50.0
1,1,1-Trichloroethane	Ave	0.4340	0.4061		23.4	25.0	-6.4	50.0
Cyclohexane	Ave	0.5046	0.4814		23.9	25.0	-4.6	50.0
1,1-Dichloropropene	Ave	0.4076	0.3629		22.3	25.0	-11.0	50.0
Carbon tetrachloride	Ave	0.3694	0.3525		23.9	25.0	-4.6	50.0
Benzene	Ave	1.138	1.057		23.2	25.0	-7.2	50.0
1,2-Dichloroethane	Ave	0.4904	0.4773		24.3	25.0	-2.7	50.0
Trichloroethene	Ave	0.2963	0.2688		22.7	25.0	-9.3	50.0
Methylcyclohexane	Ave	0.4382	0.4287		24.5	25.0	-2.2	50.0
1,2-Dichloropropane	Ave	0.3103	0.2999		24.2	25.0	-3.4	20.0
Dibromomethane	Ave	0.1973	0.1882		23.9	25.0	-4.6	50.0
Bromodichloromethane	Ave	0.3775	0.3599		23.8	25.0	-4.7	50.0
2-Chloroethyl vinyl ether	Ave	0.2247	0.2363		132	125	5.2	50.0
trans-1,3-Dichloropropene	Ave	0.8878	0.7937		22.4	25.0	-10.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8219	0.8358		127	125	1.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Lab Sample ID: CCVIS 480-59670/3 Calibration Date: 04/15/2012 09:57

Instrument ID: HP5973C Calib Start Date: 04/04/2012 15:34

GC Column: ZB-624 (30) ID: 0.53(mm) Calib End Date: 04/04/2012 19:16

Lab File ID: C18485.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.302	1.159		22.3	25.0	-11.0	20.0
Ethyl methacrylate	Ave	0.7080	0.7047		24.9	25.0	-0.5	50.0
cis-1,3-Dichloropropene	Ave	0.4448	0.4234		23.8	25.0	-4.8	50.0
1,1,2-Trichloroethane	Ave	0.4334	0.3972		22.9	25.0	-8.4	50.0
2-Hexanone	Ave	0.5837	0.5960		128	125	2.1	50.0
Tetrachloroethene	Ave	0.5543	0.4750		21.4	25.0	-14.3	50.0
1,3-Dichloropropane	Ave	0.9137	0.8319		22.8	25.0	-9.0	50.0
Dibromochloromethane	Ave	0.5417	0.5005		23.1	25.0	-7.6	50.0
1,2-Dibromoethane	Ave	0.5373	0.4940		23.0	25.0	-8.1	50.0
Chlorobenzene	Ave	1.440	1.282	0.3000	22.3	25.0	-11.0	50.0
Ethylbenzene	Ave	2.517	2.198		21.8	25.0	-12.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5192	0.4679		22.5	25.0	-9.9	50.0
m,p-Xylene	Ave	0.9673	0.8582		44.4	50.0	-11.3	50.0
o-Xylene	Ave	0.9625	0.8355		21.7	25.0	-13.2	50.0
Styrene	Ave	1.424	1.274		22.4	25.0	-10.6	50.0
Isopropylbenzene	Ave	2.621	2.327		22.2	25.0	-11.2	50.0
Bromoform	Ave	0.3581	0.3353	0.1000	23.4	25.0	-6.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8475	0.7626	0.3000	22.5	25.0	-10.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3034	0.3078		127	125	1.5	50.0
N-Propylbenzene	Ave	3.340	2.993		22.4	25.0	-10.4	50.0
1,2,3-Trichloropropane	Ave	0.2664	0.2431		22.8	25.0	-8.7	50.0
Bromobenzene	Ave	0.6509	0.5910		22.7	25.0	-9.2	50.0
1,3,5-Trimethylbenzene	Ave	2.181	1.913		21.9	25.0	-12.3	50.0
2-Chlorotoluene	Ave	0.6329	0.5515		21.8	25.0	-12.9	50.0
4-Chlorotoluene	Ave	0.6441	0.5684		22.1	25.0	-11.7	50.0
tert-Butylbenzene	Ave	0.4487	0.3902		21.7	25.0	-13.0	50.0
1,2,4-Trimethylbenzene	Ave	2.226	1.978		22.2	25.0	-11.1	50.0
sec-Butylbenzene	Ave	2.768	2.411		21.8	25.0	-12.9	50.0
4-Isopropyltoluene	Ave	2.256	1.941		21.5	25.0	-14.0	50.0
1,3-Dichlorobenzene	Ave	1.251	1.093		21.8	25.0	-12.6	50.0
1,4-Dichlorobenzene	Ave	1.279	1.128		22.0	25.0	-11.8	50.0
n-Butylbenzene	Ave	2.177	1.863		21.4	25.0	-14.4	50.0
1,2-Dichlorobenzene	Ave	1.211	1.081		22.3	25.0	-10.7	50.0
1,2-Dibromo-3-Chloropropane	LinF		0.1656		22.3	25.0	-10.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8953	0.7706		21.5	25.0	-13.9	50.0
Hexachlorobutadiene	Ave	0.3367	0.2651		19.7	25.0	-21.3	50.0
Naphthalene	Ave	2.704	2.411		22.3	25.0	-10.8	50.0
1,2,3-Trichlorobenzene	Ave	0.8492	0.7401		21.8	25.0	-12.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2042	0.1796		22.0	25.0	-12.1	50.0
Toluene-d8 (Surr)	Ave	2.000	1.730		21.6	25.0	-13.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6341	0.5633		22.2	25.0	-11.2	50.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-60821/5

Matrix: Solid Lab File ID: F8312.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/20/2012 22:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 60821 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
591-78-6	2-Hexanone	2.83	J	25	2.5
78-93-3	2-Butanone (MEK)	ND		25	1.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-60821/5

Matrix: Solid Lab File ID: F8312.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/20/2012 22:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 60821 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5.0	0.93
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	ND		5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	ND		5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	ND		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		64-126
2037-26-5	Toluene-d8 (Surr)	96		71-125
460-00-4	4-Bromofluorobenzene (Surr)	91		72-126

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QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-18504-1

7 Soil Samples and 1 Field Duplicate Collected April 10-17, 2012

Prepared by: Donald Anné
May 10, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for 4-chloroaniline, 3-nitroaniline, and 3,3'-dichlorobenzidine were above the allowable maximum (25%) on 04-17-12 (W13938.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of three base/neutral surrogate recoveries for sample SS-A6 was below control limits, but was not below 10%. No action is taken on one surrogate per fraction outside control limits, provided the recovery is not less than10%.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries were within QC limits for soil

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MS/MSD sample SS-A3. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for soil samples LCS 480-59470/2-A and LCS 480-60404/2-A.

Field Duplicates: The relative percent differences for applicable compounds were below the allowable maximum (35%) for soil field duplicate pair SS-A1/DUP-03 (attached table), as required.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-18504-1

S1= SS-A1 **S2=** DUP-03

Analyte	S1	S2	RPD (%)
2-methylnaphthalene	**57**	**55**	NC
acenaphthene	**27**	**33**	NC
acenaphthylene	**130**	**98**	NC
anthracene	**120**	**240**	NC
benzo(a)anthracene	1300	1200	8%
benzo(a)pyrene	1700	1500	13%
benzo(b)fluoranthene	3100	2900	7%
benzo(g,h,i)perylene	**600**	**610**	NC
benzo(k)fluoranthene	1400	1300	7%
carbazole	**72**	**97**	NC
chrysene	1700	1600	6%
dibenz(a,h)anthracene	**210**	**200**	NC
dibenzofuran	**31**	**35**	NC
fluoranthene	1800	1700	6%
fluorene	ND	**29**	NC
indeno(1,2,3-cd)pyrene	**570**	**560**	NC
phenanthrene	**600**	**560**	7%
pyrene	1700	1400	19%

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #	
SS-A1	480-18504-1	73	84	81	93	92	102	
SS-A2	480-18504-2	76	85	83	94	94	102	
SS-A3	480-18504-3	81	89	89	97	98	103	
SS-A4	480-18504-4	60	67	66	77	96	91	
SS-A5	480-18504-5	73	84	82	91	91	100	
SS-A7	480-18504-6	62	72	69	79	95	88	
DUP-03	480-18504-7	70	80	80	89	89	94	
SS-A6	480-18798-1	45	45	44	59	54	64	X
	MB 480-59470/1-A	83	88	89	92	102	110	
	MB 480-60404/1-A	76	79	78	89	108	113	
	LCS 480-59470/2-A	85	89	91	93	103	110	
	LCS 480-60404/2-A	77	81	80	91	112	109	
SS-A3 MS	480-18504-3 MS	91	97	94	100	106	118	
SS-A3 MSD	480-18504-3 MSD	92	97	97	103	109	116	

	QC LIMITS
2FP = 2-Fluorophenol	18-120
PHL = Phenol-d5	11-120
NBZ = Nitrobenzene-d5	34-132
FBP = 2-Fluorobiphenyl	37-120
TBP = 2,4,6-Tribromophenol	39-146
TPH = p-Terphenyl-d14	65-153

Column to be used to flag recovery values

FORM II 8270C

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Lab Sample ID: ICV 480-59982/3 Calibration Date: 04/17/2012 10:29

Instrument ID: HP5973W Calib Start Date: 04/16/2012 13:36

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 04/16/2012 15:44

Lab File ID: W13938.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Ave	0.2262	0.2375	0.0500	52500	50000	5.0	25.0
2,4-Dinitrotoluene	Ave	0.3877	0.4285	0.0100	55300	50000	10.5	25.0
Dibenzofuran	Ave	1.517	1.595	0.0100	52600	50000	5.1	25.0
Diethyl phthalate	Ave	1.212	1.308	0.0100	54000	50000	8.0	25.0
Fluorene	Ave	1.239	1.350	0.0100	54500	50000	9.0	25.0
4-Chlorophenyl phenyl ether	Ave	0.6050	0.6628	0.0100	54800	50000	9.6	25.0
4-Nitroaniline	Ave	0.3242	0.3268	0.0100	50400	50000	0.8	25.0
4,6-Dinitro-2-methylphenol	Linl		0.1407	0.0100	47200	50000	-5.6	25.0
N-Nitrosodiphenylamine	Ave	0.5033	0.5386	0.0100	53500	50000	7.0	25.0
1,2-Diphenylhydrazine	Ave	1.572	1.693	0.0100	53800	50000	7.7	25.0
4-Bromophenyl phenyl ether	Ave	0.2032	0.2090	0.0100	51400	50000	2.9	25.0
Hexachlorobenzene	Ave	0.2244	0.2272	0.0100	50600	50000	1.3	25.0
Pentachlorophenol	Linl		0.1511	0.0100	50700	50000	1.4	25.0
Phenanthrene	Ave	1.109	1.150	0.0100	51800	50000	3.6	25.0
Anthracene	Ave	1.120	1.177	0.0100	52500	50000	5.1	25.0
Carbazole	Ave	1.005	1.063	0.0100	52900	50000	5.8	25.0
Di-n-butyl phthalate	Ave	1.182	1.276	0.0100	54000	50000	8.0	25.0
Fluoranthene	Ave	1.189	1.233	0.0100	51900	50000	3.8	25.0
Benzidine	Ave	0.6869	0.2092	0.0100	15200	50000	-69.5*	25.0
Pyrene	Ave	1.193	1.241	0.0100	52000	50000	4.1	25.0
Butyl benzyl phthalate	Ave	0.5302	0.5697	0.0100	53700	50000	7.4	25.0
3,3'-Dichlorobenzidine	Ave	0.4190	0.2745	0.0100	32800	50000	-34.5*	25.0
Bis(2-ethylhexyl) phthalate	Ave	0.7459	0.8356	0.0100	56000	50000	12.0	25.0
Benzo(a)anthracene	Ave	1.172	1.196	0.0100	51000	50000	2.0	25.0
Chrysene	Ave	1.129	1.154	0.0100	51100	50000	2.2	25.0
Di-n-octyl phthalate	Linl		1.374	0.0100	50900	50000	1.8	25.0
Benzo(b)fluoranthene	Ave	1.063	1.029	0.0100	48400	50000	-3.2	25.0
Benzo(k)fluoranthene	Ave	1.058	1.164	0.0100	55000	50000	10.0	25.0
Benzo(a)pyrene	Ave	0.9011	0.9300	0.0100	51600	50000	3.2	25.0
Indeno(1,2,3-cd)pyrene	Ave	1.095	1.196	0.0100	54600	50000	9.2	25.0
Dibenz(a,h)anthracene	Ave	0.9750	1.068	0.0100	54800	50000	9.5	25.0
Benzo(g,h,i)perylene	Ave	0.9083	0.9112	0.0100	50200	50000	0.3	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Lab Sample ID: ICV 480-59982/3 Calibration Date: 04/17/2012 10:29

Instrument ID: HP5973W Calib Start Date: 04/16/2012 13:36

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 04/16/2012 15:44

Lab File ID: W13938.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	1.007	1.066	0.0100	52900	50000	5.8	25.0
Pyridine	Ave	1.367	1.422	0.0100	52000	50000	4.0	25.0
Phenol	Ave	2.044	2.152	0.0100	52700	50000	5.3	25.0
Aniline	Ave	2.450	1.469	0.0100	30000	50000	-40.0*	25.0
Bis(2-chloroethyl)ether	Ave	1.600	1.695	0.0100	53000	50000	5.9	25.0
2-Chlorophenol	Ave	1.524	1.573	0.0100	51600	50000	3.2	25.0
1,3-Dichlorobenzene	Ave	1.578	1.650	0.0100	52300	50000	4.6	25.0
1,4-Dichlorobenzene	Ave	1.622	1.686	0.0100	52000	50000	4.0	25.0
Benzyl alcohol	Ave	1.060	1.116	0.0100	52600	50000	5.3	25.0
1,2-Dichlorobenzene	Ave	1.516	1.593	0.0100	52600	50000	5.1	25.0
2-Methylphenol	Ave	1.453	1.584	0.0100	54500	50000	9.0	25.0
bis (2-chloroisopropyl) ether	Ave	2.592	2.815	0.0100	54300	50000	8.6	25.0
4-Methylphenol	Ave	1.523	1.718	0.0100	113000	100000	12.8	25.0
N-Nitrosodi-n-propylamine	Ave	1.229	1.389	0.0500	56500	50000	13.1	25.0
Hexachloroethane	Ave	0.6127	0.6624	0.0100	54100	50000	8.1	25.0
Nitrobenzene	Ave	0.4500	0.4401	0.0100	48900	50000	-2.2	25.0
Isophorone	Ave	0.7759	0.7830	0.0100	50500	50000	0.9	25.0
2-Nitrophenol	Ave	0.1831	0.1781	0.0100	48600	50000	-2.7	25.0
2,4-Dimethylphenol	Ave	0.3948	0.4004	0.0100	50700	50000	1.4	25.0
Tetraethyl lead	Ave	0.1394	0.1350	0.0100	24200	25000	-3.1	25.0
Bis(2-chloroethoxy)methane	Ave	0.4413	0.4476	0.0100	50700	50000	1.4	25.0
Benzoic acid	Ave	0.3216	0.2780	0.0100	41100	47500	-13.6	25.0
2,4-Dichlorophenol	Ave	0.2954	0.2910	0.0100	49300	50000	-1.5	25.0
1,2,4-Trichlorobenzene	Ave	0.3165	0.3117	0.0100	49200	50000	-1.5	25.0
Naphthalene	Ave	1.057	1.058	0.0100	50100	50000	0.1	25.0
4-Chloroaniline	Ave	0.4450	0.3061	0.0100	29600	43000	-31.2*	25.0
Hexachlorobutadiene	Ave	0.1821	0.1792	0.0100	49200	50000	-1.6	25.0
4-Chloro-3-methylphenol	Ave	0.3353	0.3407	0.0100	50800	50000	1.6	25.0
2-Methylnaphthalene	Ave	0.6688	0.6638	0.0100	49600	50000	-0.7	25.0
Hexachlorocyclopentadiene	Ave	0.3397	0.3626	0.0500	53400	50000	6.7	25.0
2,4,6-Trichlorophenol	Ave	0.3362	0.3406	0.0100	50700	50000	1.3	25.0
2,4,5-Trichlorophenol	Ave	0.3631	0.3812	0.0100	52500	50000	5.0	25.0
2-Chloronaphthalene	Ave	1.069	1.120	0.0100	52400	50000	4.8	25.0
2-Nitroaniline	Ave	0.3914	0.4290	0.0100	54800	50000	9.6	25.0
Dimethyl phthalate	Ave	1.261	1.327	0.0100	52600	50000	5.2	25.0
2,6-Dinitrotoluene	Ave	0.2746	0.3074	0.0100	56000	50000	11.9	25.0
Acenaphthylene	Ave	1.673	1.791	0.0100	53500	50000	7.1	25.0
3-Nitroaniline	Ave	0.3209	0.2383	0.0100	35600	48000	-25.7*	25.0
Acenaphthene	Ave	1.104	1.142	0.0100	51700	50000	3.5	25.0
2,4-Dinitrophenol	Lin1		0.1642	0.0500	45800	50000	-8.4	25.0

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QA/QC Review of Method 8082 PCB Data for
TestAmerica Buffalo, Job No: 480-18504-1

7 Soil Samples, and 1 Field Duplicate
Collected April 10-17, 2012

Prepared by: Donald Anné
May 10, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analyses of method blanks reported target PCBs as not detected.

Surrogate Recovery: The surrogates recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples SS-A3 and SS-A6.

Laboratory Control Sample: The percent recoveries for PCB-1016 and PCB-1260 were within QC limits for soil samples LCS 480-59463/2-A and LCS 480-60652/2-A.

Field Duplicates: The analyses of soil field duplicate pair SS-A1/DUP-03 reported target PCBs as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pairs were acceptable.

Initial Calibration: The %RSDs for PCB-1016 and PCB-1260 were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-13-12 (CCV480-59465/35) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-14-12 (CCV480-59465/48) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-21-12 (CCV480-60848/38) for the ZB-5 column. Positive results for PCB-1016 and PCB-1260 should be considered estimated in associated samples.

PCB Identification Summary for Multicomponent Analytes: The checked surrogates and PCBs were within GC quantitation limits. The %D for dual column quantitation of PCB-1260 was below the allowable maximum (25%) for sample SS-A2, as required.

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FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Lab Sample ID: CCV 480-59465/48 Calibration Date: 04/14/2012 06:53

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_164_240.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	335334		0.735	0.500	47.0*	15.0
PCB-1016 Peak 2	Ave	119908	188372		0.786	0.500	57.1*	15.0
PCB-1016 Peak 3	Ave	331581	458322		0.691	0.500	38.2*	15.0
PCB-1016 Peak 4	Ave	133756	228772		0.855	0.500	71.0*	15.0
PCB-1260 Peak 1	Ave	272257	395806		0.727	0.500	45.4*	15.0
PCB-1260 Peak 2	Ave	438611	576560		0.657	0.500	31.5*	15.0
PCB-1260 Peak 3	Ave	177029	257750		0.728	0.500	45.6*	15.0
PCB-1260 Peak 4	Ave	124111	149216		0.601	0.500	20.2*	15.0
Tetrachloro-m-xylene	Lin1		5896167		0.0401	0.0300	33.7*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6668600		0.0433	0.0300	44.4*	15.0

average %D - PCB-1016 = 53.3%

" " PCB-1260 = 35.7%

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Lab Sample ID: CCV 480-59465/35 Calibration Date: 04/13/2012 19:29

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_164_233.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	320008		0.701	0.500	40.3*	15.0
PCB-1016 Peak 2	Ave	119908	171746		0.716	0.500	43.2*	15.0
PCB-1016 Peak 3	Ave	331581	428542		0.646	0.500	29.2*	15.0
PCB-1016 Peak 4	Ave	133756	219650		0.821	0.500	64.2*	15.0
PCB-1260 Peak 1	Ave	272257	336868		0.619	0.500	23.7*	15.0
PCB-1260 Peak 2	Ave	438611	486722		0.555	0.500	11.0	15.0
PCB-1260 Peak 3	Ave	177029	250046		0.706	0.500	41.2*	15.0
PCB-1260 Peak 4	Ave	124111	148312		0.598	0.500	19.5*	15.0
Tetrachloro-m-xylene	Lin1		5735033		0.0390	0.0300	30.0*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6851133		0.0445	0.0300	48.4*	15.0

average %D PCB-1016 = 44.2%
" " PCB-1260 = 23.9%

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18504-1

SDG No.:

Lab Sample ID: CCV 480-60848/38 Calibration Date: 04/21/2012 13:54

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_165_236.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	352394		0.772	0.500	54.5*	15.0
PCB-1016 Peak 2	Ave	119908	198254		0.827	0.500	65.3*	15.0
PCB-1016 Peak 3	Ave	331581	477158		0.720	0.500	43.9*	15.0
PCB-1016 Peak 4	Ave	133756	240386		0.899	0.500	79.7*	15.0
PCB-1260 Peak 1	Ave	272257	442402		0.813	0.500	62.5*	15.0
PCB-1260 Peak 2	Ave	438611	610458		0.696	0.500	39.2*	15.0
PCB-1260 Peak 3	Ave	177029	269924		0.762	0.500	52.5*	15.0
PCB-1260 Peak 4	Ave	124111	155574		0.627	0.500	25.4*	15.0
Tetrachloro-m-xylene	Lin1		6125167		0.0416	0.0300	38.7*	15.0
DCB Decachlorobiphenyl	Ave	4617528	7504067		0.0488	0.0300	62.5*	15.0

average %D PCB-1016 = 60.9%

" " PCB-1260 = 44.9%

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QA/QC Review of TAL Metals Data for
TestAmerica Buffalo, Job No: 480-18504-1

7 Soil Samples and 1 Field Duplicate
Collected April 10-17, 2012

Prepared by: Donald Anné
May 10, 2012

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRQL standard samples CRI 480-59704/15, CRI 480-59955/7, CRI 480-60990/7, CRI 480-60889/7, CRA 480-59512/3, and CRA 480-61078/3.

Blanks: The analyses of initial calibration and continuing calibration, and method blanks reported TAL metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries (%Rs) for aluminum were above control limits (75-125%), but were not above 250% for soil MS/MSD sample SS-A3. Since aluminum is a naturally occurring metal, positive for aluminum should be considered estimated (J) in associated soil samples.

Two of two %Rs for barium were above control limits (75-125%), but only one was above 200% for soil MS/MSD sample SS-A3. Positive for barium should be considered estimated (J) in associated soil samples.

One of two %Rs for potassium was above control limits (75-125%), but was not above 200% for soil MS/MSD sample SS-A3. Positive for potassium should be considered estimated (J) in associated soil samples.

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Two of two %Rs for copper were below control limits (75-125%), but were not below 10% for soil MS/MSD sample SS-A3. Positive and "not detected" results for copper should be considered estimated (J) in associated soil samples.

Laboratory Duplicates: The relative percent differences for barium, calcium, and magnesium was above the allowable maximum (35%) in soil MS/MSD sample SS-A3. Positive results for barium, calcium, and magnesium should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent differences for arsenic, copper, iron, and manganese were above the allowable maximum (35%) for soil field duplicate pair SS-A1/DUP-03 (attached table). Positive results for arsenic, copper, iron, and manganese should be considered estimated (J) in samples SS-A1 and DUP-03.

Laboratory Control Sample: The percent recoveries for TAL metals were within QC limits in soil samples LCSSRM 480-59481/2-A, LCSSRM 480-60688/2-A, LCSSRM 480-60688/2-A, LCSSRM 480-59400/2-A, and LCSSRM 480-60873/2-A

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil serial dilution sample SS-A3, as required.

Instrument Detection Limits: The MDLs were at or below the RLs, as required.

Percent Solids: The % solids for soil samples were above 50%.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-18504-1

S1= SS-A1 **S2=** DUP-03

Analyte	S1	S2	RPD (%)	
aluminum	3940	4080	3%	
antimony	**1.1**	**1.5**	NC	
arsenic	12.2	19.6	47%	*
barium	129	154	18%	
beryllium	0.33	0.36	9%	
cadmium	0.70	0.63	11%	
calcium	46000	53100	14%	
chromium	29.1	32.7	12%	
cobalt	6.4	8.6	29%	
copper	190	317	50%	*
iron	25300	45100	56%	*
lead	311	298	4%	
magnesium	20900	24300	15%	
manganese	502	787	44%	*
mercury	0.24	0.22	9%	
nickel	40.7	57.7	35%	
potassium	653	592	10%	
selenium	ND	ND	NC	
silver	ND	ND	NC	
sodium	**84.4**	**110**	NC	
thallium	ND	ND	NC	
vanadium	18.5	19.0	3%	
zinc	229	248	8%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS-A3 MSD | Lab ID: 480-18504-3 MSD

Lab Name: TestAmerica Buffalo | Job No.: 480-18504-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids: 92.2

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	8870		2210	229	75-125	4	20	F	6010B
Antimony	45.20		44.0	83	75-125	2	20		6010B
Arsenic	72.46		44.0	92	75-125	2	20		6010B
Barium	251.3		44.0	197	75-125	67	20	F	6010B
Beryllium	44.42		44.0	100	75-125	4	20		6010B
Cadmium	43.56		44.0	97	75-125	22	20	F	6010B
Calcium	53930		2200	NA 356	75-125	43	20	4 F	6010B
Chromium	75.35		44.0	103	75-125	12	20		6010B
Cobalt	50.23		44.0	93	75-125	3	20		6010B
Copper	110.8		44.0	42	75-125	7	20	F	6010B
Iron	24700		2200	NA -740	75-125	21	20	4 F	6010B
Lead	974.5		44.0	NA 176	75-125	11	20	4	6010B
Magnesium	28230		2200	NA 258	75-125	48	20	4 F	6010B
Manganese	432.2		44.0	NA 131	75-125	13	20	4	6010B
Nickel	74.99		44.0	120	75-125	16	20		6010B
Potassium	3304		2200	127	75-125	1	20	F	6010B
Selenium	40.65		44.0	92	75-125	9	20		6010B
Silver	10.57		11.0	96	75-125	2	20		6010B
Sodium	2294		2210	101	75-125	2	20		6010B
Thallium	43.59		44.0	99	75-125	2	20		6010B
Vanadium	60.65		44.0	104	75-125	2	20		6010B
Zinc	199.9		44.0	75	75-125	10	20		6010B
Hg	2.98		0.365	NA 282	75-125	11	20	4	7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS-A3 MS | Lab ID: 480-18504-3 MS

Lab Name: TestAmerica Buffalo | Job No.: 480-18504-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids: 92.2

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	9204		3820		2280	236	75-125	F	6010B
Antimony	46.29		8.6	J	45.5	83	75-125		6010B
Arsenic	73.95		32.1		45.5	92	75-125		6010B
Barium	502.5		164		45.5	744	75-125	F	6010B
Beryllium	46.32		0.31		45.5	101	75-125		6010B
Cadmium	54.53		0.75		45.5	118	75-125		6010B
Calcium	34890		46100		2270	NA -493	75-125	4	6010B
Chromium	84.88		30.0		45.5	121	75-125		6010B
Cobalt	52.01		9.1		45.5	94	75-125		6010B
Copper	103.1		92.3		45.5	24	75-125	F	6010B
Iron	30400		41000		2270	NA -466	75-125	4	6010B
Lead	870.7		897		45.5	NA -58	75-125	4	6010B
Magnesium	17240		22500		2270	NA -233	75-125	4	6010B
Manganese	378.0		375		45.5	NA 8	75-125	4	6010B
Nickel	63.69		22.2		45.5	91	75-125		6010B
Potassium	3324		513		2280	124	75-125		6010B
Selenium	44.33		ND		45.5	98	75-125		6010B
Silver	10.81		ND		11.4	95	75-125		6010B
Sodium	2346		63.8	J	2280	100	75-125		6010B
Thallium	44.40		ND		45.5	98	75-125		6010B
Vanadium	61.93		14.7		45.5	104	75-125		6010B
Zinc	220.3		167		45.5	118	75-125		6010B
Hg	2.67		2.0		0.364	NA 195	75-125	4	7471A

SSR = Spiked Sample Result

NA - Not applicable, the sample concentration was greater than 4 times the spiking level therefore, valid percent recoveries could not be calculated.

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-19021-1

4 Ground Water Samples,
1 Field Duplicate, and 1 Trip Blank
Collected April 23, 2012

Prepared by: Donald Anné
May 10, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 4 ground water samples,1 field duplicate, and 1 trip blank analyzed for volatiles, and 4 ground water samples and1 field duplicate analyzed semi-volatiles.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The volatile results for cis-1,2-dichloroethene in samples MW-25D, MW-52, and CHA-4 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for cis-1,2-dichloroethene marked "E" in the undiluted samples MW-25D, MW-52, and CHA-4 were qualified as estimated (J).

- The volatile results for trichloroethene in samples MW-52 and CHA-4 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for trichloroethene marked "E" in the undiluted samples MW-52 and CHA-4 were qualified as estimated (J).

- The positive volatile results for 1,1-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, and vinyl chloride were flagged as "estimated" (J) in samples MW-52 and CHA-4 because relative percent differences for 1,1-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, and vinyl chloride were above the allowable maximum in the associated aqueous field duplicate pair MW-52/CHA-4.

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- The positive volatile results for vinyl chloride were flagged as "estimated" (J) in samples MW-52 DL and CHA-4 DL because relative percent difference for vinyl chloride was above the allowable maximum in the associated aqueous field duplicate pair MW-52 DL/CHA-4 DL.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data for TestAmerica Buffalo, Job No: 480-19021-1

4 Ground Water Samples, 1 Field Duplicate, and 1 Trip Blank Collected April 23, 2012

Prepared by: Donald Anné
May 10, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected. The trip blank contained a trace of trichloroethene (0.60 ug/L). Positive results for trichloroethene that are less than five times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximum, but 1 of 26 percent recoveries (%Rs) was below QC limits for aqueous MS/MSD sample MW-52. The RPDs for spiked compounds were below the allowable maximum, but 2 of 26 %Rs were below QC limits for aqueous MS/MSD sample CHA-4. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for aqueous samples LCS 480-62035/4, LCS 480-62171/4, and LCS 480-62252/4.

Field Duplicates: The relative percent differences (RPDs) for 1,1-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, and vinyl chloride were above the allowable maximum (20%) for aquoeus field duplicate pair MW-52/CHA-4 (attached table). The results for 1,1-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, and vinyl chloride should be considered estimated in samples MW-52 and CHA-4.

The RPD for vinyl chloride was above the allowable maximum (20%) for aquoeus field duplicate pair MW-52 DL/CHA-4 DL (attached table). The results for vinyl chloride should be considered estimated in samples MW-52 DL and CHA-4 DL.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

There are results for cis-1,2-dichloroethene in samples MW-25D, MW-52, and CHA-4,and trichloroethene in samples MW-52 and CHA-4 that were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The samples were diluted by the laboratory and re-analyzed; therefore, the results for cis-1,2-dichloroethene and trichloroethene that are flagged as 'E' in the undiluted samples should be considered estimated (J). The use of the diluted results for cis-1,2-dichloroethene and trichloroethene is recommended. It is recommended that the undiluted results for samples MW-25D, MW-52, and CHA-4 be used for all other compounds.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-19021-1

S1= MW-53 **S2=** CHA-4

Analyte	S1	S2	RPD (%)	
1,1-dichloroethene	5.2	9.4	58%	*
cis-1,2-dichloroethene	*450*	*890*	NC	
tetrachloroethene	25	45	57%	*
trans-1,2-dichloroethene	13	24	59%	*
trichloroethene	*400*	*750*	NC	
vinyl chloride	25	46	59%	*

S1= MW-53 DL **S2=** CHA-4 DL

Analyte	S1	S2	RPD (%)	
1,1-dichloroethene	**13**	**13**	NC	
cis-1,2-dichloroethene	970	900	7%	
tetrachloroethene	43	42	2%	
trans-1,2-dichloroethene	30	27	11%	
trichloroethene	760	740	3%	
vinyl chloride	25	41	48%	*

* RPD is above the allowable maximum (35%)

All results are in ug/kg

Bold numbers were values that below the CRQL.
Italic numbers were values above the highest standard
ND - Not detected.
NC - Not calculated, both results must be above the CRDL and below the highest standard for valid RPDs to be calculated.

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-19021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C18883.D

Lab ID: 480-19021-4 MS Client ID: MW-52 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	500	ND	538	108	71-129	
1,1-Dichloroethene	500	13 J	464	90	65-138	
1,2-Dichlorobenzene	500	ND	524	105	77-120	
1,2-Dichloroethane	500	ND	544	109	75-127	
Benzene	500	ND	556	111	71-124	
Chlorobenzene	500	ND	548	110	72-120	
cis-1,2-Dichloroethene	500	970	1400	86	74-124	
Ethylbenzene	500	ND	538	108	77-123	
Methyl tert-butyl ether	500	ND	518	104	64-127	
Tetrachloroethene	500	43	588	109	74-122	
Toluene	500	ND	586	117	70-122	
trans-1,2-Dichloroethene	500	30	558	106	73-127	
Trichloroethene	500	760	1230	94	74-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-19021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C18884.D

Lab ID: 480-19021-4 MSD Client ID: MW-52 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	500	500	100	7	20	71-129	
1,1-Dichloroethene	500	422	82	9	16	65-138	
1,2-Dichlorobenzene	500	490	98	7	20	77-120	
1,2-Dichloroethane	500	524	105	4	20	75-127	
Benzene	500	518	104	7	13	71-124	
Chlorobenzene	500	510	102	7	25	72-120	
cis-1,2-Dichloroethene	500	1300	67	7	15	74-124	F
Ethylbenzene	500	488	98	10	15	77-123	
Methyl tert-butyl ether	500	492	98	5	37	64-127	
Tetrachloroethene	500	546	101	7	20	74-122	
Toluene	500	538	108	9	15	70-122	
trans-1,2-Dichloroethene	500	526	99	6	20	73-127	
Trichloroethene	500	1140	77	7	16	74-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-19021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C18857.D

Lab ID: 480-19021-5 MS Client ID: CHA-4 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	500	ND	460	92	71-129	
1,1-Dichloroethene	500	13 J	390	75	65-138	
1,2-Dichlorobenzene	500	ND	452	90	77-120	
1,2-Dichloroethane	500	ND	458	92	75-127	
Benzene	500	ND	472	94	71-124	
Chlorobenzene	500	ND	474	95	72-120	
cis-1,2-Dichloroethene	500	900	1200	60	74-124	F
Ethylbenzene	500	ND	458	92	77-123	
Methyl tert-butyl ether	500	ND	428	86	64-127	
Tetrachloroethene	500	42	510	94	74-122	
Toluene	500	ND	466	93	70-122	
trans-1,2-Dichloroethene	500	27	480	91	73-127	
Trichloroethene	500	740	1060	64	74-123	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-19021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C18858.D

Lab ID: 480-19021-5 MSD Client ID: CHA-4 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	500	494	99	7	20	71-129	
1,1-Dichloroethene	500	414	80	6	16	65-138	
1,2-Dichlorobenzene	500	480	96	6	20	77-120	
1,2-Dichloroethane	500	508	102	10	20	75-127	
Benzene	500	504	101	7	13	71-124	
Chlorobenzene	500	500	100	5	25	72-120	
cis-1,2-Dichloroethene	500	1300	80	8	15	74-124	
Ethylbenzene	500	476	95	4	15	77-123	
Methyl tert-butyl ether	500	466	93	9	37	64-127	
Tetrachloroethene	500	530	98	4	20	74-122	
Toluene	500	494	99	6	15	70-122	
trans-1,2-Dichloroethene	500	514	97	7	20	73-127	
Trichloroethene	500	1130	78	6	16	74-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

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QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-19021-1

4 Ground Water Samples and 1 Field Duplicate Collected April 23, 2012

Prepared by: Donald Anné
May 10, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010)and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of three base/neutral surrogate recoveries for samples MW-25D, MW-52, and CHA-4 was below control limits, but was not below 10%. No action is taken on one surrogate per fraction outside control limits, provided the recovery is not less than10%.

Laboratory Control Sample: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous samples LCS 480-61379/2-A and LCSD 480-61379/3-A.

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Field Duplicates: The analyses of aqueous field duplicate pairs MW-52/CHA-4 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-19021-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MW-36	480-19021-1	45	32	85	95	111	79
MW-36B	480-19021-2	36	27	81	96	114	94
MW-25D	480-19021-3	35	27	73	83	96	45 X
MW-52	480-19021-4	37	27	72	82	105	48 X
CHA-4	480-19021-5	42	30	82	95	108	55 X
	MB 480-61379/1-A	44	33	75	79	104	123
	LCS 480-61379/2-A	56	40	88	97	110	121
	LCSD 480-61379/3-A	60	43	96	100	111	122

	QC LIMITS
2FP = 2-Fluorophenol	20-120
PHL = Phenol-d5	16-120
NBZ = Nitrobenzene-d5	46-120
FBP = 2-Fluorobiphenyl	48-120
TBP = 2,4,6-Tribromophenol	52-132
TPH = p-Terphenyl-d14	67-150

Column to be used to flag recovery values

FORM II 8270C

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May 2, 2012

Ms. Sarah Newell
Clough, Harbour, & Associates LLP
III Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
ALCO Maxon RI
August-September 2011 Ground Water, Soil, and Air Sampling Events

Dear Ms. Newell:

The data usability summary reports (DUSR) and data validation summaries are attached to this letter for ALOC Maxon RI, August-September 2011 ground water, soil, and air sampling events. The data for TestAmerica job numbers 480-8280-1, 480-9072-1, 480-10088-1, 480-10389-1, and 480-10585-1 and TestAmerica Burlington job numbers 200-6629-1 and 200-7167-1 were mostly acceptable with some issues that are identified and discussed in the validation summaries. There was a PCB result in data pack 480-8280-1 that was qualified as unusable (R) . The DUSR and QA/QC review outline the reason for rejecting the data. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Clough, Harbour, & Associates LLP.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

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Data Usability Summary Report for
TestAmerica Burlington, SDG No: 200-6629-1

13 Air Samples, 2 Field Duplicates,
and 1 Trip Blank
Collected August 16 and 18, 2011

Prepared by: Donald Anné
May 2, 2012

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appears legible and complete. The data pack contained the results of TO15 volatile analyses for 13 air samples, 2 field duplicates, and 1 trip blank.

The overall performances of the analyses are acceptable. TestAmerica Burlington did fulfill the requirements of the analytical method.

The data are acceptable with no issues identified in the accompanying data validation review. There were no data that were flagged as either estimated (J) or unusable (R); therefore, all data are considered usable. Detailed information on data quality is included in the data validation review.

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QA/QC Review of TO15 Volatiles Data for TestAmerica Burlington, SDG No: 200-6629-1

13 Air Samples, 2 Field Duplicates, and 1 Trip Blank Collected August 16 and 18, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF10s for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (30%), as required.

Blanks: The analyses of method and trip blanks reported target compounds as not detected. The certification analyses of summa canisters reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits (70-130%) for samples LCS 200-24125/3 and LCS 200-24217/25.

Field Duplicates: The relative percent differences for applicable compounds were below the allowable maximum (50%) in field duplicate pairs SV-B10/CHA-1 and SV-B9/CHA-2 (attached table), as required.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

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Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 200-6629-1

S1= SV-B10 **S2=** CHA-1

Analyte	S1	S2	RPD (%)
n-butane	73	68	7%
acetone	250	200	22%
n-hexane	40	35	13%
cyclohexane	23	21	9%
n-heptane	28	25	11%
methyl metacrylate	59	54	9%
cumene	44	41	7%
n-propylbenzene	36	34	6%
tert-butylbenzene	ND	7.8	NC
sec-butylbenzene	35	34	3%

S1= SV-B9 **S2=** CHA-2

Analyte	S1	S2	RPD (%)
trichloroethene	11	11	0%

* RPD is greater than 50%

Results are in units of bbpv.

Bold numbers are below quantitation limits

ND - Not detected.

NC - Not calculated, both results must be detected and above quantitation limits for valid RPDs to be calculated.

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Data Usability Summary Report for
TestAmerica Burlington, SDG No: 200-7167-1

15 Air Samples, 2 Field Duplicates,
and 1 Trip Blank
Collected September 22 and 23, 2011

Prepared by: Donald Anné
May 2, 2012

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appears legible and complete. The data pack contained the results of TO15 volatile analyses for 13 air samples, 2 field duplicates, and 1 trip blank.

The overall performances of the analyses are acceptable. TestAmerica Burlington did fulfill the requirements of the analytical method.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- There was a result for isopropyl alcohol in sample CHA-4 that was quantitated using data extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The result for ethanol marked "E" in the sample was qualified as estimated (J).

- Positive results for the following compounds were flagged as "estimated" (J) in samples SV-B3A and CHA-4 because relative percent differences for these compounds were above the allowable maximum in the associated soil field duplicate pair SV-B3A/CHA-4.

isopropyl alcohol	methyl ethyl ketone	ethylbenzene
m,p-xylene	o-xylene	xylene (total)

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of TO15 Volatiles Data for TestAmerica Burlington, SDG No: 200-7167-1

15 Air Samples, 2 Field Duplicates, and 1 Trip Blank Collected September 22 and 23, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within the EPA recommended holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF10s for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (30%), as required.

Blanks: The analyses of method and trip blanks reported target compounds as not detected. The certification analyses of summa canisters reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits (70-130%) for samples LCS 200-25992/3 and LCS 200-26049/3.

Field Duplicates: The relative percent differences (RPDs) for applicable compounds were below the allowable maximum (50%) in field duplicate pair SV-C13/CHA-3 (attached table), as required.

The RPDs for the following compounds were above the allowable maximum (35%) for soil field duplicate pair SV-B3A/CHA-4 (attached table). Results for these compounds should be considered estimated (J) in samples SV-B3A and CHA-4.

isopropyl alcohol	methyl ethyl ketone	ethylbenzene
m,p-xylene	o-xylene	xylene (total)

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Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

There is a result for isopropyl alcohol in sample CHA-4 that was quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The result for isopropyl alcohol that is flagged as 'E' in the sample CHA-4 should be considered estimated (J).

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 200-7167-1

S1= SV-C13 **S2=** CHA-3

Analyte	S1	S2	RPD (%)	
freon 22	0.55	ND	NC	
trichlorofluoromethane	0.86	0.85	1%	
freon TF	0.33	ND	NC	
acetone	19	18	5%	
carbon disulfide	1.1	1.2	9%	
methyl ethyl ketone	1.1	1.4	24%	
chloroform	0.36	0.35	3%	
1,1,1-trichloroethane	0.45	0.43	5%	
toluene	0.27	ND	NC	
tetrachloroethene	2.8	1.9	38%	
ethylbenzene	0.20	ND	NC	
m,p-xylene	0.56	ND	NC	
xylene, o-	0.24	ND	NC	
xylene (total)	0.79	ND	NC	
1,2,4-trimethylbenzene	0.23	ND	NC	

S1= SV-B3A **S2=** CHA-4

Analyte	S1	S2	RPD (%)	
n-butene	ND	0.71	NC	
trichlorofluoromethane	3.8	3.5	8%	
acetone	10	12	18%	
isopropyl alcohol	5.3	**260**	192%	*
carbon disulfide	2.1	1.8	15%	
n-hexane	0.29	0.32	10%	
methyl ethyl ketone	0.55	1.0	58%	*
chloroform	0.30	0.27	11%	
cyclohexane	0.33	0.35	6%	
carbon tetrachloride	1.4	1.3	7%	
n-heptane	ND	0.25	NC	
toluene	ND	0.26	NC	
tetrachloroethene	ND	0.67	NC	
ethylbenzene	0.26	0.73	95%	*
m,p-xylene	0.66	1.7	88%	*
xylene, o-	0.29	0.64	75%	*
xylene (total)	0.95	2.3	83%	*
1,2,4-trimethylbenzene	0.23	0.24	4%	

* RPD is greater than 50%

Results are in units of bbpv.

Bold numbers are above quantitation limits

ND - Not detected.

NC - Not calculated, both results must be detected and above quantitation limits for valid RPDs to be calculated.

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-8280-1

19 Soil Samples,
2 Field Duplicates, and 3 Trip Blanks
Collected August 8-22, 2011

Prepared by: Donald Anné
May 2, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 19 soil samples, 2 field duplicates, and 3 trip blanks analyzed for volatiles, and 19 soil samples and 2 field duplicates analyzed semi-volatiles, PCB, and TAL metals.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile result for tetrachloroethene were flagged as "not detected" (U) for the following soil samples because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.

SS-A8	SS-B1	SS-B2	SS-B3	SS-B4	SS-B5
SS-B7	SS-B8	SS-C3	SS-C5	SS-C6	SS-C8
SS-C9	DUP-01				

- Positive volatile results for tetrachloroethene and toluene were flagged as "not detected" (U) for the trip blanks collected on 08-09-11 and 08-10-11 because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.

- Positive volatile result for methylene chloride was flagged as "not detected" (U) for the trip blank collected on 08-09-11 because the level reported in the sample was not significantly greater than (more than 10 times) the highest associated blank level.

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- Positive semi-volatile results for benzo(b)fluoranthene were flagged as "estimated" (J) in samples SS-C2 and DUP-02 because relative percent differences for benzo(b)fluoranthene was above the allowable maximum in the associated soil field duplicate pair SS-C2/DUP-02.

- The positive PCB results for PCB-1254 were flagged as "estimated" (J) in sample SS-C1 and DUP-02 because the %Ds for dual quantitation of PCB-1254 were above the allowable maximum, but were not above 70% in the samples SS-C1 and DUP-02.

- The positive PCB result for PCB-1260 was flagged as "unusable" (R) in sample SS-B4 because the %D for dual quantitation of PCB-1260 was above the allowable maximum and was above 100% in the sample SS-B4.

- The positive results for aluminum were flagged as "estimated" (J) in all 19 soil samples and both field duplicates because 2 of 2 percent recoveries for aluminum were above control limits, but were not above 300% in the associated soil MS/MSD samples.

- The positive results for potassium were flagged as "estimated" (J) in all 19 soil samples and both field duplicates because 2 of 2 percent recoveries for potassium were above control limits, but were not above 200% in the associated soil MS/MSD samples.

- The positive results for barium were flagged as "estimated" (J) in the following soil samples because 2 of 2 percent recoveries for barium were above control limits, but were not above 200% in the associated soil MS/MSD sample.

SS-C3	SS-C5	SS-C6	SS-C8	SS-C9	DUP-01
SS-C1	SS-C2	DUP-02	SS-C7	SS-C4	SS-B6

- The positive results for calcium were flagged as "estimated" (J) in the following soil samples because 2 of 2 percent recoveries for calcium were below control limits and were below 10% in the associated soil MS/MSD sample.

SS-C3	SS-C5	SS-C6	SS-C8	SS-C9	DUP-01
SS-C1	SS-C2	DUP-02	SS-C7	SS-C4	SS-B6

- The positive results for magnesium were flagged as "estimated" (J) in the following soil samples because 2 of 2 percent recoveries for magnesium were below control limits and one was below 10% in the associated soil MS/MSD sample.

SS-C3	SS-C5	SS-C6	SS-C8	SS-C9	DUP-01
SS-C1	SS-C2	DUP-02	SS-C7	SS-C4	SS-B6

- The positive and "not detected" results for antimony were flagged as "estimated" (J) in the following soil samples because 1 of 2 percent recoveries for antimony was below control limits, but was not below 10% in the associated soil MS/MSD sample.

SS-C3	SS-C5	SS-C6	SS-C8	SS-C9	DUP-01
SS-C1	SS-C2	DUP-02	SS-C7	SS-C4	SS-B6

- The positive results for chromium were flagged as "estimated" (J) in the following soil samples because 1 of 2 percent recoveries for chromium was above control limits, but was not above 200% in the associated soil MS/MSD sample.

SS-A8	SS-A9	SS-B1	SS-B2	SS-B3
SS-B4	SS-B5	SS-B7	SS-B8	

- The positive results for arsenic were flagged as "estimated" (J) in the following soil samples because 2 of 2 percent recoveries for arsenic were above control limits and were below 10% in the associated soil MS/MSD sample.

SS-A8	SS-A9	SS-B1	SS-B2	SS-B3
SS-B4	SS-B5	SS-B7	SS-B8	

All data that are not flagged unusable (R) are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-8280-1

19 Soil Samples, 2 Field Duplicates,
and 3 Trip Blanks
Collected August 8-22, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for chloroethane, acetone, and 2-butanone were above the allowable maximum (25%) on 08-13-11 (P4482.D). The %Ds for chloroethane and 1,2-dibromo-3-chloropropane were above the allowable maximum (25%) on 08-17-11 (S5005.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-27458/7 contained traces of tetrachloroethene (1.97 ug/kg) and toluene (1.34 ug/kg). Method blank MS 480-29184/26 contained a trace of methylene chloride (5.78 ug/kg). Method blank MB 480-31091/4 contained traces of methylene chloride (0.812 ug/L), tetrachloroethene (1.86 ug/L), and toluene (1.25 ug/L). The trip blank collected on 08-09-11 contained a trace of acetone (3.1 ug/L). Positive results for acetone and methylene chloride that are less than ten times the highest blank level should be reported as not detected (J) in associated samples. Positive results for tetrachloroethene and toleune that are less than five times the highest blank level should be reported as not detected (J) in associated samples.

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Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum, but 12 of 26 percent recoveries were below QC limits for soil MS/MSD sample SS-C6. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for the following aqueous and soil samples.

LCS 480-27458/3	LCS 480-27603/6	LCS 480-27822/4
LCS 480-27936/4	LCS 480-29135/5	LCS 480-29184/4
LCS 480-31091/3		

Field Duplicates: The analyses of soil field duplicate pairs SS-C3/DUP-01 and SS-C2/DUP-02 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P4500.D

Lab ID: 480-8453-3 MS Client ID: SS-C6 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	52.8	ND	53.5	101	79-126	
1,1-Dichloroethene	52.8	ND	43.7	83	65-153	
1,2-Dichlorobenzene	52.8	ND	20.5	39	75-120	F
1,2-Dichloroethane	52.8	ND	50.4	95	77-122	
Benzene	52.8	ND	49.7	94	79-127	
Chlorobenzene	52.8	ND	32.3	61	76-124	F
cis-1,2-Dichloroethene	52.8	ND	46.2	88	81-117	
Ethylbenzene	52.8	ND	34.3	65	80-120	F
Methyl tert-butyl ether	52.8	ND	52.1	99	63-125	
Tetrachloroethene	52.8	1.5 J	31.1	-221	74-122	F
Toluene	52.8	ND	34.1	65	74-128	F
trans-1,2-Dichloroethene	52.8	ND	45.8	87	78-126	
Trichloroethene	52.8	6.2	53.9	-1067	77-129	4

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P4501.D

Lab ID: 480-8453-3 MSD Client ID: SS-C6 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	43.0	42.2	98	24	30	79-126	
1,1-Dichloroethene	43.0	34.2	80	24	30	65-153	
1,2-Dichlorobenzene	43.0	19.2	45	7	30	75-120	F
1,2-Dichloroethane	43.0	39.7	92	24	30	77-122	
Benzene	43.0	40.2	94	21	30	79-127	
Chlorobenzene	43.0	26.9	63	18	30	76-124	F
cis-1,2-Dichloroethene	43.0	36.5	85	23	30	81-117	
Ethylbenzene	43.0	28.8	67	17	30	80-120	F
Methyl tert-butyl ether	43.0	41.0	95	24	30	63-125	
Tetrachloroethene	43.0	25.9	-284	18	30	74-122	F
Toluene	43.0	28.2	66	19	30	74-128	F
trans-1,2-Dichloroethene	43.0	36.0	84	24	30	78-126	
Trichloroethene	43.0	43.8	-1334	20	30	77-129	4

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Lab Sample ID: CCVIS 480-27458/2 Calibration Date: 08/13/2011 14:19

Instrument ID: HP5973P Calib Start Date: 08/02/2011 01:54

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 08/02/2011 04:01

Lab File ID: P4482.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3681	0.3828		52.0	50.0	4.0	50.0
Chloromethane	Ave	0.3975	0.3763	0.1000	47.3	50.0	-5.4	50.0
Vinyl chloride	Ave	0.3571	0.3689		51.7	50.0	3.3	20.0
Bromomethane	Ave	0.0629	0.0624		49.6	50.0	-0.9	50.0
Chloroethane	Ave	0.0771	0.0573		37.2	50.0	-25.7	50.0
Trichlorofluoromethane	Ave	0.5959	0.6080		51.0	50.0	2.0	50.0
Acrolein	Ave	0.0191	0.0178		933	1000	-6.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3523	0.3799		53.9	50.0	7.8	50.0
1,1-Dichloroethene	Ave	0.3453	0.3910	0.1000	56.6	50.0	13.2	20.0
Acetone	Ave	0.1020	0.1292		317	250	26.6	50.0
Iodomethane	Ave	0.4815	0.5476		56.9	50.0	13.7	50.0
Carbon disulfide	Ave	0.9074	1.021		56.3	50.0	12.6	50.0
Methyl acetate	Ave	0.4094	0.5183		63.3	50.0	NA 26.6	50.0
Acetonitrile	Ave	0.0241	0.0307		2550	2000	NA 27.3	50.0
Methylene Chloride	LinF		0.4440		58.4	50.0	16.8	50.0
Methyl tert-butyl ether	Ave	0.9509	1.126		59.2	50.0	18.4	50.0
trans-1,2-Dichloroethene	Ave	0.3626	0.4136		57.0	50.0	14.1	50.0
Acrylonitrile	Ave	0.1187	0.1587		334	250	NA 33.7	50.0
Vinyl acetate	Ave	0.4801	0.6556		341	250	NA 36.6	50.0
1,1-Dichloroethane	Ave	0.6679	0.7460		55.8	50.0	11.7	50.0
2,2-Dichloropropane	Ave	0.4802	0.5723		59.6	50.0	19.2	50.0
2-Butanone (MEK)	Ave	0.1568	0.2065		329	250	31.7	50.0
cis-1,2-Dichloroethene	Ave	0.3951	0.4494		56.9	50.0	13.7	50.0
Bromochloromethane	Ave	0.1898	0.2239		59.0	50.0	17.9	50.0
Tetrahydrofuran	Ave	0.0988	0.1310		332	250	NA 32.6	50.0
Chloroform	Ave	0.6239	0.6935		55.6	50.0	11.2	20.0
1,1,1-Trichloroethane	Ave	0.4942	0.5770		58.4	50.0	16.8	50.0
Cyclohexane	Ave	0.5923	0.6404		54.1	50.0	8.1	50.0
1,1-Dichloropropene	Ave	0.4673	0.5409		57.9	50.0	15.8	50.0
Carbon tetrachloride	Ave	0.4288	0.5043		58.8	50.0	17.6	50.0
Benzene	Ave	1.343	1.546		57.6	50.0	15.1	50.0
1,2-Dichloroethane	Ave	0.4549	0.5083		55.9	50.0	11.7	50.0
Trichloroethene	Ave	0.3608	0.4101		56.8	50.0	13.7	50.0
Methylcyclohexane	Ave	0.5675	0.6348		55.9	50.0	11.9	50.0
1,2-Dichloropropane	Ave	0.3695	0.4119		55.7	50.0	11.5	20.0
Dibromomethane	Ave	0.2150	0.2544		59.1	50.0	18.3	50.0
Bromodichloromethane	Ave	0.4172	0.4895		58.7	50.0	17.3	50.0
2-Chloroethyl vinyl ether	Ave	0.1735	0.2493		359	250	NA 43.7	50.0
cis-1,3-Dichloropropene	Ave	0.5171	0.6121		59.2	50.0	18.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6685	0.7521		281	250	12.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Lab Sample ID: CCVIS 480-27458/2 Calibration Date: 08/13/2011 14:19

Instrument ID: HP5973P Calib Start Date: 08/02/2011 01:54

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 08/02/2011 04:01

Lab File ID: P4482.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.897	1.794		47.3	50.0	-5.4	20.0
trans-1,3-Dichloropropene	Ave	0.9488	1.026		54.1	50.0	8.1	50.0
Ethyl methacrylate	Ave	0.8112	0.9025		55.6	50.0	11.3	50.0
1,1,2-Trichloroethane	Ave	0.5319	0.5462		51.3	50.0	2.7	50.0
Tetrachloroethene	Ave	0.9666	0.9508		49.2	50.0	-1.6	50.0
1,3-Dichloropropane	Ave	1.036	1.049		50.6	50.0	1.2	50.0
2-Hexanone	Ave	0.4881	0.5406		277	250	10.8	50.0
Dibromochloromethane	Lin1F		0.7055		48.4	50.0	-3.2	50.0
1,2-Dibromoethane	Ave	0.6649	0.7105		53.4	50.0	6.9	50.0
Chlorobenzene	Ave	2.075	2.071	0.3000	49.9	50.0	-0.2	50.0
Ethylbenzene	Ave	3.226	3.265		50.6	50.0	1.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6795	0.7300		53.7	50.0	7.4	50.0
m,p-Xylene	Ave	1.353	1.375		102	100	1.6	50.0
o-Xylene	Ave	1.361	1.369		50.3	50.0	0.7	50.0
Styrene	Ave	2.307	2.302		49.9	50.0	-0.2	50.0
Bromoform	LinF		0.5230	0.1000	46.5	50.0	-7.0	50.0
Isopropylbenzene	Ave	3.021	2.610		43.2	50.0	-13.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7479	0.6840	0.3000	45.7	50.0	-8.5	50.0
Bromobenzene	Ave	0.9222	0.7805		42.3	50.0	-15.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1830	0.1761		241	250	-3.8	50.0
1,2,3-Trichloropropane	Ave	0.2145	0.1939		45.2	50.0	-9.6	50.0
N-Propylbenzene	Ave	3.669	3.169		43.2	50.0	-13.6	50.0
2-Chlorotoluene	Ave	0.7999	0.6725		42.0	50.0	-15.9	50.0
1,3,5-Trimethylbenzene	Ave	2.552	2.191		42.9	50.0	-14.1	50.0
4-Chlorotoluene	Ave	0.8263	0.6929		41.9	50.0	-16.1	50.0
tert-Butylbenzene	Ave	0.5581	0.4800		43.0	50.0	-14.0	50.0
1,2,4-Trimethylbenzene	Ave	2.601	2.215		42.6	50.0	-14.8	50.0
sec-Butylbenzene	Ave	3.326	2.897		43.5	50.0	-12.9	50.0
4-Isopropyltoluene	Ave	2.685	2.326		43.3	50.0	-13.4	50.0
1,3-Dichlorobenzene	Ave	1.652	1.414		42.8	50.0	-14.4	50.0
1,4-Dichlorobenzene	Ave	1.686	1.445		42.8	50.0	-14.3	50.0
n-Butylbenzene	Ave	2.629	2.233		42.5	50.0	-15.0	50.0
1,2-Dichlorobenzene	Ave	1.569	1.347		42.9	50.0	-14.2	50.0
1,2-Dibromo-3-Chloropropane	Lin1F		0.1179		46.6	50.0	-6.8	50.0
1,2,4-Trichlorobenzene	Ave	1.174	1.073		45.7	50.0	-8.6	50.0
Hexachlorobutadiene	Ave	0.3685	0.4487		60.9	50.0	21.8	50.0
Naphthalene	Ave	1.149	1.637		71.3	50.0	VA 42.5	50.0
1,2,3-Trichlorobenzene	Ave	0.5433	0.6595		60.7	50.0	21.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2258	0.2244		49.7	50.0	-0.6	50.0
Toluene-d8 (Surr)	Ave	2.825	2.698		47.8	50.0	-4.5	50.0
4-Bromofluorobenzene (Surr)	Ave	1.144	1.112		48.6	50.0	-2.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Lab Sample ID: CCVIS 480-27822/2 Calibration Date: 08/17/2011 09:42

Instrument ID: HP5973S Calib Start Date: 07/08/2011 12:49

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 07/08/2011 14:39

Lab File ID: S5005.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3034	0.2815		23.2	25.0	-7.2	50.0
Chloromethane	Ave	0.4141	0.3494	0.1000	21.1	25.0	-15.6	50.0
Vinyl chloride	Ave	0.4116	0.3299		20.0	25.0	-19.9	20.0
Bromomethane	Ave	0.0905	0.0701		19.4	25.0	-22.5	50.0
Chloroethane	QuaF		0.1563		34.4	25.0	37.6	50.0
Trichlorofluoromethane	Lin1F		0.3362		24.1	25.0	-3.6	50.0
Acrolein	Ave	0.0239	0.0130		272	500	-45.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2719	0.3241		29.8	25.0	19.2	50.0
1,1-Dichloroethene	Ave	0.3417	0.2955	0.1000	21.6	25.0	-13.5	20.0
Acetone	Ave	0.1508	0.1520		126	125	0.8	50.0
Iodomethane	Ave	0.3482	0.3564		25.6	25.0	2.3	50.0
Carbon disulfide	Ave	0.8314	0.8657		26.0	25.0	4.1	50.0
Methyl acetate	Ave	0.6175	0.6211		25.1	25.0	0.6	50.0
Acetonitrile	Ave	0.0354	0.0351		993	1000	-0.7	50.0
Methylene Chloride	Ave	0.3877	0.3269		21.1	25.0	-15.7	50.0
Methyl tert-butyl ether	Ave	1.244	1.153		23.2	25.0	-7.3	50.0
trans-1,2-Dichloroethene	Ave	0.3422	0.3089		22.6	25.0	-9.7	50.0
Acrylonitrile	Ave	0.1880	0.1895		126	125	0.8	50.0
1,1-Dichloroethane	Ave	0.6458	0.5540		21.4	25.0	-14.2	50.0
Vinyl acetate	Ave	0.7713	0.7287		118	125	-5.5	50.0
2,2-Dichloropropane	Ave	0.2987	0.2418		20.2	25.0	-19.1	50.0
cis-1,2-Dichloroethene	Ave	0.3912	0.3381		21.6	25.0	-13.6	50.0
2-Butanone (MEK)	Ave	0.2497	0.2381		119	125	-4.7	50.0
Bromochloromethane	Ave	0.1812	0.1619		22.3	25.0	-10.7	50.0
Tetrahydrofuran	Ave	0.1667	0.1564		117	125	-6.2	50.0
Chloroform	Ave	0.6146	0.5129		20.9	25.0	-16.5	20.0
1,1,1-Trichloroethane	Ave	0.4026	0.3687		22.9	25.0	-8.4	50.0
Cyclohexane	Ave	0.6830	0.6830		25.0	25.0	0.0	50.0
Carbon tetrachloride	Ave	0.4084	0.3613		22.1	25.0	-11.5	50.0
1,1-Dichloropropene	Ave	0.4975	0.4170		21.0	25.0	-16.2	50.0
Benzene	Ave	1.524	1.275		20.9	25.0	-16.3	50.0
1,2-Dichloroethane	Ave	0.5053	0.4213		20.8	25.0	-16.6	50.0
Trichloroethene	Ave	0.3603	0.3046		21.1	25.0	-15.5	50.0
Methylcyclohexane	Ave	0.6254	0.6617		26.4	25.0	5.8	50.0
1,2-Dichloropropane	Ave	0.3897	0.3122		20.0	25.0	-19.9	20.0
Dibromomethane	Ave	0.2150	0.1804		21.0	25.0	-16.1	50.0
Bromodichloromethane	Ave	0.4517	0.3715		20.6	25.0	-17.8	50.0
2-Chloroethyl vinyl ether	Ave	0.2960	0.2714		115	125	-8.3	50.0
cis-1,3-Dichloropropene	Ave	0.6262	0.4886		19.5	25.0	-22.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9897	0.9809		124	125	-0.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Lab Sample ID: CCVIS 480-27822/2 Calibration Date: 08/17/2011 09:42

Instrument ID: HP5973S Calib Start Date: 07/08/2011 12:49

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 07/08/2011 14:39

Lab File ID: S5005.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.968	1.715		21.8	25.0	-12.9	20.0
trans-1,3-Dichloropropene	Ave	1.162	0.9461		20.4	25.0	-18.6	50.0
Ethyl methacrylate	Ave	1.225	1.146		23.4	25.0	-6.4	50.0
1,1,2-Trichloroethane	Ave	0.5824	0.5049		21.7	25.0	-13.3	50.0
Tetrachloroethene	Ave	0.7217	0.6639		23.0	25.0	-8.0	50.0
1,3-Dichloropropane	Ave	1.245	1.053		21.1	25.0	-15.4	50.0
2-Hexanone	Ave	0.7294	0.7128		122	125	-2.3	50.0
Dibromochloromethane	Ave	0.6810	0.5917		21.7	25.0	-13.1	50.0
1,2-Dibromoethane	Ave	0.6939	0.5970		21.5	25.0	-14.0	50.0
Chlorobenzene	Ave	2.132	1.869	0.3000	21.9	25.0	-12.3	50.0
Ethylbenzene	Ave	3.608	3.112		21.6	25.0	-13.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6760	0.5945		22.0	25.0	-12.1	50.0
m,p-Xylene	Ave	1.447	1.234		42.7	50.0	-14.7	50.0
o-Xylene	Ave	1.393	1.185		21.3	25.0	-14.9	50.0
Styrene	Ave	2.444	2.092		21.4	25.0	-14.4	50.0
Bromoform	Ave	0.4230	0.3628	0.1000	21.4	25.0	-14.2	50.0
Isopropylbenzene	Ave	3.805	3.156		20.7	25.0	-17.0	50.0
Bromobenzene	Ave	0.8847	0.7767		21.9	25.0	-12.2	50.0
1,1,2,2-Tetrachloroethane	Ave	1.022	0.8400	0.3000	20.6	25.0	-17.8	50.0
N-Propylbenzene	Ave	4.711	4.005		21.3	25.0	-15.0	50.0
1,2,3-Trichloropropane	Ave	0.3123	0.2692		21.5	25.0	-13.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3124	0.3053		122	125	-2.3	50.0
2-Chlorotoluene	Ave	0.8869	0.7529		21.2	25.0	-15.1	50.0
1,3,5-Trimethylbenzene	Ave	3.200	2.680		20.9	25.0	-16.2	50.0
4-Chlorotoluene	Ave	0.9284	0.8067		21.7	25.0	-13.1	50.0
tert-Butylbenzene	Ave	0.7090	0.5999		21.2	25.0	-15.4	50.0
1,2,4-Trimethylbenzene	Ave	3.221	2.730		21.2	25.0	-15.3	50.0
sec-Butylbenzene	Ave	4.105	3.486		21.2	25.0	-15.1	50.0
1,3-Dichlorobenzene	Ave	1.742	1.536		22.0	25.0	-11.8	50.0
4-Isopropyltoluene	Ave	3.453	2.973		21.5	25.0	-13.9	50.0
1,4-Dichlorobenzene	Ave	1.804	1.566		21.7	25.0	-13.2	50.0
n-Butylbenzene	Ave	3.195	2.755		21.6	25.0	-13.8	50.0
1,2-Dichlorobenzene	Ave	1.684	1.480		22.0	25.0	-12.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.2044	0.1508		18.4	25.0	-26.2	50.0
1,2,4-Trichlorobenzene	Ave	1.203	1.045		21.7	25.0	-13.2	50.0
Hexachlorobutadiene	Ave	0.2436	0.2210		22.7	25.0	-9.3	50.0
Naphthalene	Ave	1.654	1.313		19.8	25.0	-20.7	50.0
1,2,3-Trichlorobenzene	Ave	0.5173	0.4501		21.8	25.0	-13.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1978	0.2015		25.5	25.0	1.9	50.0
Toluene-d8 (Surr)	Ave	2.467	2.734		27.7	25.0	10.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7741	0.7894		25.5	25.0	2.0	50.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-27458/7

Matrix: Solid Lab File ID: P4485.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/13/2011 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 27458 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
591-78-6	2-Hexanone	ND		25	2.5
78-93-3	2-Butanone (MEK)	ND		25	1.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-27458/7

Matrix: Solid Lab File ID: P4485.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/13/2011 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 27458 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5.0	0.93
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	ND		5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	1.97	J	5.0	0.67
108-88-3	Toluene	1.34	J	5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	ND		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		64-126
2037-26-5	Toluene-d8 (Surr)	92		71-125
460-00-4	4-Bromofluorobenzene (Surr)	90		72-126

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-29184/26

Matrix: Solid Lab File ID: P4707.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/27/2011 15:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 29184 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
591-78-6	2-Hexanone	ND		25	2.5
78-93-3	2-Butanone (MEK)	ND		25	1.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-29184/26

Matrix: Solid Lab File ID: P4707.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/27/2011 15:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 29184 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5.0	0.93
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	5.78		5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	ND		5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	ND		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		64-126
2037-26-5	Toluene-d8 (Surr)	102		71-125
460-00-4	4-Bromofluorobenzene (Surr)	93		72-126

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-31091/4

Matrix: Water Lab File ID: P4485A.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2011 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 31091 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
591-78-6	2-Hexanone	ND		5.0	1.2
78-93-3	2-Butanone (MEK)	ND		10	1.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-31091/4

Matrix: Water Lab File ID: P4485A.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2011 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 31091 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		1.0	0.50
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	0.812	J	1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	1.86		1.0	0.36
108-88-3	Toluene	1.25		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		66-137
2037-26-5	Toluene-d8 (Surr)	91		71-126
460-00-4	4-Bromofluorobenzene (Surr)	86		73-120

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QA/QC Review of Method 8270C Semi-Volatiles Data
for TestAmerica Buffalo, Job No: 480-8280-1

19 Soil Samples, and 2 Field Duplicates
Collected August 8-22, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for benzaldehyde, 4-chloroaniline, 3-nitroaniline, and 3,3'-dichlorobenzidine were above the allowable maximum (25%) on 08-11-11 (U2627.D). The %D for benzaldehyde was above the allowable maximum (25%) on 08-11-11 (U.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of six surrogates for samples SS-C4 and SS-A9 DL was diluted beyond detection limits. No action is taken on surrogates diluted beyond detection limits.

One of three acid extractable surrogate recoveries for sample SS-B6 was above control limits. No action is taken on one surrogate per fraction outside control limits, provided the recovery is not less than 10%.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximums, but 2 of 24 the percent recoveries (%Rs) were above QC limits for soil MS/MSD sample SS-C6. One of 12 RPDs for spiked compounds were above the allowable maximum and 10 of 24 %Rs were outside QC limits for soil MS/MSD sample SS-A8. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for soil samples LCS 480-28965/2-A and LCSD 480-28965/3-A. The %Rs for spiked compounds were within QC limits for soil samples LCS 480-26908/2-A and LCS 480-27915/2-A.

Field Duplicates: The analyses of soil field duplicate pair SS-C3/DUP-01 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

The relative percent difference for benzo(b)fluoranthene was above the allowable maximum (35%) for soil field duplicate pair SS-C2/DUP-02 (attached table). Results for benzo(b)fluoranthene should be considered estimated (J) in samples SS-C2 and DUP-02.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-8280-1

S1= SS-C2 **S2=** DUP-02

Analyte	S1	S2	RPD (%)	
anthracene	**620**	**760**	NC	
benzo(a)anthracene	**4600**	3900	NC	
benzo(a)pyrene	**6400**	4700	NC	
benzo(b)fluoranthene	9600	5200	59%	*
benzo(g,h,i)perylene	**2700**	4000	NC	
benzo(k)fluoranthene	**3500**	**3200**	NC	
carbazole	**410**	**400**	NC	
chrysene	**4900**	4300	NC	
dibnez(a,h)anthracene	ND	**1000**	NC	
fluoranthene	8300	8100	2%	
indeno(1,2,3-cd)pyrene	**3600**	**3300**	NC	
phenanthrene	**2600**	**3200**	NC	
pyrene	**5700**	6600	NC	

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
SS-A8	480-8280-1	64	74	65	82	97	97
SS-A9	480-8280-2	77	84	83	100	116	110
SS-A9	480-8280-2	74	92	90	107	99	130
SS-A9 DL	480-8280-2 DL	70	77	79	103	DL 0 X	104
SS-B1	480-8382-1	61	71	63	85	62	81
SS-B2	480-8382-2	76	97	70	117	67	117
SS-B3	480-8382-3	75	89	68	112	64	111
SS-B4	480-8382-4	72	93	84	107	93	106
SS-B5	480-8382-5	44	58	46	65	97	84
SS-B7	480-8382-6	37	46	42	57	79	70
SS-B8	480-8382-7	57	71	67	84	71	80
SS-C3	480-8453-1	54	66	59	74	96	88
SS-C5	480-8453-2	70	82	77	94	76	100
SS-C6	480-8453-3	48	63	49	73	74	98
SS-C8	480-8453-4	60	68	61	71	97	84
SS-C9	480-8453-5	65	73	65	81	60	78
DUP-01	480-8453-6	61	75	69	87	72	85
SS-C1	480-8505-1	72	87	74	102	89	102
SS-C2	480-8505-2	69	86	77	103	83	102
DUP-02	480-8505-3	53	62	57	77	61	91
SS-C7	480-8853-1	67	83	76	92	79	106
SS-C4	480-8853-2	63	79	77	92	DL 0 X	110
SS-B6	480-8853-3	50	69	65	78	(24) X	87
	MB 480-26908/1-A	66	76	72	83	96	136
	MB 480-27915/1-A	74	80	77	83	88	93
	MB 480-28965/1-A	55	62	59	69	75	92
	LCS 480-26908/2-A	84	93	89	98	113	119
	LCS 480-27915/2-A	68	74	72	82	93	105
	LCS 480-28965/2-A	65	71	71	81	88	94
	LCSD 480-28965/3-A	65	72	72	80	89	94
SS-A8 MS	480-8280-1 MS	77	89	80	94	119	116
SS-C6 MS	480-8453-3 MS	68	78	71	90	88	108
SS-A8 MSD	480-8280-1 MSD	72	78	80	93	129	113

	QC LIMITS
2FP = 2-Fluorophenol	18-120
PHL = Phenol-d5	11-120
NBZ = Nitrobenzene-d5	34-132
FBP = 2-Fluorobiphenyl	37-120
TBP = 2,4,6-Tribromophenol	39-146
TPH = p-Terphenyl-d14	58-147

Column to be used to flag recovery values

FORM II 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U2633.D

Lab ID: 480-8280-1 MS Client ID: SS-A8 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	3860	ND	5150	134	55-125	F
2-Chlorophenol	3860	ND	3460 J	90	38-120	
4-Chloro-3-methylphenol	3860	ND	3290 J	85	49-125	
4-Nitrophenol	3860	ND	6310 J	164	43-137	F
Acenaphthene	3860	5400	7940	66	53-120	
Bis(2-ethylhexyl) phthalate	3860	ND	3860 J	100	61-133	
Fluorene	3860	3600 J	6590	79	63-126	
Hexachloroethane	3860	ND	3360 J	87	41-120	
N-Nitrosodi-n-propylamine	3860	ND	3240 J	84	46-120	
Pentachlorophenol	3860	ND	7320 J	190	33-136	F
Phenol	3860	ND	3450 J	90	36-120	
Pyrene	3860	40000	45600	140	51-133	4

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: W4059.D

Lab ID: 480-8453-3 MS Client ID: SS-C6 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	3510	ND	3250	93	55-125	
2-Chlorophenol	3510	ND	2530	72	38-120	
4-Chloro-3-methylphenol	3510	ND	3170	90	49-125	
4-Nitrophenol	3510	ND	2670 J	76	43-137	
Acenaphthene	3510	340 J	3730	96	53-120	
Bis(2-ethylhexyl) phthalate	3510	ND	3430	98	61-133	
Fluorene	3510	330 J	3900	102	63-126	
Hexachloroethane	3510	ND	2340	67	41-120	
N-Nitrosodi-n-propylamine	3510	ND	2700	77	46-120	
Pentachlorophenol	3510	ND	2180 J	62	33-136	
Phenol	3510	ND	2850	81	36-120	
Pyrene	3510	7300	12000	134	51-133	F

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U2634.D

Lab ID: 480-8280-1 MSD Client ID: SS-A8 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dinitrotoluene	3880	5090	131	1	20	55-125	F
2-Chlorophenol	3880	3000 J	77	14	25	38-120	
4-Chloro-3-methylphenol	3880	3420 J	88	4	27	49-125	
4-Nitrophenol	3880	6420 J	165	2	25	43-137	F
Acenaphthene	3880	6520	29	20	35	53-120	F
Bis(2-ethylhexyl) phthalate	3880	4300 J	111	11	15	61-133	
Fluorene	3880	5070	39	26	15	63-126	F
Hexachloroethane	3880	2850 J	73	16	46	41-120	
N-Nitrosodi-n-propylamine	3880	3340 J	86	3	31	46-120	
Pentachlorophenol	3880	7230 J	186	1	35	33-136	F
Phenol	3880	3200 J	82	8	35	36-120	
Pyrene	3880	31900	215	35	35	51-133	4

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: W4060.D

Lab ID: 480-8453-3 MSD Client ID: SS-C6 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dinitrotoluene	3540	3380	95	4	20	55-125	
2-Chlorophenol	3540	3050	86	19	25	38-120	
4-Chloro-3-methylphenol	3540	3340	94	5	27	49-125	
4-Nitrophenol	3540	2770 J	78	4	25	43-137	
Acenaphthene	3540	4040	104	8	35	53-120	
Bis(2-ethylhexyl) phthalate	3540	3650	103	6	15	61-133	
Fluorene	3540	4140	108	6	15	63-126	
Hexachloroethane	3540	2820	80	19	46	41-120	
N-Nitrosodi-n-propylamine	3540	3130	89	15	31	46-120	
Pentachlorophenol	3540	2110 J	60	3	35	33-136	
Phenol	3540	3220	91	12	35	36-120	
Pyrene	3540	12100	136	1	35	51-133	F

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Lab Sample ID: ICV 480-27157/9 Calibration Date: 08/11/2011 16:45

Instrument ID: HP5973U Calib Start Date: 08/10/2011 12:09

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 08/10/2011 14:06

Lab File ID: U2627.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.5765	0.5880	0.0100	51000	50000	2.0	25.0
Pyridine	Ave	0.5889	0.5066	0.0100	43000	50000	-14.0	25.0
Phenol	Ave	1.404	1.259	0.0100	44900	50000	-10.3	25.0
Aniline	Ave	1.597	0.9708	0.0100	30400	50000	-39.2*	25.0
Bis(2-chloroethyl)ether	Ave	0.9635	0.8909	0.0100	46200	50000	-7.5	25.0
2-Chlorophenol	Ave	1.348	1.276	0.0100	47300	50000	-5.3	25.0
1,3-Dichlorobenzene	Ave	1.593	1.538	0.0100	48300	50000	-3.5	25.0
1,4-Dichlorobenzene	Ave	1.642	1.621	0.0100	49400	50000	-1.3	25.0
Benzyl alcohol	Ave	0.8183	0.7303	0.0100	44600	50000	-10.8	25.0
1,2-Dichlorobenzene	Ave	1.553	1.460	0.0100	47000	50000	-6.0	25.0
2-Methylphenol	Ave	1.053	1.021	0.0100	48500	50000	-3.0	25.0
bis (2-chloroisopropyl) ether	Ave	0.8325	0.7337	0.0100	44100	50000	-11.9	25.0
N-Nitrosodi-n-propylamine	Ave	0.6814	0.6630	0.0500	48600	50000	-2.7	25.0
4-Methylphenol	Ave	1.096	1.096	0.0100	100000	100000	-0.0	25.0
Hexachloroethane	Ave	0.5307	0.5273	0.0100	49700	50000	-0.6	25.0
Nitrobenzene	Ave	0.3107	0.2885	0.0100	46400	50000	-7.1	25.0
Isophorone	Ave	0.5130	0.4975	0.0100	48500	50000	-3.0	25.0
2-Nitrophenol	Lin1		0.1824	0.0100	46600	50000	-6.8	25.0
2,4-Dimethylphenol	Ave	0.3526	0.3433	0.0100	48700	50000	-2.7	25.0
Tetraethyl lead	Ave	0.1600	0.1656	0.0100	25900	25000	3.5	25.0
Bis(2-chloroethoxy)methane	Ave	0.3056	0.2852	0.0100	46700	50000	-6.7	25.0
Benzoic acid	Ave	0.2518	0.2744	0.0100	54500	50000	9.0	25.0
2,4-Dichlorophenol	Ave	0.3271	0.3253	0.0100	49700	50000	-0.5	25.0
1,2,4-Trichlorobenzene	Ave	0.3678	0.3627	0.0100	49300	50000	-1.4	25.0
Naphthalene	Ave	1.077	1.053	0.0100	48900	50000	-2.2	25.0
4-Chloroaniline	Ave	0.4296	0.2718	0.0100	31600	50000	-36.7*	25.0
Hexachlorobutadiene	Ave	0.2176	0.2225	0.0100	51100	50000	2.3	25.0
4-Chloro-3-methylphenol	Ave	0.2962	0.2968	0.0100	50100	50000	0.2	25.0
2-Methylnaphthalene	Ave	0.7448	0.7382	0.0100	49600	50000	-0.9	25.0
Hexachlorocyclopentadiene	Ave	0.3774	0.3801	0.0500	50400	50000	0.7	25.0
2,4,6-Trichlorophenol	Ave	0.3659	0.3611	0.0100	49300	50000	-1.3	25.0
2,4,5-Trichlorophenol	Ave	0.3881	0.3810	0.0100	49100	50000	-1.8	25.0
2-Chloronaphthalene	Ave	1.124	1.072	0.0100	47700	50000	-4.7	25.0
2-Nitroaniline	Lin1		0.2350	0.0100	46400	50000	-7.2	25.0
Dimethyl phthalate	Ave	1.334	1.308	0.0100	49000	50000	-2.0	25.0
2,6-Dinitrotoluene	Lin1		0.3043	0.0100	50000	50000	0.0	25.0
Acenaphthylene	Ave	1.770	1.773	0.0100	50100	50000	0.2	25.0
3-Nitroaniline	Lin1		0.2226	0.0100	35800	50000	-28.4*	25.0
Acenaphthene	Ave	1.109	1.077	0.0100	48600	50000	-2.9	25.0
2,4-Dinitrophenol	Lin1		0.1477	0.0500	44500	50000	-11.0	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Lab Sample ID: ICV 480-27157/9 Calibration Date: 08/11/2011 16:45

Instrument ID: HP5973U Calib Start Date: 08/10/2011 12:09

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 08/10/2011 14:06

Lab File ID: U2627.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Linl		0.2188	0.0500	48400	50000	-3.2	25.0
2,4-Dinitrotoluene	Linl		0.4077	0.0100	46100	50000	-7.8	25.0
Dibenzofuran	Ave	1.720	1.618	0.0100	47100	50000	-5.9	25.0
Diethyl phthalate	Ave	1.279	1.266	0.0100	49500	50000	-1.0	25.0
4-Chlorophenyl phenyl ether	Ave	0.7382	0.7072	0.0100	47900	50000	-4.2	25.0
Fluorene	Ave	1.401	1.379	0.0100	49200	50000	-1.6	25.0
4-Nitroaniline	Ave	0.3069	0.2781	0.0100	45300	50000	-9.4	25.0
4,6-Dinitro-2-methylphenol	Linl		0.1354	0.0100	45300	50000	-9.4	25.0
N-Nitrosodiphenylamine	Ave	0.5613	0.5367	0.0100	47800	50000	-4.4	25.0
1,2-Diphenylhydrazine	Ave	0.9692	0.9379	0.0100	48400	50000	-3.2	25.0
4-Bromophenyl phenyl ether	Ave	0.2256	0.2168	0.0100	48000	50000	-3.9	25.0
Hexachlorobenzene	Ave	0.2333	0.2225	0.0100	47700	50000	-4.7	25.0
Pentachlorophenol	Linl		0.1438	0.0100	48200	50000	-3.6	25.0
Phenanthrene	Ave	1.148	1.110	0.0100	48300	50000	-3.3	25.0
Anthracene	Ave	1.155	1.132	0.0100	49000	50000	-2.0	25.0
Carbazole	Ave	1.037	0.9793	0.0100	47200	50000	-5.6	25.0
Di-n-butyl phthalate	Ave	1.160	1.102	0.0100	47500	50000	-5.0	25.0
Pyrene	Ave	1.188	1.146	0.0100	50000	50000	-3.6	25.0
Benzidine	Ave	0.5828	0.1855	0.0100	15900	50000	-68.2*	25.0
Fluoranthene	Ave	1.273	1.263	0.0100	47900	50000	-0.8	25.0
Butyl benzyl phthalate	Ave	0.5141	0.4925	0.0100	47900	50000	-4.2	25.0
3,3'-Dichlorobenzidine	Ave	0.4596	0.2877	0.0100	31300	50000	-37.4*	25.0
Bis(2-ethylhexyl) phthalate	Ave	0.7062	0.6867	0.0100	48600	50000	-2.8	25.0
Benzo(a)anthracene	Ave	1.158	1.137	0.0100	49100	50000	-1.8	25.0
Chrysene	Ave	1.129	1.096	0.0100	48500	50000	-2.9	25.0
Di-n-octyl phthalate	Linl		1.094	0.0100	46900	50000	-6.2	25.0
Benzo(b)fluoranthene	Ave	1.166	1.168	0.0100	50100	50000	0.2	25.0
Benzo(k)fluoranthene	Ave	1.205	1.143	0.0100	47400	50000	-5.1	25.0
Benzo(a)pyrene	Ave	0.9856	0.9704	0.0100	49200	50000	-1.5	25.0
Indeno(1,2,3-cd)pyrene	Ave	1.241	1.153	0.0100	46400	50000	-7.1	25.0
Dibenz(a,h)anthracene	Ave	1.092	1.047	0.0100	48000	50000	-4.1	25.0
Benzo(g,h,i)perylene	Ave	0.9531	0.8920	0.0100	46800	50000	-6.4	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Lab Sample ID: ICV 480-27157/9 Calibration Date: 08/11/2011 16:45

Instrument ID: HP5973U Calib Start Date: 08/11/2011 14:25

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 08/11/2011 16:22

Lab File ID: U2627.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzaldehyde	Ave	0.7374	0.3337	0.0100	22600	50000	-54.7*	25.0
Acetophenone	Ave	1.525	1.556	0.0100	51000	50000	2.1	25.0
Caprolactam	Lin1		0.0930	0.0100	54100	50000	8.2	25.0
Biphenyl	Ave	1.500	1.418	0.0100	47300	50000	-5.5	25.0
2,3,4,6-Tetrachlorophenol	Lin1		0.3203	0.0100	55800	50000	11.6	25.0
Atrazine	Ave	0.3567	0.4100	0.0100	57500	50000	14.9	25.0

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QA/QC Review of Method 8082 PCB Data for TestAmerica Buffalo, Job No: 480-8280-1

19 Soil Samples, and 2 Field Duplicates Collected August 8-22, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analyses of method blanks reported target PCBs as not detected.

Surrogate Recovery: The surrogates recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample SS-C6 (7-8).

Laboratory Control Sample: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for soil samples LCS 480-26952/2-A, LCS 480-27842/2-A, LCSD 480-26952/3-A, and LCSD 480-27842/3-A. The %Rs for PCB-1016 and PCB-1260 were within QC limits for soil samples LCS 480-27839/2-A and LCS 480-28850/2-A.

Field Duplicates: The analyses of soil field duplicate pairs SS-C3/DUP-01 and SS-C2/DUP-02 reported target PCBs as either not detected or below the lowest standard in one or both samples; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pairs were acceptable.

Initial Calibration: The "r" squared for PCB-1016 and PCB-1260 were above the allowable minimum (0.990), as required.

Continuing Calibration: The average %Ds for PCB-1016 and PCB-1260 were below the allowable maximum (15%), as required.

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PCB Identification Summary for Multicomponent Analytes: The checked surrogate was within GC quantitation limits. The %Ds for dual column quantitation of PCB-1254 in samples SS-C1 and DUP-02 were above the allowable maximum (25%), but were not above 70%. The results for PCB-1254 should be considered estimated (J) in samples SS-C1 and DUP-02.

The %D for dual column quantitation of PCB-1260 in sample SS-B4 was above the allowable maximum (25%) and was above 100%. The result for PCB-1260 should be considered unusable (R) in sample SS-B4.

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 480-8505-3

Instrument ID (1): HP5890-12 Instrument ID (2): HP5890-12

Date Analyzed (1): 08/18/2011 16:30 Date Analyzed (2): 08/18/2011 16:30

GC Column (1): ZB-5 ID: 0.53(mm) GC Column (2): ZB-35 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1254	1	1	3.65	3.61	3.67	138	230	26.1
		2	3.72	3.69	3.75	199		
		3	3.90	3.86	3.92	240		
		4	4.27	4.23	4.29	325		
	2	1	3.39	3.35	3.41	271	290	
		2	3.52	3.48	3.54	240		
		3	3.79	3.75	3.81	265		
		4	3.90	3.87	3.93	396		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: SS-B4 Lab Sample ID: 480-8382-4

Instrument ID (1): HP5890-12 Instrument ID (2): HP5890-12

Date Analyzed (1): 08/18/2011 11:23 Date Analyzed (2): 08/18/2011 11:23

GC Column (1): ZB-5 ID: 0.53(mm) GC Column (2): ZB-35 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1254	1	1	3.64	3.61	3.67	448	440	1.2
		2	3.72	3.69	3.75	427		
		3	3.89	3.86	3.92	451		
		4	4.26	4.23	4.29	423		
	2	1	3.38	3.35	3.41	391	430	
		2	3.51	3.48	3.54	418		
		3	3.78	3.75	3.81	427		
		4	3.90	3.87	3.93	492		
PCB-1260	1	2	4.73	4.70	4.76	183	170	109.4
		3	4.94	4.91	4.97	294		
	2	1	4.17	4.14	4.20	284	570	
		3	4.60	4.57	4.63	381		
		4	4.97	4.94	5.00	1060		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-8280-1

SDG No.:

Client Sample ID: SS-C1 Lab Sample ID: 480-8505-1

Instrument ID (1): HP5890-12 Instrument ID (2): HP5890-12

Date Analyzed (1): 08/18/2011 16:01 Date Analyzed (2): 08/18/2011 16:01

GC Column (1): ZB-5 ID: 0.53(mm) GC Column (2): ZB-35 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1254	1	1	3.64	3.61	3.67	255	260	30.0
		2	3.71	3.69	3.75	232		
		3	3.89	3.86	3.92	276		
		4	4.25	4.23	4.29	263		
	2	1	3.38	3.35	3.41	180	190	
		2	3.50	3.48	3.54	199		
		3	3.77	3.75	3.81	179		
		4	3.89	3.87	3.93	200		

ALPHA GEOSCIENCE

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Water Supply

QA/QC Review of TAL Metals Data for TestAmerica Buffalo, Job No: 480-8280-1

19 Soil Samples and 2 Field Duplicates Collected August 8-22, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for target metals were within laboratory QC limits (50-150%) for the following CRQL standard samples.

CRI 480-27260/7	CRI 480-27881/10	CRI 480-28017/7	CRI 480-28241/7
CRI 480-28494/8	CRI 480-28511/10	CRI 480-28669/7	CRI 480-29371/7
CRI 480-29371/40	CRI 480-29560/7	CRA 480-27102/3	CRA 480-27200/3
CRA 480-27346/3	CRA 480-27580/3	CRA 480-27788/3	

Blanks: The analyses of initial calibration and continuing calibration, and method blanks reported TAL metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries (%Rs) for barium and potassium were above control limits (75-125%), but were not above 200% for soil MS/MSD sample SS-C6. Two of two %Rs for potassium were above control limits (75-125%), but were not above 200% for soil MS/MSD sample SS-B3. One of two %Rs for chromium was above control limits (75-125%), but was not above 200% for soil MS/MSD sample SS-B3. Positive results for these metals should be considered estimated (J) in associated soil samples.

Two of two %Rs for aluminum were above control limits (75-125%), but were not above 300% for soil MS/MSD samples SS-C6 and SS-B3. Since aluminum is a naturally occurring metal, positive for aluminum should be considered estimated (J) in associated soil samples.

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One of two %Rs for antimony was below control limits (75-125%), but was not below 10% for soil MS/MSD sample SS-C6. Positive and "not detected" results for antimony should be considered estimated (J) in associated soil samples.

Two of two %Rs for calcium and magnesium were below control limits (75-125%) and 1 or 2 were below 10% for soil MS/MSD sample SS-C6. Two of two %Rs for arsenic were below control limits (75-125%) and were below 10% for soil MS/MSD sample SS-B3. Positive results for these metals should be considered estimated (J) and "not detected" unusable (R) in associated soil samples.

Laboratory Duplicates: The relative percent differences for TAL metals were below the allowable maximum (35%) in soil MS/MSD samples SS-C6 and SS-B3, as required.

Field Duplicates: The relative percent differences (RPDs) for applicable metals were below the allowable maximum (35%) for soil field duplicate pair SS-C5/DUP-01 (attached table), as required.

The RPD for magnesium was above the allowable maximum (35%) for soil field duplicate pair SS-C2 /DUP-02 (attached table). Positive results for magnesium should be considered estimated (J) in samples SS-C2 and DUP-02.

Laboratory Control Sample: The percent recoveries for TAL metals were within QC limits in the following soil samples.

LCSSRM 480-26989/2-A	LCSSRM 480-27300/2-A	LCSSRM 480-27541/2-A
LCSSRM 480-28190/2-A	LCSSRM 480-28991/2-A	LCSSRM 480-26967/2-A
LCSSRM 480-27128/2-A	LCSSRM 480-27292/2-A	LCSSRM 480-27520/2-A
LCSSRM 480-28748/2-A		

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil serial dilution sample SS-B3, as required. The %D for potassium was above the allowable maximum (10%) for soil serial dilution sample SS-C6. Positive results for potassium that are above the CRDLs should be considered estimated (J) in associated soil samples.

Instrument Detection Limits: The MDLs were at or below the RLs, as required.

Percent Solids: The % solids for soil samples were above 50%.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-8280-1

S1= SS-C5 **S2=** DUP-01

Analyte	S1	S2	RPD (%)
aluminum	7950	8160	3%
antimony	ND	ND	NC
arsenic	4.9	5.1	4%
barium	62.3	61.5	1%
beryllium	0.50	0.48	4%
cadmium	0.33	0.29	13%
calcium	11500	9570	18%
chromium	15.9	15.2	5%
cobalt	6.8	6.5	5%
copper	27.3	26.9	1%
iron	19400	18600	4%
lead	36.0	39.7	10%
magnesium	6560	5690	14%
manganese	433	412	5%
mercury	0.050	0.056	11%
nickel	15.8	15.3	3%
potassium	859	837	3%
selenium	ND	ND	NC
silver	ND	ND	NC
sodium	**82.2**	**68.2**	NC
thallium	ND	ND	NC
vanadium	19.7	18.5	6%
zinc	296	262	12%

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-8280-1

S1= SS-C2 **S2=** DUP-02

Analyte	S1	S2	RPD (%)	
aluminum	3390	3610	6%	
antimony	**1.6**	**1.7**	NC	
arsenic	8.4	7.5	11%	
barium	112	115	3%	
beryllium	0.34	0.32	6%	
cadmium	0.80	0.72	11%	
calcium	60500	48500	22%	
chromium	51.2	46.1	10%	
cobalt	6.7	6.2	8%	
copper	149	135	10%	
iron	34300	31900	7%	
lead	126	113	11%	
magnesium	29400	18500	46%	*
manganese	408	361	12%	
mercury	0.36	0.20	57%	
nickel	41.6	39.8	4%	
potassium	517	511	1%	
selenium	ND	ND	NC	
silver	ND	ND	NC	
sodium	173	150	14%	
thallium	ND	ND	NC	
vanadium	23.6	21.5	9%	
zinc	1980	1770	11%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS-B3 MS
Lab ID: 480-8382-3 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-8280-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 96.1

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	5648		914		2040	232	75-125	F	6010B
Antimony	35.90		ND		40.9	88	75-125		6010B
Arsenic	50.32		79.7		40.9	-72	75-125	F	6010B
Barium	68.82		32.4		40.9	89	75-125		6010B
Beryllium	38.41		0.20	J	40.9	93	75-125		6010B
Cadmium	38.57		0.27		40.9	94	75-125		6010B
Calcium	146900		150000		2040	NA -139	75-125	4	6010B
Chromium	60.65		5.0		40.9	136	75-125	F	6010B
Cobalt	42.10		3.1		40.9	95	75-125		6010B
Copper	47.56		15.7		40.9	78	75-125		6010B
Iron	11350		21200		2040	NA -483	75-125	4	6010B
Lead	54.31		16.4		40.9	93	75-125		6010B
Magnesium	77260		72000		2040	NA 258	75-125	4	6010B
Manganese	361.0		297		40.9	NA 156	75-125	4	6010B
Nickel	48.38		15.8		40.9	80	75-125		6010B
Potassium	3656		463		2040	156	75-125	F	6010B
Selenium	37.95		ND		40.9	93	75-125		6010B
Silver	9.05		ND		10.2	89	75-125		6010B
Sodium	2144		120	J	2040	99	75-125		6010B
Thallium	36.83		ND		40.9	90	75-125		6010B
Vanadium	62.24		28.9		40.9	82	75-125		6010B
Zinc	50.28		15.4		39.3	89	75-125		6010B

SSR = Spiked Sample Result

NA - Not Applicable, concentration in the sample was greater than 4 times the spiking level; therefore, valid %Rs could not be calculated.

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS-B3 MSD
Lab ID: 480-8382-3 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-8280-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 96.1

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	5524		2000	231	75-125	2	20	F	6010B
Antimony	35.99		39.9	90	75-125	0	20		6010B
Arsenic	46.98		39.9	-82	75-125	7	20	F	6010B
Barium	75.37		39.9	108	75-125	9	20		6010B
Beryllium	38.48		39.9	96	75-125	0	20		6010B
Cadmium	38.27		39.9	95	75-125	1	20		6010B
Calcium	146000		2000	NA -190	75-125	1	20	4	6010B
Chromium	43.41		39.9	96	75-125	33	20	F	6010B
Cobalt	40.29		39.9	93	75-125	4	20		6010B
Copper	47.44		39.9	80	75-125	0	20		6010B
Iron	9282		2000	NA -598	75-125	20	20	4	6010B
Lead	51.66		39.9	88	75-125	5	20		6010B
Magnesium	69280		2000	NA -136	75-125	11	20	4	6010B
Manganese	293.9		39.9	NA -9	75-125	20	20	4	6010B
Nickel	46.33		39.9	77	75-125	4	20		6010B
Potassium	4005		2000	177	75-125	9	20	F	6010B
Selenium	38.11		39.9	95	75-125	0	20		6010B
Silver	9.00		9.98	90	75-125	1	20		6010B
Sodium	2088		2000	99	75-125	3	20		6010B
Thallium	35.67		39.9	89	75-125	3	20		6010B
Vanadium	59.59		39.9	77	75-125	4	20		6010B
Zinc	61.48		41.1	112	75-125	20	20		6010B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS-C6 MS
Lab ID: 480-8453-3 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-8280-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 92.9

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	11380		5480		2180	271	75-125	F	6010B
Antimony	32.59		ND		43.6	75	75-125		6010B
Arsenic	46.97		6.5		43.6	93	75-125		6010B
Barium	117.9		44.8		43.6	168	75-125	F	6010B
Beryllium	38.12		0.33		43.6	87	75-125		6010B
Cadmium	42.53		0.39		43.6	97	75-125		6010B
Calcium	6449		8630		2180	-100	75-125	F	6010B
Chromium	58.23		18.0		43.6	92	75-125		6010B
Cobalt	49.57		5.9		43.6	100	75-125		6010B
Copper	92.63		47.4		43.6	104	75-125		6010B
Iron	22380		17800		2180	NA 209	75-125	4	6010B
Lead	108.2		64.6		43.6	100	75-125		6010B
Magnesium	5552		5230		2180	15	75-125	F	6010B
Manganese	371.8		324		43.6	111	75-125	4	6010B
Nickel	56.43		14.5		43.6	96	75-125		6010B
Potassium	3598		712		2180	133	75-125	F	6010B
Selenium	40.85		ND		43.6	94	75-125		6010B
Silver	10.01		ND		10.9	92	75-125		6010B
Sodium	2165		74.8	J	2180	96	75-125		6010B
Thallium	39.68		ND		43.6	91	75-125		6010B
Vanadium	59.02		15.2		43.6	101	75-125		6010B
Zinc	160.0		112		43.6	109	75-125		6010B
Hg	0.503		0.14		0.333	108	75-125		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS-C6 MSD
Lab ID: 480-8453-3 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-8280-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 92.9

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	11420	2030	293	75-125	0	20	F	6010B
Antimony	28.57	40.5	70	75-125	13	20	F	6010B
Arsenic	43.25	40.5	91	75-125	8	20		6010B
Barium	105.4	40.5	149	75-125	11	20	F	6010B
Beryllium	35.46	40.5	87	75-125	7	20		6010B
Cadmium	39.44	40.5	96	75-125	8	20		6010B
Calcium	6797	2030	-90	75-125	5	20	4 F	6010B
Chromium	55.27	40.5	92	75-125	5	20		6010B
Cobalt	45.52	40.5	98	75-125	9	20		6010B
Copper	87.29	40.5	98	75-125	6	20		6010B
Iron	19510	2030	83	75-125	14	20	4	6010B
Lead	107.3	40.5	105	75-125	1	20		6010B
Magnesium	5367	2030	7	75-125	3	20	F	6010B
Manganese	348.6	40.5	M 61	75-125	6	20	4	6010B
Nickel	52.61	40.5	94	75-125	7	20		6010B
Potassium	3672	2030	146	75-125	2	20	F	6010B
Selenium	37.38	40.5	92	75-125	9	20		6010B
Silver	9.44	10.1	93	75-125	6	20		6010B
Sodium	2056	2030	98	75-125	5	20		6010B
Thallium	36.58	40.5	90	75-125	8	20		6010B
Vanadium	56.51	40.5	102	75-125	4	20		6010B
Zinc	156.1	40.5	108	75-125	2	20		6010B
Hg	0.546	0.348	116	75-125	8	20		7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-8453-3

SDG No:

Lab Name: TestAmerica Buffalo

Job No: 480-8280-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	5480		5834		6.5		6010B
Antimony	ND		ND		NC		6010B
Arsenic	6.5		7.37	J	NC		6010B
Barium	44.8		48.76		8.8		6010B
Beryllium	0.33		0.362	J	NC		6010B
Cadmium	0.39		0.410	J	NC		6010B
Calcium	8630		9117		5.6		6010B
Chromium	18.0		19.07		5.7		6010B
Cobalt	5.9		5.81		1.1		6010B
Copper	47.4		48.69		2.6		6010B
Iron	17800		17970		0.76		6010B
Lead	64.6		66.42		2.8		6010B
Magnesium	5230		5588		6.8		6010B
Manganese	324		343.9		6.3		6010B
Nickel	14.5		14.49	J	0.06		6010B
Potassium	712		803.3		13	y	6010B
Selenium	ND		ND		NC		6010B
Silver	ND		ND		NC		6010B
Sodium	74.8	J	96.08	J	NC		6010B
Thallium	ND		ND		NC		6010B
Vanadium	15.2		16.07		5.9		6010B
Zinc	112		120.0		6.7		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-9072-1

9 Soil Samples,
2 Field Duplicates, and 1 Trip Blank
Collected August 25-September 7, 2011

Prepared by: Donald Anné
May 2, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 9 soil samples, 2 field duplicates, and 1 trip blank analyzed for volatiles, and 9 soil samples and 2 field duplicates analyzed semi-volatiles.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile results for toluene were flagged as "not detected" (U) for samples SB-B1 (5-9) and SB-B2 (3-4) because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.

- Positive volatile result for methylene chloride was flagged as "not detected" (U) for the trip blank because the level reported in the sample was not significantly greater than (more than 10 times) the highest associated blank level.

- Positive semi-volatile results for the following compounds were flagged as "estimated" (J) in samples SB-C3 (5-8) and DUP-01 because relative percent differences for these compounds were above the allowable maximum in the associated soil field duplicate pair SB-C3 (5-8)/DUP-01.

benzo(a)anthracene	benzo(a)pyrene	benzo(b)fluoranthene
benzo(g,h,i)perylene	benzo(k)fluoranthene	chrysene
fluoranthene	indeno(1,2,3-cd)pyrene	phenanthrene
pyrene		

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-9072-1

9 Soil Samples, 2 Field Duplicates,
and 1 Trip Blank
Collected August 25-September 7, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for dichlorodifluoromethane and bromomethane were above the allowable maximum (25%) on 08-30-11 (P4754.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MS 480-29441/5 contained traces of methylene chloride (3.21 ug/kg) and toluene (0.683 ug/kg). Method blank MB 480-31837/5 contained a trace of methylene chloride (2.18 ug/L). The trip blank contained a trace of toluene (0.68 ug/L). Positive results for methylene chloride that are less than ten times the highest blank level should be reported as not detected (J) in associated samples. Positive results for toleune that are less than five times the highest blank level should be reported as not detected (J) in associated samples.

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Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample SB-B1 (5-9).

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for soil samples LCS 480-29441/4, LCS 480-30731/4, and LCS 480-30918/4, and aqueous sample LCS 480-31837/4.

Field Duplicates: The analyses of soil field duplicate pairs SB-C3 (5-8)/DUP-01 and SB-B2 (3-4)/DUP-02 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pairs were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-9072-1

SDG No.:

Lab Sample ID: CCVIS 480-29441/2 Calibration Date: 08/30/2011 11:55

Instrument ID: HP5973P Calib Start Date: 08/18/2011 15:26

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 08/18/2011 17:33

Lab File ID: P4754.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3726	0.2482		33.3	50.0	-33.4	50.0
Chloromethane	Ave	0.3702	0.2919	0.1000	39.4	50.0	-21.2	50.0
Vinyl chloride	Ave	0.3441	0.2994		43.5	50.0	-13.0	20.0
Bromomethane	Ave	0.0633	0.0450		35.5	50.0	-29.0	50.0
Chloroethane	Ave	0.0563	0.0427		37.9	50.0	-24.2	50.0
Trichlorofluoromethane	Ave	0.6045	0.5235		43.3	50.0	-13.4	50.0
Acrolein	Ave	0.0163	0.0149		910	1000	-9.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3330	0.3026		45.4	50.0	-9.1	50.0
1,1-Dichloroethene	Ave	0.3222	0.3059	0.1000	47.5	50.0	-5.1	20.0
Acetone	Ave	0.1193	0.1145		240	250	-4.0	50.0
Iodomethane	Ave	0.4376	0.4211		48.1	50.0	-3.8	50.0
Carbon disulfide	Ave	0.8751	0.8172		46.7	50.0	-6.6	50.0
Methyl acetate	Ave	0.5091	0.4822		47.4	50.0	-5.3	50.0
Acetonitrile	Ave	0.0291	0.0276		1890	2000	-5.3	50.0
Methylene Chloride	LinF		0.3688		50.0	50.0	0.0	50.0
Methyl tert-butyl ether	Ave	0.9627	0.9308		48.3	50.0	-3.3	50.0
trans-1,2-Dichloroethene	Ave	0.3515	0.3329		47.4	50.0	-5.3	50.0
Acrylonitrile	Ave	0.1442	0.1414		245	250	-1.9	50.0
Vinyl acetate	Ave	0.5495	0.5338		243	250	-2.9	50.0
1,1-Dichloroethane	Ave	0.6587	0.5985		45.4	50.0	-9.1	50.0
2-Butanone (MEK)	Ave	0.1890	0.1793		237	250	-5.1	50.0
2,2-Dichloropropane	Ave	0.4519	0.4622		51.1	50.0	2.3	50.0
cis-1,2-Dichloroethene	Ave	0.3848	0.3654		47.5	50.0	-5.1	50.0
Bromochloromethane	Ave	0.1904	0.1870		49.1	50.0	-1.8	50.0
Tetrahydrofuran	Ave	0.1183	0.1134		240	250	-4.1	50.0
Chloroform	Ave	0.6283	0.5648		44.9	50.0	-10.1	20.0
1,1,1-Trichloroethane	Ave	0.4825	0.4670		48.4	50.0	-3.2	50.0
Cyclohexane	Ave	0.5614	0.4946		44.0	50.0	-11.9	50.0
1,1-Dichloropropene	Ave	0.4630	0.4265		46.1	50.0	-7.9	50.0
Carbon tetrachloride	Ave	0.4163	0.4287		51.5	50.0	3.0	50.0
Benzene	Ave	1.319	1.242		47.1	50.0	-5.8	50.0
1,2-Dichloroethane	Ave	0.4702	0.4196		44.6	50.0	-10.8	50.0
Trichloroethene	Ave	0.3469	0.3239		46.7	50.0	-6.6	50.0
Methylcyclohexane	Ave	0.5355	0.4972		46.4	50.0	-7.2	50.0
1,2-Dichloropropane	Ave	0.3603	0.3303		45.8	50.0	-8.3	20.0
Dibromomethane	Ave	0.2202	0.2084		47.3	50.0	-5.3	50.0
Bromodichloromethane	Ave	0.4124	0.4077		49.4	50.0	-1.1	50.0
2-Chloroethyl vinyl ether	Ave	0.2142	0.1977		231	250	-7.7	50.0
cis-1,3-Dichloropropene	Ave	0.5009	0.4993		49.8	50.0	-0.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7984	0.7775		243	250	-2.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-9072-1

SDG No.:

Lab Sample ID: CCVIS 480-29441/2 Calibration Date: 08/30/2011 11:55

Instrument ID: HP5973P Calib Start Date: 08/18/2011 15:26

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 08/18/2011 17:33

Lab File ID: P4754.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.841	1.718		46.7	50.0	-6.7	20.0
trans-1,3-Dichloropropene	Ave	0.999	1.022		51.1	50.0	2.3	50.0
Ethyl methacrylate	Ave	0.8893	0.8730		49.1	50.0	-1.8	50.0
1,1,2-Trichloroethane	Ave	0.5644	0.5460		48.4	50.0	-3.3	50.0
Tetrachloroethene	Ave	0.9325	0.8828		47.3	50.0	-5.3	50.0
1,3-Dichloropropane	Ave	1.095	1.047		47.8	50.0	-4.4	50.0
2-Hexanone	Ave	0.5726	0.5633		246	250	-1.6	50.0
Dibromochloromethane	Lin1F		0.7483		47.7	50.0	-4.6	50.0
1,2-Dibromoethane	Ave	0.7172	0.7112		49.6	50.0	-0.8	50.0
Chlorobenzene	Ave	2.078	2.061	0.3000	49.6	50.0	-0.8	50.0
Ethylbenzene	Ave	3.268	3.179		48.6	50.0	-2.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7103	0.7583		53.4	50.0	6.8	50.0
m,p-Xylene	Ave	1.358	1.354		99.7	100	-0.3	50.0
o-Xylene	Ave	1.353	1.347		49.8	50.0	-0.5	50.0
Styrene	Ave	2.264	2.238		49.4	50.0	-1.2	50.0
Bromoform	QuaF		0.5930	0.1000	56.5	50.0	13.0	50.0
Isopropylbenzene	Ave	2.966	2.623		44.2	50.0	-11.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8262	0.7330	0.3000	44.4	50.0	-11.3	50.0
Bromobenzene	Ave	0.9079	0.8159		44.9	50.0	-10.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2108	0.1934		229	250	-8.3	50.0
1,2,3-Trichloropropane	Ave	0.2337	0.2119		45.3	50.0	-9.4	50.0
N-Propylbenzene	Ave	3.644	3.243		44.5	50.0	-11.0	50.0
2-Chlorotoluene	Ave	0.7676	0.6833		44.5	50.0	-11.0	50.0
1,3,5-Trimethylbenzene	Ave	2.508	2.205		44.0	50.0	-12.1	50.0
4-Chlorotoluene	Ave	0.7961	0.7039		44.2	50.0	-11.6	50.0
tert-Butylbenzene	Ave	0.5460	0.4912		45.0	50.0	-10.0	50.0
1,2,4-Trimethylbenzene	Ave	2.558	2.246		43.9	50.0	-12.2	50.0
sec-Butylbenzene	Ave	3.301	2.929		44.4	50.0	-11.3	50.0
4-Isopropyltoluene	Ave	2.644	2.377		44.9	50.0	-10.1	50.0
1,3-Dichlorobenzene	Ave	1.636	1.476		45.1	50.0	-9.8	50.0
1,4-Dichlorobenzene	Ave	1.672	1.512		45.2	50.0	-9.6	50.0
n-Butylbenzene	Ave	2.605	2.225		42.7	50.0	-14.6	50.0
1,2-Dichlorobenzene	Ave	1.578	1.434		45.4	50.0	-9.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1322	0.1288		48.7	50.0	-2.6	50.0
1,2,4-Trichlorobenzene	Ave	1.204	1.105		45.9	50.0	-8.2	50.0
Hexachlorobutadiene	Ave	0.3540	0.3623		51.2	50.0	2.3	50.0
Naphthalene	Ave	1.250	1.498		59.9	50.0	19.8	50.0
1,2,3-Trichlorobenzene	Ave	0.5506	0.5631		51.1	50.0	2.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2314	0.1962		42.4	50.0	-15.2	50.0
Toluene-d8 (Surr)	Ave	2.852	2.808		49.2	50.0	-1.5	50.0
4-Bromofluorobenzene (Surr)	Ave	1.140	1.181		51.8	50.0	3.7	50.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-9072-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-29441/5

Matrix: Solid Lab File ID: P4757.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/30/2011 13:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 29441 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
591-78-6	2-Hexanone	ND		25	2.5
78-93-3	2-Butanone (MEK)	ND		25	1.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-9072-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-29441/5

Matrix: Solid Lab File ID: P4757.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 08/30/2011 13:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 29441 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5.0	0.93
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	3.21	J	5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	0.683	J	5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	ND		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		64-126
2037-26-5	Toluene-d8 (Surr)	100		71-125
460-00-4	4-Bromofluorobenzene (Surr)	100		72-126

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-9072-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-31837/5

Matrix: Water Lab File ID: F3811A.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 09/10/2011 14:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 31837 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
591-78-6	2-Hexanone	ND		5.0	1.2
78-93-3	2-Butanone (MEK)	ND		10	1.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-9072-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-31837/5

Matrix: Water Lab File ID: F3811A.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 09/10/2011 14:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 31837 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		1.0	0.50
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	2.18		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		66-137
2037-26-5	Toluene-d8 (Surr)	97		71-126
460-00-4	4-Bromofluorobenzene (Surr)	91		73-120

ALPHA GEOSCIENCE

Geology
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QA/QC Review of Method 8270C Semi-Volatiles Data
for TestAmerica Buffalo, Job No: 480-9072-1

9 Soil Samples, and 2 Field Duplicates
Collected August 25-September 7, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum, as required.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximums and the percent recoveries were within QC limits for soil MS/MSD sample SB-B1 (5-9).

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for soil samples LCS 480-29814/2-A, LCS 480-30582/2-A, and LCS 480-30841/2-A.

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Field Duplicates: The relative percent differences (RPDs) for applicable compounds were below the allowable maximum (35%) for soil field duplicate pair SB-B2 (3-4)/DUP-02 (attached table), as required.

The RPDs for the following compounds were above the allowable maximum (35%) for soil field duplicate pair SB-C3 (5-8')/DUP-01 (attached table). Results for these compounds should be considered estimated (J) in samples SB-C3 (5-8) and DUP-01.

benzo(a)anthracene	benzo(a)pyrene	benzo(b)fluoranthene
benzo(g,h,i)perylene	benzo(k)fluoranthene	chrysene
fluoranthene	indeno(1,2,3-cd)pyrene	phenanthrene
pyrene		

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-9072-1

S1= SB-C3 (5-8) **S2=** DUP-01

Analyte	S1	S2	RPD (%)	
2-methylnaphthalene	**75**	**29**	NC	
acenaphthene	320	**54**	NC	
acenaphthylene	**84**	**53**	NC	
anthracene	510	**120**	NC	
benzo(a)anthracene	1200	340	112%	*
benzo(a)pyrene	1200	390	102%	*
benzo(b)fluoranthene	1300	420	102%	*
benzo(g,h,i)perylene	840	270	103%	*
benzo(k)fluoranthene	620	230	92%	*
biphenyl	**24**	ND	NC	
carbazole	**190**	**32**	NC	
chrysene	1200	370	106%	*
dibenz(a,h)anthracene	230	**67**	NC	
dibenzofuran	**160**	**45**	NC	
fluoranthene	2900	690	123%	*
fluorene	**160**	**61**	NC	
indeno(1,2,3-cd)pyrene	700	230	101%	*
naphthalene	ND	**34**	NC	
phenanthrene	2800	520	137%	*
pyrene	2300	560	122%	*

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-9072-1

S1= SB-B2 (3-4) **S2=** DUP-02

Analyte	S1	S2	RPD (%)
2-methylnaphthalene	**860**	**890**	NC
acenaphthene	4500	4400	2%
acenaphthylene	**110**	**160**	NC
anthracene	7600	7900	4%
benzo(a)anthracene	13000	13000	0%
benzo(a)pyrene	13000	13000	0%
benzo(b)fluoranthene	14000	15000	7%
benzo(g,h,i)perylene	8300	7700	8%
benzo(k)fluoranthene	7000	6200	12%
biphenyl	**210**	**210**	NC
carbazole	3100	3600	15%
chrysene	12000	13000	8%
dibenz(a,h)anthracene	2400	2200	9%
dibenzofuran	**1700**	1900	NC
fluoranthene	29000	26000	11%
fluorene	3500	3600	3%
indeno(1,2,3-cd)pyrene	7000	6400	9%
naphthalene	**1600**	1400	NC
phenanthrene	26000	25000	4%
pyrene	22000	22000	0%

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-10088-1

5 Soil Samples, 1 Equipment Blank,
and 1 Trip Blank
Collected September 19, 2011

Prepared by: Donald Anné
May 2, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 5 soil samples, 1 equipment blank, and 1 trip blanks analyzed for volatiles, and 5 soil samples and 1 equipment blank analyzed semi-volatiles.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive semi-volatile result for di-n-butyl phthalate was flagged as "not detected" (U) for the sample EB because the level reported in the sample was not significantly greater than (more than 10 times) the highest associated blank level.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-10088-1

5 Soil Samples, 1 Equipment Blank,
and 1 Trip Blank
Collected September 19, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %D for bromomethane was above the allowable maximum (25%) on 09-27-11 (F4206.D). Positive results for bromomethane should be considered estimated (J) in associated samples.

Blanks: The analyses of method, equipment, and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum, but 22 of 26 percent recoveries were below QC limits for soil MS/MSD sample TP-C4 (7-8). No action is taken on batch MS/MSD data alone to qualify or reject an entire set of samples. (This data is from job no: 480-10389-1.)

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Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for soil sample LCS 480-33080/4 and aqueous sample LCS 480-33097/4.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10088-1

SDG No.:

Lab Sample ID: CCVIS 480-33080/2 Calibration Date: 09/27/2011 18:11

Instrument ID: HP5973F Calib Start Date: 09/01/2011 13:30

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 09/01/2011 15:38

Lab File ID: F4206.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2499	0.2056		41.1	50.0	-17.8	50.0
Chloromethane	Ave	0.2882	0.2809	0.1000	48.7	50.0	-2.5	50.0
Vinyl chloride	Ave	0.2347	0.2253		48.0	50.0	-4.0	20.0
Bromomethane	QuaF		0.0659		63.3	50.0	26.6	50.0
Chloroethane	Ave	0.0748	0.0826		55.2	50.0	10.4	50.0
Trichlorofluoromethane	Ave	0.2338	0.2607		55.8	50.0	11.5	50.0
Acrolein	Ave	0.0093	0.0101		1080	1000	7.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2140	0.2226		52.0	50.0	4.0	50.0
1,1-Dichloroethene	Ave	0.2275	0.2170	0.1000	47.7	50.0	-4.6	20.0
Acetone	Ave	0.1169	0.1175		251	250	0.5	50.0
Iodomethane	Ave	0.3042	0.2901		47.7	50.0	-4.6	50.0
Carbon disulfide	Ave	0.6158	0.5895		47.9	50.0	-4.3	50.0
Methyl acetate	Ave	0.4745	0.4871		51.3	50.0	2.6	50.0
Acetonitrile	Ave	0.0243	0.0261		2150	2000	7.5	50.0
Methylene Chloride	LinF		0.2600		51.2	50.0	2.4	50.0
Methyl tert-butyl ether	Ave	0.8322	0.8064		48.4	50.0	-3.1	50.0
trans-1,2-Dichloroethene	Ave	0.2546	0.2505		49.2	50.0	-1.6	50.0
Acrylonitrile	Ave	0.1255	0.1299		259	250	3.5	50.0
Vinyl acetate	Ave	0.5473	0.5696		260	250	4.1	50.0
1,1-Dichloroethane	Ave	0.4637	0.4632		49.9	50.0	-0.1	50.0
2-Butanone (MEK)	Ave	0.1850	0.1929		261	250	4.3	50.0
2,2-Dichloropropane	Ave	0.3590	0.3351		46.7	50.0	-6.7	50.0
cis-1,2-Dichloroethene	Ave	0.2872	0.2813		49.0	50.0	-2.1	50.0
Bromochloromethane	Ave	0.1556	0.1567		50.3	50.0	0.7	50.0
Tetrahydrofuran	Ave	0.1187	0.1271		268	250	7.1	50.0
Chloroform	Ave	0.4539	0.4370		48.1	50.0	-3.7	20.0
1,1,1-Trichloroethane	Ave	0.3909	0.3681		47.1	50.0	-5.8	50.0
Cyclohexane	Ave	0.4458	0.4632		52.0	50.0	3.9	50.0
1,1-Dichloropropene	Ave	0.3479	0.3365		48.4	50.0	-3.3	50.0
Carbon tetrachloride	Ave	0.3463	0.3368		48.6	50.0	-2.7	50.0
Benzene	Ave	0.998	0.9789		49.0	50.0	-1.9	50.0
1,2-Dichloroethane	Ave	0.4091	0.4005		48.9	50.0	-2.1	50.0
Trichloroethene	Ave	0.2714	0.2610		48.1	50.0	-3.8	50.0
Methylcyclohexane	Ave	0.4197	0.4127		49.2	50.0	-1.7	50.0
1,2-Dichloropropane	Ave	0.2692	0.2658		49.4	50.0	-1.3	20.0
Dibromomethane	LinlF		0.1655		50.2	50.0	0.4	50.0
Bromodichloromethane	Ave	0.3299	0.3226		48.9	50.0	-2.2	50.0
2-Chloroethyl vinyl ether	Ave	0.1900	0.1981		261	250	4.3	50.0
cis-1,3-Dichloropropene	Ave	0.4236	0.4103		48.4	50.0	-3.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7887	0.8352		265	250	5.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10088-1

SDG No.:

Lab Sample ID: CCVIS 480-33080/2 Calibration Date: 09/27/2011 18:11

Instrument ID: HP5973F Calib Start Date: 09/01/2011 13:30

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 09/01/2011 15:38

Lab File ID: F4206.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.520	1.425		46.9	50.0	-6.3	20.0
Ethyl methacrylate	Ave	0.8206	0.7753		47.2	50.0	-5.5	50.0
trans-1,3-Dichloropropene	Ave	0.8632	0.8346		48.3	50.0	-3.3	50.0
1,1,2-Trichloroethane	Ave	0.4286	0.4220		49.2	50.0	-1.5	50.0
Tetrachloroethene	Ave	0.6517	0.6166		47.3	50.0	-5.4	50.0
1,3-Dichloropropane	Ave	0.8929	0.8801		49.3	50.0	-1.4	50.0
2-Hexanone	Ave	0.5863	0.6161		263	250	5.1	50.0
Dibromochloromethane	Ave	0.5848	0.6105		52.2	50.0	4.4	50.0
1,2-Dibromoethane	Ave	0.5928	0.5806		49.0	50.0	-2.1	50.0
Chlorobenzene	Ave	1.703	1.655	0.3000	48.6	50.0	-2.8	50.0
Ethylbenzene	Ave	2.750	2.672		48.6	50.0	-2.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5719	0.5791		50.6	50.0	1.3	50.0
m,p-Xylene	Ave	1.134	1.108		97.7	100	-2.3	50.0
o-Xylene	Ave	1.104	1.067		48.3	50.0	-3.3	50.0
Styrene	Ave	1.907	1.839		48.2	50.0	-3.6	50.0
Bromoform	Lin1F		0.3657	0.1000	46.3	50.0	-7.4	50.0
Isopropylbenzene	Ave	2.572	2.390		46.5	50.0	-7.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6370	0.6131	0.3000	48.1	50.0	-3.7	50.0
Bromobenzene	Ave	0.6997	0.6638		47.4	50.0	-5.1	50.0
N-Propylbenzene	Ave	2.983	2.857		47.9	50.0	-4.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2247	0.2203		245	250	-2.0	50.0
1,2,3-Trichloropropane	Ave	0.2195	0.2122		48.3	50.0	-3.3	50.0
2-Chlorotoluene	Ave	0.6427	0.6064		47.2	50.0	-5.6	50.0
1,3,5-Trimethylbenzene	Ave	2.169	2.036		46.9	50.0	-6.1	50.0
4-Chlorotoluene	Ave	0.6899	0.6419		46.5	50.0	-7.0	50.0
tert-Butylbenzene	Ave	0.4933	0.4581		46.4	50.0	-7.1	50.0
1,2,4-Trimethylbenzene	Ave	2.228	2.069		46.5	50.0	-7.1	50.0
sec-Butylbenzene	Ave	2.745	2.583		47.1	50.0	-5.9	50.0
4-Isopropyltoluene	Ave	2.379	2.247		47.2	50.0	-5.6	50.0
1,3-Dichlorobenzene	Ave	1.334	1.260		47.2	50.0	-5.6	50.0
1,4-Dichlorobenzene	Ave	1.350	1.277		47.3	50.0	-5.4	50.0
n-Butylbenzene	Ave	2.050	1.900		46.3	50.0	-7.3	50.0
1,2-Dichlorobenzene	Ave	1.281	1.180		46.0	50.0	-7.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1211	0.1131		46.7	50.0	-6.6	50.0
1,2,4-Trichlorobenzene	Ave	0.8233	0.7234		43.9	50.0	-12.1	50.0
Hexachlorobutadiene	Ave	0.3932	0.3466		44.1	50.0	-11.8	50.0
Naphthalene	Ave	2.309	2.016		43.7	50.0	-12.7	50.0
1,2,3-Trichlorobenzene	Ave	0.7463	0.6648		44.5	50.0	-10.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1755	0.1645		46.8	50.0	-6.3	50.0
Toluene-d8 (Surr)	Ave	2.284	2.331		51.0	50.0	2.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8003	0.8056		50.3	50.0	0.7	50.0

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QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-10088-1

5 Soil Samples and 1 Equipment Blank Collected September 19, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %D for caprolactam was above the allowable maximum (25%) on 09-26-11 (U4528.D). Positive results for caprolactam should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-32537/1-A contained a trace of di-n-butyl phthalate (0.457 ug/L). Positive results for di-n-butyl phthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximums, but 2 of 26 percent recoveries were within QC limits for soil MS/MSD sample SB-B3 (5-9). No action is taken on batch MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The relative percent differences for spiked compounds were below the allowable maximums and percent recoveries (%Rs) were within QC limits for aqueous samples LCS 480-32537/2-A and LCSD 480-32537/3-A. The %Rs for spiked compounds were within QC limits for soil sample LCS 480-32474/2-A.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10088-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U4529.D

Lab ID: 480-10088-1 MS Client ID: SB-B3 (5-9) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4-Dinitrophenol	3930	ND	2350	60	35-146	
2,4-Dinitrotoluene	3930	ND	3970	101	55-125	
2-Chlorophenol	3930	ND	3180	81	38-120	
4-Chloro-3-methylphenol	3930	ND	3440	88	49-125	
4-Nitrophenol	3930	ND	3590	91	43-137	
Acenaphthene	3930	86 J	4010	100	53-120	
Bis(2-ethylhexyl) phthalate	3930	ND	3680	94	61-133	
Fluorene	3930	64 J	3840	96	63-126	
Hexachloroethane	3930	ND	2850	73	41-120	
N-Nitrosodi-n-propylamine	3930	ND	3460	88	46-120	
Pentachlorophenol	3930	ND	2190	56	33-136	
Phenol	3930	ND	3290	84	36-120	
Pyrene	3930	5800	12000	157	51-133	F

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10088-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U4530.D

Lab ID: 480-10088-1 MSD Client ID: SB-B3 (5-9) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dinitrophenol	3920	2330	59	1	22	35-146	
2,4-Dinitrotoluene	3920	3970	101	0	20	55-125	
2-Chlorophenol	3920	3470	89	9	25	38-120	
4-Chloro-3-methylphenol	3920	3680	94	7	27	49-125	
4-Nitrophenol	3920	3530	90	2	25	43-137	
Acenaphthene	3920	4150	104	4	35	53-120	
Bis(2-ethylhexyl) phthalate	3920	3820	97	4	15	61-133	
Fluorene	3920	3900	98	1	15	63-126	
Hexachloroethane	3920	3260	83	13	46	41-120	
N-Nitrosodi-n-propylamine	3920	3850	98	11	31	46-120	
Pentachlorophenol	3920	2370	60	8	35	33-136	
Phenol	3920	3610	92	9	35	36-120	
Pyrene	3920	11300	141	6	35	51-133	F

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10088-1

SDG No.:

Lab Sample ID: CCV 480-32845/3 Calibration Date: 09/26/2011 14:37

Instrument ID: HP5973U Calib Start Date: 09/14/2011 17:22

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 09/14/2011 19:20

Lab File ID: U4528.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzaldehyde	Ave	0.8538	0.8540	0.0100	50000	50000	0.0	40.0
Acetophenone	Ave	1.842	1.749	0.0100	47500	50000	-5.0	40.0
Caprolactam	Ave	0.0722	0.0965	0.0100	64700	50000	33.6	40.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6018	0.5870	0.0100	48800	50000	-2.5	40.0
Biphenyl	Ave	1.531	1.520	0.0100	49700	50000	-0.7	40.0
2,3,4,6-Tetrachlorophenol	Lin1		0.3190	0.0100	45200	50000	-9.6	40.0
Atrazine	Ave	0.4044	0.4165	0.0100	51500	50000	3.0	25.0

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-10585-1

2 Soil Samples, 7 Ground Water samples, 1 Field Duplicate, 1 Equipment Blank, and 1 Trip Blank Collected September 29 and 30, 2011

Prepared by: Donald Anné
May 2, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 7 ground water samples, 2 soil samples, 1 field duplicate, 1 equipment blank, and 1 trip blanks analyzed for volatiles, and 7 ground water samples, 2 soil samples, 1 field duplicate, and 1 equipment blank analyzed semi-volatiles.

The overall performances of the analyses are acceptable. TestAmerica Buffal did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The volatile results for cis-1,2-dichloroethene and tetrachloroethene in sample MW-46 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for cis-1,2-dichloroethene and tetrachloroethene marked "E" in the undiluted sample MW-46 were qualified as estimated (J).

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data for TestAmerica Buffalo, Job No: 480-10585-1

2 Soil Samples, 7 Ground Water samples, 1 Field Duplicate, 1 Equipment Blank, and 1 Trip Blank Collected September 29 and 30, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method, equipment, and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample MW-31.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for soil sample LCS 480-34830/4 , and aqueous samples LCS 480-35002/4 and LCS 480-35066/4.

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Field Duplicates: The analyses of aqueous field duplicate pair MW-32/CHA-2 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

There are results for cis-1,2-dichloroethene and trichloroethene in sample MW-46 that were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The sample was diluted by the laboratory and re-analyzed; therefore, the results for cis-1,2-dichloroethene and tetrachloroethene that are flagged as 'E' in the undiluted sample should be considered estimated (J). The use of the diluted results for cis-1,2-dichloroethene and tetrachloroethene is recommended. It is recommended that the undiluted results for sample MW-46 be used for all other compounds.

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QA/QC Review of Method 8270C Semi-Volatiles Data
for TestAmerica Buffalo, Job No: 480-10585-1

7 Ground Water Samples, 2 Soil Samples,
1 Field Duplicate, and 1 Equipment Blank
Collected September 29 and 30, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method and equipment blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximums and the percent recoveries were within QC limits for aqueous MS/MSD sample MW-31.

Laboratory Control Sample: The percent recoveries (%Rs) for spiked compounds were within QC limits for soil sample LCS 480-33829/2-A.

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The %R for 2,4-dinitrotoluene was above QC limits for aqueous sample LCS 480-34007/2-A. Positive results for 2,4-dinitrotoluene should be considered estimated (J) in associated aqueous samples.

Field Duplicates: The analyses of aqueous field duplicate pair MW-32/CHA-2 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10585-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V6229.D

Lab ID: LCS 480-34007/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-Dinitrophenol	100	118	118	42-153	
2,4-Dinitrotoluene	100	126	126	59-125	*
2-Chlorophenol	100	88.8	89	48-120	
4-Chloro-3-methylphenol	100	111	111	64-120	
4-Nitrophenol	100	64.8	65	16-120	
Acenaphthene	100	114	114	60-120	
Bis(2-ethylhexyl) phthalate	100	120	120	69-136	
Fluorene	100	120	120	66-129	
Hexachloroethane	100	78.9	79	25-120	
N-Nitrosodi-n-propylamine	100	113	113	56-120	
Pentachlorophenol	100	131	131	39-136	
Phenol	100	49.0	49	17-120	
Pyrene	100	116	116	58-136	

Column to be used to flag recovery and RPD values

FORM III 8270C

ALPHA GEOSCIENCE

Geology
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Water Supply

Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-10389-1

5 Soil Samples, 15 Ground Water samples,
2 Field Duplicates, and 4 Trip Blanks
Collected September 27-30, 2011

Prepared by: Donald Anné
May 2, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 15 ground water samples, 5 soil samples, 2 field duplicates, and 4 trip blanks analyzed for volatiles; 14 ground water samples, 5 soil samples, and 2 field duplicates analyzed semi-volatiles; 1 ground water sample, 5 soil samples, and 1 field duplicate analyzed for PCB; 5 soil samples and 1 field duplicate analyzed for TAL metals.

The overall performances of the analyses are acceptable. TestAmerica Buffal did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The volatile results for vinyl chloride, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene in sample MW-48 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for vinyl chloride, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene marked "E" in the undiluted sample MW-48 were qualified as estimated (J).

- The volatile results for cis-1,2-dichloroethene and tetrachloroethene in sample MW-19 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for cis-1,2-dichloroethene and tetrachloroethene marked "E" in the undiluted sample MW-19 were qualified as estimated (J).

- The positive volatile result for 1,1,1-trichloroethane was flagged as "estimated" (J) in sample MW-12 because the %D for 1,1,1-trichloroethane was above the allowable maximum in the associated continuing calibration.

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- The positive semi-volatile results for acephenone were flagged as "estimated" (J) in samples DUP-01 and TP-B1 (5-6) because the %D for acephenone was above the allowable maximum in the associated continuing calibration.

- The "not detected" results for antimony were flagged as "estimated" (J) in all 5 soil samples and the field duplicate because 2 of 2 percent recoveries for antimony were below control limits, but were not below 10% in the associated soil MS/MSD sample.

- The positive results for copper and potassium were flagged as "estimated" (J) in all 5 soil samples and the field duplicate because the %Ds for copper and potassium were above the allowable in the associated soil serial dilution sample and the sample results were above the CRDLs.

- Positive results for arsenic and calcium were flagged as "estimated" (J) in samples TP-B1 (5-6) and DUP-0-1 because relative percent differences for arsenic and calcium were above the allowable maximum in the associated soil field duplicate pair TP-B1 (5-6)/DUP-01.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-10389-1

5 Soil Samples, 15 Ground Water samples,
2 Field Duplicates, and 4 Trip Blanks
Collected September 27-30, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for carbon disulfide and carbon tetrachloride were above the allowable maximum (25%) on 10-05-11 (N1733.D). The %Ds for chloroethane, trichlorofluoromethane, 1,1,1-trichloroethane, and carbon tetrachloride were above the allowable maximum (25%) on 10-07-11 (N1839.D). The %D for chloroethane was above the allowable maximum (25%) on 10-07-11 (N1862.D). The %D for dichlorodifluoromethane was above the allowable maximum (25%) on 10-11-11 (F4481.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximum, but 22 of 26 percent recoveries (%Rs) were below QC limits for soil MS/MSD sample TP-C4 (7-8). The %Rs for spike compounds were within QC limits, but 12 of 13 RPDs were above the allowable maximum for aqueous MS/MSD sample MW-17. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for the following aqueous and soil samples.

LCS 480-33644/5	LCS 480-33837/4	LCS 480-34035/37
LCS 480-34063/5-B	LCS 480-34393/4	LCS 480-34399/5
LCS 480-34573/4	LCS 480-34830/4	LCS 480-34866/4

Field Duplicates: The analyses of aqueous field duplicate pair MW-17/CHA-1 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

The relative percent differences for applicable compounds were below the allowable maximum (35%) for soil field duplicate pair TP-B1 (5-6)/DUP-01 (attached table), as required.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

There are results for cis-1,2-dichloroethene in samples MW-19 and MW-48; tetrachloroethene in samples MW-19 and MW-48; trichloroethene in sample MW-48, and vinyl chloride in sample MW-48 that were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The samples were diluted by the laboratory and re-analyzed; therefore, the results for vinyl chloride, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene that are flagged as 'E' in the undiluted samples should be considered estimated (J). The use of the diluted results for vinyl chloride, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene is recommended. It is recommended that the undiluted results for these samples be used for all other compounds.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-10389-1

S1= TP-B1 (5-6) **S2=** DUP-01

Analyte	S1	S2	RPD (%)
cyclohexane	100	ND	NC
isopropylbenzene	95	67	35%
methyl acetate	52	ND	NC
methylcyclohexane	170	200	16%
toluene	ND	**22**	NC
xylenes, total	ND	**28**	NC

* RPD is above the allowable maximum (35%)

All results are in ug/kg

Bold numbers were values that below the CRQL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S6587.D

Lab ID: 480-10389-3 MS Client ID: MW-18 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	25.0	0.83 J	28.1	109	71-129	
1,1-Dichloroethene	25.0	ND	25.1	100	65-138	
1,2-Dichlorobenzene	25.0	ND	26.5	106	77-120	
1,2-Dichloroethane	25.0	ND	26.9	108	75-127	
Benzene	25.0	ND	26.8	107	71-124	
Chlorobenzene	25.0	ND	27.0	108	72-120	
cis-1,2-Dichloroethene	25.0	ND	26.6	106	74-124	
Ethylbenzene	25.0	ND	26.4	106	77-123	
Methyl tert-butyl ether	25.0	ND	24.4	98	64-127	
Tetrachloroethene	25.0	ND	27.0	108	74-122	
Toluene	25.0	ND	25.8	103	70-122	
trans-1,2-Dichloroethene	25.0	ND	27.4	110	73-127	
Trichloroethene	25.0	0.99 J	27.9	108	74-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5696.D

Lab ID: 480-10588-5 MS Client ID: TP-C4 (7-8) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	47.0	ND	31.4	67	79-126	F
1,1-Dichloroethene	47.0	ND	27.2	58	65-153	F
1,2-Dichlorobenzene	47.0	ND	26.5	56	75-120	F
1,2-Dichloroethane	47.0	ND	29.3	62	77-122	F
Benzene	47.0	ND	32.4	69	79-127	F
Chlorobenzene	47.0	ND	31.2	66	76-124	F
cis-1,2-Dichloroethene	47.0	ND	30.3	64	81-117	F
Ethylbenzene	47.0	ND	31.5	67	80-120	F
Methyl tert-butyl ether	47.0	ND	28.9	61	63-125	F
Tetrachloroethene	47.0	ND	29.5	63	74-122	F
Toluene	47.0	ND	30.8	65	74-128	F
trans-1,2-Dichloroethene	47.0	ND	28.9	61	78-126	F
Trichloroethene	47.0	ND	30.4	65	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S6588.D

Lab ID: 480-10389-3 MSD Client ID: MW-18 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	25.0	21.3	82	28	20	71-129	F
1,1-Dichloroethene	25.0	18.6	74	30	16	65-138	F
1,2-Dichlorobenzene	25.0	20.2	81	27	20	77-120	F
1,2-Dichloroethane	25.0	20.5	82	27	20	75-127	F
Benzene	25.0	19.9	80	30	13	71-124	F
Chlorobenzene	25.0	20.4	82	28	25	72-120	F
cis-1,2-Dichloroethene	25.0	19.5	78	31	15	74-124	F
Ethylbenzene	25.0	20.0	80	28	15	77-123	F
Methyl tert-butyl ether	25.0	17.8	71	31	37	64-127	
Tetrachloroethene	25.0	21.0	84	25	20	74-122	F
Toluene	25.0	19.9	80	26	15	70-122	F
trans-1,2-Dichloroethene	25.0	20.8	83	27	20	73-127	F
Trichloroethene	25.0	21.0	80	28	16	74-123	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5697.D

Lab ID: 480-10588-5 MSD Client ID: TP-C4 (7-8) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	46.0	35.4	77	12	30	79-126	F
1,1-Dichloroethene	46.0	30.7	67	12	30	65-153	
1,2-Dichlorobenzene	46.0	30.1	65	12	30	75-120	F
1,2-Dichloroethane	46.0	32.8	71	11	30	77-122	F
Benzene	46.0	35.9	78	10	30	79-127	F
Chlorobenzene	46.0	34.9	76	11	30	76-124	
cis-1,2-Dichloroethene	46.0	34.6	75	13	30	81-117	F
Ethylbenzene	46.0	35.0	76	11	30	80-120	F
Methyl tert-butyl ether	46.0	33.8	74	16	30	63-125	
Tetrachloroethene	46.0	33.3	72	12	30	74-122	F
Toluene	46.0	34.1	74	10	30	74-128	
trans-1,2-Dichloroethene	46.0	33.6	73	15	30	78-126	F
Trichloroethene	46.0	34.6	75	13	30	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCVIS 480-34573/2 Calibration Date: 10/07/2011 22:11

Instrument ID: HP5973N Calib Start Date: 09/20/2011 11:55

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 09/20/2011 13:51

Lab File ID: N1862.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2284	0.2583		28.3	25.0	13.1	50.0
Chloromethane	Ave	0.2302	0.2445	0.1000	26.6	25.0	6.2	50.0
Vinyl chloride	Ave	0.2234	0.2611		29.2	25.0	16.9	20.0
Bromomethane	Ave	0.1399	0.1678		30.0	25.0	19.9	50.0
Chloroethane	Ave	0.1235	0.1555		31.5	25.0	25.9	50.0
Trichlorofluoromethane	Ave	0.3023	0.3495		28.9	25.0	15.6	50.0
Acrolein	Ave	0.0084	0.0076		450	500	-10.0	50.0
1,1-Dichloroethene	Ave	0.2794	0.2740	0.1000	24.5	25.0	-1.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2075	0.2355		28.4	25.0	13.5	50.0
Acetone	Ave	0.0635	0.0682		134	125	7.3	50.0
Iodomethane	Ave	0.2780	0.2942		26.5	25.0	5.8	50.0
Carbon disulfide	Ave	0.6127	0.6187		25.2	25.0	1.0	50.0
Acetonitrile	Ave	0.0139	0.0130		936	1000	-6.4	50.0
Methyl acetate	Ave	0.2797	0.2723		24.3	25.0	-2.6	50.0
Methylene Chloride	Ave	0.2872	0.2690		23.4	25.0	-6.4	50.0
Methyl tert-butyl ether	Ave	0.7650	0.8414		27.5	25.0	10.0	50.0
trans-1,2-Dichloroethene	Ave	0.2723	0.2789		25.6	25.0	2.4	50.0
Acrylonitrile	Ave	0.0826	0.0773		117	125	-6.4	50.0
1,1-Dichloroethane	Ave	0.4878	0.4903		25.1	25.0	0.5	50.0
Vinyl acetate	Lin1F		0.3551		118	125	-5.7	50.0
2,2-Dichloropropane	Ave	0.2879	0.3378		29.3	25.0	17.3	50.0
cis-1,2-Dichloroethene	Ave	0.3010	0.3007		25.0	25.0	-0.0	50.0
2-Butanone (MEK)	Ave	0.1016	0.1020		126	125	0.4	50.0
Bromochloromethane	Ave	0.1350	0.1403		26.0	25.0	3.9	50.0
Tetrahydrofuran	Ave	0.0657	0.0633		120	125	-3.8	50.0
Chloroform	Ave	0.5017	0.5117		25.5	25.0	2.0	20.0
1,1,1-Trichloroethane	Ave	0.2994	0.3511		29.3	25.0	17.3	50.0
Cyclohexane	Ave	0.4086	0.4233		25.9	25.0	3.6	50.0
Carbon tetrachloride	Ave	0.2824	0.3358		29.7	25.0	18.9	50.0
1,1-Dichloropropene	Ave	0.3841	0.4160		27.1	25.0	8.3	50.0
Benzene	Ave	1.149	1.123		24.4	25.0	-2.3	50.0
1,2-Dichloroethane	Ave	0.3656	0.3963		27.1	25.0	8.4	50.0
Trichloroethene	Ave	0.2859	0.2960		25.9	25.0	3.5	50.0
Methylcyclohexane	Ave	0.4579	0.4906		26.8	25.0	7.1	50.0
1,2-Dichloropropane	Ave	0.2686	0.2576		24.0	25.0	-4.1	20.0
Dibromomethane	Ave	0.1556	0.1558		25.0	25.0	0.1	50.0
Bromodichloromethane	Ave	0.3338	0.3604		27.0	25.0	8.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1542	0.1638		133	125	6.2	50.0
cis-1,3-Dichloropropene	Ave	0.4161	0.4362		26.2	25.0	4.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2473	0.2466		125	125	-0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCVIS 480-34573/2 Calibration Date: 10/07/2011 22:11

Instrument ID: HP5973N Calib Start Date: 09/20/2011 11:55

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 09/20/2011 13:51

Lab File ID: N1862.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	0.8608	0.8665		25.2	25.0	0.7	20.0
trans-1,3-Dichloropropene	Ave	0.4254	0.4653		27.3	25.0	9.4	50.0
Ethyl methacrylate	LinF		0.3741		23.6	25.0	-5.6	50.0
1,1,2-Trichloroethane	Ave	0.2266	0.2214		24.4	25.0	-2.3	50.0
Tetrachloroethene	Ave	0.3655	0.3796		26.0	25.0	3.9	50.0
1,3-Dichloropropane	Ave	0.4791	0.4847		25.3	25.0	1.2	50.0
2-Hexanone	Ave	0.1733	0.1730		125	125	-0.2	50.0
Dibromochloromethane	Ave	0.2685	0.2964		27.6	25.0	10.4	50.0
1,2-Dibromoethane	Ave	0.2648	0.2723		25.7	25.0	2.8	50.0
Chlorobenzene	Ave	0.9430	0.9529	0.3000	25.3	25.0	1.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2831	0.3105		27.4	25.0	9.7	50.0
Ethylbenzene	Ave	1.593	1.689		26.5	25.0	6.0	20.0
m,p-Xylene	Ave	0.6336	0.6586		52.0	50.0	3.9	50.0
o-Xylene	Ave	0.6008	0.6116		25.4	25.0	1.8	50.0
Styrene	Ave	1.033	1.056		25.6	25.0	2.3	50.0
Bromoform	LinF		0.1662	0.1000	23.2	25.0	-7.2	50.0
Isopropylbenzene	Ave	2.785	2.936		26.4	25.0	5.4	50.0
Bromobenzene	Ave	0.7167	0.7140		24.9	25.0	-0.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5929	0.5746	0.3000	24.2	25.0	-3.1	50.0
1,2,3-Trichloropropane	Ave	0.1697	0.1911		28.2	25.0	12.6	50.0
N-Propylbenzene	Ave	3.345	3.496		26.1	25.0	4.5	50.0
trans-1,4-Dichloro-2-butene	Lin1F		0.1442		110	125	-12.0	50.0
2-Chlorotoluene	Ave	0.6725	0.6758		25.1	25.0	0.5	50.0
1,3,5-Trimethylbenzene	Ave	2.291	2.436		26.6	25.0	6.3	50.0
4-Chlorotoluene	Ave	2.316	2.455		26.5	25.0	6.0	50.0
tert-Butylbenzene	Ave	0.5236	0.5440		26.0	25.0	3.9	50.0
1,2,4-Trimethylbenzene	Ave	2.365	2.474		26.1	25.0	4.6	50.0
sec-Butylbenzene	Ave	2.952	2.991		25.3	25.0	1.3	50.0
1,3-Dichlorobenzene	Ave	1.403	1.421		25.3	25.0	1.2	50.0
4-Isopropyltoluene	Ave	2.480	2.551		25.7	25.0	2.9	50.0
1,4-Dichlorobenzene	Ave	1.458	1.477		25.3	25.0	1.2	50.0
n-Butylbenzene	Ave	2.243	2.272		25.3	25.0	1.3	50.0
1,2-Dichlorobenzene	Ave	1.312	1.331		25.4	25.0	1.4	50.0
1,2-Dibromo-3-Chloropropane	LinF		0.0945		23.3	25.0	-6.8	50.0
1,2,4-Trichlorobenzene	Lin1F		0.8265		23.6	25.0	-5.6	50.0
Hexachlorobutadiene	Ave	0.3453	0.3259		23.6	25.0	-5.6	50.0
Naphthalene	Lin1F		1.748		23.1	25.0	-7.6	50.0
1,2,3-Trichlorobenzene	Ave	0.6792	0.6819		25.1	25.0	0.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3046	0.3318		27.2	25.0	8.9	50.0
Toluene-d8 (Surr)	Ave	1.195	1.278		26.7	25.0	6.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3622	0.3914		27.0	25.0	8.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCVIS 480-34393/2 Calibration Date: 10/07/2011 11:32

Instrument ID: HP5973N Calib Start Date: 09/20/2011 11:55

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 09/20/2011 13:51

Lab File ID: N1839.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2284	0.2644		28.9	25.0	15.7	50.0
Chloromethane	Ave	0.2302	0.2331	0.1000	25.3	25.0	1.2	50.0
Vinyl chloride	Ave	0.2234	0.2478		27.7	25.0	10.9	20.0
Bromomethane	Ave	0.1399	0.1726		30.8	25.0	23.4	50.0
Chloroethane	Ave	0.1235	0.1557		31.5	25.0	26.1	50.0
Trichlorofluoromethane	Ave	0.3023	0.3809		31.5	25.0	26.0	50.0
Acrolein	Ave	0.0084	0.0070		414	500	-17.2	50.0
1,1-Dichloroethene	Ave	0.2794	0.2696	0.1000	24.1	25.0	-3.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2075	0.2264		27.3	25.0	9.1	50.0
Acetone	Ave	0.0635	0.0682		134	125	7.3	50.0
Iodomethane	Ave	0.2780	0.2983		26.8	25.0	7.3	50.0
Carbon disulfide	Ave	0.6127	0.6064		24.7	25.0	-1.0	50.0
Acetonitrile	Ave	0.0139	0.0114		817	1000	-18.3	50.0
Methyl acetate	Ave	0.2797	0.2542		22.7	25.0	-9.1	50.0
Methylene Chloride	Ave	0.2872	0.2764		24.1	25.0	-3.8	50.0
Methyl tert-butyl ether	Ave	0.7650	0.8317		27.2	25.0	8.7	50.0
trans-1,2-Dichloroethene	Ave	0.2723	0.2786		25.6	25.0	2.3	50.0
Acrylonitrile	Ave	0.0826	0.0746		113	125	-9.8	50.0
1,1-Dichloroethane	Ave	0.4878	0.4829		24.7	25.0	-1.0	50.0
Vinyl acetate	Lin1F		0.3460		115	125	-8.1	50.0
2,2-Dichloropropane	Ave	0.2879	0.3533		30.7	25.0	22.7	50.0
cis-1,2-Dichloroethene	Ave	0.3010	0.3073		25.5	25.0	2.1	50.0
2-Butanone (MEK)	Ave	0.1016	0.0962		118	125	-5.3	50.0
Bromochloromethane	Ave	0.1350	0.1432		26.5	25.0	6.1	50.0
Tetrahydrofuran	Ave	0.0657	0.0581		111	125	-11.6	50.0
Chloroform	Ave	0.5017	0.5357		26.7	25.0	6.8	20.0
1,1,1-Trichloroethane	Ave	0.2994	0.3764		31.4	25.0	25.7	50.0
Cyclohexane	Ave	0.4086	0.4066		24.9	25.0	-0.5	50.0
Carbon tetrachloride	Ave	0.2824	0.3627		32.1	25.0	28.4	50.0
1,1-Dichloropropene	Ave	0.3841	0.4146		27.0	25.0	8.0	50.0
Benzene	Ave	1.149	1.110		24.1	25.0	-3.4	50.0
1,2-Dichloroethane	Ave	0.3656	0.4143		28.3	25.0	13.3	50.0
Trichloroethene	Ave	0.2859	0.2916		25.5	25.0	2.0	50.0
Methylcyclohexane	Ave	0.4579	0.4885		26.7	25.0	6.7	50.0
1,2-Dichloropropane	Ave	0.2686	0.2530		23.5	25.0	-5.8	20.0
Dibromomethane	Ave	0.1556	0.1584		25.5	25.0	1.8	50.0
Bromodichloromethane	Ave	0.3338	0.3888		29.1	25.0	16.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1542	0.1567		127	125	1.6	50.0
cis-1,3-Dichloropropene	Ave	0.4161	0.4576		27.5	25.0	10.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2473	0.2282		115	125	-7.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCVIS 480-34393/2 Calibration Date: 10/07/2011 11:32

Instrument ID: HP5973N Calib Start Date: 09/20/2011 11:55

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 09/20/2011 13:51

Lab File ID: N1839.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	0.8608	0.8477		24.6	25.0	-1.5	20.0
trans-1,3-Dichloropropene	Ave	0.4254	0.4661		27.4	25.0	9.6	50.0
Ethyl methacrylate	LinF		0.3503		22.1	25.0	-11.6	50.0
1,1,2-Trichloroethane	Ave	0.2266	0.2169		23.9	25.0	-4.3	50.0
Tetrachloroethene	Ave	0.3655	0.3722		25.5	25.0	1.8	50.0
1,3-Dichloropropane	Ave	0.4791	0.4848		25.3	25.0	1.2	50.0
2-Hexanone	Ave	0.1733	0.1604		116	125	-7.5	50.0
Dibromochloromethane	Ave	0.2685	0.3112		29.0	25.0	15.9	50.0
1,2-Dibromoethane	Ave	0.2648	0.2733		25.8	25.0	3.2	50.0
Chlorobenzene	Ave	0.9430	0.9491	0.3000	25.2	25.0	0.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2831	0.3331		29.4	25.0	17.7	50.0
Ethylbenzene	Ave	1.593	1.624		25.5	25.0	1.9	20.0
m,p-Xylene	Ave	0.6336	0.6270		49.5	50.0	-1.0	50.0
o-Xylene	Ave	0.6008	0.5955		24.8	25.0	-0.9	50.0
Styrene	Ave	1.033	1.031		25.0	25.0	-0.1	50.0
Bromoform	LinF		0.1700	0.1000	23.8	25.0	-4.8	50.0
Isopropylbenzene	Ave	2.785	2.911		26.1	25.0	4.5	50.0
Bromobenzene	Ave	0.7167	0.7245		25.3	25.0	1.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5929	0.5646	0.3000	23.8	25.0	-4.8	50.0
1,2,3-Trichloropropane	Ave	0.1697	0.1865		27.5	25.0	9.9	50.0
N-Propylbenzene	Ave	3.345	3.490		26.1	25.0	4.3	50.0
trans-1,4-Dichloro-2-butene	Lin1F		0.1361		104	125	-17.0	50.0
2-Chlorotoluene	Ave	0.6725	0.6846		25.5	25.0	1.8	50.0
1,3,5-Trimethylbenzene	Ave	2.291	2.471		27.0	25.0	7.9	50.0
4-Chlorotoluene	Ave	2.316	2.472		26.7	25.0	6.8	50.0
tert-Butylbenzene	Ave	0.5236	0.5428		25.9	25.0	3.7	50.0
1,2,4-Trimethylbenzene	Ave	2.365	2.501		26.4	25.0	5.8	50.0
sec-Butylbenzene	Ave	2.952	2.501		21.2	25.0	-15.3	50.0
1,3-Dichlorobenzene	Ave	1.403	1.449		25.8	25.0	3.2	50.0
4-Isopropyltoluene	Ave	2.480	2.632		26.5	25.0	6.1	50.0
1,4-Dichlorobenzene	Ave	1.458	1.488		25.5	25.0	2.0	50.0
n-Butylbenzene	Ave	2.243	2.345		26.1	25.0	4.5	50.0
1,2-Dichlorobenzene	Ave	1.312	1.364		26.0	25.0	3.9	50.0
1,2-Dibromo-3-Chloropropane	LinF		0.0974		24.0	25.0	-4.0	50.0
1,2,4-Trichlorobenzene	Lin1F		0.8531		24.3	25.0	-2.8	50.0
Hexachlorobutadiene	Ave	0.3453	0.3578		25.9	25.0	3.6	50.0
Naphthalene	Lin1F		1.685		22.3	25.0	-10.8	50.0
1,2,3-Trichlorobenzene	Ave	0.6792	0.6970		25.7	25.0	2.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3046	0.3575		29.3	25.0	17.4	50.0
Toluene-d8 (Surr)	Ave	1.195	1.269		26.6	25.0	6.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3622	0.3960		27.3	25.0	9.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCVIS 480-34035/2 Calibration Date: 10/05/2011 10:51

Instrument ID: HP5973N Calib Start Date: 09/20/2011 11:55

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 09/20/2011 13:51

Lab File ID: N1733.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2284	0.1836		20.1	25.0	-19.6	
Chloromethane	Ave	0.2302	0.1837		19.9	25.0	-20.2	
Vinyl chloride	Ave	0.2234	0.2026		22.7	25.0	-9.3	
Bromomethane	Ave	0.1399	0.1544		27.6	25.0	10.4	
Chloroethane	Ave	0.1235	0.1397		28.3	25.0	13.2	
Trichlorofluoromethane	Ave	0.3023	0.3647		30.2	25.0	20.6	
Acrolein	Ave	0.0084	0.0068		405	500	-19.0	
1,1-Dichloroethene	Ave	0.2794	0.2373		21.2	25.0	-15.1	
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2075	0.1819		21.9	25.0	-12.3	
Acetone	Ave	0.0635	0.0608		120	125	-4.3	
Iodomethane	Ave	0.2780	0.2448		22.0	25.0	-12.0	
Carbon disulfide	Ave	0.6127	0.4407		18.0	25.0	-28.1	
Acetonitrile	Ave	0.0139	0.0100		719	1000	-28.1	
Methyl acetate	Ave	0.2797	0.2270		20.3	25.0	-18.8	
Methylene Chloride	Ave	0.2872	0.2415		21.0	25.0	-15.9	
Methyl tert-butyl ether	Ave	0.7650	0.7623		24.9	25.0	-0.4	
trans-1,2-Dichloroethene	Ave	0.2723	0.2521		23.1	25.0	-7.4	
Acrylonitrile	Ave	0.0826	0.0611		92.4	125	-26.0	
1,1-Dichloroethane	Ave	0.4878	0.4542		23.3	25.0	-6.9	
Vinyl acetate	Lin1F		0.3143		104	125	-16.5	
2,2-Dichloropropane	Ave	0.2879	0.3541		30.7	25.0	23.0	
cis-1,2-Dichloroethene	Ave	0.3010	0.2725		22.6	25.0	-9.5	
2-Butanone (MEK)	Ave	0.1016	0.0855		105	125	-15.8	
Bromochloromethane	Ave	0.1350	0.1323		24.5	25.0	-2.0	
Tetrahydrofuran	Ave	0.0657	0.0512		97.4	125	-22.1	
Chloroform	Ave	0.5017	0.5101		25.4	25.0	1.7	
1,1,1-Trichloroethane	Ave	0.2994	0.3618		30.2	25.0	20.8	
Cyclohexane	Ave	0.4086	0.3326		20.3	25.0	-18.6	
Carbon tetrachloride	Ave	0.2824	0.3669		32.5	25.0	29.9	
1,1-Dichloropropene	Ave	0.3841	0.3904		25.4	25.0	1.6	
Benzene	Ave	1.149	0.9927		21.6	25.0	-13.6	
1,2-Dichloroethane	Ave	0.3656	0.4065		27.8	25.0	11.2	
Trichloroethene	Ave	0.2859	0.2734		23.9	25.0	-4.4	
Methylcyclohexane	Ave	0.4579	0.4054		22.1	25.0	-11.5	
1,2-Dichloropropane	Ave	0.2686	0.2285		21.3	25.0	-14.9	
Dibromomethane	Ave	0.1556	0.1479		23.8	25.0	-4.9	
Bromodichloromethane	Ave	0.3338	0.3680		27.6	25.0	10.2	
2-Chloroethyl vinyl ether	Ave	0.1542	0.1306		106	125	-15.3	
cis-1,3-Dichloropropene	Ave	0.4161	0.4062		24.4	25.0	-2.4	
4-Methyl-2-pentanone (MIBK)	Ave	0.2473	0.2081		105	125	-15.9	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCVIS 480-34035/2 Calibration Date: 10/05/2011 10:51

Instrument ID: HP5973N Calib Start Date: 09/20/2011 11:55

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 09/20/2011 13:51

Lab File ID: N1733.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	0.8608	0.7822		22.7	25.0	-9.1	
trans-1,3-Dichloropropene	Ave	0.4254	0.4351		25.6	25.0	2.3	
Ethyl methacrylate	LinF		0.3199		20.2	25.0	-19.2	
1,1,2-Trichloroethane	Ave	0.2266	0.1969		21.7	25.0	-13.1	
Tetrachloroethene	Ave	0.3655	0.3541		24.2	25.0	-3.1	
1,3-Dichloropropane	Ave	0.4791	0.4422		23.1	25.0	-7.7	
2-Hexanone	Ave	0.1733	0.1451		105	125	-16.3	
Dibromochloromethane	Ave	0.2685	0.3018		28.1	25.0	12.4	
1,2-Dibromoethane	Ave	0.2648	0.2517		23.8	25.0	-5.0	
Chlorobenzene	Ave	0.9430	0.8883		23.6	25.0	-5.8	
1,1,1,2-Tetrachloroethane	Ave	0.2831	0.3176		28.0	25.0	12.2	
Ethylbenzene	Ave	1.593	1.543		24.2	25.0	-3.1	
m,p-Xylene	Ave	0.6336	0.5970		47.1	50.0	-5.8	
o-Xylene	Ave	0.6008	0.5488		22.8	25.0	-8.7	
Styrene	Ave	1.033	0.9602		23.2	25.0	-7.0	
Bromoform	LinF		0.1708		23.9	25.0	-4.4	
Isopropylbenzene	Ave	2.785	2.774		24.9	25.0	-0.4	
Bromobenzene	Ave	0.7167	0.6813		23.8	25.0	-4.9	
1,1,2,2-Tetrachloroethane	Ave	0.5929	0.5010		21.1	25.0	-15.5	
1,2,3-Trichloropropane	Ave	0.1697	0.1778		26.2	25.0	4.8	
N-Propylbenzene	Ave	3.345	3.252		24.3	25.0	-2.8	
trans-1,4-Dichloro-2-butene	Lin1F		0.1403		107	125	-14.4	
2-Chlorotoluene	Ave	0.6725	0.6308		23.5	25.0	-6.2	
1,3,5-Trimethylbenzene	Ave	2.291	2.348		25.6	25.0	2.5	
4-Chlorotoluene	Ave	2.316	2.337		25.2	25.0	0.9	
tert-Butylbenzene	Ave	0.5236	0.5205		24.9	25.0	-0.6	
1,2,4-Trimethylbenzene	Ave	2.365	2.357		24.9	25.0	-0.3	
sec-Butylbenzene	Ave	2.952	2.891		24.5	25.0	-2.1	
1,3-Dichlorobenzene	Ave	1.403	1.341		23.9	25.0	-4.4	
4-Isopropyltoluene	Ave	2.480	2.542		25.6	25.0	2.5	
1,4-Dichlorobenzene	Ave	1.458	1.374		23.5	25.0	-5.8	
n-Butylbenzene	Ave	2.243	2.278		25.4	25.0	1.6	
1,2-Dichlorobenzene	Ave	1.312	1.253		23.9	25.0	-4.6	
1,2-Dibromo-3-Chloropropane	LinF		0.0939		23.1	25.0	-7.6	
1,2,4-Trichlorobenzene	Lin1F		0.8210		23.4	25.0	-6.4	
Hexachlorobutadiene	Ave	0.3453	0.3871		28.0	25.0	12.1	
Naphthalene	Lin1F		1.641		21.7	25.0	-13.2	
1,2,3-Trichlorobenzene	Ave	0.6792	0.6865		25.3	25.0	1.1	
1,2-Dichloroethane-d4 (Surr)	Ave	0.3046	0.3665		30.1	25.0	20.3	
Toluene-d8 (Surr)	Ave	1.195	1.258		26.3	25.0	5.3	
4-Bromofluorobenzene (Surr)	Ave	0.3622	0.4067		28.1	25.0	12.3	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCVIS 480-34830/2 Calibration Date: 10/11/2011 09:27

Instrument ID: HP5973F Calib Start Date: 10/04/2011 15:11

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 10/04/2011 17:19

Lab File ID: F4481.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2045	0.2820		68.9	50.0	37.9	50.0
Chloromethane	Ave	0.3351	0.3849	0.1000	57.4	50.0	14.8	50.0
Vinyl chloride	Ave	0.2710	0.3142		58.0	50.0	15.9	20.0
Bromomethane	Ave	0.0874	0.0932		53.3	50.0	6.6	50.0
Chloroethane	Ave	0.1016	0.1104		54.3	50.0	8.6	50.0
Trichlorofluoromethane	Ave	0.3130	0.3415		54.5	50.0	9.1	50.0
Acrolein	Ave	0.0110	0.0117		1070	1000	6.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2389	0.2734		57.2	50.0	14.4	50.0
1,1-Dichloroethene	Ave	0.2306	0.2549	0.1000	55.3	50.0	10.6	20.0
Acetone	Ave	0.1302	0.1351		259	250	3.7	50.0
Iodomethane	Ave	0.3138	0.3671		58.5	50.0	17.0	50.0
Carbon disulfide	Ave	0.6225	0.7262		58.3	50.0	16.7	50.0
Methyl acetate	Ave	0.5237	0.5392		51.5	50.0	3.0	50.0
Acetonitrile	Ave	0.0273	0.0274		2010	2000	0.6	50.0
Methylene Chloride	Ave	0.2831	0.2932		51.8	50.0	3.6	50.0
Methyl tert-butyl ether	Ave	0.8468	0.9217		54.4	50.0	8.9	50.0
trans-1,2-Dichloroethene	Ave	0.2665	0.2905		54.5	50.0	9.0	50.0
Acrylonitrile	Ave	0.1313	0.1368		261	250	4.2	50.0
Vinyl acetate	Ave	0.5918	0.6286		266	250	6.2	50.0
1,1-Dichloroethane	Ave	0.5024	0.5221		52.0	50.0	3.9	50.0
2-Butanone (MEK)	Ave	0.2043	0.2118		259	250	3.6	50.0
2,2-Dichloropropane	Ave	0.3479	0.3986		57.3	50.0	14.6	50.0
cis-1,2-Dichloroethene	Ave	0.3008	0.3154		52.4	50.0	4.8	50.0
Bromochloromethane	Ave	0.1639	0.1752		53.4	50.0	6.9	50.0
Tetrahydrofuran	Ave	0.1275	0.1325		260	250	3.9	50.0
Chloroform	Ave	0.4929	0.5079		51.5	50.0	3.0	20.0
1,1,1-Trichloroethane	Ave	0.4056	0.4385		54.1	50.0	8.1	50.0
Cyclohexane	Ave	0.4688	0.5149		54.9	50.0	9.8	50.0
1,1-Dichloropropene	Ave	0.3614	0.3850		53.3	50.0	6.5	50.0
Carbon tetrachloride	Ave	0.3529	0.3993		56.6	50.0	13.1	50.0
Benzene	Ave	1.041	1.088		52.2	50.0	4.5	50.0
1,2-Dichloroethane	Ave	0.4487	0.4672		52.1	50.0	4.1	50.0
Trichloroethene	Ave	0.2835	0.2978		52.5	50.0	5.0	50.0
Methylcyclohexane	Ave	0.4244	0.4665		55.0	50.0	9.9	50.0
1,2-Dichloropropane	Ave	0.2755	0.2849		51.7	50.0	3.4	20.0
Dibromomethane	Ave	0.1771	0.1891		53.4	50.0	6.8	50.0
Bromodichloromethane	Ave	0.3407	0.3614		53.0	50.0	6.1	50.0
2-Chloroethyl vinyl ether	Ave	0.2006	0.2126		265	250	6.0	50.0
cis-1,3-Dichloropropene	Ave	0.4089	0.4434		54.2	50.0	8.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8848	0.9075		256	250	2.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCVIS 480-34830/2 Calibration Date: 10/11/2011 09:27

Instrument ID: HP5973F Calib Start Date: 10/04/2011 15:11

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 10/04/2011 17:19

Lab File ID: F4481.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.569	1.579		50.3	50.0	0.6	20.0
Ethyl methacrylate	Ave	0.8007	0.8493		53.0	50.0	6.1	50.0
trans-1,3-Dichloropropene	Ave	0.8632	0.9280		53.7	50.0	7.5	50.0
1,1,2-Trichloroethane	Ave	0.4531	0.4668		51.5	50.0	3.0	50.0
Tetrachloroethene	Ave	0.7304	0.7315		50.1	50.0	0.2	50.0
1,3-Dichloropropane	Ave	0.9534	0.9558		50.1	50.0	0.3	50.0
2-Hexanone	Ave	0.6536	0.6786		260	250	3.8	50.0
Dibromochloromethane	Ave	0.6109	0.6931		56.7	50.0	13.5	50.0
1,2-Dibromoethane	Ave	0.6136	0.6441		52.5	50.0	5.0	50.0
Chlorobenzene	Ave	1.805	1.851	0.3000	51.3	50.0	2.5	50.0
Ethylbenzene	Ave	2.936	3.005		51.2	50.0	2.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5968	0.6546		54.8	50.0	9.7	50.0
m,p-Xylene	Ave	1.182	1.212		103	100	2.5	50.0
o-Xylene	Ave	1.127	1.176		52.2	50.0	4.4	50.0
Styrene	Ave	1.945	1.990		51.2	50.0	2.3	50.0
Bromoform	LinF		0.4103	0.1000	48.1	50.0	-3.8	50.0
Isopropylbenzene	Ave	2.682	2.758		51.4	50.0	2.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6760	0.7008	0.3000	51.8	50.0	3.7	50.0
Bromobenzene	Ave	0.7418	0.7513		50.6	50.0	1.3	50.0
N-Propylbenzene	Ave	3.272	3.303		50.5	50.0	0.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2463	0.2668		271	250	8.3	50.0
1,2,3-Trichloropropane	Ave	0.2366	0.2393		50.6	50.0	1.2	50.0
2-Chlorotoluene	Ave	0.6875	0.7011		51.0	50.0	2.0	50.0
1,3,5-Trimethylbenzene	Ave	2.290	2.329		50.9	50.0	1.7	50.0
4-Chlorotoluene	Ave	0.7173	0.7271		50.7	50.0	1.4	50.0
tert-Butylbenzene	Ave	0.4966	0.5234		52.7	50.0	5.4	50.0
1,2,4-Trimethylbenzene	Ave	2.311	2.331		50.4	50.0	0.9	50.0
sec-Butylbenzene	Ave	2.871	2.939		51.2	50.0	2.4	50.0
4-Isopropyltoluene	Ave	2.462	2.551		51.8	50.0	3.6	50.0
1,3-Dichlorobenzene	Ave	1.404	1.420		50.6	50.0	1.1	50.0
1,4-Dichlorobenzene	Ave	1.417	1.440		50.8	50.0	1.7	50.0
n-Butylbenzene	Ave	2.137	2.186		51.1	50.0	2.3	50.0
1,2-Dichlorobenzene	Ave	1.322	1.345		50.9	50.0	1.8	50.0
1,2-Dibromo-3-Chloropropane	Lin1F		0.1215		48.7	50.0	-2.6	50.0
1,2,4-Trichlorobenzene	Ave	0.7845	0.8457		53.9	50.0	7.8	50.0
Hexachlorobutadiene	Ave	0.3849	0.4060		52.7	50.0	5.5	50.0
Naphthalene	Ave	2.126	2.380		56.0	50.0	12.0	50.0
1,2,3-Trichlorobenzene	Ave	0.7185	0.7597		52.9	50.0	5.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1700	0.1691		49.7	50.0	-0.5	50.0
Toluene-d8 (Surr)	Ave	2.216	2.260		51.0	50.0	2.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7357	0.7807		53.1	50.0	6.1	50.0

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QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-10389-1

14 Ground Water Samples, 5 Soil Samples, and 2 Field Duplicates Collected September 27-30, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for 4-chloroaniline, 3-nitroaniline, and 3,3'-dichlorobenzidine were above the allowable maximum (25%) on 10-07-11 (U4976.D). The %Ds for 4-chloroaniline and 3,3'-dichlorobenzidine were above the allowable maximum (25%) on 10-11-11 (U5083.D). The %D for acetophenone was above the allowable maximum (25%) on 10-13-11 (U5166.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-33652/1-A contained a trace of butyl benzyl phthalate (0.496 ug/L). Positive results for butyl benzyl phthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

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Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximums and the percent recoveries (%Rs) were within QC limits for soil MS/MSD sample TP-C4 (7-8).

Four of 12 RPDs for spiked compounds were above the allowable maximum and 2 of 24 %Rs were above QC limits for aqueous MS/MSD sample MW-18. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples LCS 480-33829/2-A and LCSD 480-33829/3-A. The %Rs for spiked compounds were within QC limits for aqueous samples LCS 480-33652/2-A and 480-34007/2-A and soil sample 480-34190/2-A.

Field Duplicates: The analyses of aqueous field duplicate pair MW-17/CHA-1 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

The relative percent difference for phenanthrene was below the allowable maximum (35%) for soil field duplicate pair TP-B1 (5-6)/DUP-01 (attached table), as required.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-10389-1

S1= TP-B1 (5-6) **S2=** DUP-01

Analyte	S1	S2	RPD (%)
2-methylnaphthalene	**790**	**590**	NC
acetophenone	**560**	**410**	NC
anthracene	**390**	**330**	NC
benzo(a)anthracene	**220**	**340**	NC
benzo(a)pyrene	**350**	**260**	NC
benzo(b)fluoranthene	**320**	**300**	NC
benzo(g,h,i)perylene	**230**	**230**	NC
benzo(k)fluoranthene	**120**	**180**	NC
chrysene	**330**	**400**	NC
fluoranthene	**420**	**540**	NC
fluorene	**770**	**860**	NC
indeno(1,2,3-cd)pyrene	**160**	**170**	NC
phenanthrene	2000	2200	10%
pyrene	**520**	**680**	NC

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U4985.D

Lab ID: 480-10389-3 MSD Client ID: MW-18 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dinitrophenol	96.2	123	128	23	22	42-153	F
2-Chlorophenol	96.2	86.4	90	21	25	48-120	
4-Chloro-3-methylphenol	96.2	118	122	27	27	64-120	F
4-Nitrophenol	96.2	75.6	79	36	48	16-120	
Acenaphthene	96.2	105	110	21	24	60-120	
Bis(2-ethylhexyl) phthalate	96.2	124	129	24	15	69-136	F
Fluorene	96.2	115	120	25	15	66-129	F
Hexachloroethane	96.2	62.3	65	30	46	25-120	
N-Nitrosodi-n-propylamine	96.2	106	110	24	31	56-120	
Pentachlorophenol	96.2	133	139	23	37	39-136	F
Phenol	96.2	45.9	48	21	34	17-120	
Pyrene	96.2	119	124	23	19	58-136	F

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U4984.D

Lab ID: 480-10389-3 MS Client ID: MW-18 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2,4-Dinitrophenol	95.2	ND	97.5	102	42-153	
2-Chlorophenol	95.2	ND	69.9	73	48-120	
4-Chloro-3-methylphenol	95.2	ND	89.5	94	64-120	
4-Nitrophenol	95.2	ND	52.4	55	16-120	
Acenaphthene	95.2	ND	85.0	89	60-120	
Bis(2-ethylhexyl) phthalate	95.2	ND	97.6	103	69-136	
Fluorene	95.2	ND	89.4	94	66-129	
Hexachloroethane	95.2	ND	46.1	48	25-120	
N-Nitrosodi-n-propylamine	95.2	ND	82.8	87	56-120	
Pentachlorophenol	95.2	ND	106	111	39-136	
Phenol	95.2	ND	37.3	39	17-120	
Pyrene	95.2	ND	94.4	99	58-136	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: ICV 480-34421/8 Calibration Date: 10/07/2011 16:50

Instrument ID: HP5973U Calib Start Date: 10/07/2011 11:46

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 10/07/2011 13:43

Lab File ID: U4976.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.7414	0.8107	0.0100	54700	50000	9.3	25.0
Pyridine	Ave	1.100	1.090	0.0100	49500	50000	-0.9	25.0
Phenol	Ave	1.749	1.661	0.0100	47500	50000	-5.1	25.0
Aniline	Ave	2.000	1.292	0.0100	25800	40000	-35.4*	25.0
Bis(2-chloroethyl)ether	Ave	1.316	1.262	0.0100	48000	50000	-4.1	25.0
2-Chlorophenol	Ave	1.411	1.404	0.0100	49800	50000	-0.5	25.0
1,3-Dichlorobenzene	Ave	1.543	1.568	0.0100	50800	50000	1.6	25.0
1,4-Dichlorobenzene	Ave	1.569	1.588	0.0100	50600	50000	1.2	25.0
Benzyl alcohol	Ave	0.8902	0.8608	0.0100	48300	50000	-3.3	25.0
1,2-Dichlorobenzene	Ave	1.472	1.485	0.0100	50500	50000	0.9	25.0
2-Methylphenol	Ave	1.177	1.177	0.0100	50000	50000	-0.0	25.0
bis (2-chloroisopropyl) ether	Ave	1.965	1.908	0.0100	48500	50000	-2.9	25.0
N-Nitrosodi-n-propylamine	Ave	0.9390	0.9441	0.0500	50300	50000	0.6	25.0
4-Methylphenol	Ave	1.205	1.212	0.0100	101000	100000	0.6	25.0
Hexachloroethane	Ave	0.5587	0.5808	0.0100	52000	50000	4.0	25.0
Nitrobenzene	Ave	0.3593	0.3627	0.0100	50500	50000	1.0	25.0
Isophorone	Ave	0.6075	0.6211	0.0100	51100	50000	2.2	25.0
2-Nitrophenol	Ave	0.1817	0.1839	0.0100	50600	50000	1.2	25.0
2,4-Dimethylphenol	Ave	0.3444	0.3609	0.0100	52400	50000	4.8	25.0
Tetraethyl lead	Ave	0.1274	0.1546	0.0100	30300	25000	21.3	25.0
Bis(2-chloroethoxy)methane	Ave	0.3688	0.3647	0.0100	49400	50000	-1.1	25.0
Benzoic acid	Ave	0.2683	0.2126	0.0100	39600	50000	-20.8	25.0
2,4-Dichlorophenol	Ave	0.2666	0.2808	0.0100	52700	50000	5.3	25.0
1,2,4-Trichlorobenzene	Ave	0.3158	0.3293	0.0100	52100	50000	4.3	25.0
Naphthalene	Ave	0.9654	1.012	0.0100	52400	50000	4.9	25.0
4-Chloroaniline	Ave	0.4166	0.2570	0.0100	27500	44500	-38.3*	25.0
Hexachlorobutadiene	Ave	0.1782	0.1987	0.0100	55700	50000	11.5	25.0
4-Chloro-3-methylphenol	Ave	0.2880	0.3098	0.0100	53800	50000	7.6	25.0
2-Methylnaphthalene	Ave	0.6424	0.6821	0.0100	53100	50000	6.2	25.0
Hexachlorocyclopentadiene	Ave	0.3520	0.3677	0.0500	52200	50000	4.5	25.0
2,4,6-Trichlorophenol	Ave	0.3467	0.3565	0.0100	51400	50000	2.8	25.0
2,4,5-Trichlorophenol	Ave	0.3863	0.3824	0.0100	49500	50000	-1.0	25.0
2-Chloronaphthalene	Ave	1.091	1.090	0.0100	50000	50000	-0.0	25.0
2-Nitroaniline	Ave	0.3305	0.3448	0.0100	52200	50000	4.3	25.0
Dimethyl phthalate	Ave	1.281	1.329	0.0100	51900	50000	3.7	25.0
2,6-Dinitrotoluene	Ave	0.2844	0.3147	0.0100	55300	50000	10.6	25.0
Acenaphthylene	Ave	1.691	1.808	0.0100	53500	50000	6.9	25.0
3-Nitroaniline	Ave	0.3283	0.2329	0.0100	35500	50000	-29.1*	25.0
Acenaphthene	Ave	1.086	1.130	0.0100	52000	50000	4.1	25.0
2,4-Dinitrophenol	Linl		0.1521	0.0500	44100	50000	-11.8	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: ICV 480-34421/8 Calibration Date: 10/07/2011 16:50

Instrument ID: HP5973U Calib Start Date: 10/07/2011 11:46

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 10/07/2011 13:43

Lab File ID: U4976.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Ave	0.1896	0.2148	0.0500	56600	50000	13.3	25.0
2,4-Dinitrotoluene	Ave	0.3893	0.4175	0.0100	53600	50000	7.2	25.0
Dibenzofuran	Ave	1.532	1.556	0.0100	50800	50000	1.6	25.0
Diethyl phthalate	Ave	1.292	1.381	0.0100	53500	50000	6.9	25.0
Fluorene	Ave	1.223	1.303	0.0100	53300	50000	6.6	25.0
4-Chlorophenyl phenyl ether	Ave	0.6177	0.6509	0.0100	52700	50000	5.4	25.0
4-Nitroaniline	Ave	0.3403	0.3255	0.0100	47800	50000	-4.4	25.0
4,6-Dinitro-2-methylphenol	Lin1		0.1296	0.0100	46400	50000	-7.2	25.0
N-Nitrosodiphenylamine	Ave	0.4993	0.4986	0.0100	49900	50000	-0.1	25.0
1,2-Diphenylhydrazine	Ave	1.233	1.279	0.0100	51900	50000	3.7	25.0
4-Bromophenyl phenyl ether	Ave	0.2039	0.2030	0.0100	49800	50000	-0.4	25.0
Hexachlorobenzene	Ave	0.2295	0.2310	0.0100	50300	50000	0.7	25.0
Pentachlorophenol	Ave	0.1365	0.1436	0.0100	52600	50000	5.2	25.0
Phenanthrene	Ave	1.073	1.083	0.0100	50500	50000	0.9	25.0
Anthracene	Ave	1.072	1.099	0.0100	51300	50000	2.5	25.0
Carbazole	Ave	0.9767	0.9682	0.0100	49600	50000	-0.9	25.0
Di-n-butyl phthalate	Ave	1.177	1.189	0.0100	50500	50000	1.0	25.0
Fluoranthene	Ave	1.191	1.226	0.0100	51500	50000	3.0	25.0
Benzidine	Ave	0.6378	0.1833	0.0100	14400	50000	-71.3*	25.0
Pyrene	Ave	1.162	1.159	0.0100	49900	50000	-0.3	25.0
Butyl benzyl phthalate	Ave	0.5351	0.5505	0.0100	51400	50000	2.9	25.0
3,3'-Dichlorobenzidine	Ave	0.4528	0.2598	0.0100	28700	50000	-42.6*	25.0
Bis(2-ethylhexyl) phthalate	Ave	0.7616	0.7736	0.0100	50800	50000	1.6	25.0
Benzo(a)anthracene	Ave	1.147	1.173	0.0100	51200	50000	2.3	25.0
Chrysene	Ave	1.150	1.177	0.0100	51200	50000	2.3	25.0
Di-n-octyl phthalate	Ave	1.218	1.264	0.0100	51900	50000	3.8	25.0
Benzo(b)fluoranthene	Ave	1.138	1.118	0.0100	49200	50000	-1.7	25.0
Benzo(k)fluoranthene	Ave	1.170	1.257	0.0100	53800	50000	7.5	25.0
Benzo(a)pyrene	Ave	0.9627	1.004	0.0100	52100	50000	4.2	25.0
Dibenz(a,h)anthracene	Ave	0.9864	0.9785	0.0100	49600	50000	-0.8	25.0
Indeno(1,2,3-cd)pyrene	Ave	1.155	1.117	0.0100	48300	50000	-3.3	25.0
Benzo(g,h,i)perylene	Ave	0.9285	0.9116	0.0100	49100	50000	-1.8	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: ICV 480-34909/8 Calibration Date: 10/11/2011 17:04

Instrument ID: HP5973U Calib Start Date: 10/11/2011 14:43

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 10/11/2011 16:41

Lab File ID: U5083.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.9533	0.9918	0.0100	52000	50000	4.0	25.0
Pyridine	Ave	1.051	1.041	0.0100	49500	50000	-1.0	25.0
Phenol	Ave	1.620	1.523	0.0100	47000	50000	-6.0	25.0
Aniline	Ave	1.856	1.217	0.0100	26200	40000	-34.4*	25.0
Bis(2-chloroethyl)ether	Ave	1.172	1.142	0.0100	48700	50000	-2.6	25.0
2-Chlorophenol	Ave	1.365	1.370	0.0100	50200	50000	0.4	25.0
1,3-Dichlorobenzene	Ave	1.579	1.563	0.0100	49500	50000	-1.0	25.0
1,4-Dichlorobenzene	Ave	1.624	1.590	0.0100	48900	50000	-2.1	25.0
Benzyl alcohol	Ave	0.8348	0.8174	0.0100	49000	50000	-2.1	25.0
1,2-Dichlorobenzene	Ave	1.520	1.473	0.0100	48500	50000	-3.1	25.0
2-Methylphenol	Ave	1.123	1.105	0.0100	49200	50000	-1.6	25.0
bis (2-chloroisopropyl) ether	Ave	1.704	1.675	0.0100	49100	50000	-1.7	25.0
N-Nitrosodi-n-propylamine	Ave	0.9495	0.9443	0.0500	49700	50000	-0.5	25.0
4-Methylphenol	Ave	1.169	1.196	0.0100	102000	100000	2.3	25.0
Hexachloroethane	Ave	0.6369	0.6077	0.0100	47700	50000	-4.6	25.0
Nitrobenzene	Ave	0.3876	0.3702	0.0100	47700	50000	-4.5	25.0
Isophorone	Ave	0.6219	0.6151	0.0100	49500	50000	-1.1	25.0
2-Nitrophenol	Ave	0.1848	0.1814	0.0100	49100	50000	-1.8	25.0
2,4-Dimethylphenol	Ave	0.3824	0.3862	0.0100	50500	50000	1.0	25.0
Tetraethyl lead	Ave	0.1654	0.1802	0.0100	27200	25000	9.0	25.0
Bis(2-chloroethoxy)methane	Ave	0.3424	0.3296	0.0100	48100	50000	-3.7	25.0
Benzoic acid	Ave	0.2851	0.2325	0.0100	40800	50000	-18.5	25.0
2,4-Dichlorophenol	Ave	0.2835	0.2871	0.0100	50600	50000	1.3	25.0
1,2,4-Trichlorobenzene	Ave	0.3501	0.3430	0.0100	49000	50000	-2.0	25.0
Naphthalene	Ave	0.9904	0.9888	0.0100	49900	50000	-0.2	25.0
4-Chloroaniline	Ave	0.4075	0.2545	0.0100	27800	44500	-37.6*	25.0
Hexachlorobutadiene	Ave	0.2270	0.2295	0.0100	50500	50000	1.1	25.0
4-Chloro-3-methylphenol	Ave	0.3154	0.3203	0.0100	50800	50000	1.6	25.0
2-Methylnaphthalene	Ave	0.6824	0.6767	0.0100	49600	50000	-0.8	25.0
Hexachlorocyclopentadiene	Ave	0.3946	0.4021	0.0500	50900	50000	1.9	25.0
2,4,6-Trichlorophenol	Ave	0.3776	0.3817	0.0100	50500	50000	1.1	25.0
2,4,5-Trichlorophenol	Ave	0.4002	0.4036	0.0100	50400	50000	0.9	25.0
2-Chloronaphthalene	Ave	1.128	1.118	0.0100	49600	50000	-0.9	25.0
2-Nitroaniline	Ave	0.3577	0.3656	0.0100	51100	50000	2.2	25.0
Dimethyl phthalate	Ave	1.374	1.407	0.0100	51200	50000	2.4	25.0
2,6-Dinitrotoluene	Ave	0.2882	0.3182	0.0100	55200	50000	10.4	25.0
Acenaphthylene	Ave	1.744	1.833	0.0100	52500	50000	5.1	25.0
3-Nitroaniline	Ave	0.3042	0.2284	0.0100	37500	50000	-24.9	25.0
Acenaphthene	Ave	1.117	1.119	0.0100	50100	50000	0.1	25.0
2,4-Dinitrophenol	Linl		0.1296	0.0500	42800	50000	-14.4	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: ICV 480-34909/8 Calibration Date: 10/11/2011 17:04

Instrument ID: HP5973U Calib Start Date: 10/11/2011 14:43

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 10/11/2011 16:41

Lab File ID: U5083.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Ave	0.2528	0.2746	0.0500	54300	50000	8.6	25.0
2,4-Dinitrotoluene	Ave	0.4213	0.4388	0.0100	52100	50000	4.1	25.0
Dibenzofuran	Ave	1.654	1.613	0.0100	48800	50000	-2.4	25.0
Diethyl phthalate	Ave	1.451	1.506	0.0100	51900	50000	3.7	25.0
4-Chlorophenyl phenyl ether	Ave	0.7208	0.7132	0.0100	49500	50000	-1.1	25.0
Fluorene	Ave	1.353	1.388	0.0100	51300	50000	2.6	25.0
4-Nitroaniline	Ave	0.3026	0.2906	0.0100	48000	50000	-4.0	25.0
4,6-Dinitro-2-methylphenol	Lin1		0.1500	0.0100	50300	50000	0.6	25.0
N-Nitrosodiphenylamine	Ave	0.5032	0.5021	0.0100	49900	50000	-0.2	25.0
1,2-Diphenylhydrazine	Ave	1.289	1.284	0.0100	49800	50000	-0.4	25.0
4-Bromophenyl phenyl ether	Ave	0.2206	0.2200	0.0100	49900	50000	-0.3	25.0
Hexachlorobenzene	Ave	0.2488	0.2455	0.0100	49300	50000	-1.4	25.0
Pentachlorophenol	Lin1		0.1435	0.0100	49400	50000	-1.2	25.0
Phenanthrene	Ave	1.078	1.105	0.0100	51200	50000	2.4	25.0
Anthracene	Ave	1.080	1.107	0.0100	51200	50000	2.4	25.0
Carbazole	Ave	0.9275	0.9218	0.0100	49700	50000	-0.6	25.0
Di-n-butyl phthalate	Ave	1.235	1.231	0.0100	49800	50000	-0.4	25.0
Fluoranthene	Ave	1.199	1.199	0.0100	50000	50000	0.0	25.0
Benzidine	Ave	0.5408	0.1925	0.0100	17800	50000	-64.4*	25.0
Pyrene	Ave	1.147	1.161	0.0100	50600	50000	1.3	25.0
Butyl benzyl phthalate	Ave	0.5836	0.5913	0.0100	50700	50000	1.3	25.0
3,3'-Dichlorobenzidine	Ave	0.4739	0.2978	0.0100	31400	50000	-37.2*	25.0
Bis(2-ethylhexyl) phthalate	Ave	0.8187	0.8319	0.0100	50800	50000	1.6	25.0
Benzo(a)anthracene	Ave	1.159	1.182	0.0100	51000	50000	2.0	25.0
Chrysene	Ave	1.119	1.143	0.0100	51100	50000	2.1	25.0
Di-n-octyl phthalate	Ave	1.266	1.354	0.0100	53400	50000	6.9	25.0
Benzo(b)fluoranthene	Ave	1.150	1.131	0.0100	49100	50000	-1.7	25.0
Benzo(k)fluoranthene	Ave	1.201	1.199	0.0100	49900	50000	-0.2	25.0
Benzo(a)pyrene	Ave	0.9764	0.9850	0.0100	50400	50000	0.9	25.0
Indeno(1,2,3-cd)pyrene	Ave	1.339	1.261	0.0100	47100	50000	-5.8	25.0
Dibenz(a,h)anthracene	Ave	1.154	1.115	0.0100	48300	50000	-3.3	25.0
Benzo(g,h,i)perylene	Ave	1.023	1.011	0.0100	49400	50000	-1.2	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCV 480-35243/3 Calibration Date: 10/13/2011 11:01

Instrument ID: HP5973U Calib Start Date: 10/07/2011 14:06

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 10/07/2011 16:26

Lab File ID: U5166.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzaldehyde	Ave	1.021	1.146	0.0100	56100	50000	12.2	40.0
Acetophenone	Ave	1.751	2.207	0.0100	63000	50000	26.0	40.0
Caprolactam	Lin1		0.1104	0.0100	56700	50000	13.4	40.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5519	0.6035	0.0100	54700	50000	9.3	40.0
Biphenyl	Ave	1.495	1.609	0.0100	53800	50000	7.6	40.0
2,3,4,6-Tetrachlorophenol	Lin1		0.3307	0.0100	59300	50000	18.6	40.0
Atrazine	Ave	0.3464	0.4315	0.0100	62300	50000	24.6	25.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-33652/1-A

Matrix: Water Lab File ID: U4980.D

Analysis Method: 8270C Date Collected:

Extract. Method: 3510C Date Extracted: 10/03/2011 09:02

Sample wt/vol: 1000(mL) Date Analyzed: 10/07/2011 18:23

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 34421 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		5.0	0.48
88-06-2	2,4,6-Trichlorophenol	ND		5.0	0.61
120-83-2	2,4-Dichlorophenol	ND		5.0	0.51
105-67-9	2,4-Dimethylphenol	ND		5.0	0.50
51-28-5	2,4-Dinitrophenol	ND		10	2.2
121-14-2	2,4-Dinitrotoluene	ND		5.0	0.45
606-20-2	2,6-Dinitrotoluene	ND		5.0	0.40
91-58-7	2-Chloronaphthalene	ND		5.0	0.46
95-57-8	2-Chlorophenol	ND		5.0	0.53
91-57-6	2-Methylnaphthalene	ND		5.0	0.60
95-48-7	2-Methylphenol	ND		5.0	0.40
88-74-4	2-Nitroaniline	ND		10	0.42
88-75-5	2-Nitrophenol	ND		5.0	0.48
91-94-1	3,3'-Dichlorobenzidine	ND		5.0	0.40
99-09-2	3-Nitroaniline	ND		10	0.48
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	2.2
101-55-3	4-Bromophenyl phenyl ether	ND		5.0	0.45
59-50-7	4-Chloro-3-methylphenol	ND		5.0	0.45
106-47-8	4-Chloroaniline	ND		5.0	0.59
7005-72-3	4-Chlorophenyl phenyl ether	ND		5.0	0.35
106-44-5	4-Methylphenol	ND		10	0.36
100-01-6	4-Nitroaniline	ND		10	0.25
100-02-7	4-Nitrophenol	ND		10	1.5
83-32-9	Acenaphthene	ND		5.0	0.41
208-96-8	Acenaphthylene	ND		5.0	0.38
98-86-2	Acetophenone	ND		5.0	0.54
120-12-7	Anthracene	ND		5.0	0.28
1912-24-9	Atrazine	ND		5.0	0.46
100-52-7	Benzaldehyde	ND		5.0	0.27
56-55-3	Benzo(a)anthracene	ND		5.0	0.36
50-32-8	Benzo(a)pyrene	ND		5.0	0.47
205-99-2	Benzo(b)fluoranthene	ND		5.0	0.34
191-24-2	Benzo(g,h,i)perylene	ND		5.0	0.35
207-08-9	Benzo(k)fluoranthene	ND		5.0	0.73

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-10389-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-33652/1-A

Matrix: Water | Lab File ID: U4980.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3510C | Date Extracted: 10/03/2011 09:02

Sample wt/vol: 1000(mL) | Date Analyzed: 10/07/2011 18:23

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 34421 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	1.8
85-68-7	Butyl benzyl phthalate	0.496	J	5.0	0.42
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	ND		5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno(1,2,3-cd)pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	ND		5.0	0.44
108-95-2	Phenol	ND		5.0	0.39
129-00-0	Pyrene	ND		5.0	0.34

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QA/QC Review of Method 8082 PCB Data for TestAmerica Buffalo, Job No: 480-10389-1

1 Ground Water Samples, 5 Soil Samples, and 1 Field Duplicate Collected September 27-30, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analyses of method blanks reported target PCBs as not detected.

Surrogate Recovery: One of two surrogates recoveries for sample TP-C3 (7-8) was above QC limits on one column. No action is taken on one surrogate per column outside QC limits, provided the recovery is not less than 10%.

Two of two percent recoveries for sample TP-B2 (5-6) were above QC limits on one column. Positive results for sample TP-B2 (5-6) should be considered estimated (J).

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample TP-C4 (7-8).

Laboratory Control Sample: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples LCS 480-33668/2-A and LCSD 480-33668/3-A. The %Rs for PCB-1016 and PCB-1260 were within QC limits for soil sample LCS 480-33687/2-A.

Field Duplicates: The analyses of soil field duplicate pair TP-B1 (5-6)/DUP-01 reported target PCBs as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Initial Calibration: The "r" squared for PCB-1016 and PCB-1260 were above the allowable minimum (0.990), as required.

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Continuing Calibration: The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 10-04-11 (CCV 480-33769/34) on the ZB-35 column. Positive results for PCB-1016 and PCB-1260 should be considered estimated (J) in associated samples.

PCB Identification Summary for Multicomponent Analytes: The checked surrogate was within GC quantitation limits. The analyses of samples in this data pack reported target PCBs as not detected.

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ZB-5 ID: 0.53 (mm) GC Column (2): ZB-35 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1	#	TCX2	#	DCB1	#	DCB2	#
DUP-01	480-10588-1	39		43		79		105	
TP-B1 (5-6)	480-10588-2	43		47		78		105	
TP-C2 (5-6)	480-10588-3	82		132		107		141	
TP-C3 (7-8)	480-10588-4	88		125		119		151	X
TP-C4 (7-8)	480-10588-5	85		133		108		140	
TP-B2 (5-6)	480-10588-6	91		146	X	120		157	X
	MB 480-33687/1-A	93		144	X	122		153	X
	LCS 480-33687/2-A	109		166	X	139		166	X
TP-C4 (7-8) MS	480-10588-5 MS	93		137	X	130		163	X
TP-C4 (7-8) MSD	480-10588-5 MSD	82		119		118		150	X

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

QC LIMITS
35-134
34-148

Column to be used to flag recovery values

FORM II 8082

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-10389-1

SDG No.:

Lab Sample ID: CCV 480-33769/34 Calibration Date: 10/04/2011 00:39

Instrument ID: HP6890-7 Calib Start Date: 09/27/2011 22:59

GC Column: ZB-35 ID: 0.53(mm) Calib End Date: 09/28/2011 00:35

Lab File ID: 7_200_147.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	LinF		19164896		0.744	0.500	48.8*	15.0
PCB-1016 Peak 2	LinF		39300370		0.670	0.500	34.1*	15.0
PCB-1016 Peak 3	LinF		15041064		0.749	0.500	49.8*	15.0
PCB-1016 Peak 4	LinF		9776586		0.738	0.500	47.6*	15.0
PCB-1260 Peak 1	LinF		11103646		0.699	0.500	39.7*	15.0
PCB-1260 Peak 2	LinF		27839060		0.662	0.500	32.4*	15.0
PCB-1260 Peak 3	LinF		14704936		0.676	0.500	35.2*	15.0
PCB-1260 Peak 4	LinF		5998886		0.731	0.500	46.2*	15.0
Tetrachloro-m-xylene	LinF		734228067		0.0394	0.0300	31.3*	15.0
DCB Decachlorobiphenyl	LinF		206593233		0.0432	0.0300	44.0*	15.0

average %D PCB-1016 = 45.1%

average %D PCB-1260 = 38.4%

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QA/QC Review of TAL Metals Data for TestAmerica Buffalo, Job No: 480-10389-1

5 Soil Samples and 1 Field Duplicate Collected September 29 and 30, 2011

Prepared by: Donald Anné
May 2, 2012

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRQL standard samples CRI 480-33872/7 and CRA 480-33961/3.

Blanks: The analyses of initial calibration and continuing calibration, and method blanks reported TAL metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries for antimony were below control limits (75-125%), but were not below 10% for soil MS/MSD sample TP-C4 (7-8). Positive and "not detected" results for antimony should be considered estimated (J) in associated soil samples.

Laboratory Duplicates: The relative percent differences for TAL metals were below the allowable maximum (35%) in soil MS/MSD sample TP-C4 (7-8), as required.

Field Duplicates: The relative percent differences for arsenic and calcium were above the allowable maximum (35%) for soil field duplicate pair TP-B1 (5-6) /DUP-01 (attached table). Positive results for arsenic and calcium should be considered estimated (J) in samples TP-B1 (5-6) and DUP-01.

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Laboratory Control Sample: The percent recoveries for TAL metals were within QC limits in soil samples LCS 480-33670/2-A and LCS 480-33859/2-A.

ICP Serial Dilution: The %Ds for copper and potassium were above the allowable maximum (10%) for soil serial dilution sample TP-C4 (7-8). Positive results for copper and potassium that are above the CRDLs should be considered estimated (J) in associated soil samples.

Instrument Detection Limits: The MDLs were at or below the RLs, as required.

Percent Solids: The % solids for soil samples were above 50%.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-10389-1

S1= TP-B1 (5-6) **S2=** DUP-01

Analyte	S1	S2	RPD (%)	
aluminum	10300	9210	11%	
antimony	ND	ND	NC	
arsenic	8.4	4.9	53%	*
barium	67.4	58.1	15%	
beryllium	0.64	0.54	17%	
cadmium	**0.12**	**0.068**	NC	
calcium	2510	4670	60%	*
chromium	15.1	12.7	17%	
cobalt	9.7	9.5	2%	
copper	25.1	21.8	14%	
iron	21100	19300	9%	
lead	33.2	25.6	26%	
magnesium	2930	2850	3%	
manganese	291	238	20%	
mercury	0.10	0.071	34%	
nickel	24.4	21.6	12%	
potassium	1380	1140	19%	
selenium	ND	ND	NC	
silver	ND	ND	NC	
sodium	55.3	47.2	16%	
thallium	ND	ND	NC	
vanadium	18.6	17.0	9%	
zinc	64.4	55.2	15%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: TP-C4 (7-8) MS
Lab ID: 480-10588-5 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-10389-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 82.2

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	16220		10000		2340	NA 265	75-125	4	6010B
Antimony	28.30		ND		46.8	(61)	75-125	F	6010B
Arsenic	43.84		4.3		46.8	85	75-125		6010B
Barium	112.5		56.8		46.8	119	75-125		6010B
Beryllium	42.08		0.59		46.8	89	75-125		6010B
Cadmium	40.55		0.051	J	46.8	87	75-125		6010B
Calcium	3604		1520		2340	89	75-125		6010B
Chromium	58.62		13.1		46.8	97	75-125		6010B
Cobalt	55.19		9.6		46.8	97	75-125		6010B
Copper	59.82		16.6		46.8	92	75-125		6010B
Iron	23480		20100		2340	NA 144	75-125	4	6010B
Lead	56.28		12.6		46.8	93	75-125		6010B
Magnesium	5457		2920		2340	108	75-125		6010B
Manganese	370.5		302		46.8	NA 145	75-125	4	6010B
Nickel	67.06		19.7		46.8	101	75-125		6010B
Potassium	3813		1010		2340	120	75-125		6010B
Selenium	39.65		ND		46.8	85	75-125		6010B
Silver	10.46		ND		11.7	89	75-125		6010B
Sodium	2284		99.1	J	2340	93	75-125		6010B
Thallium	43.37		ND		46.8	93	75-125		6010B
Vanadium	66.22		19.2		46.8	101	75-125		6010B
Zinc	95.61		48.0		46.8	102	75-125		6010B
Hg	0.657		0.25		0.376	109	75-125		7471A

SSR = Spiked Sample Result

NA - not applicable, the sample concentration was greater than 4 times the spiking leve, therefore, valid %R's could not be calculated.

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: TP-C4 (7-8) MSD
Lab ID: 480-10588-5 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-10389-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 82.2

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	16310	2400	NA 263	75-125	1	20	4	6010B
Antimony	28.96	47.9	(60)	75-125	2	20	F	6010B
Arsenic	44.16	47.9	83	75-125	1	20		6010B
Barium	113.1	47.9	118	75-125	1	20		6010B
Beryllium	42.48	47.9	87	75-125	1	20		6010B
Cadmium	40.90	47.9	85	75-125	1	20		6010B
Calcium	3653	2390	89	75-125	1	20		6010B
Chromium	57.39	47.9	93	75-125	2	20		6010B
Cobalt	55.61	47.9	96	75-125	1	20		6010B
Copper	60.01	47.9	91	75-125	0	20		6010B
Iron	24870	2390	NA 199	75-125	6	20	4	6010B
Lead	56.39	47.9	91	75-125	0	20		6010B
Magnesium	5534	2390	109	75-125	1	20		6010B
Manganese	393.7	47.9	NA 190	75-125	6	20	4	6010B
Nickel	68.72	47.9	102	75-125	2	20		6010B
Potassium	3829	2400	117	75-125	0	20		6010B
Selenium	40.15	47.9	84	75-125	1	20		6010B
Silver	10.45	12.0	87	75-125	0	20		6010B
Sodium	2299	2400	92	75-125	1	20		6010B
Thallium	43.63	47.9	91	75-125	1	20		6010B
Vanadium	65.47	47.9	97	75-125	1	20		6010B
Zinc	95.07	47.9	98	75-125	1	20		6010B
Hg	0.637	0.374	105	75-125	3	20		7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-10588-5

SDG No:

Lab Name: TestAmerica Buffalo Job No: 480-10389-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	10000		10940		9.2		6010B
Antimony	ND		ND		NC		6010B
Arsenic	4.3		4.59	J	NC		6010B
Barium	56.8		62.49		10		6010B
Beryllium	0.59		0.686	J	NC		6010B
Cadmium	0.051	J	ND		NC		6010B
Calcium	1520		1645		8.2		6010B
Chromium	13.1		14.11		8.0		6010B
Cobalt	9.6		9.45		1.9		6010B
Copper	16.6		18.56		12	V	6010B
Iron	20100		21310		6.0		6010B
Lead	12.6		13.48		6.6		6010B
Magnesium	2920		3191		9.1		6010B
Manganese	302		327.1		8.1		6010B
Nickel	19.7		19.78	J	0.57		6010B
Potassium	1010		1163		15	V	6010B
Selenium	ND		ND		NC		6010B
Silver	ND		ND		NC		6010B
Sodium	99.1	J	97.95	J	NC		6010B
Thallium	ND		ND		NC		6010B
Vanadium	19.2		20.51		6.9		6010B
Zinc	48.0		50.94		6.1		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

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May 4, 2012

Ms. Sarah Newell
Clough, Harbour, & Associates LLP
III Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
ALCO Maxon RI
April 2012 Ground Water and Soil Sampling Events

Dear Ms. Newell:

The data usability summary reports (DUSRs) and data validation summaries are attached to this letter for ALOC Maxon RI, April 2012 ground water and soil sampling events. The data for TestAmerica job numbers 480-18067-1, 480-18068-1, 480-18071-1, and 480-18292-1 were acceptable with some minor issues that are identified and discussed in the validation summaries. There were data that was qualified as unusable (R) in the data packs.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Clough, Harbour, & Associates LLP.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-18067-1

10 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, 1 Equipment Blank, and 3 Trip Blanks
Collected April 2 and 3, 2012

Prepared by: Donald Anné
May 4, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 10 ground water samples, 1 field duplicate, 1 field blank, 1 equipment blank, and 3 trip blanks analyzed for volatiles, and 10 ground water samples, 1 field duplicate, 1 field blank, and 1 equipment blank analyzed semi-volatiles.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive semi-volatile results for bis(2-ethylhexyl)phthalate were flagged as "not detected" (U) for samples MW-04, MW-16, MW-21, EQUIPMENT BLANK, and FIELD BLANK because the level reported in the samples were not significantly greater than (more than 10 times) the highest associated blank level.

- Positive semi-volatile result for butyl benzyl phthalate was flagged as "not detected" (U) for sample MW-21 because the level reported in the sample was not significantly greater than (more than 10 times) the highest associated blank level.

- The positive semi-volatile result for caprolactam was flagged as "estimated" (J) in sample MW-12D because the %D for caprolactam was above the allowable maximum in the associated continuing calibration.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-18067-1

10 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, 1 Equipment Blank, and 3Trip Blank
Collected April 3 and 4, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %D for bromomethane was above the allowable maximum (25%) on 04-07-12 (P8848.D). The %D for bromomethane was above the allowable maximum (25%) on 04-07-12 (P8873.D). The %Ds for chloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, 4-methyl-2-pentanone, and 2-hexanone were above the allowable maximum (25%) on 04-10-12 (S12829.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method, trip, field, and equipment blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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www.alphageoscience.com

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample MW-06.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for aqueous samples LCS 480-58595/3, LCS 480-58635/3, and LCS 480-58898/4.

Field Duplicates: The analyses of aqueous field duplicate pair MW-21/CHA-3 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18067-1

SDG No.:

Lab Sample ID: CCVIS 480-58595/2 Calibration Date: 04/07/2012 11:34

Instrument ID: HP5973P Calib Start Date: 03/16/2012 13:56

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/16/2012 15:59

Lab File ID: P8848.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4132	0.3822		23.1	25.0	-7.5	50.0
Chloromethane	Ave	0.2706	0.2452	0.1000	22.7	25.0	-9.4	50.0
Vinyl chloride	Ave	0.2879	0.2687		23.3	25.0	-6.7	20.0
Bromomethane	Ave	0.1946	0.1128		14.5	25.0	-42.0	50.0
Chloroethane	Ave	0.1479	0.1168		19.7	25.0	-21.0	50.0
Trichlorofluoromethane	Ave	0.6550	0.6195		23.6	25.0	-5.4	50.0
Acrolein	Ave	0.0457	0.0329		360	500	-28.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3807	0.3669		24.1	25.0	-3.6	50.0
1,1-Dichloroethene	Ave	0.3562	0.3062	0.1000	21.5	25.0	-14.0	20.0
Acetone	Ave	0.1539	0.1682		137	125	9.3	50.0
Iodomethane	Ave	0.5363	0.5405		25.2	25.0	0.8	50.0
Carbon disulfide	Ave	0.9939	1.065		26.8	25.0	7.1	50.0
Methyl acetate	Ave	0.4232	0.4296		25.4	25.0	1.5	50.0
Acetonitrile	Ave	0.0291	0.0297		1020	1000	1.9	50.0
Methylene Chloride	Ave	0.4166	0.3420		20.5	25.0	-17.9	50.0
Methyl tert-butyl ether	Ave	1.219	1.324		27.2	25.0	8.6	50.0
trans-1,2-Dichloroethene	Ave	0.3778	0.3333		22.1	25.0	-11.8	50.0
Acrylonitrile	Ave	0.1421	0.1456		128	125	2.4	50.0
Vinyl acetate	Ave	0.6504	0.7233		139	125	11.2	50.0
1,1-Dichloroethane	Ave	0.6597	0.5428		20.6	25.0	-17.7	50.0
2-Butanone (MEK)	Ave	0.2066	0.2149		130	125	4.0	50.0
2,2-Dichloropropane	Ave	0.6172	0.5555		22.5	25.0	-10.0	50.0
cis-1,2-Dichloroethene	Ave	0.4226	0.3674		21.7	25.0	-13.1	50.0
Bromochloromethane	Ave	0.2262	0.1960		21.7	25.0	-13.4	50.0
Tetrahydrofuran	Ave	0.1196	0.1238		129	125	3.5	50.0
Chloroform	Ave	0.8046	0.6873		21.4	25.0	-14.6	20.0
1,1,1-Trichloroethane	Ave	0.6931	0.6168		22.2	25.0	-11.0	50.0
Cyclohexane	Ave	0.4540	0.4243		23.4	25.0	-6.5	50.0
1,1-Dichloropropene	Ave	0.5255	0.4532		21.6	25.0	-13.8	50.0
Carbon tetrachloride	Ave	0.5996	0.5437		22.7	25.0	-9.3	50.0
Benzene	Ave	1.440	1.215		21.1	25.0	-15.6	50.0
1,2-Dichloroethane	Ave	0.6487	0.5656		21.8	25.0	-12.8	50.0
Trichloroethene	Ave	0.4169	0.3614		21.7	25.0	-13.3	50.0
Methylcyclohexane	Lin1F		0.4770		21.7	25.0	-13.2	50.0
1,2-Dichloropropane	Ave	0.3316	0.2796		21.1	25.0	-15.7	20.0
Dibromomethane	Ave	0.2881	0.2580		22.4	25.0	-10.4	50.0
Bromodichloromethane	Ave	0.5320	0.5030		23.6	25.0	-5.4	50.0
2-Chloroethyl vinyl ether	Ave	0.2332	0.2601		139	125	11.5	50.0
cis-1,3-Dichloropropene	Ave	0.5764	0.5339		23.2	25.0	-7.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8433	0.8819		131	125	4.6	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18067-1

SDG No.:

Lab Sample ID: CCVIS 480-58595/2 Calibration Date: 04/07/2012 11:34

Instrument ID: HP5973P Calib Start Date: 03/16/2012 13:56

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/16/2012 15:59

Lab File ID: P8848.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.866	1.621		21.7	25.0	-13.1	20.0
Ethyl methacrylate	Lin1F		1.096		24.9	25.0	-0.4	50.0
trans-1,3-Dichloropropene	Ave	1.164	1.135		24.4	25.0	-2.4	50.0
1,1,2-Trichloroethane	Ave	0.6496	0.5667		21.8	25.0	-12.8	50.0
Tetrachloroethene	Ave	0.8917	0.7627		21.4	25.0	-14.5	50.0
1,3-Dichloropropane	Ave	1.270	1.125		22.1	25.0	-11.5	50.0
2-Hexanone	Ave	0.6179	0.6675		135	125	8.0	50.0
Dibromochloromethane	Lin1F		0.8531		22.3	25.0	-10.8	50.0
1,2-Dibromoethane	Ave	0.8790	0.8052		22.9	25.0	-8.4	50.0
Chlorobenzene	Ave	2.301	1.969	0.3000	21.4	25.0	-14.4	50.0
Ethylbenzene	Ave	3.614	3.229		22.3	25.0	-10.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8187	0.7604		23.2	25.0	-7.1	50.0
m,p-Xylene	Ave	1.381	1.252		45.3	50.0	-9.3	50.0
o-Xylene	Ave	1.339	1.234		23.0	25.0	-7.8	50.0
Styrene	Ave	2.123	1.994		23.5	25.0	-6.0	50.0
Bromoform	LinF		0.6164	0.1000	21.2	25.0	-15.2	50.0
Isopropylbenzene	Ave	3.126	2.783		22.3	25.0	-11.0	50.0
1,1,2,2-Tetrachloroethane	Ave	1.007	0.8892	0.3000	22.1	25.0	-11.7	50.0
Bromobenzene	Ave	0.9220	0.8218		22.3	25.0	-10.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2423	0.3039		157	125	NA 25.4	50.0
1,2,3-Trichloropropane	Ave	0.3262	0.2878		22.1	25.0	-11.8	50.0
N-Propylbenzene	Ave	3.933	3.465		22.0	25.0	-11.9	50.0
2-Chlorotoluene	Ave	0.8200	0.7076		21.6	25.0	-13.7	50.0
1,3,5-Trimethylbenzene	Ave	2.749	2.398		21.8	25.0	-12.8	50.0
4-Chlorotoluene	Ave	0.8632	0.7395		21.4	25.0	-14.3	50.0
tert-Butylbenzene	Ave	0.5076	0.4507		22.2	25.0	-11.2	50.0
1,2,4-Trimethylbenzene	Ave	2.796	2.474		22.1	25.0	-11.5	50.0
sec-Butylbenzene	Ave	3.283	2.737		20.8	25.0	-16.6	50.0
4-Isopropyltoluene	Ave	2.756	2.396		21.7	25.0	-13.1	50.0
1,3-Dichlorobenzene	Ave	1.706	1.476		21.6	25.0	-13.5	50.0
1,4-Dichlorobenzene	Ave	1.784	1.516		21.2	25.0	-15.1	50.0
n-Butylbenzene	Ave	2.530	2.075		20.5	25.0	-18.0	50.0
1,2-Dichlorobenzene	Ave	1.705	1.462		21.4	25.0	-14.2	50.0
1,2-Dibromo-3-Chloropropane	Lin1F		0.2178		21.8	25.0	-12.8	50.0
1,2,4-Trichlorobenzene	Ave	1.238	1.110		22.4	25.0	-10.4	50.0
Hexachlorobutadiene	Ave	0.2977	0.2278		19.1	25.0	-23.5	50.0
Naphthalene	Ave	1.805	1.768		24.5	25.0	-2.0	50.0
1,2,3-Trichlorobenzene	Ave	0.6471	0.5853		22.6	25.0	-9.5	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1F		0.2173		22.3	25.0	-10.8	50.0
Toluene-d8 (Surr)	Lin1F		2.532		24.1	25.0	-3.6	50.0
4-Bromofluorobenzene (Surr)	Lin1F		1.006		25.4	25.0	1.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18067-1

SDG No.:

Lab Sample ID: CCVIS 480-58635/2 Calibration Date: 04/07/2012 22:51

Instrument ID: HP5973P Calib Start Date: 03/16/2012 13:56

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/16/2012 15:59

Lab File ID: P8873.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4132	0.4339		26.2	25.0	5.0	50.0
Chloromethane	Ave	0.2706	0.2923	0.1000	27.0	25.0	8.0	50.0
Vinyl chloride	Ave	0.2879	0.3359		29.2	25.0	16.7	20.0
Bromomethane	Ave	0.1946	0.0958		12.3	25.0	-50.8*	50.0
Chloroethane	Ave	0.1479	0.1201		20.3	25.0	-18.8	50.0
Trichlorofluoromethane	Ave	0.6550	0.6658		25.4	25.0	1.7	50.0
Acrolein	Ave	0.0457	0.0348		381	500	-23.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3807	0.3722		24.4	25.0	-2.2	50.0
1,1-Dichloroethene	Ave	0.3562	0.3730	0.1000	26.2	25.0	4.7	20.0
Acetone	Ave	0.1539	0.1500		122	125	-2.5	50.0
Iodomethane	Ave	0.5363	0.5354		25.0	25.0	-0.2	50.0
Carbon disulfide	Ave	0.9939	1.035		26.0	25.0	4.1	50.0
Methyl acetate	Ave	0.4232	0.4180		24.7	25.0	-1.2	50.0
Acetonitrile	Ave	0.0291	0.0288		988	1000	-1.2	50.0
Methylene Chloride	Ave	0.4166	0.3911		23.5	25.0	-6.1	50.0
Methyl tert-butyl ether	Ave	1.219	1.228		25.2	25.0	0.7	50.0
trans-1,2-Dichloroethene	Ave	0.3778	0.3853		25.5	25.0	2.0	50.0
Acrylonitrile	Ave	0.1421	0.1425		125	125	0.3	50.0
Vinyl acetate	Ave	0.6504	0.7011		135	125	7.8	50.0
1,1-Dichloroethane	Ave	0.6597	0.6235		23.6	25.0	-5.5	50.0
2-Butanone (MEK)	Ave	0.2066	0.2087		126	125	1.0	50.0
2,2-Dichloropropane	Ave	0.6172	0.6149		24.9	25.0	-0.4	50.0
cis-1,2-Dichloroethene	Ave	0.4226	0.4288		25.4	25.0	1.5	50.0
Bromochloromethane	Ave	0.2262	0.2240		24.8	25.0	-1.0	50.0
Tetrahydrofuran	Ave	0.1196	0.1225		128	125	2.4	50.0
Chloroform	Ave	0.8046	0.7377		22.9	25.0	-8.3	20.0
1,1,1-Trichloroethane	Ave	0.6931	0.6606		23.8	25.0	-4.7	50.0
Cyclohexane	Ave	0.4540	0.4602		25.3	25.0	1.4	50.0
1,1-Dichloropropene	Ave	0.5255	0.5437		25.9	25.0	3.5	50.0
Carbon tetrachloride	Ave	0.5996	0.5723		23.9	25.0	-4.5	50.0
Benzene	Ave	1.440	1.450		25.2	25.0	0.7	50.0
1,2-Dichloroethane	Ave	0.6487	0.5763		22.2	25.0	-11.2	50.0
Trichloroethene	Ave	0.4169	0.4225		25.3	25.0	1.3	50.0
Methylcyclohexane	LinlF		0.5251		23.9	25.0	-4.4	50.0
1,2-Dichloropropane	Ave	0.3316	0.3326		25.1	25.0	0.3	20.0
Dibromomethane	Ave	0.2881	0.2780		24.1	25.0	-3.5	50.0
Bromodichloromethane	Ave	0.5320	0.5386		25.3	25.0	1.3	50.0
2-Chloroethyl vinyl ether	Ave	0.2332	0.2526		135	125	8.3	50.0
cis-1,3-Dichloropropene	Ave	0.5764	0.6081		26.4	25.0	5.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8433	0.8727		129	125	3.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18067-1

SDG No.:

Lab Sample ID: CCVIS 480-58635/2 Calibration Date: 04/07/2012 22:51

Instrument ID: HP5973P Calib Start Date: 03/16/2012 13:56

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/16/2012 15:59

Lab File ID: P8873.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.866	1.984		26.6	25.0	6.4	20.0
trans-1,3-Dichloropropene	Ave	1.164	1.259		27.1	25.0	8.2	50.0
Ethyl methacrylate	Lin1F		1.116		25.3	25.0	1.2	50.0
1,1,2-Trichloroethane	Ave	0.6496	0.6579		25.3	25.0	1.3	50.0
Tetrachloroethene	Ave	0.8917	0.9516		26.7	25.0	6.7	50.0
1,3-Dichloropropane	Ave	1.270	1.284		25.3	25.0	1.1	50.0
2-Hexanone	Ave	0.6179	0.6548		133	125	6.0	50.0
Dibromochloromethane	Lin1F		0.9312		24.4	25.0	-2.4	50.0
1,2-Dibromoethane	Ave	0.8790	0.9238		26.3	25.0	5.1	50.0
Chlorobenzene	Ave	2.301	2.339	0.3000	25.4	25.0	1.7	50.0
Ethylbenzene	Ave	3.614	3.801		26.3	25.0	5.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8187	0.8492		25.9	25.0	3.7	50.0
m,p-Xylene	Ave	1.381	1.491		54.0	50.0	8.0	50.0
o-Xylene	Ave	1.339	1.463		27.3	25.0	9.3	50.0
Styrene	Ave	2.123	2.370		27.9	25.0	11.6	50.0
Bromoform	LinF		0.6432	0.1000	22.1	25.0	-11.6	50.0
Isopropylbenzene	Ave	3.126	3.309		26.5	25.0	5.8	50.0
1,1,2,2-Tetrachloroethane	Ave	1.007	1.019	0.3000	25.3	25.0	1.2	50.0
Bromobenzene	Ave	0.9220	0.9623		26.1	25.0	4.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2423	0.2269		117	125	-6.4	50.0
1,2,3-Trichloropropane	Ave	0.3262	0.3082		23.6	25.0	-5.5	50.0
N-Propylbenzene	Ave	3.933	3.965		25.2	25.0	0.8	50.0
2-Chlorotoluene	Ave	0.8200	0.8483		25.9	25.0	3.4	50.0
1,3,5-Trimethylbenzene	Ave	2.749	2.775		25.2	25.0	0.9	50.0
4-Chlorotoluene	Ave	0.8632	0.8776		25.4	25.0	1.7	50.0
tert-Butylbenzene	Ave	0.5076	0.5419		26.7	25.0	6.8	50.0
1,2,4-Trimethylbenzene	Ave	2.796	2.823		25.2	25.0	1.0	50.0
sec-Butylbenzene	Ave	3.283	3.260		24.8	25.0	-0.7	50.0
4-Isopropyltoluene	Ave	2.756	2.819		25.6	25.0	2.3	50.0
1,3-Dichlorobenzene	Ave	1.706	1.690		24.8	25.0	-0.9	50.0
1,4-Dichlorobenzene	Ave	1.784	1.738		24.3	25.0	-2.6	50.0
n-Butylbenzene	Ave	2.530	2.466		24.4	25.0	-2.5	50.0
1,2-Dichlorobenzene	Ave	1.705	1.681		24.6	25.0	-1.4	50.0
1,2-Dibromo-3-Chloropropane	Lin1F		0.2258		22.6	25.0	-9.6	50.0
1,2,4-Trichlorobenzene	Ave	1.238	1.280		25.8	25.0	3.4	50.0
Hexachlorobutadiene	Ave	0.2977	0.2632		22.1	25.0	-11.6	50.0
Naphthalene	Ave	1.805	1.926		26.7	25.0	6.7	50.0
1,2,3-Trichlorobenzene	Ave	0.6471	0.6367		24.6	25.0	-1.6	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1F		0.2017		20.7	25.0	-17.2	50.0
Toluene-d8 (Surr)	Lin1F		2.571		24.5	25.0	-2.0	50.0
4-Bromofluorobenzene (Surr)	Lin1F		1.026		25.9	25.0	3.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18067-1

SDG No.:

Lab Sample ID: CCVIS 480-58898/2 Calibration Date: 04/10/2012 09:48

Instrument ID: HP5973S Calib Start Date: 04/09/2012 20:52

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 04/09/2012 22:39

Lab File ID: S12829.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2754	0.2863		26.0	25.0	4.0	50.0
Chloromethane	Ave	0.3868	0.3719	0.1000	24.0	25.0	-3.9	50.0
Vinyl chloride	Ave	0.3183	0.3208		25.2	25.0	0.8	20.0
Bromomethane	QuaF		0.0916		26.0	25.0	4.0	50.0
Chloroethane	QuaF		0.1041		17.1	25.0	-31.6	50.0
Trichlorofluoromethane	Ave	0.2980	0.2897		24.3	25.0	-2.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin1F		0.1569		15.3	25.0	-38.8	50.0
Acrolein	Ave	0.0292	0.0366		628	500	NR 25.6	50.0
1,1-Dichloroethene	Lin1F		0.2599	0.1000	24.1	25.0	-3.6	20.0
Acetone	Ave	0.1116	0.1351		151	125	21.0	50.0
Iodomethane	LinF		0.2748		24.4	25.0	-2.4	50.0
Carbon disulfide	LinF		0.7638		24.2	25.0	-3.2	50.0
Methyl acetate	Ave	0.3425	0.4176		30.5	25.0	21.9	50.0
Acetonitrile	Ave	0.0241	0.0304		1260	1000	NR 25.9	50.0
Methylene Chloride	Ave	0.3074	0.3064		24.9	25.0	-0.3	50.0
Methyl tert-butyl ether	Ave	0.8130	0.9576		29.4	25.0	17.8	50.0
trans-1,2-Dichloroethene	Ave	0.2456	0.2323		23.6	25.0	-5.4	50.0
Acrylonitrile	Ave	0.1168	0.1450		155	125	24.1	50.0
1,1-Dichloroethane	Ave	0.4724	0.4759		25.2	25.0	0.8	50.0
Vinyl acetate	Lin1F		0.6903		137	125	9.9	50.0
2,2-Dichloropropane	Ave	0.2546	0.2616		25.7	25.0	2.7	50.0
cis-1,2-Dichloroethene	Ave	0.2907	0.2888		24.8	25.0	-0.7	50.0
2-Butanone (MEK)	Ave	0.1727	0.2130		154	125	23.3	50.0
Bromochloromethane	Ave	0.1299	0.1300		25.0	25.0	0.0	50.0
Tetrahydrofuran	Ave	0.1134	0.1373		151	125	21.0	50.0
Chloroform	Ave	0.4571	0.4548		24.9	25.0	-0.5	20.0
1,1,1-Trichloroethane	Ave	0.3031	0.3081		25.4	25.0	1.7	50.0
Cyclohexane	LinF		0.4680		25.9	25.0	3.6	50.0
Carbon tetrachloride	LinF		0.2572		19.8	25.0	-20.8	50.0
1,1-Dichloropropene	Ave	0.3790	0.3726		24.6	25.0	-1.7	50.0
Benzene	Ave	1.165	1.135		24.3	25.0	-2.6	50.0
1,2-Dichloroethane	Ave	0.3985	0.3775		23.7	25.0	-5.3	50.0
Trichloroethene	Ave	0.2790	0.2688		24.1	25.0	-3.7	50.0
Methylcyclohexane	Ave	0.4004	0.4664		29.1	25.0	16.5	50.0
1,2-Dichloropropane	Ave	0.2895	0.2835		24.5	25.0	-2.1	20.0
Dibromomethane	Ave	0.1621	0.1635		25.2	25.0	0.9	50.0
Bromodichloromethane	Lin1F		0.3175		23.1	25.0	-7.6	50.0
2-Chloroethyl vinyl ether	Lin1F		0.2231		135	125	8.0	50.0
cis-1,3-Dichloropropene	Lin1F		0.4231		23.1	25.0	-7.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6423	0.8129		158	125	26.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18067-1

SDG No.:

Lab Sample ID: CCVIS 480-58898/2 Calibration Date: 04/10/2012 09:48

Instrument ID: HP5973S Calib Start Date: 04/09/2012 20:52

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 04/09/2012 22:39

Lab File ID: S12829.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.420	1.404		24.7	25.0	-1.1	20.0
trans-1,3-Dichloropropene	LinF		0.7572		22.2	25.0	-11.2	50.0
Ethyl methacrylate	LinF		0.9391		25.8	25.0	3.2	50.0
1,1,2-Trichloroethane	Ave	0.4157	0.4254		25.6	25.0	2.3	50.0
Tetrachloroethene	Ave	0.5216	0.5126		24.6	25.0	-1.7	50.0
1,3-Dichloropropane	Ave	0.9142	0.9147		25.0	25.0	0.0	50.0
2-Hexanone	Ave	0.4716	0.6060		161	125	28.5	50.0
Dibromochloromethane	LinF		0.4276		21.7	25.0	-13.2	50.0
1,2-Dibromoethane	Ave	0.4801	0.5022		26.2	25.0	4.6	50.0
Chlorobenzene	Ave	1.550	1.510	0.3000	24.4	25.0	-2.6	50.0
Ethylbenzene	Ave	2.684	2.642		24.6	25.0	-1.5	20.0
1,1,1,2-Tetrachloroethane	Lin1F		0.4575		24.0	25.0	-4.0	50.0
m,p-Xylene	Ave	1.042	1.028		49.3	50.0	-1.4	50.0
o-Xylene	Ave	0.9930	0.998		25.1	25.0	0.5	50.0
Styrene	Lin1F		1.665		24.5	25.0	-2.0	50.0
Bromoform	QuaF		0.2554	0.1000	27.4	25.0	9.6	50.0
Isopropylbenzene	Ave	2.922	2.915		24.9	25.0	-0.2	50.0
Bromobenzene	Ave	0.6568	0.6492		24.7	25.0	-1.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7741	0.8288	0.3000	26.8	25.0	7.1	50.0
N-Propylbenzene	Ave	3.535	3.660		25.9	25.0	3.6	50.0
1,2,3-Trichloropropane	Ave	0.2531	0.2595		25.6	25.0	2.5	50.0
trans-1,4-Dichloro-2-butene	QuaF		0.2376		174	125	38.9	50.0
2-Chlorotoluene	Ave	0.6640	0.6660		25.1	25.0	0.3	50.0
1,3,5-Trimethylbenzene	Ave	2.464	2.466		25.0	25.0	0.0	50.0
4-Chlorotoluene	Ave	0.7063	0.6972		24.7	25.0	-1.3	50.0
tert-Butylbenzene	Ave	0.5044	0.5097		25.3	25.0	1.1	50.0
1,2,4-Trimethylbenzene	Ave	2.500	2.487		24.9	25.0	-0.5	50.0
sec-Butylbenzene	Ave	3.075	3.066		24.9	25.0	-0.3	50.0
1,3-Dichlorobenzene	Ave	1.336	1.311		24.5	25.0	-1.9	50.0
4-Isopropyltoluene	Ave	2.548	2.576		25.3	25.0	1.1	50.0
1,4-Dichlorobenzene	Ave	1.396	1.336		23.9	25.0	-4.3	50.0
n-Butylbenzene	Ave	2.395	2.429		25.4	25.0	1.4	50.0
1,2-Dichlorobenzene	Ave	1.310	1.276		24.3	25.0	-2.6	50.0
1,2-Dibromo-3-Chloropropane	QuaF		0.1542		27.5	25.0	10.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8981	0.9025		25.1	25.0	0.5	50.0
Hexachlorobutadiene	Ave	0.1705	0.1668		24.5	25.0	-2.2	50.0
Naphthalene	Lin1F		1.304		23.4	25.0	-6.4	50.0
1,2,3-Trichlorobenzene	Ave	0.3909	0.3869		24.7	25.0	-1.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1671	0.1665		24.9	25.0	-0.4	50.0
Toluene-d8 (Surr)	Ave	1.895	1.974		26.0	25.0	4.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5274	0.5301		25.1	25.0	0.5	50.0

FORM VII 8260B

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-18067-1

10 Ground Water Samples, 1 Field Duplicate, 1 Field Duplicate, and 1 Equipment Blank Collected April 3 and 4, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for caprolactam and atrazine were above the allowable maximum (25%) on 04-06-12 (X4918.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-58414/1-A contained traces of bis(2-ethylhexyl)phthalate (3.83 ug/L) and butyl benzyl phthalate (2.25 ug/L). Positive results for bis(2-ethylhexyl)phthalate and butyl benzyl phthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogates for samples MW-45 and MW-53 were diluted beyond detection limits. No action is taken on surrogates diluted beyond detection limits.

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One of three base/neutral surrogate recoveries for sample MW-53 was above control limits. No action is taken on one surrogate per fraction outside control limits, provided the recovery is not less than 10%.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximums and the percent recoveries were within QC limits for aqueous MS/MSD sample MW-06.

Laboratory Control Sample: The relative percent differences for spiked compounds were below the allowable maximums and the percent recoveries (%Rs) were within QC limits for aqueous samples LCS 480-58414/2-A and LCSD 480-58414/3-A. The percent recoveries (%Rs) were within QC limits for aqueous sample LCS 480-58223/2-A

Field Duplicates: The analyses of aqueous field duplicate pair MW-21/CHA-3 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18067-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MW-45	480-18067-1	0 XX	0 XX	0 XX	0 XX	0 XX	0 XX
MW-07	480-18067-2	33	23	78	82	106	94
MW-06	480-18067-3	33	21	83	82	113	96
MW-12D	480-18067-4	38	24	91	81	109	103
MW-04	480-18172-1	40	27	85	95	114	85
MW-16	480-18172-2	35	26	75	90	117	76
MW-53	480-18172-3	0 XX	0 XX	0 XX	123 X	0 XX	72
MW-01	480-18172-4	45	31	82	102	123	94
MW-21	480-18172-5	39	23	68	87	99	75
OW-3	480-18172-6	36	23	70	93	110	86
CHA-3	480-18172-7	48	35	101	114	132	79
EQUIPMENT BLANK	480-18172-8	38	25	73	93	101	89
FIELD BLANK	480-18172-9	34	23	69	86	98	88
	MB 480-58223/1-A	35	23	66	69	98	117
	MB 480-58414/1-A	43	30	70	88	105	118
	LCS 480-58223/2-A	46	33	83	86	101	94
	LCS 480-58414/2-A	49	35	76	87	100	101
	LCSD 480-58414/3-A	52	38	86	99	112	115
MW-06 MS	480-18067-3 MS	46	30	100	94	110	47 X
MW-06 MSD	480-18067-3 MSD	47	33	101	100	118	50 X

XX - surrogate diluted beyond detection limits

	QC LIMITS
2FP = 2-Fluorophenol	20-120
PHL = Phenol-d5	16-120
NBZ = Nitrobenzene-d5	46-120
FBP = 2-Fluorobiphenyl	48-120
TBP = 2,4,6-Tribromophenol	52-132
TPH = p-Terphenyl-d14	67-150

Column to be used to flag recovery values

FORM II 8270C

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18067-1

SDG No.:

Lab Sample ID: CCV 480-58387/3 Calibration Date: 04/06/2012 00:43

Instrument ID: HP5973X Calib Start Date: 03/01/2012 14:12

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 03/01/2012 16:13

Lab File ID: X4918.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzaldehyde	Ave	1.063	1.207	0.0100	56800	50000	13.6	40.0
Acetophenone	Ave	1.870	2.078	0.0100	55600	50000	11.1	40.0
Caprolactam	Lin1		0.0644	0.0100	35500	50000	-29.0	40.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4710	0.4826	0.0100	51200	50000	2.5	40.0
Biphenyl	Ave	1.326	1.288	0.0100	48600	50000	-2.8	40.0
2,3,4,6-Tetrachlorophenol	Ave	0.2494	0.2615	0.0100	52400	50000	4.9	40.0
Atrazine	Ave	0.3017	0.3773	0.0100	62500	50000	25.1*	25.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 480-18067-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 480-58414/1-A
Matrix: Water
Lab File ID: V8619.D
Analysis Method: 8270C
Date Collected:
Extract. Method: 3510C
Date Extracted: 04/06/2012 07:08
Sample wt/vol: 1000(mL)
Date Analyzed: 04/06/2012 17:44
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 58452
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
95-95-4	2,4,5-Trichlorophenol	ND		5.0	0.48
88-06-2	2,4,6-Trichlorophenol	ND		5.0	0.61
120-83-2	2,4-Dichlorophenol	ND		5.0	0.51
105-67-9	2,4-Dimethylphenol	ND		5.0	0.50
51-28-5	2,4-Dinitrophenol	ND		10	2.2
121-14-2	2,4-Dinitrotoluene	ND		5.0	0.45
606-20-2	2,6-Dinitrotoluene	ND		5.0	0.40
91-58-7	2-Chloronaphthalene	ND		5.0	0.46
95-57-8	2-Chlorophenol	ND		5.0	0.53
91-57-6	2-Methylnaphthalene	ND		5.0	0.60
95-48-7	2-Methylphenol	ND		5.0	0.40
88-74-4	2-Nitroaniline	ND		10	0.42
88-75-5	2-Nitrophenol	ND		5.0	0.48
91-94-1	3,3'-Dichlorobenzidine	ND		5.0	0.40
99-09-2	3-Nitroaniline	ND		10	0.48
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	2.2
101-55-3	4-Bromophenyl phenyl ether	ND		5.0	0.45
59-50-7	4-Chloro-3-methylphenol	ND		5.0	0.45
106-47-8	4-Chloroaniline	ND		5.0	0.59
7005-72-3	4-Chlorophenyl phenyl ether	ND		5.0	0.35
106-44-5	4-Methylphenol	ND		10	0.36
100-01-6	4-Nitroaniline	ND		10	0.25
100-02-7	4-Nitrophenol	ND		10	1.5
83-32-9	Acenaphthene	ND		5.0	0.41
208-96-8	Acenaphthylene	ND		5.0	0.38
98-86-2	Acetophenone	ND		5.0	0.54
120-12-7	Anthracene	ND		5.0	0.28
1912-24-9	Atrazine	ND		5.0	0.46
100-52-7	Benzaldehyde	ND		5.0	0.27
56-55-3	Benzo(a)anthracene	ND		5.0	0.36
50-32-8	Benzo(a)pyrene	ND		5.0	0.47
205-99-2	Benzo(b)fluoranthene	ND		5.0	0.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 480-18067-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 480-58414/1-A
Matrix: Water
Lab File ID: V8619.D
Analysis Method: 8270C
Date Collected:
Extract. Method: 3510C
Date Extracted: 04/06/2012 07:08
Sample wt/vol: 1000(mL)
Date Analyzed: 04/06/2012 17:44
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 58452
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo(g,h,i)perylene	ND		5.0	0.35
207-08-9	Benzo(k)fluoranthene	ND		5.0	0.73
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	3.83	J	5.0	1.8
85-68-7	Butyl benzyl phthalate	2.25	J	5.0	0.42
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	ND		5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno(1,2,3-cd)pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	ND		5.0	0.44
108-95-2	Phenol	ND		5.0	0.39
129-00-0	Pyrene	ND		5.0	0.34

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-18068-1

15 Soil Samples, 1 Field Duplicate,
1 Equipment Blank, and 1 Trip Blank
Collected April 2 and 3, 2012

Prepared by: Donald Anné
May 4, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 15 soil samples, 1 field duplicate, 1 equipment blank, and 1 trip blank analyzed for volatiles; 15 soil samples, 1 field duplicate, and 1 equipment blank analyzed semi-volatiles; 12 soil samples analyzed for PCB; and 12 soil samples analyzed for TAL metals.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile result for total xylenes were flagged as "not detected" (U) for the following soil samples because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.

RB-03(0-6")	RB-03(6"-12")	RB-03(12"-24")
RB-04(0-6")	RB-04(6"-12")	RB-04(12"-24")
RB-05(0-6")	RB-05(6"-12")	RB-06(6"-12")

- The positive volatile results for acetone and 2-butanone were flagged as "estimated" (J) in sample SB-A2(10'-11') because the %Ds for acetone and 2-butanone were above the allowable maximum in the associated continuing calibration.

- Positive results for the following compounds were flagged as "estimated" (J) in samples SB-A2 (10'-11') and DUP-03 because relative percent differences for these compounds were above the allowable maximum in the associated soil field duplicate pair SB-A2 (10'-11')/DUP-03.

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benzo(a)anthracene	benzo(a)pyrene	benzo(b)fluoranthene
benzo(g,h,i)perylene	chrysene	fluoranthene
indeno(1,2,3-cd)pyrene	phenanthrene	pyrene

- The positive results for aluminum were flagged as "estimated" (J) in all 12 soil samples because 2 of 2 percent recoveries for aluminum were above control limits, but were not above 250% in the associated soil MS/MSD sample.

- The positive results for barium were flagged as "estimated" (J) in all 12 soil samples because 1 of 2 percent recoveries for barium was above control limits, but were not above 250% in the associated soil MS/MSD sample.

- The positive and "not detected" results for antimony were flagged as "estimated" (J) in all 12 soil samples because 1 of 2 percent recoveries for antimony was below control limits, but was not below 10% in the associated soil MS/MSD sample.

- The positive results for magnesium were flagged as "estimated" (J) in all 12 soil samples because 1 of 2 percent recoveries for magnesium was below control limits, but was not below 10% in the associated soil MS/MSD sample.

- The positive results for the following metals were flagged as "estimated" (J) in all 12 soil samples because the %Ds for these metals were above the allowable in the associated soil serial dilution sample and the sample results were above the CRDLs.

calcium	chromium	iron
manganese	vanadium	zinc

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

ALPHA GEOSCIENCE

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QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-18068-1

15 Soil Samples, 1 Field Duplicate,
1 Equipment Blank, and 1 Trip Blank
Collected April 2 and 3, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for dichlorodifluoromethane, bromomethane, carbon sulfide, cyclohexane, and bromoform were above the allowable maximum (25%) on 04-07-12 (G10801.D). The %Ds for acetone and 2-butanone were above the allowable maximum (25%) on 04-10-12 (F7960.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-58567/5 contained a trace of total xylenes (0.859 ug/kg). Positive results for total xylenes that are less than five times the highest blank level should be reported as not detected (J) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample SB-A3(5'-6'1").

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for soil samples LCS 480-58567/4 and LCS 480-58856/3 and aqueous sample LCS 480-58634/4.

Field Duplicates: The analyses of aqueous field duplicate pair SB-A2((10'-11')/DUP-03 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Lab Sample ID: CCVIS 480-58856/3 Calibration Date: 04/10/2012 09:47

Instrument ID: HP5973F Calib Start Date: 03/07/2012 23:43

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/08/2012 01:25

Lab File ID: F7960.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2059	0.1799		43.7	50.0	-12.6	50.0
Chloromethane	Ave	0.2765	0.2379	0.1000	43.0	50.0	-14.0	50.0
Vinyl chloride	Ave	0.2213	0.2060		46.5	50.0	-6.9	20.0
Bromomethane	Ave	0.1097	0.0947		43.2	50.0	-13.7	50.0
Chloroethane	Ave	0.1050	0.0928		44.2	50.0	-11.7	50.0
Trichlorofluoromethane	Ave	0.2394	0.2349		49.1	50.0	-1.9	50.0
Acrolein	Ave	0.0379	0.0211		558	1000	MA -44.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2313	0.1840		39.8	50.0	-20.5	50.0
1,1-Dichloroethene	Ave	0.2420	0.2277	0.1000	47.0	50.0	-5.9	20.0
Acetone	Ave	0.1081	0.0783		181	250	-27.6	50.0
Iodomethane	Ave	0.3623	0.3193		44.1	50.0	-11.9	50.0
Carbon disulfide	Ave	0.6556	0.4956		37.8	50.0	-24.4	50.0
Methyl acetate	Ave	0.3785	0.2859		37.8	50.0	-24.4	50.0
Acetonitrile	Ave	0.0226	0.0191		1700	2000	-15.2	50.0
Methylene Chloride	Ave	0.2868	0.2676		46.7	50.0	-6.7	50.0
Methyl tert-butyl ether	Ave	0.8378	0.6792		40.5	50.0	-18.9	50.0
trans-1,2-Dichloroethene	Ave	0.2812	0.2651		47.1	50.0	-5.7	50.0
Acrylonitrile	Ave	0.1271	0.1022		201	250	-19.6	50.0
Vinyl acetate	Ave	0.6567	0.5250		200	250	-20.1	50.0
1,1-Dichloroethane	Ave	0.4772	0.4220		44.2	50.0	-11.6	50.0
2-Butanone (MEK)	Ave	0.1867	0.1358		182	250	-27.3	50.0
2,2-Dichloropropane	Ave	0.3267	0.3058		46.8	50.0	-6.4	50.0
cis-1,2-Dichloroethene	Ave	0.3174	0.2942		46.4	50.0	-7.3	50.0
Bromochloromethane	Ave	0.1669	0.1560		46.7	50.0	-6.6	50.0
Tetrahydrofuran	Ave	0.1231	0.0910		185	250	MA -26.0	50.0
Chloroform	Ave	0.4648	0.4132		44.4	50.0	-11.1	20.0
1,1,1-Trichloroethane	Ave	0.3695	0.3399		46.0	50.0	-8.0	50.0
Cyclohexane	Ave	0.4776	0.3720		38.9	50.0	-22.1	50.0
1,1-Dichloropropene	Ave	0.3625	0.3170		43.7	50.0	-12.6	50.0
Carbon tetrachloride	Ave	0.3123	0.2918		46.7	50.0	-6.6	50.0
Benzene	Ave	1.074	0.9829		45.8	50.0	-8.5	50.0
1,2-Dichloroethane	Ave	0.3784	0.3116		41.2	50.0	-17.7	50.0
Trichloroethene	Ave	0.2881	0.2635		45.7	50.0	-8.5	50.0
Methylcyclohexane	Ave	0.4705	0.3917		41.6	50.0	-16.7	50.0
1,2-Dichloropropane	Ave	0.2858	0.2525		44.2	50.0	-11.7	20.0
Dibromomethane	Ave	0.1702	0.1462		42.9	50.0	-14.1	50.0
Bromodichloromethane	Ave	0.3334	0.2868		43.0	50.0	-14.0	50.0
2-Chloroethyl vinyl ether	Ave	0.2068	0.1664		201	250	-19.5	50.0
cis-1,3-Dichloropropene	Ave	0.4314	0.3701		42.9	50.0	-14.2	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8542	0.6771		198	250	-20.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Lab Sample ID: CCVIS 480-58856/3 Calibration Date: 04/10/2012 09:47

Instrument ID: HP5973F Calib Start Date: 03/07/2012 23:43

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/08/2012 01:25

Lab File ID: F7960.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.664	1.584		47.6	50.0	-4.9	20.0
Ethyl methacrylate	Ave	0.9228	0.7654		41.5	50.0	-17.1	50.0
trans-1,3-Dichloropropene	Ave	0.9099	0.7833		43.0	50.0	-13.9	50.0
1,1,2-Trichloroethane	Ave	0.5001	0.4427		44.3	50.0	-11.5	50.0
Tetrachloroethene	Ave	0.7388	0.7456		50.5	50.0	0.9	50.0
1,3-Dichloropropane	Ave	1.038	0.9115		43.9	50.0	-12.1	50.0
2-Hexanone	Ave	0.6379	0.4798		188	250	-24.8	50.0
Dibromochloromethane	Ave	0.6588	0.5982		45.4	50.0	-9.2	50.0
1,2-Dibromoethane	Ave	0.6697	0.6077		45.4	50.0	-9.3	50.0
Chlorobenzene	Ave	2.027	1.928	0.3000	47.6	50.0	-4.9	50.0
Ethylbenzene	Ave	3.069	2.923		47.6	50.0	-4.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6553	0.6518		49.7	50.0	-0.5	50.0
m,p-Xylene	Ave	1.283	1.232		96.0	100	-4.0	50.0
o-Xylene	Ave	1.233	1.189		48.2	50.0	-3.6	50.0
Styrene	Ave	2.044	1.966		48.1	50.0	-3.8	50.0
Bromoform	Ave	0.3801	0.3397	0.1000	44.7	50.0	-10.6	50.0
Isopropylbenzene	Ave	2.706	2.517		46.5	50.0	-7.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7166	0.6083	0.3000	42.4	50.0	-15.1	50.0
Bromobenzene	Ave	0.7878	0.7216		45.8	50.0	-8.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2406	0.1789		186	250	-25.6	50.0
N-Propylbenzene	Ave	3.278	2.948		45.0	50.0	-10.1	50.0
1,2,3-Trichloropropane	Ave	0.2483	0.1994		40.2	50.0	-19.7	50.0
2-Chlorotoluene	Ave	0.7471	0.6934		46.4	50.0	-7.2	50.0
1,3,5-Trimethylbenzene	Ave	2.282	2.132		46.7	50.0	-6.6	50.0
4-Chlorotoluene	Ave	0.7987	0.7251		45.4	50.0	-9.2	50.0
tert-Butylbenzene	Ave	0.5765	0.5431		47.1	50.0	-5.8	50.0
1,2,4-Trimethylbenzene	Ave	2.322	2.149		46.3	50.0	-7.5	50.0
sec-Butylbenzene	Ave	2.926	2.719		46.4	50.0	-7.1	50.0
4-Isopropyltoluene	Ave	2.670	2.512		47.0	50.0	-5.9	50.0
1,3-Dichlorobenzene	Ave	1.504	1.384		46.0	50.0	-7.9	50.0
1,4-Dichlorobenzene	Ave	1.550	1.414		45.6	50.0	-8.8	50.0
n-Butylbenzene	Ave	2.179	2.014		46.2	50.0	-7.6	50.0
1,2-Dichlorobenzene	Ave	1.420	1.317		46.4	50.0	-7.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1193	0.0895		37.5	50.0	-25.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8879	0.8830		49.7	50.0	-0.6	50.0
Hexachlorobutadiene	Ave	0.3855	0.3871		50.2	50.0	0.4	50.0
Naphthalene	Ave	2.610	2.317		44.4	50.0	-11.2	50.0
1,2,3-Trichlorobenzene	Ave	0.8054	0.7874		48.9	50.0	-2.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1520	0.1390		45.7	50.0	-8.5	50.0
Toluene-d8 (Surr)	Ave	2.361	2.579		54.6	50.0	9.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7860	0.8467		53.9	50.0	7.7	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Lab Sample ID: CCVIS 480-58634/2 Calibration Date: 04/07/2012 21:47

Instrument ID: HP5973G Calib Start Date: 03/24/2012 01:37

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/24/2012 03:26

Lab File ID: G10801.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3497	0.4374		31.3	25.0	25.1	50.0
Chloromethane	Ave	0.6073	0.6275	0.1000	25.8	25.0	3.3	50.0
Vinyl chloride	Ave	0.5159	0.5979		29.0	25.0	15.9	20.0
Bromomethane	LinF		0.1145		34.1	25.0	36.4	50.0
Chloroethane	Ave	0.2678	0.2754		25.7	25.0	2.8	50.0
Trichlorofluoromethane	Ave	0.4028	0.4235		26.3	25.0	5.2	50.0
Acrolein	Ave	0.0544	0.0546		502	500	0.4	50.0
1,1-Dichloroethene	Ave	0.3758	0.3814	0.1000	25.4	25.0	1.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin1F		0.2210		20.0	25.0	-20.0	50.0
Acetone	Ave	0.1714	0.1986		145	125	15.9	50.0
Iodomethane	Ave	0.3034	0.2590		21.3	25.0	-14.7	50.0
Carbon disulfide	LinF		0.4174		9.73	25.0	-61.1*	50.0
Methyl acetate	Ave	0.6345	0.6380		25.1	25.0	0.6	50.0
Acetonitrile	Lin1F		0.0490		1070	1000	7.1	50.0
Methylene Chloride	Ave	0.4873	0.4781		24.5	25.0	-1.9	50.0
Methyl tert-butyl ether	Ave	1.222	1.161		23.8	25.0	-5.0	50.0
trans-1,2-Dichloroethene	Ave	0.4195	0.4178		24.9	25.0	-0.4	50.0
Acrylonitrile	Ave	0.2445	0.2670		137	125	9.2	50.0
1,1-Dichloroethane	Ave	0.5936	0.7124		30.0	25.0	20.0	50.0
Vinyl acetate	Ave	0.9887	0.9906		125	125	0.2	50.0
2,2-Dichloropropane	Ave	0.2389	0.2403		25.2	25.0	0.6	50.0
cis-1,2-Dichloroethene	Ave	0.3497	0.4017		28.7	25.0	14.9	50.0
2-Butanone (MEK)	Ave	0.3631	0.3920		135	125	7.9	50.0
Bromochloromethane	Ave	0.1598	0.1725		27.0	25.0	7.9	50.0
Tetrahydrofuran	Ave	0.2397	0.2609		136	125	8.8	50.0
Chloroform	Ave	0.3701	0.3888		26.3	25.0	5.0	20.0
1,1,1-Trichloroethane	Ave	0.3623	0.3488		24.1	25.0	-3.7	50.0
Cyclohexane	Ave	0.5619	0.7048		31.4	25.0	25.4	50.0
Carbon tetrachloride	QuaF		0.3037		26.5	25.0	6.0	50.0
1,1-Dichloropropene	Ave	0.5304	0.5391		25.4	25.0	1.6	50.0
Benzene	Ave	1.615	1.621		25.1	25.0	0.3	50.0
1,2-Dichloroethane	Ave	0.5683	0.5344		23.5	25.0	-6.0	50.0
Trichloroethene	Ave	0.3813	0.3812		25.0	25.0	-0.0	50.0
Methylcyclohexane	Ave	0.5062	0.6005		29.7	25.0	18.6	50.0
1,2-Dichloropropane	Ave	0.4332	0.4325		25.0	25.0	-0.2	20.0
Dibromomethane	Ave	0.2212	0.2085		23.6	25.0	-5.7	50.0
Bromodichloromethane	Ave	0.3875	0.3350		21.6	25.0	-13.6	50.0
2-Chloroethyl vinyl ether	Ave	0.3385	0.3342		123	125	-1.3	50.0
cis-1,3-Dichloropropene	Ave	0.5702	0.4931		21.6	25.0	-13.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	1.286	1.353		132	125	5.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Lab Sample ID: CCVIS 480-58634/2 Calibration Date: 04/07/2012 21:47

Instrument ID: HP5973G Calib Start Date: 03/24/2012 01:37

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/24/2012 03:26

Lab File ID: G10801.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.968	1.997		25.4	25.0	1.4	20.0
trans-1,3-Dichloropropene	Ave	0.9808	0.8208		20.9	25.0	-16.3	50.0
Ethyl methacrylate	Lin1F		1.135		21.9	25.0	-12.4	50.0
1,1,2-Trichloroethane	Ave	0.5574	0.5493		24.6	25.0	-1.5	50.0
Tetrachloroethene	Ave	0.6886	0.7128		25.9	25.0	3.5	50.0
1,3-Dichloropropane	Ave	1.270	1.225		24.1	25.0	-3.5	50.0
2-Hexanone	Ave	0.9808	1.074		137	125	9.5	50.0
Dibromochloromethane	QuaF		0.3656		19.2	25.0	-23.2	50.0
1,2-Dibromoethane	Ave	0.6695	0.6595		24.6	25.0	-1.5	50.0
Chlorobenzene	Ave	2.082	2.086	0.3000	25.1	25.0	0.2	50.0
Ethylbenzene	Ave	3.647	3.741		25.6	25.0	2.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5482	0.5148		23.5	25.0	-6.1	50.0
m,p-Xylene	Ave	1.419	1.465		51.6	50.0	3.3	50.0
o-Xylene	Ave	1.345	1.413		26.3	25.0	5.0	50.0
Styrene	Ave	2.184	2.354		26.9	25.0	7.8	50.0
Bromoform	QuaF		0.1728	0.1000	18.1	25.0	-27.6	50.0
Isopropylbenzene	Ave	4.028	4.033		25.0	25.0	0.1	50.0
Bromobenzene	Ave	0.8830	0.8650		24.5	25.0	-2.0	50.0
1,1,2,2-Tetrachloroethane	Ave	1.159	1.133	0.3000	24.5	25.0	-2.2	50.0
N-Propylbenzene	Ave	4.914	4.913		25.0	25.0	-0.0	50.0
1,2,3-Trichloropropane	Ave	0.3929	0.3820		24.3	25.0	-2.8	50.0
trans-1,4-Dichloro-2-butene	LinF		0.1832		55.9	125	-55.3*	50.0
2-Chlorotoluene	Ave	0.9078	0.9035		24.9	25.0	-0.5	50.0
1,3,5-Trimethylbenzene	Ave	3.389	3.477		25.7	25.0	2.6	50.0
4-Chlorotoluene	Ave	0.9657	0.9480		24.5	25.0	-1.8	50.0
tert-Butylbenzene	Ave	0.7129	0.7230		25.4	25.0	1.4	50.0
1,2,4-Trimethylbenzene	Ave	3.440	3.549		25.8	25.0	3.2	50.0
sec-Butylbenzene	Ave	4.285	4.395		25.6	25.0	2.6	50.0
1,3-Dichlorobenzene	Ave	1.804	1.859		25.8	25.0	3.1	50.0
4-Isopropyltoluene	Ave	3.518	3.677		26.1	25.0	4.5	50.0
1,4-Dichlorobenzene	Ave	1.896	1.920		25.3	25.0	1.3	50.0
n-Butylbenzene	Ave	3.272	3.456		26.4	25.0	5.6	50.0
1,2-Dichlorobenzene	Ave	1.770	1.810		25.6	25.0	2.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.2066	0.1989		24.1	25.0	-3.7	50.0
1,2,4-Trichlorobenzene	Ave	1.105	1.084		24.5	25.0	-1.9	50.0
Hexachlorobutadiene	Ave	0.4522	0.4308		23.8	25.0	-4.7	50.0
Naphthalene	Ave	3.668	3.752		25.6	25.0	2.3	50.0
1,2,3-Trichlorobenzene	LinF		0.9518		29.0	25.0	16.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2019	0.1990		24.6	25.0	-1.4	50.0
Toluene-d8 (Surr)	Ave	2.422	2.624		27.1	25.0	8.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6385	0.6929		27.1	25.0	8.5	50.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-58567/5

Matrix: Solid Lab File ID: F7881.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/06/2012 22:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 58567 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
591-78-6	2-Hexanone	ND		25	2.5
78-93-3	2-Butanone (MEK)	ND		25	1.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-58567/5

Matrix: Solid Lab File ID: F7881.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/06/2012 22:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 58567 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		5.0	0.93
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	ND		5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	ND		5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	0.859	J	10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		64-126
2037-26-5	Toluene-d8 (Surr)	105		71-125
460-00-4	4-Bromofluorobenzene (Surr)	100		72-126

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-18068-1

15 Soil Samples, 1 Field Duplicate, and 1 Equipment Blank Collected April 2 and 3, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for caprolactam and atrazine were above the allowable maximum (25%) on 04-06-12 (X4918.D). The %D for atrazine was above the allowable maximum (25%) on 04-06-12 (X4953.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method and equipment blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: One of twelve relative percent differences for spiked compounds was above the allowable maximums and 3 of 24 percent recoveries were outside

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QC limits for soil MS/MSD sample SB-A3(5'-6'1"). No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries (%Rs) for spiked compounds were within QC limits for aqueous sample LCS 480-58223/2-A.

The %R for 4-nitrophenol was above QC limits for soil sample 480-58302/2-A. Positive results for 4-nitrophenol should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent differences for the following compounds were above the allowable maximum (35%) for soil field duplicate pair SB-A2 (10'-11')/DUP-03 (attached table). Results for these compounds should be considered estimated (J) in samples SB-A2 (10'-11') and DUP-03.

benzo(a)anthracene	benzo(a)pyrene	benzo(b)fluoranthene
benzo(g,h,i)perylene	chrysene	fluoranthene
indeno(1,2,3-cd)pyrene	phenanthrene	pyrene

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-18068-1

S1= SB-A2 (10'-11') **S2=** DUP-03

Analyte	S1	S2	RPD (%)	
2-methylnaphthalene	**48**	**36**	NC	
acenaphthene	**170**	**97**	NC	
acenaphthylene	**140**	**120**	NC	
anthracene	**590**	380	NC	
benzo(a)anthracene	2000	1300	42%	*
benzo(a)pyrene	1900	1300	38%	*
benzo(b)fluoranthene	2500	1400	56%	*
benzo(g,h,i)perylene	1100	640	53%	*
benzo(k)fluoranthene	**890**	760	NC	
biphenyl	ND	**13**	NC	
bis(2-ethylhexyl)phthalate	ND	**73**	NC	
carbazole	**250**	**140**	NC	
chrysene	2000	1300	42%	*
dibenz(a,h)anthracene	**370**	220	NC	
dibenzofuran	**98**	**60**	NC	
fluoranthene	4000	2400	50%	*
fluorene	**190**	**110**	NC	
indeno(1,2,3-cd)pyrene	1100	650	51%	*
naphthalene	**75**	**52**	NC	
phenanthrene	2500	1300	63%	*
pyrene	3200	2100	42%	*

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4972.D

Lab ID: 480-18068-15 MS Client ID: SB-A3 (5'-6'1") MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	3530	ND	4080	116	55-125	
2-Chlorophenol	3530	ND	2910	83	38-120	
4-Chloro-3-methylphenol	3530	ND	3760	107	49-125	
4-Nitrophenol	3530	ND	5650	160	43-137	E F
Acenaphthene	3530	430	3640	91	53-120	
Bis(2-ethylhexyl) phthalate	3530	ND	4020	114	61-133	
Fluorene	3530	630	4110	99	63-126	
Hexachloroethane	3530	ND	3090	87	41-120	
N-Nitrosodi-n-propylamine	3530	ND	3670	104	46-120	
Pentachlorophenol	3530	ND	2820	80	33-136	
Phenol	3530	21 J	3140	88	36-120	
Pyrene	3530	3300	7340	114	51-133	E

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4973.D

Lab ID: 480-18068-15 MSD Client ID: SB-A3 (5'-6'1") MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dinitrotoluene	3480	3910	112	4.44	20	55-125	
2-Chlorophenol	3480	2920	84	0.000	25	38-120	
4-Chloro-3-methylphenol	3480	3580	103	4.81	27	49-125	
4-Nitrophenol	3480	5190	149	8.59	25	43-137	F
Acenaphthene	3480	3460	87	5.13	35	53-120	
Bis(2-ethylhexyl) phthalate	3480	4060	116	1.07	15	61-133	
Fluorene	3480	3650	87	12.0	15	63-126	
Hexachloroethane	3480	3260	94	5.57	46	41-120	
N-Nitrosodi-n-propylamine	3480	3730	107	1.47	31	46-120	
Pentachlorophenol	3480	3220	92	13.1	35	33-136	
Phenol	3480	3160	90	1.00	35	36-120	
Pyrene	3480	4130	23	55.9	35	51-133	F

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4971.D

Lab ID: LCS 480-58302/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
2,4-Dinitrophenol	3290	2990	91	35-146	
2,4-Dinitrotoluene	3290	3770	114	55-125	
2-Chlorophenol	3290	2700	82	38-120	
4-Chloro-3-methylphenol	3290	3680	112	49-125	
4-Nitrophenol	3290	5000	152	43-137	*
Acenaphthene	3290	3340	101	53-120	
Bis(2-ethylhexyl) phthalate	3290	3710	113	61-133	
Fluorene	3290	3740	114	63-126	
Hexachloroethane	3290	2870	87	41-120	
N-Nitrosodi-n-propylamine	3290	3560	108	46-120	
Pentachlorophenol	3290	2900	88	33-136	
Phenol	3290	2830	86	36-120	
Pyrene	3290	3500	106	51-133	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Lab Sample ID: CCV 480-58387/3 Calibration Date: 04/06/2012 00:43

Instrument ID: HP5973X Calib Start Date: 03/01/2012 14:12

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 03/01/2012 16:13

Lab File ID: X4918.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzaldehyde	Ave	1.063	1.207	0.0100	56800	50000	13.6	40.0
Acetophenone	Ave	1.870	2.078	0.0100	55600	50000	11.1	40.0
Caprolactam	Lin1		0.0644	0.0100	35500	50000	-29.0	40.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4710	0.4826	0.0100	51200	50000	2.5	40.0
Biphenyl	Ave	1.326	1.288	0.0100	48600	50000	-2.8	40.0
2,3,4,6-Tetrachlorophenol	Ave	0.2494	0.2615	0.0100	52400	50000	4.9	40.0
Atrazine	Ave	0.3017	0.3773	0.0100	62500	50000	25.1*	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Lab Sample ID: CCV 480-58507/3 Calibration Date: 04/06/2012 15:33

Instrument ID: HP5973X Calib Start Date: 03/01/2012 14:12

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 03/01/2012 16:13

Lab File ID: X4953.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzaldehyde	Ave	1.063	1.205	0.0100	56700	50000	13.4	40.0
Acetophenone	Ave	1.870	2.092	0.0100	55900	50000	11.9	40.0
Caprolactam	Lin1		0.1054	0.0100	56100	50000	12.2	40.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4710	0.5160	0.0100	54800	50000	9.6	40.0
Biphenyl	Ave	1.326	1.386	0.0100	52300	50000	4.5	40.0
2,3,4,6-Tetrachlorophenol	Ave	0.2494	0.2621	0.0100	52500	50000	5.1	40.0
Atrazine	Ave	0.3017	0.4166	0.0100	69000	50000	38.1*	25.0

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QA/QC Review of Method 8082 PCB Data for
TestAmerica Buffalo, Job No: 480-18068-1

12 Soil Samples
Collected April 2, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analysis of the method blank reported target PCBs as not detected.

Surrogate Recovery: The surrogates recoveries were within QC limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD sample RB-06 (12"-24").

Laboratory Control Sample: The percent recoveries for PCB-1016 and PCB-1260 were within QC limits for soil sample LCS 480-58267/2-A.

Initial Calibration: The %RSDs for PCB-1016 and PCB-1260 were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-05-12 (CCV 480-58319/16) on the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-05-12 (CCV 480-58319/28) on the ZB-5 column. Positive results for PCB-1016 and PCB-1260 should be considered estimated (J) in associated samples.

PCB Identification Summary for Multicomponent Analytes: The checked surrogates were within GC quantitation limits. The analyses of samples in this data pack reported target PCBs as not detected.

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FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Lab Sample ID: CCV 480-58319/28 Calibration Date: 04/05/2012 22:23

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_163_216.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	305374		0.669	0.500	33.9*	15.0
PCB-1016 Peak 2	Ave	119908	170210		0.710	0.500	42.0*	15.0
PCB-1016 Peak 3	Ave	331581	415532		0.627	0.500	25.3*	15.0
PCB-1016 Peak 4	Ave	133756	204462		0.764	0.500	52.9*	15.0
PCB-1260 Peak 1	Ave	272257	361406		0.664	0.500	32.7*	15.0
PCB-1260 Peak 2	Ave	438611	525586		0.599	0.500	19.8*	15.0
PCB-1260 Peak 3	Ave	177029	232348		0.656	0.500	31.2*	15.0
PCB-1260 Peak 4	Ave	124111	137218		0.553	0.500	10.6	15.0
Tetrachloro-m-xylene	Lin1		5395333		0.0368	0.0300	22.7*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6218167		0.0404	0.0300	34.7*	15.0

average %D for PCB-1016 = 38.5%

average %D for PCB-1260 = 23.6%

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18068-1

SDG No.:

Lab Sample ID: CCV 480-58319/16 Calibration Date: 04/05/2012 19:26

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_163_204.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	305564		0.670	0.500	33.9*	15.0
PCB-1016 Peak 2	Ave	119908	169896		0.708	0.500	41.7*	15.0
PCB-1016 Peak 3	Ave	331581	422558		0.637	0.500	27.4*	15.0
PCB-1016 Peak 4	Ave	133756	200484		0.749	0.500	49.9*	15.0
PCB-1260 Peak 1	Ave	272257	375708		0.690	0.500	38.0*	15.0
PCB-1260 Peak 2	Ave	438611	517738		0.590	0.500	18.0*	15.0
PCB-1260 Peak 3	Ave	177029	232138		0.656	0.500	31.1*	15.0
PCB-1260 Peak 4	Ave	124111	136058		0.548	0.500	9.6	15.0
Tetrachloro-m-xylene	Linl		5338667		0.0364	0.0300	21.3*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6119167		0.0398	0.0300	32.5*	15.0

average %D for PCB-1016 = 38.2%
average %D for PCB-1260 = 24.2%

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QA/QC Review of TAL Metals Data for
TestAmerica Buffalo, Job No: 480-18068-1

12 Soil Samples
Collected April 2, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRQL standard samples CRI 480-58450/7, CRI 480-58892/7, and CRA 480-58512/3.

Blanks: The analyses of initial calibration and continuing calibration, and method blanks reported TAL metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries (%Rs) for aluminum and 1 of 2 %Rs barium were above control limits (75-125%), but were not above 250% for soil MS/MSD sample RB-03 (12"-24"). Positive results for aluminum and barium should be considered estimated (J) in associated soil samples.

One of two %Rs for antimony and magnesium were below control limits (75-125%), but were not below 10% for soil MS/MSD sample RB-03 (12"-24"). Positive and "not detected" results for antimony and magnesium should be considered estimated (J) in associated soil samples.

Laboratory Duplicates: The relative percent differences for TAL metals were below the allowable maximum (35%) in soil MS/MSD samples RB-03 (0"-6") and RB-03 (12"-24"), as required.

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Laboratory Control Sample: The percent recoveries for TAL metals were within QC limits in soil samples LCSSRM 480-58242/2-A and LCSSRM 480-58215/2-A.

ICP Serial Dilution: The %Ds for following metals were above the allowable maximum (10%) for soil serial dilution sample RB-03 (12"-24"). Positive results for these metals that are above the CRDLs should be considered estimated (J) in associated soil samples.

aluminum	calcium	chromium	iron
magnesium	manganese	vanadium	zinc

Instrument Detection Limits: The MDLs were at or below the RLs, as required.

Percent Solids: The % solids for soil samples were above 50%.

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: RB-03 (12"-24") MS
Lab ID: 480-18068-3 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-18068-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 77.1

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	12750		7330		2490	217	75-125	F	6010B
Antimony	37.78		ND		49.8	76	75-125		6010B
Arsenic	51.84		5.4		49.8	93	75-125		6010B
Barium	137.9		72.9		49.8	131	75-125	F	6010B
Beryllium	48.89		0.48		49.8	97	75-125		6010B
Cadmium	47.16		0.28		49.8	94	75-125		6010B
Calcium	21660		19500		2490	88	75-125	4	6010B
Chromium	61.04		13.1		49.8	96	75-125		6010B
Cobalt	58.24		8.2		49.8	101	75-125		6010B
Copper	72.57		22.0		49.8	102	75-125		6010B
Iron	21320		17800		2490	NA 140	75-125	4	6010B
Lead	71.48		18.0		49.8	107	75-125		6010B
Magnesium	8982		6670		2490	93	75-125		6010B
Manganese	556.8		468		49.8	NA 179	75-125	4	6010B
Nickel	70.24		19.3		49.8	102	75-125		6010B
Potassium	3708		972		2490	110	75-125		6010B
Selenium	44.94		ND		49.8	90	75-125		6010B
Silver	11.53		ND		12.4	93	75-125		6010B
Sodium	2459		68.2	J	2490	96	75-125		6010B
Thallium	47.72		ND		49.8	96	75-125		6010B
Vanadium	66.74		15.6		49.8	103	75-125		6010B
Zinc	110.6		58.2		49.8	105	75-125		6010B

SSR = Spiked Sample Result

NA - Not applicable, the sample concentration was greater than 4 times the spiking level; therefore, a valid %R could not be calculated.

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: RB-03 (12"-24") MSD
Lab ID: 480-18068-3 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-18068-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 77.1

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	12710	2520	214	75-125	0.000	20	F	6010B
Antimony	33.69	50.3	67	75-125	11.5	20	F	6010B
Arsenic	49.58	50.3	88	75-125	4.46	20		6010B
Barium	132.4	50.3	118	75-125	4.02	20		6010B
Beryllium	46.39	50.3	91	75-125	5.24	20		6010B
Cadmium	44.50	50.3	88	75-125	5.80	20		6010B
Calcium	18520	2520	NA -38	75-125	15.6	20	4	6010B
Chromium	58.68	50.3	91	75-125	3.94	20		6010B
Cobalt	54.39	50.3	92	75-125	6.84	20		6010B
Copper	71.45	50.3	98	75-125	1.56	20		6010B
Iron	21240	2520	NA 135	75-125	0.000	20	4	6010B
Lead	67.71	50.3	99	75-125	5.42	20		6010B
Magnesium	7968	2520	52	75-125	12.0	20	F	6010B
Manganese	609.7	50.3	NA 282	75-125	9.08	20	4	6010B
Nickel	67.29	50.3	95	75-125	4.29	20		6010B
Potassium	3900	2520	116	75-125	5.05	20		6010B
Selenium	43.04	50.3	86	75-125	4.33	20		6010B
Silver	10.99	12.6	87	75-125	4.77	20		6010B
Sodium	2316	2520	89	75-125	6.01	20		6010B
Thallium	45.25	50.3	90	75-125	5.32	20		6010B
Vanadium	64.48	50.3	97	75-125	3.45	20		6010B
Zinc	104.7	50.3	93	75-125	5.44	20		6010B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-18068-3

SDG No:

Lab Name: TestAmerica Buffalo

Job No: 480-18068-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	7330		8137		11	V	6010B
Antimony	ND		ND		NC		6010B
Arsenic	5.4		5.16	J	NC		6010B
Barium	72.9		80.49		10		6010B
Beryllium	0.48		0.498	J	NC		6010B
Cadmium	0.28		0.342	J	NC		6010B
Calcium	19500		21910		13	V	6010B
Chromium	13.1		15.33		17	V	6010B
Cobalt	8.2		8.71		6.2		6010B
Copper	22.0		23.82		8.3		6010B
Iron	17800		20270		14	V	6010B
Lead	18.0		19.17		6.5		6010B
Magnesium	6670		7392		11	V	6010B
Manganese	468		529.1		13	V	6010B
Nickel	19.3		20.66	J	6.8		6010B
Potassium	972		1065		9.6		6010B
Selenium	ND		ND		NC		6010B
Silver	ND		ND		NC		6010B
Sodium	68.2	J	88.75	J	NC		6010B
Thallium	ND		ND		NC		6010B
Vanadium	15.6		17.64		13	V	6010B
Zinc	58.2		66.04		13	V	6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

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Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-18071-1

12 Soil Samples,
3 Field Duplicates, and 2 Trip Blanks
Collected April 3-5, 2012

Prepared by: Donald Anné
May 4, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 12 soil samples, 3 field duplicates, and 2 trip blanks analyzed for volatiles, and 12 soil samples and 3 field duplicates analyzed semi-volatiles, PCB, and TAL metals.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive semi-volatile results for indeno(1,2,3-cd)pyrene and benzo(g,h,i)perylene were flagged as "estimated" (J) in the following samples because %Ds for indeno(1,2,3-cd)pyrene and benzo(g,h,i)perylene were above the allowable maximum in the associated soil continuing calibration.

RB-07(0-6")	RB-07(6"-12")	RB-07(12"-24")	RB-08(0-6")
RB-08(6"-12")	RB-08(12"-24")	RB-09(0-6")	RB-09(6"-12")
RB-09(12"-24")	DUP-01	DUP-02 (4/5)	RB-10(0-6")

- Positive semi-volatile results for dibenz(a,h)anthracene were flagged as "estimated" (J) in the following samples because %D for dibenz(a,h)anthracene wAS above the allowable maximum in the associated soil continuing calibration.

RB-07(0-6")	RB-07(6"-12")	RB-07(12"-24")	RB-08(0-6")
RB-08(6"-12")	RB-08(12"-24")	RB-09(0-6")	RB-09(6"-12")
DUP-01	DUP-02 (4/5)	RB-10(0-6")	

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- Positive semi-volatile results for 2-methylnaphthalene were flagged as "estimated" (J) in samples TP-A2 and DUP-02 (4/3) because relative percent difference for 2-methylnaphthalene was above the allowable maximum in the associated soil field duplicate pair TP-A2/DUP-02 (4/3).

- Positive semi-volatile results for benzo(k)fluoranthene were flagged as "estimated" (J) in samples RB-09(0-6") and DUP-01 because relative percent difference for benzo(k)fluoranthene was above the allowable maximum in the associated soil field duplicate pair RB-09(0-6")/DUP-01.

- Positive semi-volatile results for benzo(b)fluoranthene were flagged as "estimated" (J) in samples RB-09(12"-24") and DUP-02 (4/5) because relative percent difference for benzo(b)fluoranthene was above the allowable maximum in the associated soil field duplicate pair RB-09(12"-24")/DUP-02 (4/5).

- Positive metals results for aluminum were flagged as "estimated" (J) in all 12 soil samples and 3 field duplicates because 2 of 2 percent recoveries for aluminum were above control limits, but only one was above 200% in the associated soil MS/MSD samples.

- Positive metal results for magnesium were flagged as "estimated" (J) in all 12 soil samples and 3 field duplicates because 1 or 2 of 2 percent recoveries for magnesium were below control limits, but were not below 10% in the associated soil MS/MSD samples.

- Positive metal results for nickel were flagged as "estimated" (J) in the following soil samples because 1 of 2 percent recoveries for nickel was above control limits, but was not above 200% in the associated soil MS/MSD sample.

RB-07(0-6")	RB-07(6"-12")	RB-07(12"-24")	RB-08(0-6")
RB-08(6"-12")	RB-08(12"-24")	RB-09(0-6")	RB-09(6"-12")
RB-09(12"-24")	DUP-01	DUP-02 (4/5)	RB-10(0-6")

- Positive metal results for arsenic and calcium were flagged as "estimated" (J) in the following soil samples because 2 of 2 percent recoveries for arsenic and calcium were below control limits, but were not below 10% in the associated soil MS/MSD sample.

RB-07(0-6")	RB-07(6"-12")	RB-07(12"-24")	RB-08(0-6")
RB-08(6"-12")	RB-08(12"-24")	RB-09(0-6")	RB-09(6"-12")
RB-09(12"-24")	DUP-01	DUP-02 (4/5)	RB-10(0-6")

- Positive metal results for mercury were flagged as "estimated" (J) in the following soil samples because 1 of 2 percent recoveries for mercury was below control limits, but was not below 10% in the associated soil MS/MSD sample.

RB-07(0-6")	RB-07(6"-12")	RB-07(12"-24")	RB-08(0-6")
RB-08(6"-12")	RB-08(12"-24")	RB-09(0-6")	RB-09(6"-12")
RB-09(12"-24")	DUP-01	DUP-02 (4/5)	RB-10(0-6")

- Positive metal results for iron were flagged as "estimated" (J) in the following soil samples because the relative percent difference for iron was above the allowable maximum in the associated soil MS/MSD sample.

RB-07(0-6")	RB-07(6"-12")	RB-07(12"-24")	RB-08(0-6")
RB-08(6"-12")	RB-08(12"-24")	RB-09(0-6")	RB-09(6"-12")
RB-09(12"-24")	DUP-01	DUP-02 (4/5)	RB-10(0-6")

- Positive metal results for cobalt were flagged as "estimated" (J) in the following soil samples because the %D for cobalt was above the allowable maximum in the associated serial dilution sample.

RB-07(0-6")	RB-07(6"-12")	RB-07(12"-24")	RB-08(0-6")
RB-08(6"-12")	RB-08(12"-24")	RB-09(0-6")	RB-09(6"-12")
RB-09(12"-24")	DUP-01	DUP-02 (4/5)	RB-10(0-6")

- Positive metal results for potassium were flagged as "estimated" (J) in samples TP-A2, DUP-02 (4/3), and TP-A1 because the %D for potassium was above the allowable maximum in the associated serial dilution sample.

- Positive metal results for calcium were flagged as "estimated" (J) in samples TP-A2 and DUP-02 (4/3) because relative percent difference for calcium was above the allowable maximum in the associated soil field duplicate pair TP-A2/DUP-02 (4/3).

- Positive metal results for lead were flagged as "estimated" (J) in samples RB-09(0-6") and DUP-01 because relative percent difference for lead was above the allowable maximum in the associated soil field duplicate pair RB-09(0-6")/DUP-01.

- Positive metal results for barium, lead, manganese, potassium, and zinc were flagged as "estimated" (J) in samples RB-09(12"-24") and DUP-02 (4/5) because relative percent differences for barium, lead, manganese, potassium, and zinc were above the allowable maximum in the associated soil field duplicate pair RB-09(12"-24")/DUP-02 (4/5).

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260B Volatiles Data for TestAmerica Buffalo, Job No: 480-18071-1

12 Soil Samples, 3 Field Duplicates, and 2 Trip Blanks Collected April 3-5, 2011

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for acetone and 2-butanone were above the allowable maximum (25%) on 04-10-12 (F7960.D). The %Ds for methyl tert-butyl ether and carbon tetrachloride were above the allowable maximum (25%) on 04-13-12 (G11022.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximum, but 9 of 26 percent recoveries (%Rs) were below QC limits for soil MS/MSD sample TP-A1. The RPDs for spike compounds were below the allowable maximum, but 21 of 26 %Rs were below QC limits for soil MS/MSD

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sample RB-10 (0-6"). No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for the following aqueous and soil samples.

LCS 480-58812/3	LCS 480-58856/5	LCS 480-59033/4
LCS 480-58994/4	LCS 480-59014/17-A	LCS 480-59414/6
LCS 480-59441/4		

Field Duplicates: The analyses of soil field duplicate pairs RB-09(0-6")/DUP-01 and RB-09(12"-24")/DUP-02 (4/5) reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

The relative percent differences for applicable compounds were below the allowable maximum (35%) for soil field duplicate pair TP-A2/DUP-02 (4/3) (attached table), as required.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-18071-1

S1= TP-A2 **S2=** DUP-02 (4/3)

Analyte	S1	S2	RPD (%)
1,1,1-trichloroethane	**39**	ND	NC
1,2-dichloroethane	**61**	**53**	NC
benzene	100	**92**	NC
cis-1,2-dichloroethene	**64**	**59**	NC
ethylbenzene	140	120	15%
isopropylbenzene	940	1000	6%
methyl acetate	230	230	0%
methylcyclohexane	850	860	1%
methylene chloride	ND	**29**	NC
toluene	**78**	**65**	NC
xylenes, total	320	270.0	17%

* RPD is above the allowable maximum (35%)

All results are in ug/kg

Bold numbers were values that below the CRQL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8094.D

Lab ID: 480-18147-1 MS Client ID: TP-A1 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	50.3	ND	46.4	92	79-126	
1,1-Dichloroethene	50.3	ND	39.0	78	65-153	
1,2-Dichlorobenzene	50.3	ND	42.1	84	75-120	
1,2-Dichloroethane	50.3	ND	44.4	88	77-122	
Benzene	50.3	ND	47.1	94	79-127	
Chlorobenzene	50.3	ND	47.9	95	76-124	
cis-1,2-Dichloroethene	50.3	ND	46.9	93	81-117	
Ethylbenzene	50.3	ND	48.3	96	80-120	
Methyl tert-butyl ether	50.3	ND	40.5	81	63-125	
Tetrachloroethene	50.3	7.7	60.0	104	74-122	
Toluene	50.3	ND	48.1	96	74-128	
trans-1,2-Dichloroethene	50.3	ND	47.6	95	78-126	
Trichloroethene	50.3	8.5	53.8	90	77-129	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8025.D

Lab ID: 480-18147-1 MSD Client ID: TP-A1 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	52.7	38.9	74	17.6	30	79-126	F
1,1-Dichloroethene	52.7	34.0	64	13.8	30	65-153	F
1,2-Dichlorobenzene	52.7	34.0	64	21.5	30	75-120	F
1,2-Dichloroethane	52.7	35.2	67	23.1	30	77-122	F
Benzene	52.7	39.8	75	17.0	30	79-127	F
Chlorobenzene	52.7	39.4	75	19.5	30	76-124	F
cis-1,2-Dichloroethene	52.7	39.0	74	18.4	30	81-117	F
Ethylbenzene	52.7	38.7	73	22.2	30	80-120	F
Methyl tert-butyl ether	52.7	33.2	63	19.8	30	63-125	
Tetrachloroethene	52.7	52.3	85	13.7	30	74-122	
Toluene	52.7	40.5	77	17.3	30	74-128	
trans-1,2-Dichloroethene	52.7	40.1	76	17.3	30	78-126	F
Trichloroethene	52.7	50.1	79	7.09	30	77-129	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7996.D

Lab ID: 480-18223-12 MS Client ID: RB-10 (0-6") MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	48.7	ND	35.4	73	79-126	F
1,1-Dichloroethene	48.7	ND	29.2	60	65-153	F
1,2-Dichlorobenzene	48.7	ND	12.0	25	75-120	F
1,2-Dichloroethane	48.7	ND	29.8	61	77-122	F
Benzene	48.7	ND	34.1	70	79-127	F
Chlorobenzene	48.7	ND	22.5	46	76-124	F
cis-1,2-Dichloroethene	48.7	ND	32.2	66	81-117	F
Ethylbenzene	48.7	ND	22.2	46	80-120	F
Methyl tert-butyl ether	48.7	ND	32.0	66	63-125	
Tetrachloroethene	48.7	ND	22.8	47	74-122	F
Toluene	48.7	ND	29.5	61	74-128	F
trans-1,2-Dichloroethene	48.7	ND	31.5	65	78-126	F
Trichloroethene	48.7	ND	25.3	52	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7997.D

Lab ID: 480-18223-12 MSD Client ID: RB-10 (0-6") MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	54.9	45.8	83	26	30	79-126	
1,1-Dichloroethene	54.9	39.2	71	29	30	65-153	
1,2-Dichlorobenzene	54.9	15.2	28	23	30	75-120	F
1,2-Dichloroethane	54.9	37.6	68	23	30	77-122	F
Benzene	54.9	43.5	79	24	30	79-127	
Chlorobenzene	54.9	28.9	53	25	30	76-124	F
cis-1,2-Dichloroethene	54.9	41.0	75	24	30	81-117	F
Ethylbenzene	54.9	28.7	52	25	30	80-120	F
Methyl tert-butyl ether	54.9	41.1	75	25	30	63-125	
Tetrachloroethene	54.9	30.7	56	29	30	74-122	F
Toluene	54.9	37.8	69	25	30	74-128	F
trans-1,2-Dichloroethene	54.9	40.8	74	26	30	78-126	F
Trichloroethene	54.9	33.0	60	26	30	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCVIS 480-58856/3 Calibration Date: 04/10/2012 09:47

Instrument ID: HP5973F Calib Start Date: 03/07/2012 23:43

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/08/2012 01:25

Lab File ID: F7960.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2059	0.1799		43.7	50.0	-12.6	50.0
Chloromethane	Ave	0.2765	0.2379	0.1000	43.0	50.0	-14.0	50.0
Vinyl chloride	Ave	0.2213	0.2060		46.5	50.0	-6.9	20.0
Bromomethane	Ave	0.1097	0.0947		43.2	50.0	-13.7	50.0
Chloroethane	Ave	0.1050	0.0928		44.2	50.0	-11.7	50.0
Trichlorofluoromethane	Ave	0.2394	0.2349		49.1	50.0	-1.9	50.0
Acrolein	Ave	0.0379	0.0211		558	1000	NA -44.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2313	0.1840		39.8	50.0	-20.5	50.0
1,1-Dichloroethene	Ave	0.2420	0.2277	0.1000	47.0	50.0	-5.9	20.0
Acetone	Ave	0.1081	0.0783		181	250	-27.6	50.0
Iodomethane	Ave	0.3623	0.3193		44.1	50.0	-11.9	50.0
Carbon disulfide	Ave	0.6556	0.4956		37.8	50.0	-24.4	50.0
Methyl acetate	Ave	0.3785	0.2859		37.8	50.0	-24.4	50.0
Acetonitrile	Ave	0.0226	0.0191		1700	2000	-15.2	50.0
Methylene Chloride	Ave	0.2868	0.2676		46.7	50.0	-6.7	50.0
Methyl tert-butyl ether	Ave	0.8378	0.6792		40.5	50.0	-18.9	50.0
trans-1,2-Dichloroethene	Ave	0.2812	0.2651		47.1	50.0	-5.7	50.0
Acrylonitrile	Ave	0.1271	0.1022		201	250	-19.6	50.0
Vinyl acetate	Ave	0.6567	0.5250		200	250	-20.1	50.0
1,1-Dichloroethane	Ave	0.4772	0.4220		44.2	50.0	-11.6	50.0
2-Butanone (MEK)	Ave	0.1867	0.1358		182	250	-27.3	50.0
2,2-Dichloropropane	Ave	0.3267	0.3058		46.8	50.0	-6.4	50.0
cis-1,2-Dichloroethene	Ave	0.3174	0.2942		46.4	50.0	-7.3	50.0
Bromochloromethane	Ave	0.1669	0.1560		46.7	50.0	-6.6	50.0
Tetrahydrofuran	Ave	0.1231	0.0910		185	250	NA -26.0	50.0
Chloroform	Ave	0.4648	0.4132		44.4	50.0	-11.1	20.0
1,1,1-Trichloroethane	Ave	0.3695	0.3399		46.0	50.0	-8.0	50.0
Cyclohexane	Ave	0.4776	0.3720		38.9	50.0	-22.1	50.0
1,1-Dichloropropene	Ave	0.3625	0.3170		43.7	50.0	-12.6	50.0
Carbon tetrachloride	Ave	0.3123	0.2918		46.7	50.0	-6.6	50.0
Benzene	Ave	1.074	0.9829		45.8	50.0	-8.5	50.0
1,2-Dichloroethane	Ave	0.3784	0.3116		41.2	50.0	-17.7	50.0
Trichloroethene	Ave	0.2881	0.2635		45.7	50.0	-8.5	50.0
Methylcyclohexane	Ave	0.4705	0.3917		41.6	50.0	-16.7	50.0
1,2-Dichloropropane	Ave	0.2858	0.2525		44.2	50.0	-11.7	20.0
Dibromomethane	Ave	0.1702	0.1462		42.9	50.0	-14.1	50.0
Bromodichloromethane	Ave	0.3334	0.2868		43.0	50.0	-14.0	50.0
2-Chloroethyl vinyl ether	Ave	0.2068	0.1664		201	250	-19.5	50.0
cis-1,3-Dichloropropene	Ave	0.4314	0.3701		42.9	50.0	-14.2	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8542	0.6771		198	250	-20.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCVIS 480-58856/3 Calibration Date: 04/10/2012 09:47

Instrument ID: HP5973F Calib Start Date: 03/07/2012 23:43

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/08/2012 01:25

Lab File ID: F7960.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.664	1.584		47.6	50.0	-4.9	20.0
Ethyl methacrylate	Ave	0.9228	0.7654		41.5	50.0	-17.1	50.0
trans-1,3-Dichloropropene	Ave	0.9099	0.7833		43.0	50.0	-13.9	50.0
1,1,2-Trichloroethane	Ave	0.5001	0.4427		44.3	50.0	-11.5	50.0
Tetrachloroethene	Ave	0.7388	0.7456		50.5	50.0	0.9	50.0
1,3-Dichloropropane	Ave	1.038	0.9115		43.9	50.0	-12.1	50.0
2-Hexanone	Ave	0.6379	0.4798		188	250	-24.8	50.0
Dibromochloromethane	Ave	0.6588	0.5982		45.4	50.0	-9.2	50.0
1,2-Dibromoethane	Ave	0.6697	0.6077		45.4	50.0	-9.3	50.0
Chlorobenzene	Ave	2.027	1.928	0.3000	47.6	50.0	-4.9	50.0
Ethylbenzene	Ave	3.069	2.923		47.6	50.0	-4.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6553	0.6518		49.7	50.0	-0.5	50.0
m,p-Xylene	Ave	1.283	1.232		96.0	100	-4.0	50.0
o-Xylene	Ave	1.233	1.189		48.2	50.0	-3.6	50.0
Styrene	Ave	2.044	1.966		48.1	50.0	-3.8	50.0
Bromoform	Ave	0.3801	0.3397	0.1000	44.7	50.0	-10.6	50.0
Isopropylbenzene	Ave	2.706	2.517		46.5	50.0	-7.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7166	0.6083	0.3000	42.4	50.0	-15.1	50.0
Bromobenzene	Ave	0.7878	0.7216		45.8	50.0	-8.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2406	0.1789		186	250	-25.6	50.0
N-Propylbenzene	Ave	3.278	2.948		45.0	50.0	-10.1	50.0
1,2,3-Trichloropropane	Ave	0.2483	0.1994		40.2	50.0	-19.7	50.0
2-Chlorotoluene	Ave	0.7471	0.6934		46.4	50.0	-7.2	50.0
1,3,5-Trimethylbenzene	Ave	2.282	2.132		46.7	50.0	-6.6	50.0
4-Chlorotoluene	Ave	0.7987	0.7251		45.4	50.0	-9.2	50.0
tert-Butylbenzene	Ave	0.5765	0.5431		47.1	50.0	-5.8	50.0
1,2,4-Trimethylbenzene	Ave	2.322	2.149		46.3	50.0	-7.5	50.0
sec-Butylbenzene	Ave	2.926	2.719		46.4	50.0	-7.1	50.0
4-Isopropyltoluene	Ave	2.670	2.512		47.0	50.0	-5.9	50.0
1,3-Dichlorobenzene	Ave	1.504	1.384		46.0	50.0	-7.9	50.0
1,4-Dichlorobenzene	Ave	1.550	1.414		45.6	50.0	-8.8	50.0
n-Butylbenzene	Ave	2.179	2.014		46.2	50.0	-7.6	50.0
1,2-Dichlorobenzene	Ave	1.420	1.317		46.4	50.0	-7.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1193	0.0895		37.5	50.0	-25.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8879	0.8830		49.7	50.0	-0.6	50.0
Hexachlorobutadiene	Ave	0.3855	0.3871		50.2	50.0	0.4	50.0
Naphthalene	Ave	2.610	2.317		44.4	50.0	-11.2	50.0
1,2,3-Trichlorobenzene	Ave	0.8054	0.7874		48.9	50.0	-2.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1520	0.1390		45.7	50.0	-8.5	50.0
Toluene-d8 (Surr)	Ave	2.361	2.579		54.6	50.0	9.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7860	0.8467		53.9	50.0	7.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCVIS 480-59441/2 Calibration Date: 04/13/2012 09:56

Instrument ID: HP5973G Calib Start Date: 04/09/2012 20:15

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 04/09/2012 22:09

Lab File ID: G11022.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4294	0.4134		24.1	25.0	-3.7	50.0
Chloromethane	Ave	0.6789	0.6553	0.1000	24.1	25.0	-3.5	50.0
Vinyl chloride	Ave	0.5844	0.5909		25.3	25.0	1.1	20.0
Bromomethane	QuaF		0.0950		21.2	25.0	-15.2	50.0
Chloroethane	Ave	0.2790	0.2520		22.6	25.0	-9.7	50.0
Trichlorofluoromethane	Lin1F		0.4305		22.8	25.0	-8.8	50.0
Acrolein	Ave	0.0447	0.0454		509	500	1.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3255	0.3367		25.9	25.0	3.4	50.0
1,1-Dichloroethene	Ave	0.3701	0.3545	0.1000	23.9	25.0	-4.2	20.0
Acetone	Ave	0.2016	0.2016		125	125	0.0	50.0
Iodomethane	Ave	0.3520	0.3369		23.9	25.0	-4.3	50.0
Carbon disulfide	Ave	0.8992	0.7703		21.4	25.0	-14.3	50.0
Methyl acetate	Ave	0.7292	0.7536		25.8	25.0	3.3	50.0
Acetonitrile	Ave	0.0508	0.0560		1100	1000	10.2	50.0
Methylene Chloride	Ave	0.4522	0.4788		26.5	25.0	5.9	50.0
Methyl tert-butyl ether	Ave	1.050	1.331		31.7	25.0	26.7	50.0
trans-1,2-Dichloroethene	Ave	0.4203	0.4077		24.2	25.0	-3.0	50.0
Acrylonitrile	Ave	0.2647	0.2886		136	125	9.0	50.0
1,1-Dichloroethane	Ave	0.6794	0.7344		27.0	25.0	8.1	50.0
Vinyl acetate	Ave	0.9164	1.165		159	125	NA 27.1	50.0
2,2-Dichloropropane	Ave	0.2572	0.2368		23.0	25.0	-7.9	50.0
cis-1,2-Dichloroethene	Ave	0.3738	0.3964		26.5	25.0	6.0	50.0
2-Butanone (MEK)	Ave	0.3857	0.4128		134	125	7.0	50.0
Bromochloromethane	Ave	0.1533	0.1767		28.8	25.0	15.3	50.0
Tetrahydrofuran	Ave	0.2726	0.2837		130	125	4.1	50.0
Chloroform	Ave	0.3712	0.3930		26.5	25.0	5.9	20.0
1,1,1-Trichloroethane	Ave	0.3735	0.3329		22.3	25.0	-10.9	50.0
Cyclohexane	Ave	0.9683	0.9926		25.6	25.0	2.5	50.0
Carbon tetrachloride	LinF		0.2868		16.5	25.0	-34.0	50.0
1,1-Dichloropropene	Ave	0.5288	0.5280		25.0	25.0	-0.2	50.0
Benzene	Ave	1.524	1.593		26.1	25.0	4.5	50.0
1,2-Dichloroethane	Ave	0.4942	0.5639		28.5	25.0	14.1	50.0
Trichloroethene	Ave	0.3732	0.3796		25.4	25.0	1.7	50.0
Methylcyclohexane	Ave	0.6878	0.7278		26.5	25.0	5.8	50.0
1,2-Dichloropropane	Ave	0.3945	0.4456		28.2	25.0	12.9	20.0
Dibromomethane	Ave	0.1832	0.2177		29.7	25.0	18.9	50.0
Bromodichloromethane	Lin1F		0.3235		21.0	25.0	-16.0	50.0
2-Chloroethyl vinyl ether	Ave	0.2854	0.3795		166	125	NA 33.0	50.0
cis-1,3-Dichloropropene	Lin1F		0.5298		25.1	25.0	0.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	1.374	1.588		145	125	15.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCVIS 480-59441/2 Calibration Date: 04/13/2012 09:56

Instrument ID: HP5973G Calib Start Date: 04/09/2012 20:15

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 04/09/2012 22:09

Lab File ID: G11022.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	2.013	2.020		25.1	25.0	0.3	20.0
trans-1,3-Dichloropropene	Lin1F		0.9675		25.1	25.0	0.4	50.0
Ethyl methacrylate	Ave	0.9933	1.307		32.9	25.0	31.6	50.0
1,1,2-Trichloroethane	Ave	0.5112	0.5990		29.3	25.0	17.2	50.0
Tetrachloroethene	Ave	0.7667	0.7548		24.6	25.0	-1.5	50.0
1,3-Dichloropropane	Ave	1.126	1.352		30.0	25.0	20.1	50.0
2-Hexanone	Ave	1.087	1.214		140	125	11.7	50.0
Dibromochloromethane	QuaF		0.3740		22.3	25.0	-10.8	50.0
1,2-Dibromoethane	Ave	0.6112	0.7206		29.5	25.0	17.9	50.0
Chlorobenzene	Ave	2.107	2.187	0.3000	26.0	25.0	3.8	50.0
Ethylbenzene	Ave	3.777	3.821		25.3	25.0	1.2	20.0
1,1,1,2-Tetrachloroethane	Lin1F		0.4998		20.8	25.0	-16.8	50.0
m,p-Xylene	Ave	1.470	1.465		49.8	50.0	-0.4	50.0
o-Xylene	Ave	1.373	1.430		26.0	25.0	4.2	50.0
Styrene	Ave	2.208	2.408		27.3	25.0	9.0	50.0
Bromoform	QuaF		0.1998	0.1000	22.6	25.0	-9.6	50.0
Isopropylbenzene	Ave	3.966	3.771		23.8	25.0	-4.9	50.0
Bromobenzene	Ave	0.8364	0.8759		26.2	25.0	4.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.996	1.111	0.3000	27.9	25.0	11.6	50.0
N-Propylbenzene	Ave	4.900	4.744		24.2	25.0	-3.2	50.0
1,2,3-Trichloropropane	Ave	0.3388	0.3700		27.3	25.0	9.2	50.0
trans-1,4-Dichloro-2-butene	LinF		0.4341		141	125	12.6	50.0
2-Chlorotoluene	Ave	0.9263	0.8985		24.2	25.0	-3.0	50.0
1,3,5-Trimethylbenzene	Ave	3.341	3.249		24.3	25.0	-2.8	50.0
4-Chlorotoluene	Ave	0.9698	0.9599		24.7	25.0	-1.0	50.0
tert-Butylbenzene	Ave	0.7380	0.7065		23.9	25.0	-4.3	50.0
1,2,4-Trimethylbenzene	Ave	3.339	3.336		25.0	25.0	-0.0	50.0
sec-Butylbenzene	Ave	4.264	4.010		23.5	25.0	-5.9	50.0
1,3-Dichlorobenzene	Ave	1.800	1.783		24.8	25.0	-0.9	50.0
4-Isopropyltoluene	Ave	3.531	3.397		24.1	25.0	-3.8	50.0
1,4-Dichlorobenzene	Ave	1.864	1.872		25.1	25.0	0.4	50.0
n-Butylbenzene	Ave	3.316	3.251		24.5	25.0	-1.9	50.0
1,2-Dichlorobenzene	Ave	1.682	1.749		26.0	25.0	4.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1921	0.1680		21.9	25.0	-12.6	50.0
1,2,4-Trichlorobenzene	QuaF		1.108		28.8	25.0	15.2	50.0
Hexachlorobutadiene	QuaF		0.4212		27.0	25.0	8.0	50.0
Naphthalene	QuaF		3.838		29.6	25.0	18.4	50.0
1,2,3-Trichlorobenzene	QuaF		0.9741		28.7	25.0	14.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1836	0.2162		29.4	25.0	17.7	50.0
Toluene-d8 (Surr)	Lin1F		2.679		24.5	25.0	-2.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6823	0.7516		27.5	25.0	10.2	50.0

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QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-18071-1

12 Soil Samples and 3 Field Duplicates Collected April 3-5, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for 4-chloroaniline and 3,3'-dichlorobenzidine were above the allowable maximum (25%) on 04-09-12 (V8764.D). The %Ds for indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene were above the allowable maximum (25%) on 04-12-12 (V8892.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method and equipment blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for soil MS/MSD sample TP-A1.

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One of twelve RPDs for spike compounds was above the allowable maximum and 2 of 24 %Rs were below QC limits for soil MS/MSD sample RB-10 (0-6"). No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries (%Rs) for spiked compounds were within QC limits for soil samples LCS 480-58505/2-A and LCS 480-58843/2-A.

The %R for 4-nitrophenol was above QC limits for soil sample 480-58302/2-A. Positive results for 4-nitrophenol should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent difference (RPD) for 2-methylnaphthalene was above the allowable maximum (35%) for soil field duplicate pair TP-A2/DUP-02 (4/3) (attached table). Results for 2-methylnaphthalene should be considered estimated (J) in samples TP-A2 and DUP-02 (4/3).

The RPD for benzo(k)fluoranthene was above the allowable maximum (35%) for soil field duplicate pair RB-09(0-6")/DUP-01 (attached table). Results for benzo(k)fluoranthene should be considered estimated (J) in samples RB-09(0-6") and DUP-01.

The RPD for benzo(b)fluoranthene was above the allowable maximum (35%) for soil field duplicate pair RB-09(12"-24")/DUP-02 (4/5) (attached table). Results for benzo(2)fluoranthene should be considered estimated (J) in samples RB-09(12"-24") and DUP-02 (4/5).

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-18071-1

S1= TP-A2 **S2=** DUP-02 (4/3)

Analyte	S1	S2	RPD (%)	
2-methylnaphthalene	5300	8000	41%	*
acenaphthene	2000	**1700**	NC	
acenaphthylene	880	**1100**	NC	
anthracene	950	**930**	NC	
benzo(a)anthracene	490	**600**	NC	
benzo(a)pyrene	410	**740**	NC	
benzo(b)fluoranthene	760	**750**	NC	
benzo(g,h,i)perylene	**290**	**470**	NC	
benzo(k)fluoranthene	**280**	**350**	NC	
biphenyl	**160**	ND	NC	
bis(2-ethylhexyl)phthalate	ND	**830**	NC	
chrysene	480	**590**	NC	
dibenzofuran	ND	2400	NC	
fluoranthene	1100	**1300**	NC	
fluorene	3900	4000	3%	
indeno(1,2,3-cd)pyrene	**250**	440	NC	
isophorone	3000	ND	NC	
naphthalene	780	**1400**	NC	
phenanthrene	6100	7000	14%	
pyrene	990	**1200**	NC	

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-18071-1

S1= RB-09(0-6") **S2=** DUP-01

Analyte	S1	S2	RPD (%)	
acenaphthene	**130**	**73**	NC	
anthracene	**310**	**200**	NC	
benzo(a)anthracene	6000	5400	11%	
benzo(a)pyrene	7000	6200	12%	
benzo(b)fluoranthene	17000	17000	0%	
benzo(g,h,i)perylene	3600	3200	12%	
benzo(k)fluoranthene	6200	4000	43%	*
carbazole	**160**	**120**	NC	
chrysene	8200	7200	13%	
dibenz(a,h)anthracene	2100	2100	0%	
fluoranthene	7500	**7100**	5%	
indeno(1,2,3-cd)pyrene	3200	2700	17%	
phenanthrene	2000	**1700**	NC	
pyrene	5900	5400	9%	

S1= RB-09(12"-24") **S2=** DUP-02 (4/5)

Analyte	S1	S2	RPD (%)	
2-methylnaphthalene	**99**	**89**	NC	
benzo(a)anthracene	**510**	**640**	NC	
benzo(a)pyrene	**580**	**860**	NC	
benzo(b)fluoranthene	1400	2100	40%	*
benzo(g,h,i)perylene	**290**	**420**	NC	
benzo(k)fluoranthene	**530**	**750**	NC	
chrysene	**840**	1100	NC	
dibenz(a,h)anthracene	ND	**670**	NC	
dibenzofuran	**32**	ND	NC	
fluoranthene	**710**	**870**	NC	
indeno(1,2,3-cd)pyrene	**270**	**340**	NC	
phenanthrene	**320**	**320**	NC	
pyrene	**540**	**670**	NC	

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Bold numbers were values that below the CRQL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4971.D

Lab ID: LCS 480-58302/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	3290	3770	114	55-125	
2-Chlorophenol	3290	2700	82	38-120	
4-Chloro-3-methylphenol	3290	3680	112	49-125	
4-Nitrophenol	3290	5000	152	43-137	*
Acenaphthene	3290	3340	101	53-120	
Bis(2-ethylhexyl) phthalate	3290	3710	113	61-133	
Fluorene	3290	3740	114	63-126	
Hexachloroethane	3290	2870	87	41-120	
N-Nitrosodi-n-propylamine	3290	3560	108	46-120	
Pentachlorophenol	3290	2900	88	33-136	
Phenol	3290	2830	86	36-120	
Pyrene	3290	3500	106	51-133	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: V8902.D

Lab ID: 480-18223-12 MS Client ID: RB-10 (0-6") MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	3620	ND	3310	91	55-125	
2-Chlorophenol	3620	ND	3050	84	38-120	
4-Chloro-3-methylphenol	3620	ND	3530	97	49-125	
4-Nitrophenol	3620	ND	ND	0	43-137	F
Acenaphthene	3620	ND	3480	96	53-120	
Bis(2-ethylhexyl) phthalate	3620	ND	3950	109	61-133	
Fluorene	3620	ND	3270	90	63-126	
Hexachloroethane	3620	ND	2720	75	41-120	
N-Nitrosodi-n-propylamine	3620	ND	3480	96	46-120	
Pentachlorophenol	3620	ND	4090	113	33-136	
Phenol	3620	ND	3160	87	36-120	
Pyrene	3620	2200	5360	86	51-133	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: V8903.D

Lab ID: 480-18223-12 MSD Client ID: RB-10 (0-6") MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dinitrotoluene	3590	2630	73	22.8	20	55-125	F
2-Chlorophenol	3590	2690	75	12.5	25	38-120	
4-Chloro-3-methylphenol	3590	3420	95	3.21	27	49-125	
4-Nitrophenol	3590	ND	0	NC	25	43-137	F
Acenaphthene	3590	3400	95	2.50	35	53-120	
Bis(2-ethylhexyl) phthalate	3590	3950	110	0.000	15	61-133	
Fluorene	3590	3190	89	2.50	15	63-126	
Hexachloroethane	3590	3170	88	15.5	46	41-120	
N-Nitrosodi-n-propylamine	3590	3340	93	4.10	31	46-120	
Pentachlorophenol	3590	4130	115	1.00	35	33-136	
Phenol	3590	2740	76	14.0	35	36-120	
Pyrene	3590	5460	90	1.85	35	51-133	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: ICV 480-58695/8 Calibration Date: 04/09/2012 16:39

Instrument ID: HP5973V Calib Start Date: 04/09/2012 14:10

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 04/09/2012 16:15

Lab File ID: V8764.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.7590	0.7491	0.0100	49400	50000	-1.3	25.0
Pyridine	Ave	0.7368	0.6822	0.0100	46300	50000	-7.4	25.0
Phenol	Ave	1.862	1.816	0.0100	48800	50000	-2.5	25.0
Aniline	Ave	2.299	1.151	0.0100	25000	50000	-49.9*	25.0
Bis(2-chloroethyl)ether	Ave	1.453	1.437	0.0100	49400	50000	-1.1	25.0
2-Chlorophenol	Ave	1.312	1.314	0.0100	50100	50000	0.1	25.0
1,3-Dichlorobenzene	Ave	1.533	1.573	0.0100	51300	50000	2.6	25.0
1,4-Dichlorobenzene	Ave	1.571	1.596	0.0100	50800	50000	1.5	25.0
Benzyl alcohol	Ave	0.9128	0.9445	0.0100	51700	50000	3.5	25.0
1,2-Dichlorobenzene	Ave	1.469	1.481	0.0100	50400	50000	0.8	25.0
2-Methylphenol	Ave	1.264	1.315	0.0100	52000	50000	4.0	25.0
bis (2-chloroisopropyl) ether	Ave	1.042	1.038	0.0100	49800	50000	-0.4	25.0
N-Nitrosodi-n-propylamine	Ave	1.076	1.154	0.0500	53600	50000	7.2	25.0
4-Methylphenol	Ave	1.283	1.384	0.0100	108000	100000	7.9	25.0
Hexachloroethane	Ave	0.5819	0.6052	0.0100	52000	50000	4.0	25.0
Nitrobenzene	Ave	0.4414	0.4673	0.0100	52900	50000	5.8	25.0
Isophorone	Ave	0.7632	0.8036	0.0100	52600	50000	5.3	25.0
2-Nitrophenol	Ave	0.1709	0.1899	0.0100	55600	50000	11.2	25.0
2,4-Dimethylphenol	Ave	0.3666	0.4160	0.0100	56700	50000	13.5	25.0
Tetraethyl lead	Ave	0.1432	0.1682	0.0100	29400	25000	17.5	25.0
Bis(2-chloroethoxy)methane	Ave	0.4206	0.4526	0.0100	53800	50000	7.6	25.0
Benzoic acid	Lin1		0.1749	0.0100	69600	50000	39.2*	25.0
2,4-Dichlorophenol	Ave	0.2792	0.3021	0.0100	54100	50000	8.2	25.0
1,2,4-Trichlorobenzene	Ave	0.3275	0.3499	0.0100	53400	50000	6.8	25.0
Naphthalene	Ave	1.006	1.053	0.0100	52300	50000	4.7	25.0
4-Chloroaniline	Ave	0.3825	0.2503	0.0100	28100	43000	-34.6*	25.0
Hexachlorobutadiene	Ave	0.2037	0.2176	0.0100	53400	50000	6.8	25.0
4-Chloro-3-methylphenol	Lin1		0.3306	0.0100	52800	50000	5.6	25.0
2-Methylnaphthalene	Ave	0.6906	0.7156	0.0100	51800	50000	3.6	25.0
Hexachlorocyclopentadiene	Lin1		0.3569	0.0500	50900	50000	1.8	25.0
2,4,6-Trichlorophenol	Ave	0.3247	0.3572	0.0100	55000	50000	10.0	25.0
2,4,5-Trichlorophenol	Lin1		0.3713	0.0100	53200	50000	6.4	25.0
2-Chloronaphthalene	Ave	1.019	1.091	0.0100	53500	50000	7.1	25.0
2-Nitroaniline	Lin1		0.3368	0.0100	52100	50000	4.2	25.0
Dimethyl phthalate	Ave	1.226	1.309	0.0100	53400	50000	6.8	25.0
2,6-Dinitrotoluene	Lin1		0.2946	0.0100	56000	50000	12.0	25.0
Acenaphthylene	Ave	1.693	1.842	0.0100	54400	50000	8.8	25.0
3-Nitroaniline	Lin1		0.2062	0.0100	36400	48000	-24.2	25.0
Acenaphthene	Ave	1.024	1.093	0.0100	53400	50000	6.8	25.0
2,4-Dinitrophenol	Lin1		0.1550	0.0500	51500	50000	3.0	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: ICV 480-58695/8 Calibration Date: 04/09/2012 16:39

Instrument ID: HP5973V Calib Start Date: 04/09/2012 14:10

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 04/09/2012 16:15

Lab File ID: V8764.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Lin1		0.1442	0.0500	45400	50000	-9.2	25.0
Dibenzofuran	Ave	1.529	1.626	0.0100	53200	50000	6.4	25.0
2,4-Dinitrotoluene	Ave	0.3546	0.4237	0.0100	59700	50000	19.5	25.0
Diethyl phthalate	Ave	1.247	1.332	0.0100	53400	50000	6.8	25.0
Fluorene	Ave	1.326	1.385	0.0100	52200	50000	4.4	25.0
4-Chlorophenyl phenyl ether	Ave	0.6807	0.7078	0.0100	52000	50000	4.0	25.0
4-Nitroaniline	Lin1		0.2611	0.0100	49400	50000	-1.2	25.0
4,6-Dinitro-2-methylphenol	Lin1		0.1384	0.0100	51800	50000	3.6	25.0
N-Nitrosodiphenylamine	Ave	0.5039	0.5140	0.0100	51000	50000	2.0	25.0
1,2-Diphenylhydrazine	Ave	1.490	1.551	0.0100	52000	50000	4.1	25.0
4-Bromophenyl phenyl ether	Ave	0.2146	0.2176	0.0100	50700	50000	1.4	25.0
Hexachlorobenzene	Ave	0.2124	0.2144	0.0100	50500	50000	1.0	25.0
Pentachlorophenol	Lin1		0.1061	0.0100	47300	50000	-5.4	25.0
Phenanthrene	Ave	1.078	1.114	0.0100	51700	50000	3.3	25.0
Anthracene	Ave	1.090	1.129	0.0100	51800	50000	3.5	25.0
Carbazole	Ave	0.9112	0.9171	0.0100	50300	50000	0.6	25.0
Di-n-butyl phthalate	Ave	1.091	1.138	0.0100	52100	50000	4.3	25.0
Fluoranthene	Ave	1.177	1.180	0.0100	50100	50000	0.2	25.0
Benzidine	Lin1		0.2470	0.0100	28600	50000	-42.8*	25.0
Pyrene	Ave	1.175	1.260	0.0100	53600	50000	7.2	25.0
Butyl benzyl phthalate	Lin1		0.5129	0.0100	51300	50000	2.6	25.0
3,3'-Dichlorobenzidine	Lin1		0.2663	0.0100	33300	50000	-33.4*	25.0
Bis(2-ethylhexyl) phthalate	Lin1		0.6853	0.0100	50200	50000	0.4	25.0
Benzo(a)anthracene	Ave	1.114	1.172	0.0100	52600	50000	5.2	25.0
Chrysene	Ave	1.136	1.090	0.0100	48000	50000	-4.0	25.0
Di-n-octyl phthalate	Lin1		1.047	0.0100	50900	50000	1.8	25.0
Benzo(b)fluoranthene	Ave	1.141	1.207	0.0100	52900	50000	5.7	25.0
Benzo(k)fluoranthene	Ave	1.309	1.353	0.0100	51700	50000	3.3	25.0
Benzo(a)pyrene	Ave	0.997	1.063	0.0100	53300	50000	6.6	25.0
Dibenz(a,h)anthracene	Lin1		1.002	0.0100	50800	50000	1.6	25.0
Indeno(1,2,3-cd)pyrene	Ave	1.070	1.217	0.0100	56900	50000	13.7	25.0
Benzo(g,h,i)perylene	Ave	0.8889	1.000	0.0100	56300	50000	12.5	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCVIS 480-59236/2 Calibration Date: 04/12/2012 10:05

Instrument ID: HP5973V Calib Start Date: 04/09/2012 14:10

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 04/09/2012 16:15

Lab File ID: V8892.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.7590	0.7965	0.0100	52500	50000	4.9	25.0
Pyridine	Ave	0.7368	0.8224	0.0100	55800	50000	11.6	100.0
Phenol	Ave	1.862	1.917	0.0100	51500	50000	3.0	20.0
Aniline	Ave	2.299	2.219	0.0100	48300	50000	-3.5	100.0
Bis(2-chloroethyl)ether	Ave	1.453	1.481	0.0100	50900	50000	1.9	25.0
2-Chlorophenol	Ave	1.312	1.357	0.0100	51700	50000	3.5	25.0
1,3-Dichlorobenzene	Ave	1.533	1.578	0.0100	51500	50000	2.9	25.0
1,4-Dichlorobenzene	Ave	1.571	1.578	0.0100	50200	50000	0.4	20.0
Benzyl alcohol	Ave	0.9128	0.9601	0.0100	52600	50000	5.2	100.0
1,2-Dichlorobenzene	Ave	1.469	1.470	0.0100	50000	50000	0.0	25.0
2-Methylphenol	Ave	1.264	1.223	0.0100	48400	50000	-3.2	25.0
bis (2-chloroisopropyl) ether	Ave	1.042	0.9886	0.0100	47400	50000	-5.1	25.0
N-Nitrosodi-n-propylamine	Ave	1.076	1.152	0.0500	53500	50000	7.0	25.0
4-Methylphenol	Ave	1.283	1.330	0.0100	51900	50000	3.7	25.0
Hexachloroethane	Ave	0.5819	0.5888	0.0100	50600	50000	1.2	25.0
Nitrobenzene	Ave	0.4414	0.4660	0.0100	52800	50000	5.6	25.0
Isophorone	Ave	0.7632	0.7951	0.0100	52100	50000	4.2	25.0
2-Nitrophenol	Ave	0.1709	0.1997	0.0100	58400	50000	16.9	20.0
2,4-Dimethylphenol	Ave	0.3666	0.3799	0.0100	51800	50000	3.6	25.0
Tetraethyl lead	Ave	0.1432	0.1275	0.0100	44500	50000	-11.0	40.0
Bis(2-chloroethoxy)methane	Ave	0.4206	0.4343	0.0100	51600	50000	3.3	25.0
2,4-Dichlorophenol	Ave	0.2792	0.3025	0.0100	54200	50000	8.3	20.0
Benzoic acid	Lin1		0.2503	0.0100	170000	150000	13.2	25.0
1,2,4-Trichlorobenzene	Ave	0.3275	0.3427	0.0100	52300	50000	4.6	25.0
Naphthalene	Ave	1.006	1.021	0.0100	50800	50000	1.5	25.0
4-Chloroaniline	Ave	0.3825	0.3851	0.0100	50300	50000	0.7	25.0
Hexachlorobutadiene	Ave	0.2037	0.2113	0.0100	51900	50000	3.7	20.0
4-Chloro-3-methylphenol	Lin1		0.3227	0.0100	51600	50000	3.2	20.0
2-Methylnaphthalene	Ave	0.6906	0.7135	0.0100	51700	50000	3.3	25.0
Hexachlorocyclopentadiene	Lin1		0.3365	0.0500	48100	50000	-3.8	25.0
2,4,6-Trichlorophenol	Ave	0.3247	0.3850	0.0100	59300	50000	18.6	20.0
2,4,5-Trichlorophenol	Lin1		0.3847	0.0100	55000	50000	10.0	25.0
2-Chloronaphthalene	Ave	1.019	1.094	0.0100	53700	50000	7.4	25.0
2-Nitroaniline	Lin1		0.3566	0.0100	55000	50000	10.0	25.0
Dimethyl phthalate	Ave	1.226	1.288	0.0100	52500	50000	5.1	25.0
2,6-Dinitrotoluene	Lin1		0.2950	0.0100	56100	50000	12.2	25.0
Acenaphthylene	Ave	1.693	1.758	0.0100	51900	50000	3.9	25.0
3-Nitroaniline	Lin1		0.2849	0.0100	51200	50000	2.4	25.0
Acenaphthene	Ave	1.024	1.060	0.0100	51800	50000	3.5	20.0
2,4-Dinitrophenol	Lin1		0.1354	0.0500	46100	50000	-7.8	25.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCVIS 480-59236/2 Calibration Date: 04/12/2012 10:05

Instrument ID: HP5973V Calib Start Date: 04/09/2012 14:10

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 04/09/2012 16:15

Lab File ID: V8892.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Lin1		0.1288	0.0500	41700	50000	-16.6	25.0
Dibenzofuran	Ave	1.529	1.610	0.0100	52700	50000	5.3	25.0
2,4-Dinitrotoluene	Ave	0.3546	0.3990	0.0100	56300	50000	12.5	25.0
Diethyl phthalate	Ave	1.247	1.339	0.0100	53700	50000	7.4	25.0
Fluorene	Ave	1.326	1.394	0.0100	52500	50000	5.1	25.0
4-Chlorophenyl phenyl ether	Ave	0.6807	0.7241	0.0100	53200	50000	6.4	25.0
4-Nitroaniline	Lin1		0.2611	0.0100	49400	50000	-1.2	25.0
4,6-Dinitro-2-methylphenol	Lin1		0.1262	0.0100	47800	50000	-4.4	25.0
N-Nitrosodiphenylamine	Ave	0.5039	0.5210	0.0100	51700	50000	3.4	20.0
1,2-Diphenylhydrazine	Ave	1.490	1.548	0.0100	51900	50000	3.9	25.0
4-Bromophenyl phenyl ether	Ave	0.2146	0.2190	0.0100	51000	50000	2.0	25.0
Hexachlorobenzene	Ave	0.2124	0.2115	0.0100	49800	50000	-0.4	25.0
Pentachlorophenol	Lin1		0.1192	0.0100	52300	50000	4.6	20.0
Phenanthrene	Ave	1.078	1.101	0.0100	51100	50000	2.1	25.0
Anthracene	Ave	1.090	1.129	0.0100	51800	50000	3.6	25.0
Carbazole	Ave	0.9112	0.9275	0.0100	50900	50000	1.8	25.0
Di-n-butyl phthalate	Ave	1.091	1.170	0.0100	53600	50000	7.3	25.0
Fluoranthene	Ave	1.177	1.221	0.0100	51900	50000	3.7	20.0
Benzidine	Lin1		0.3612	0.0100	40400	50000	-19.2	25.0
Pyrene	Ave	1.175	1.171	0.0100	49800	50000	-0.3	25.0
Butyl benzyl phthalate	Lin1		0.5062	0.0100	50700	50000	1.4	25.0
3,3'-Dichlorobenzidine	Lin1		0.4281	0.0100	51900	50000	3.8	25.0
Bis(2-ethylhexyl) phthalate	Lin1		0.7021	0.0100	51400	50000	2.8	25.0
Benzo(a)anthracene	Ave	1.114	1.153	0.0100	51800	50000	3.5	25.0
Chrysene	Ave	1.136	1.144	0.0100	50300	50000	0.7	25.0
Di-n-octyl phthalate	Lin1		1.177	0.0100	57000	50000	14.0	20.0
Benzo(b)fluoranthene	Ave	1.141	1.324	0.0100	58000	50000	16.0	25.0
Benzo(k)fluoranthene	Ave	1.309	1.316	0.0100	50300	50000	0.5	25.0
Benzo(a)pyrene	Ave	0.997	1.072	0.0100	53800	50000	7.5	20.0
Indeno(1,2,3-cd)pyrene	Ave	1.070	0.7138	0.0100	33300	50000	-33.3*	25.0
Dibenz(a,h)anthracene	Lin1		0.6299	0.0100	33000	50000	-34.0*	25.0
Benzo(g,h,i)perylene	Ave	0.8889	0.5332	0.0100	30000	50000	-40.0*	25.0
2-Fluorophenol	Ave	1.375	1.474	0.0100	53600	50000	7.2	25.0
Phenol-d5	Ave	1.826	1.862	0.0100	51000	50000	2.0	25.0
Nitrobenzene-d5	Ave	0.4246	0.4622	0.0100	54400	50000	8.9	25.0
2-Fluorobiphenyl	Ave	1.258	1.360	0.0100	54100	50000	8.2	25.0
2,4,6-Tribromophenol	Ave	0.0804	0.0864	0.0100	53700	50000	7.5	25.0
p-Terphenyl-d14	Ave	0.8684	0.8675	0.0100	49900	50000	-0.1	25.0

QA/QC Review of Method 8082 PCB Data for
TestAmerica Buffalo, Job No: 480-18071-1

12 Soil Samples, and 3 Field Duplicates
Collected April 3-5, 2012

Prepared by: Donald Anné
May 3, 2012

PCB
480-18071-1

Holding Times: Samples were extracted and analy. ...EPA SW-846 holding times.

Blanks: The analyses of method blanks reported target PCBs as not detected.

Surrogate Recovery: The surrogates recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples TP-A1 and RB-10 (0-6").

Laboratory Control Sample: The percent recoveries for PCB-1016 and PCB-1260 were within QC limits for soil samples LCS 480-58267/2-A, LCS 480-58493/2-A, and LCS 480-58715/2-A.

Field Duplicates: The analyses of soil field duplicate pairs TP-A2/DUP-02, RB-09(0-6")/DUP-01, RB-09(12"-24")/DUP-02 reported target PCBs as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pairs were acceptable.

Initial Calibration: The %RSDs for PCB-1016 and PCB-1260 were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-05-12 (CCV480-58319/9) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-06-12 (CCV480-58418/13) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-10-12 (CCV480-58658/62) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-10-12 (CCV480-58658/74) for the ZB-5 column. Positive results

for PCB-1016 and PCB-1260 should be considered estimated in associated samples.

PCB Identification Summary for Multicomponent Analytes: The checked surrogates wer within GC quantitation limits. The analyses of soil samples in this data pack reported target PCBs as not detected.

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QA/QC Review of Method 8082 PCB Data for
TestAmerica Buffalo, Job No: 480-18071-1

12 Soil Samples, and 3 Field Duplicates
Collected April 3-5, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analyses of method blanks reported target PCBs as not detected.

Surrogate Recovery: The surrogates recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples TP-A1 and RB-10 (0-6").

Laboratory Control Sample: The percent recoveries for PCB-1016 and PCB-1260 were within QC limits for soil samples LCS 480-58267/2-A, LCS 480-58493/2-A, and LCS 480-58715/2-A.

Field Duplicates: The analyses of soil field duplicate pairs TP-A2/DUP-02, RB-09(0-6")/DUP-01, RB-09(12"-24")/DUP-02 reported target PCBs as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pairs were acceptable.

Initial Calibration: The %RSDs for PCB-1016 and PCB-1260 were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-05-12 (CCV480-58319/9) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-06-12 (CCV480-58418/13) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-10-12 (CCV480-58658/62) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-10-12 (CCV480-58658/74) for the ZB-5 column. Positive results

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for PCB-1016 and PCB-1260 should be considered estimated in associated samples.

PCB Identification Summary for Multicomponent Analytes: The checked surrogates were within GC quantitation limits. The analyses of soil samples in this data pack reported target PCBs as not detected.

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCV 480-58319/9 Calibration Date: 04/05/2012 17:42

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_163_197.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	307830		0.675	0.500	34.9*	15.0
PCB-1016 Peak 2	Ave	119908	170746		0.712	0.500	42.4*	15.0
PCB-1016 Peak 3	Ave	331581	420184		0.634	0.500	26.7*	15.0
PCB-1016 Peak 4	Ave	133756	206372		0.771	0.500	54.3*	15.0
PCB-1260 Peak 1	Ave	272257	352232		0.647	0.500	29.4*	15.0
PCB-1260 Peak 2	Ave	438611	514922		0.587	0.500	17.4*	15.0
PCB-1260 Peak 3	Ave	177029	228208		0.645	0.500	28.9*	15.0
PCB-1260 Peak 4	Ave	124111	131264		0.529	0.500	5.8	15.0
Tetrachloro-m-xylene	Lin1		5384300		0.0367	0.0300	22.3*	15.0
DCB Decachlorobiphenyl	Ave	4617528	5959633		0.0387	0.0300	29.1*	15.0

average %D PCB-1016 = 39.6%

" " PCB-1260 = 20.4%

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCV 480-58418/13 Calibration Date: 04/06/2012 10:56

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_163_236.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	324932		0.712	0.500	42.4*	15.0
PCB-1016 Peak 2	Ave	119908	178096		0.743	0.500	48.5*	15.0
PCB-1016 Peak 3	Ave	331581	457562		0.690	0.500	38.0*	15.0
PCB-1016 Peak 4	Ave	133756	208326		0.779	0.500	55.8*	15.0
PCB-1260 Peak 1	Ave	272257	383912		0.705	0.500	41.0*	15.0
PCB-1260 Peak 2	Ave	438611	532656		0.607	0.500	21.4*	15.0
PCB-1260 Peak 3	Ave	177029	244130		0.690	0.500	37.9*	15.0
PCB-1260 Peak 4	Ave	124111	139276		0.561	0.500	12.2	15.0
Tetrachloro-m-xylene	Lin1		5659700		0.0385	0.0300	28.3*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6260133		0.0407	0.0300	35.6*	15.0

average %D PCB-1016 = 46.2%
" " PCB-1260 = 28.1%

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCV 480-58658/62 Calibration Date: 04/10/2012 00:22

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_163_311.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	303604		0.665	0.500	33.1*	15.0
PCB-1016 Peak 2	Ave	119908	169636		0.707	0.500	41.5*	15.0
PCB-1016 Peak 3	Ave	331581	415342		0.626	0.500	25.3*	15.0
PCB-1016 Peak 4	Ave	133756	200260		0.749	0.500	49.7*	15.0
PCB-1260 Peak 1	Ave	272257	376230		0.691	0.500	38.2*	15.0
PCB-1260 Peak 2	Ave	438611	521102		0.594	0.500	18.8*	15.0
PCB-1260 Peak 3	Ave	177029	232982		0.658	0.500	31.6*	15.0
PCB-1260 Peak 4	Ave	124111	136932		0.552	0.500	10.3	15.0
Tetrachloro-m-xylene	Lin1		5316700		0.0363	0.0300	21.0*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6257833		0.0407	0.0300	35.5*	15.0

average %D PCB-1016 = 37.4%
" " " PCB-1260 = 24.7%

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18071-1

SDG No.:

Lab Sample ID: CCV 480-58658/74 Calibration Date: 04/10/2012 03:18

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_163_323.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	305818		0.670	0.500	34.1*	15.0
PCB-1016 Peak 2	Ave	119908	171000		0.713	0.500	42.6*	15.0
PCB-1016 Peak 3	Ave	331581	411850		0.621	0.500	24.2*	15.0
PCB-1016 Peak 4	Ave	133756	206998		0.774	0.500	54.8*	15.0
PCB-1260 Peak 1	Ave	272257	358612		0.659	0.500	31.7*	15.0
PCB-1260 Peak 2	Ave	438611	522164		0.595	0.500	19.0*	15.0
PCB-1260 Peak 3	Ave	177029	235258		0.665	0.500	32.9*	15.0
PCB-1260 Peak 4	Ave	124111	135406		0.546	0.500	9.1	15.0
Tetrachloro-m-xylene	Lin1		5352100		0.0365	0.0300	21.7*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6066167		0.0394	0.0300	31.4*	15.0

average %D PCB-1016 = 38.9%
" " " PCB-1260 = 23.2%

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QA/QC Review of TAL Metals Data for
TestAmerica Buffalo, Job No: 480-18071-1

12 Soil Samples and 3 Field Duplicates
Collected April 3-5, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRQL standard samples CRI 480-58450/7, CRI 480-58690/7, CRI 480-58891/7, CRA 480-58512/3, CRA 480-58486/3, and CRA 480-58742/3.

Blanks: The analyses of initial calibration and continuing calibration, and method blanks reported TAL metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries (%Rs) for aluminum were above control limits (75-125%), but only one was above 200% for soil MS/MSD samples TP-A1 and RB-10 (0-6"). Positive for aluminum should be considered estimated (J) in associated soil samples.

One of two %Rs for nickel was above control limits (75-125%), but was not above 200% for soil MS/MSD sample RB-10 (0-6"). Positive for nickel should be considered estimated (J) in associated soil samples.

One of two %Rs for magnesium and mercury were below control limits (75-125%), but were not below 10% for soil MS/MSD sample RB-10 (0-6"). Two of two %Rs for magnesium were below control limits (75-125%), but were not below 10% for soil MS/MSD sample TP-A1. Two of two %Rs for arsenic and calcium were below control limits (75-125%), but were not below 10% for soil MS/MSD sample RB-10 (0-6"). Positive and "not detected" results for these metals should be considered estimated (J) in associated soil samples.

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Laboratory Duplicates: The relative percent difference for iron was above the allowable maximum (35%) in soil MS/MSD sample RB-10 (0-6"). Positive results for iron should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent difference (RPD) for calcium was above the allowable maximum (35%) for soil field duplicate pair TP-A2 /DUP-02 (4/3) (attached table). Positive results for magnesium should be considered estimated (J) in samples TP-A2 and DUP-02 (4/3).

The RPD for lead was above the allowable maximum (35%) for soil field duplicate pair RB-09(0-6")/DUP-01 (attached table). Positive results for lead should be considered estimated (J) in samples RB-09(0-6") and DUP-01.

The RPDs for the following metals were above the allowable maximum (35%) for soil field duplicate pair RB-09(12"-24")/DUP-02 (4/5) (attached table). Positive results for these metals should be considered estimated (J) in samples RB-09(12"-24") and DUP-02 (4/5).

barium	calcium	lead	magnesium
manganese	mercury	potassium	zinc

Laboratory Control Sample: The percent recoveries for TAL metals were within QC limits in the following soil samples.

LCSSRM 480-58242/2-A	LCSSRM 480-58490/2-A	LCSSRM 480-58539/2-A
LCSSRM 480-58417/2-A	LCSSRM 480-58215/2-A	LCSSRM 480-58652/2-A

ICP Serial Dilution: The %D for potassium was above the allowable maximum (10%) for soil serial dilution sample TP-A2. The %D for cobalt was above the allowable maximum (10%) for soil serial dilution sample RB-10(0-6"). Positive results for cobalt and potassium that are above the CRDLs should be considered estimated (J) in associated soil samples.

Instrument Detection Limits: The MDLs were at or below the RLs, as required.

Percent Solids: The % solids for soil samples were above 50%.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-18071-1

S1= TP-A2 **S2=** DUP-02 (4/3)

Analyte	S1	S2	RPD (%)	
aluminum	5330	5790	8%	
antimony	ND	ND	NC	
arsenic	6.3	6.2	2%	
barium	33.7	38.2	13%	
beryllium	0.34	0.42	21%	
cadmium	0.23	**0.19**	NC	
calcium	7430	15300	69%	*
chromium	7.1	8.2	14%	
cobalt	7.3	7.4	1%	
copper	82.2	90.5	10%	
iron	29700	21800	31%	
lead	44.4	39.9	11%	
magnesium	2680	3000	11%	
manganese	307	439	35%	
mercury	0.091	0.090	1%	
nickel	14.9	15.0	1%	
potassium	740	931	23%	
selenium	ND	ND	NC	
silver	ND	ND	NC	
sodium	**74.2**	**88.6**	NC	
thallium	ND	ND	NC	
vanadium	13.3	14.5	9%	
zinc	60.6	48.1	23%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 480-18071-1

S1= RB-09(0-6") **S2=** DUP-01

Analyte	S1	S2	RPD (%)	
aluminum	5490	5350	3%	
antimony	**1.1**	**0.99**	NC	
arsenic	63.8	78.3	20%	
barium	25.4	25.2	1%	
beryllium	0.24	**0.23**	NC	
cadmium	ND	ND	NC	
calcium	1730	1550	11%	
chromium	9.7	9.3	4%	
cobalt	2.6	2.5	4%	
copper	36	34	8%	
iron	14500	15200	5%	
lead	65.8	44.7	38%	*
magnesium	780	751	4%	
manganese	181	163	10%	
mercury	0.61	0.53	14%	
nickel	9.3	9.4	1%	
potassium	476	494	4%	
selenium	**0.69**	ND	NC	
silver	ND	ND	NC	
sodium	**51.0**	**49.0**	4%	
thallium	ND	ND	NC	
vanadium	16.8	16.1	4%	
zinc	58.3	53.2	9%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-18071-1

S1= RB-09(12"-24") **S2=** DUP-02 (4/5)

Analyte	S1	S2	RPD (%)	
aluminum	2360	3350	35%	
antimony	**0.86**	ND	NC	
arsenic	21.6	26.7	21%	
barium	121	386	105%	*
beryllium	0.40	0.51	24%	
cadmium	ND	ND	NC	
calcium	1970	3710	61%	*
chromium	5.8	6.9	17%	
cobalt	3.3	2.8	16%	
copper	25.3	30.4	18%	
iron	12700	12100	5%	
lead	27.6	40.7	38%	*
magnesium	281	475	51%	*
manganese	35.1	61.3	54%	*
mercury	0.099	0.280	96%	*
nickel	8.4	8.4	0%	
potassium	324	480	39%	*
selenium	**0.82**	ND	NC	
silver	ND	ND	NC	
sodium	**58.1**	**65.5**	12%	
thallium	ND	ND	NC	
vanadium	14.0	14.0	0%	
zinc	24.6	121	132%	*

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: TP-A1 MS
Lab ID: 480-18147-1 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-18071-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 89.6

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	11620		7140		2180	205	75-125	F	6010B
Antimony	34.13		ND		43.6	78	75-125		6010B
Arsenic	46.76		5.5		43.6	95	75-125		6010B
Barium	83.92		34.8		43.6	113	75-125		6010B
Beryllium	43.21		0.59		43.6	98	75-125		6010B
Cadmium	41.37		0.22		43.6	94	75-125		6010B
Calcium	5045		9820		2180	NA -219	75-125	4	6010B
Chromium	54.12		10.4		43.6	100	75-125		6010B
Cobalt	56.34		10.0		43.6	106	75-125		6010B
Copper	83.98		39.2		43.6	103	75-125		6010B
Iron	16990		14900		2180	96	75-125	4	6010B
Lead	66.61		20.6		43.6	105	75-125		6010B
Magnesium	4699		4050		2180	30	75-125	F	6010B
Manganese	192.5		259		43.6	NA -153	75-125	4	6010B
Nickel	76.11		31.9		43.6	101	75-125		6010B
Potassium	3167		943		2180	102	75-125		6010B
Selenium	39.88		0.60	J	43.6	90	75-125		6010B
Silver	10.05		ND		10.9	92	75-125		6010B
Sodium	2184		128	J	2180	94	75-125		6010B
Thallium	44.02		ND		43.6	101	75-125		6010B
Vanadium	58.10		13.7		43.6	102	75-125		6010B
Zinc	111.6		58.0		43.6	123	75-125		6010B
Hg	0.462		0.14		0.373	86	75-125		7471A

SSR = Spiked Sample Result

NA - Not applicable, the sample concentration is greater than 4 times the spike level; therefore, valid %Rs could not be calculated.

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: TP-A1 MSD
Lab ID: 480-18147-1 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-18071-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 89.6

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	11950		2470	194	75-125	2.75	20	F	6010B
Antimony	40.56		49.4	82	75-125	17.2	20		6010B
Arsenic	51.85		49.4	94	75-125	10.3	20		6010B
Barium	87.98		49.4	108	75-125	4.73	20		6010B
Beryllium	50.09		49.4	100	75-125	14.8	20		6010B
Cadmium	47.79		49.4	96	75-125	14.4	20		6010B
Calcium	4417		2470	NA -219	75-125	13.3	20	F4	6010B
Chromium	59.95		49.4	100	75-125	10.2	20		6010B
Cobalt	62.21		49.4	106	75-125	9.91	20		6010B
Copper	92.06		49.4	107	75-125	9.18	20		6010B
Iron	15510		2470	NA 25	75-125	9.14	20	4	6010B
Lead	73.60		49.4	107	75-125	9.97	20		6010B
Magnesium	4464		2470	17	75-125	5.13	20	F	6010B
Manganese	160.6		49.4	NA-200	75-125	18.0	20	4	6010B
Nickel	77.86		49.4	93	75-125	2.28	20		6010B
Potassium	3563		2470	106	75-125	11.8	20		6010B
Selenium	46.58		49.4	93	75-125	15.5	20		6010B
Silver	11.46		12.4	93	75-125	13.1	20		6010B
Sodium	2510		2470	96	75-125	13.9	20		6010B
Thallium	49.91		49.4	101	75-125	12.5	20		6010B
Vanadium	64.62		49.4	103	75-125	10.6	20		6010B
Zinc	108.3		49.4	102	75-125	2.96	20		6010B
Hg	0.527		0.366	105	75-125	13.2	20		7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: RB-10 (0-6") MS
Lab ID: 480-18223-12 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-18071-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 91.0

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	9315		4230		2310	220	75-125	F	6010B
Antimony	40.22		ND		46.2	87	75-125		6010B
Arsenic	62.56		29.6		46.2	71	75-125	F	6010B
Barium	107.3		52.6		46.2	118	75-125		6010B
Beryllium	46.24		0.28		46.2	100	75-125		6010B
Cadmium	44.94		0.14	J	46.2	97	75-125		6010B
Calcium	6861		5150		2310	74	75-125	F	6010B
Chromium	59.34		12.3		46.2	102	75-125		6010B
Cobalt	49.99		3.3		46.2	101	75-125		6010B
Copper	69.57		23.2		46.2	101	75-125		6010B
Iron	20140		18100		2310	88	75-125	4	6010B
Lead	94.99		41.1		46.2	117	75-125		6010B
Magnesium	5277		3200		2310	90	75-125		6010B
Manganese	274.3		213		46.2	MA 133	75-125	4	6010B
Nickel	72.01		9.5		46.2	135	75-125	F	6010B
Potassium	3019		598		2310	105	75-125		6010B
Selenium	42.49		ND		46.2	92	75-125		6010B
Silver	11.27		ND		11.5	98	75-125		6010B
Sodium	2210		31.3	J	2310	94	75-125		6010B
Thallium	45.63		ND		46.2	99	75-125		6010B
Vanadium	61.01		15.3		46.2	99	75-125		6010B
Zinc	95.86		38.8		46.2	124	75-125		6010B
Hg	0.814		0.43		0.392	97	75-125		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: RB-10 (0-6") MSD
Lab ID: 480-18223-12 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-18071-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 91.0

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	8640		2250	196	75-125	7.52	20	F	6010B
Antimony	39.70		44.9	88	75-125	1.29	20		6010B
Arsenic	62.59		44.9	73	75-125	0.000	20	F	6010B
Barium	103.3		44.9	113	75-125	3.78	20		6010B
Beryllium	45.12		44.9	100	75-125	2.45	20		6010B
Cadmium	44.16		44.9	98	75-125	1.73	20		6010B
Calcium	6702		2240	69	75-125	2.34	20	F	6010B
Chromium	60.53		44.9	108	75-125	1.98	20		6010B
Cobalt	49.32		44.9	102	75-125	1.36	20		6010B
Copper	71.44		44.9	108	75-125	2.65	20		6010B
Iron	30200		2240	NA 538	75-125	40.0	20	4 F	6010B
Lead	92.53		44.9	115	75-125	2.62	20		6010B
Magnesium	4754		2240	69	75-125	10.4	20	F	6010B
Manganese	353.6		44.9	NA 313	75-125	25.2	20	4 F	6010B
Nickel	57.28		44.9	106	75-125	22.8	20	F	6010B
Potassium	2853		2250	100	75-125	5.68	20		6010B
Selenium	41.56		44.9	93	75-125	2.24	20		6010B
Silver	10.92		11.2	97	75-125	3.19	20		6010B
Sodium	2155		2250	95	75-125	2.54	20		6010B
Thallium	43.98		44.9	98	75-125	3.70	20		6010B
Vanadium	58.69		44.9	97	75-125	3.87	20		6010B
Zinc	93.81		44.9	123	75-125	2.17	20		6010B
Hg	0.709		0.387	71	75-125	13.8	20	F	7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-18147-1

SDG No:

Lab Name: TestAmerica Buffalo Job No: 480-18071-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	7140		7706		7.9		6010B
Antimony	ND		ND		NC		6010B
Arsenic	5.5		6.11	J	NC		6010B
Barium	34.8		38.13		9.5		6010B
Beryllium	0.59		0.671	J	NC		6010B
Cadmium	0.22		0.196	J	NC		6010B
Calcium	9820		10410		6.0		6010B
Chromium	10.4		11.04		5.9		6010B
Cobalt	10.0		9.80		2.1		6010B
Copper	39.2		40.06		2.3		6010B
Iron	14900		15840		6.4		6010B
Lead	20.6		19.93		3.4		6010B
Magnesium	4050		4325		6.7		6010B
Manganese	259		278.8		7.5		6010B
Nickel	31.9		31.28		2.0		6010B
Potassium	943		1086		15	V	6010B
Selenium	0.60	J	4.14	J	NC		6010B
Silver	ND		ND		NC		6010B
Sodium	128	J	144.8	J	NC		6010B
Thallium	ND		ND		NC		6010B
Vanadium	13.7		14.95		9.0		6010B
Zinc	58.0		62.80		8.2		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-18223-12

SDG No:

Lab Name: TestAmerica Buffalo Job No: 480-18071-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	4230		4234		0.20		6010B
Antimony	ND		ND		NC		6010B
Arsenic	29.6		29.75		0.37		6010B
Barium	52.6		52.51		0.22		6010B
Beryllium	0.28		0.241	J	NC		6010B
Cadmium	0.14	J	ND		NC		6010B
Calcium	5150		5276		2.4		6010B
Chromium	12.3		11.86		3.4		6010B
Cobalt	3.3		2.93	J	12	V	6010B
Copper	23.2		23.35		0.82		6010B
Iron	18100		18870		4.2		6010B
Lead	41.1		39.98		2.8		6010B
Magnesium	3200		3225		0.93		6010B
Manganese	213		217.0		1.9		6010B
Nickel	9.5		9.07	J	4.6		6010B
Potassium	598		574.5		NC		6010B
Selenium	ND		ND		NC		6010B
Silver	ND		ND		NC		6010B
Sodium	31.3	J	ND		NC		6010B
Thallium	ND		ND		NC		6010B
Vanadium	15.3		15.85		3.7		6010B
Zinc	38.8		39.62		2.2		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

ALPHA
GEOSCIENCE
Geology
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Water Supply

Data Usability Summary Report for
TestAmerica Buffalo, Job No: 480-18292-1

10 Soil Samples,
1 Field Duplicate, and 1 Trip Blank
Collected April 5, 2012

Prepared by: Donald Anné
May 4, 2012

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 10 soil samples, 1 field duplicate, and 1 trip blank analyzed for volatiles, and 10 soil samples and 1 field duplicate analyzed semi-volatiles, PCB, and TAL metals.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive metals results for aluminum were flagged as "estimated" (J) in all 10 soil samples and the field duplicate because 2 of 2 percent recoveries for aluminum were above control limits, but were not above 300% in the associated soil MS/MSD sample.
- Positive metal results for magnesium were flagged as "estimated" (J) in all 10 soil samples and the field duplicate because 1 of 2 percent recoveries for magnesium was above control limits and was above 200% in the associated soil MS/MSD sample.
- Positive metal results for barium were flagged as "estimated" (J) in all 10 soil samples and the field duplicate because 1 of 2 percent recoveries for barium was above control limits, but was not above 200% in the associated soil MS/MSD sample.
- Positive metal results for mercury were flagged as "estimated" (J) in all 10 soil samples and the field duplicate because 2 of 2 percent recoveries for mercury were below control limits, but were not below 10% in the associated soil MS/MSD sample.

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- Positive metal results for calcium were flagged as "estimated" (J) in samples RB-01(6"-12") and DUP-03 because relative percent difference for calcium was above the allowable maximum in the associated soil field duplicate pair RB-01(6"-12")/DUP-03.

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8260B Volatiles Data
for TestAmerica Buffalo, Job No: 480-18292-1

10 Soil Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected April 5, 2011

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for 1,1,2-trichloro-1,2,2-trifluoroethane, acetone, carbon disulfide, methyl acetate, 2-butanone, cylohexane, 2-hexanone, and 1,2-dibromo-3-chloropropane were above the allowable maximum (25%) on 04-11-12 (F8012.D). The %Ds for methyl tert-butyl ether and carbon tetrachloride were above the allowable maximum (25%) on 04-13-12 (G11022.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: All relative percent differences for spiked compounds were below the allowable maximum and all percent recoveries were below QC limits for soil

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MS/MSD sample RB-01 (0-6"). No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for aqueous sample LCS 480-59441/4 and soil samples LCS 480-58994/4 and LCS 480-59033/4.

Field Duplicates: The analyses of soil field duplicate pairs RB-01(6"-12")/DUP-03 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8017.D

Lab ID: 480-18292-5 MS Client ID: RB-01 (0-6") MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethane	85.9	ND	36.6	43	79-126	F
1,1-Dichloroethene	85.9	ND	31.1	36	65-153	F
1,2-Dichlorobenzene	85.9	ND	19.6	23	75-120	F
1,2-Dichloroethane	85.9	ND	31.6	37	77-122	F
Benzene	85.9	ND	35.6	41	79-127	F
Chlorobenzene	85.9	ND	28.3	33	76-124	F
cis-1,2-Dichloroethene	85.9	ND	33.7	39	81-117	F
Ethylbenzene	85.9	ND	29.4	34	80-120	F
Methyl tert-butyl ether	85.9	ND	32.5	38	63-125	F
Tetrachloroethene	85.9	ND	30.9	36	74-122	F
Toluene	85.9	ND	34.0	40	74-128	F
trans-1,2-Dichloroethene	85.9	ND	32.3	38	78-126	F
Trichloroethene	85.9	ND	28.9	34	77-129	F

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8018.D

Lab ID: 480-18292-5 MSD Client ID: RB-01 (0-6") MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethane	100	70.2	70	63.0	30	79-126	F
1,1-Dichloroethene	100	59.4	59	62.6	30	65-153	F
1,2-Dichlorobenzene	100	32.7	33	50.2	30	75-120	F
1,2-Dichloroethane	100	59.4	59	61.1	30	77-122	F
Benzene	100	68.0	68	62.7	30	79-127	F
Chlorobenzene	100	51.0	51	57.1	30	76-124	F
cis-1,2-Dichloroethene	100	63.2	63	61.0	30	81-117	F
Ethylbenzene	100	53.0	53	57.3	30	80-120	F
Methyl tert-butyl ether	100	63.0	63	64.0	30	63-125	F
Tetrachloroethene	100	54.4	54	55.0	30	74-122	F
Toluene	100	62.8	63	59.5	30	74-128	F
trans-1,2-Dichloroethene	100	60.2	60	60.4	30	78-126	F
Trichloroethene	100	52.2	52	57.6	30	77-129	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Lab Sample ID: CCVIS 480-59033/2 Calibration Date: 04/11/2012 09:07

Instrument ID: HP5973F Calib Start Date: 03/07/2012 23:43

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/08/2012 01:25

Lab File ID: F8012.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	1.664	1.591		47.8	50.0	-4.4	20.0
Ethyl methacrylate	Ave	0.9228	0.7182		38.9	50.0	-22.2	50.0
trans-1,3-Dichloropropene	Ave	0.9099	0.7614		41.8	50.0	-16.3	50.0
1,1,2-Trichloroethane	Ave	0.5001	0.4439		44.4	50.0	-11.2	50.0
Tetrachloroethene	Ave	0.7388	0.7608		51.5	50.0	3.0	50.0
1,3-Dichloropropane	Ave	1.038	0.9010		43.4	50.0	-13.2	50.0
2-Hexanone	Ave	0.6379	0.4717		185	250	-26.1	50.0
Dibromochloromethane	Ave	0.6588	0.5926		45.0	50.0	-10.0	50.0
1,2-Dibromoethane	Ave	0.6697	0.5948		44.4	50.0	-11.2	50.0
Chlorobenzene	Ave	2.027	1.923	0.3000	47.4	50.0	-5.2	50.0
Ethylbenzene	Ave	3.069	2.908		47.4	50.0	-5.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6553	0.6535		49.9	50.0	-0.3	50.0
m-Xylene & p-Xylene	Ave	1.283	1.223		95.4	100	-4.6	50.0
o-Xylene	Ave	1.233	1.188		48.2	50.0	-3.7	50.0
Styrene	Ave	2.044	1.937		47.4	50.0	-5.3	50.0
Bromoform	Ave	0.3801	0.3300	0.1000	43.4	50.0	-13.2	50.0
Isopropylbenzene	Ave	2.706	2.509		46.4	50.0	-7.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7166	0.5995	0.3000	41.8	50.0	-16.3	50.0
Bromobenzene	Ave	0.7878	0.7129		45.2	50.0	-9.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2406	0.1745		181	250	NR -27.5	50.0
N-Propylbenzene	Ave	3.278	2.944		44.9	50.0	-10.2	50.0
1,2,3-Trichloropropane	Ave	0.2483	0.2024		40.8	50.0	-18.5	50.0
2-Chlorotoluene	Ave	0.7471	0.6953		46.5	50.0	-6.9	50.0
1,3,5-Trimethylbenzene	Ave	2.282	2.113		46.3	50.0	-7.4	50.0
4-Chlorotoluene	Ave	0.7987	0.7211		45.1	50.0	-9.7	50.0
tert-Butylbenzene	Ave	0.5765	0.5390		46.8	50.0	-6.5	50.0
1,2,4-Trimethylbenzene	Ave	2.322	2.126		45.8	50.0	-8.5	50.0
sec-Butylbenzene	Ave	2.926	2.741		46.8	50.0	-6.3	50.0
4-Isopropyltoluene	Ave	2.670	2.513		47.1	50.0	-5.9	50.0
1,3-Dichlorobenzene	Ave	1.504	1.372		45.6	50.0	-8.8	50.0
1,4-Dichlorobenzene	Ave	1.550	1.405		45.3	50.0	-9.4	50.0
n-Butylbenzene	Ave	2.179	2.008		46.1	50.0	-7.8	50.0
1,2-Dichlorobenzene	Ave	1.420	1.297		45.7	50.0	-8.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1193	0.0855		35.8	50.0	-28.3	50.0
1,2,4-Trichlorobenzene	Ave	0.8879	0.8590		48.4	50.0	-3.3	50.0
Hexachlorobutadiene	Ave	0.3855	0.3822		49.6	50.0	-0.9	50.0
Naphthalene	Ave	2.610	2.208		42.3	50.0	-15.4	50.0
1,2,3-Trichlorobenzene	Ave	0.8054	0.7627		47.3	50.0	-5.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1520	0.1422		46.8	50.0	-6.4	50.0
Toluene-d8 (Surr)	Ave	2.361	2.574		54.5	50.0	9.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7860	0.8590		54.6	50.0	9.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Lab Sample ID: CCVIS 480-59033/2 Calibration Date: 04/11/2012 09:07

Instrument ID: HP5973F Calib Start Date: 03/07/2012 23:43

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 03/08/2012 01:25

Lab File ID: F8012.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2059	0.1737		42.2	50.0	-15.6	50.0
Chloromethane	Ave	0.2765	0.2401	0.1000	43.4	50.0	-13.2	50.0
Vinyl chloride	Ave	0.2213	0.2092		47.3	50.0	-5.4	20.0
Bromomethane	Ave	0.1097	0.0921		42.0	50.0	-16.0	50.0
Chloroethane	Ave	0.1050	0.0912		43.4	50.0	-13.1	50.0
Trichlorofluoromethane	Ave	0.2394	0.2472		51.6	50.0	3.3	50.0
Acrolein	Ave	0.0379	0.0208		550	1000	NA -45.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2313	0.1680		36.3	50.0	-27.4	50.0
1,1-Dichloroethene	Ave	0.2420	0.2356	0.1000	48.7	50.0	-2.7	20.0
Acetone	Ave	0.1081	0.0778		180	250	-28.0	50.0
Iodomethane	Ave	0.3623	0.2962		40.9	50.0	-18.3	50.0
Carbon disulfide	Ave	0.6556	0.4370		33.3	50.0	-33.3	50.0
Methyl acetate	Ave	0.3785	0.2809		37.1	50.0	-25.8	50.0
Acetonitrile	Ave	0.0226	0.0190		1690	2000	-15.6	50.0
Methylene Chloride	Ave	0.2868	0.2634		45.9	50.0	-8.2	50.0
Methyl tert-butyl ether	Ave	0.8378	0.6331		37.8	50.0	-24.4	50.0
trans-1,2-Dichloroethene	Ave	0.2812	0.2665		47.4	50.0	-5.2	50.0
Acrylonitrile	Ave	0.1271	0.0988		194	250	-22.2	50.0
Vinyl acetate	Ave	0.6567	0.5084		194	250	-22.6	50.0
1,1-Dichloroethane	Ave	0.4772	0.4238		44.4	50.0	-11.2	50.0
2-Butanone (MEK)	Ave	0.1867	0.1348		181	250	-27.8	50.0
2,2-Dichloropropane	Ave	0.3267	0.2974		45.5	50.0	-9.0	50.0
cis-1,2-Dichloroethene	Ave	0.3174	0.2942		46.3	50.0	-7.3	50.0
Bromochloromethane	Ave	0.1669	0.1559		46.7	50.0	-6.6	50.0
Tetrahydrofuran	Ave	0.1231	0.0902		183	250	NA -26.7	50.0
Chloroform	Ave	0.4648	0.4158		44.7	50.0	-10.5	20.0
1,1,1-Trichloroethane	Ave	0.3695	0.3407		46.1	50.0	-7.8	50.0
Cyclohexane	Ave	0.4776	0.3467		36.3	50.0	-27.4	50.0
1,1-Dichloropropene	Ave	0.3625	0.3219		44.4	50.0	-11.2	50.0
Carbon tetrachloride	Ave	0.3123	0.2948		47.2	50.0	-5.6	50.0
Benzene	Ave	1.074	0.9877		46.0	50.0	-8.0	50.0
1,2-Dichloroethane	Ave	0.3784	0.3111		41.1	50.0	-17.8	50.0
Trichloroethene	Ave	0.2881	0.2663		46.2	50.0	-7.6	50.0
Methylcyclohexane	Ave	0.4705	0.3641		38.7	50.0	-22.6	50.0
1,2-Dichloropropane	Ave	0.2858	0.2507		43.9	50.0	-12.3	20.0
Dibromomethane	Ave	0.1702	0.1455		42.7	50.0	-14.5	50.0
Bromodichloromethane	Ave	0.3334	0.2864		43.0	50.0	-14.1	50.0
2-Chloroethyl vinyl ether	Ave	0.2068	0.1601		194	250	-22.6	50.0
cis-1,3-Dichloropropene	Ave	0.4314	0.3594		41.7	50.0	-16.7	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8542	0.6693		196	250	-21.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Lab Sample ID: CCVIS 480-59441/2 Calibration Date: 04/13/2012 09:56

Instrument ID: HP5973G Calib Start Date: 04/09/2012 20:15

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 04/09/2012 22:09

Lab File ID: G11022.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4294	0.4134		24.1	25.0	-3.7	50.0
Chloromethane	Ave	0.6789	0.6553	0.1000	24.1	25.0	-3.5	50.0
Vinyl chloride	Ave	0.5844	0.5909		25.3	25.0	1.1	20.0
Bromomethane	QuaF		0.0950		21.2	25.0	-15.2	50.0
Chloroethane	Ave	0.2790	0.2520		22.6	25.0	-9.7	50.0
Trichlorofluoromethane	Lin1F		0.4305		22.8	25.0	-8.8	50.0
Acrolein	Ave	0.0447	0.0454		509	500	1.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3255	0.3367		25.9	25.0	3.4	50.0
1,1-Dichloroethene	Ave	0.3701	0.3545	0.1000	23.9	25.0	-4.2	20.0
Acetone	Ave	0.2016	0.2016		125	125	0.0	50.0
Iodomethane	Ave	0.3520	0.3369		23.9	25.0	-4.3	50.0
Carbon disulfide	Ave	0.8992	0.7703		21.4	25.0	-14.3	50.0
Methyl acetate	Ave	0.7292	0.7536		25.8	25.0	3.3	50.0
Acetonitrile	Ave	0.0508	0.0560		1100	1000	10.2	50.0
Methylene Chloride	Ave	0.4522	0.4788		26.5	25.0	5.9	50.0
Methyl tert-butyl ether	Ave	1.050	1.331		31.7	25.0	26.7	50.0
trans-1,2-Dichloroethene	Ave	0.4203	0.4077		24.2	25.0	-3.0	50.0
Acrylonitrile	Ave	0.2647	0.2886		136	125	9.0	50.0
1,1-Dichloroethane	Ave	0.6794	0.7344		27.0	25.0	8.1	50.0
Vinyl acetate	Ave	0.9164	1.165		159	125	MA 27.1	50.0
2,2-Dichloropropane	Ave	0.2572	0.2368		23.0	25.0	-7.9	50.0
cis-1,2-Dichloroethene	Ave	0.3738	0.3964		26.5	25.0	6.0	50.0
2-Butanone (MEK)	Ave	0.3857	0.4128		134	125	7.0	50.0
Bromochloromethane	Ave	0.1533	0.1767		28.8	25.0	15.3	50.0
Tetrahydrofuran	Ave	0.2726	0.2837		130	125	4.1	50.0
Chloroform	Ave	0.3712	0.3930		26.5	25.0	5.9	20.0
1,1,1-Trichloroethane	Ave	0.3735	0.3329		22.3	25.0	-10.9	50.0
Cyclohexane	Ave	0.9683	0.9926		25.6	25.0	2.5	50.0
Carbon tetrachloride	LinF		0.2868		16.5	25.0	-34.0	50.0
1,1-Dichloropropene	Ave	0.5288	0.5280		25.0	25.0	-0.2	50.0
Benzene	Ave	1.524	1.593		26.1	25.0	4.5	50.0
1,2-Dichloroethane	Ave	0.4942	0.5639		28.5	25.0	14.1	50.0
Trichloroethene	Ave	0.3732	0.3796		25.4	25.0	1.7	50.0
Methylcyclohexane	Ave	0.6878	0.7278		26.5	25.0	5.8	50.0
1,2-Dichloropropane	Ave	0.3945	0.4456		28.2	25.0	12.9	20.0
Dibromomethane	Ave	0.1832	0.2177		29.7	25.0	18.9	50.0
Bromodichloromethane	Lin1F		0.3235		21.0	25.0	-16.0	50.0
2-Chloroethyl vinyl ether	Ave	0.2854	0.3795		166	125	MA 33.0	50.0
cis-1,3-Dichloropropene	Lin1F		0.5298		25.1	25.0	0.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	1.374	1.588		145	125	15.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Lab Sample ID: CCVIS 480-59441/2 Calibration Date: 04/13/2012 09:56

Instrument ID: HP5973G Calib Start Date: 04/09/2012 20:15

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 04/09/2012 22:09

Lab File ID: G11022.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene	Ave	2.013	2.020		25.1	25.0	0.3	20.0
trans-1,3-Dichloropropene	LinlF		0.9675		25.1	25.0	0.4	50.0
Ethyl methacrylate	Ave	0.9933	1.307		32.9	25.0	NA 31.6	50.0
1,1,2-Trichloroethane	Ave	0.5112	0.5990		29.3	25.0	17.2	50.0
Tetrachloroethene	Ave	0.7667	0.7548		24.6	25.0	-1.5	50.0
1,3-Dichloropropane	Ave	1.126	1.352		30.0	25.0	20.1	50.0
2-Hexanone	Ave	1.087	1.214		140	125	11.7	50.0
Dibromochloromethane	QuaF		0.3740		22.3	25.0	-10.8	50.0
1,2-Dibromoethane	Ave	0.6112	0.7206		29.5	25.0	17.9	50.0
Chlorobenzene	Ave	2.107	2.187	0.3000	26.0	25.0	3.8	50.0
Ethylbenzene	Ave	3.777	3.821		25.3	25.0	1.2	20.0
1,1,1,2-Tetrachloroethane	LinlF		0.4998		20.8	25.0	-16.8	50.0
m,p-Xylene	Ave	1.470	1.465		49.8	50.0	-0.4	50.0
o-Xylene	Ave	1.373	1.430		26.0	25.0	4.2	50.0
Styrene	Ave	2.208	2.408		27.3	25.0	9.0	50.0
Bromoform	QuaF		0.1998	0.1000	22.6	25.0	-9.6	50.0
Isopropylbenzene	Ave	3.966	3.771		23.8	25.0	-4.9	50.0
Bromobenzene	Ave	0.8364	0.8759		26.2	25.0	4.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.996	1.111	0.3000	27.9	25.0	11.6	50.0
N-Propylbenzene	Ave	4.900	4.744		24.2	25.0	-3.2	50.0
1,2,3-Trichloropropane	Ave	0.3388	0.3700		27.3	25.0	9.2	50.0
trans-1,4-Dichloro-2-butene	LinF		0.4341		141	125	12.6	50.0
2-Chlorotoluene	Ave	0.9263	0.8985		24.2	25.0	-3.0	50.0
1,3,5-Trimethylbenzene	Ave	3.341	3.249		24.3	25.0	-2.8	50.0
4-Chlorotoluene	Ave	0.9698	0.9599		24.7	25.0	-1.0	50.0
tert-Butylbenzene	Ave	0.7380	0.7065		23.9	25.0	-4.3	50.0
1,2,4-Trimethylbenzene	Ave	3.339	3.336		25.0	25.0	-0.0	50.0
sec-Butylbenzene	Ave	4.264	4.010		23.5	25.0	-5.9	50.0
1,3-Dichlorobenzene	Ave	1.800	1.783		24.8	25.0	-0.9	50.0
4-Isopropyltoluene	Ave	3.531	3.397		24.1	25.0	-3.8	50.0
1,4-Dichlorobenzene	Ave	1.864	1.872		25.1	25.0	0.4	50.0
n-Butylbenzene	Ave	3.316	3.251		24.5	25.0	-1.9	50.0
1,2-Dichlorobenzene	Ave	1.682	1.749		26.0	25.0	4.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1921	0.1680		21.9	25.0	-12.6	50.0
1,2,4-Trichlorobenzene	QuaF		1.108		28.8	25.0	15.2	50.0
Hexachlorobutadiene	QuaF		0.4212		27.0	25.0	8.0	50.0
Naphthalene	QuaF		3.838		29.6	25.0	18.4	50.0
1,2,3-Trichlorobenzene	QuaF		0.9741		28.7	25.0	14.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1836	0.2162		29.4	25.0	17.7	50.0
Toluene-d8 (Surr)	LinlF		2.679		24.5	25.0	-2.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6823	0.7516		27.5	25.0	10.2	50.0

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QA/QC Review of Method 8270C Semi-Volatiles Data for TestAmerica Buffalo, Job No: 480-18292-1

12 Soil Samples and 1 Field Duplicate Collected April 5, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target base/neutral compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8270C criteria.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable mxaimum (25%), as required.

Blanks: The analyses of method and equipment blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of three acid extractable surrogate recoveries for sample RB-01(0-6") was below control limits, but was not below 10%. No action is taken on one surrogate per fraction outside control limits, provided the recovery is not less than10%.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximum, but 5 of 24 percent recoveries were outside QC limits for soil MS/MSD sample RB-01 (0-6"). No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for soil sample LCS 480-58845/2-A.

Field Duplicates: The analyses of soil field duplicate pairs RB-01(6"-12")/DUP-03 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
RB-10 (6-12")	480-18292-1	70	66	75	81	73	99
RB-10 (12-24")	480-18292-2	72	73	82	91	92	107
RB-11 (0-6")	480-18292-3	71	71	70	81	78	98
RB-12 (0-6")	480-18292-4	63	65	75	86	69	100
RB-01 (0-6")	480-18292-5	52	53	55	65	37 X	82
RB-01 (6-12")	480-18292-6	66	61	67	79	43	95
RB-01 (12-24")	480-18292-7	68	69	78	89	66	97
RB-02 (0-6")	480-18292-8	66	64	75	83	56	90
RB-02 (6-12")	480-18292-9	72	64	71	80	57	89
RB-02 (12-24")	480-18292-10	68	62	65	85	67	97
DUP-03	480-18292-11	59	63	74	82	49	90
	MB 480-58845/1-A	69	71	76	82	97	103
	LCS 480-58845/2-A	74	79	91	90	115	112
RB-01 (0-6") MS	480-18292-5 MS	75	68	87	85	97	97
RB-01 (0-6") MSD	480-18292-5 MSD	82	76	95	94	96	112

	QC LIMITS
2FP = 2-Fluorophenol	18-120
PHL = Phenol-d5	11-120
NBZ = Nitrobenzene-d5	34-132
FBP = 2-Fluorobiphenyl	37-120
TBP = 2,4,6-Tribromophenol	39-146
TPH = p-Terphenyl-d14	65-153

Column to be used to flag recovery values

FORM II 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: V8864.D

Lab ID: 480-18292-5 MS Client ID: RB-01 (0-6") MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	3720	ND	2760 J	74	55-125	
2-Chlorophenol	3720	ND	3100 J	83	38-120	
4-Chloro-3-methylphenol	3720	ND	3830	103	49-125	
4-Nitrophenol	3720	ND	ND	0	43-137	F
Acenaphthene	3720	ND	3030 J	81	53-120	
Bis(2-ethylhexyl) phthalate	3720	2700 J	4740	54	61-133	F
Fluorene	3720	ND	3020 J	81	63-126	
Hexachloroethane	3720	ND	2620 J	70	41-120	
N-Nitrosodi-n-propylamine	3720	ND	3050 J	82	46-120	
Pentachlorophenol	3720	ND	6340 J	170	33-136	F
Phenol	3720	ND	2520 J	68	36-120	
Pyrene	3720	1500 J	4490	80	51-133	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: V8865.D

Lab ID: 480-18292-5 MSD Client ID: RB-01 (0-6") MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-Dinitrotoluene	3640	2490 J	68	10.3	20	55-125	
2-Chlorophenol	3640	3050 J	84	1.66	25	38-120	
4-Chloro-3-methylphenol	3640	3830	105	0.000	27	49-125	
4-Nitrophenol	3640	ND	0	NC	25	43-137	F
Acenaphthene	3640	3600 J	99	17.2	35	53-120	
Bis(2-ethylhexyl) phthalate	3640	5220	69	9.55	15	61-133	
Fluorene	3640	3450 J	95	13.6	15	63-126	
Hexachloroethane	3640	2930 J	80	11.1	46	41-120	
N-Nitrosodi-n-propylamine	3640	3240 J	89	6.07	31	46-120	
Pentachlorophenol	3640	ND	0	NC	35	33-136	F
Phenol	3640	3080 J	85	20.2	35	36-120	
Pyrene	3640	5280	103	16.1	35	51-133	

Column to be used to flag recovery and RPD values

FORM III 8270C

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QA/QC Review of Method 8082 PCB Data for
TestAmerica Buffalo, Job No: 480-18292-1

10 Soil Samples, and 1 Field Duplicate
Collected April 5, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analyses of method blanks reported target PCBs as not detected.

Surrogate Recovery: The surrogates recoveries were within QC limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for PCB-1016 and PCB-1260 were below the allowable maximum and the percent recoveries were within QC limits for soil MS/MSD samples TP-A1 and RB-01 (0-6").

Laboratory Control Sample: The percent recoveries for PCB-1016 and PCB-1260 were within QC limits for soil sample LCS 480-58864/2-A.

Field Duplicates: The analyses of soil field duplicate pair RB-01(6"-12")/DUP-03 reported target PCBs as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pairs were acceptable.

Initial Calibration: The %RSDs for PCB-1016 and PCB-1260 were below the allowable maximum (20%), as required.

Continuing Calibration: The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-11-12 (CCV480-59004/2) for the ZB-5 column. The average %Ds for PCB-1016 and PCB-1260 were above the allowable maximum (15%) on 04-11-12 (CCV480-59004/14) for the ZB-5 column. Positive results for PCB-1016 and PCB-1260 should be considered estimated in associated samples.

PCB Identification Summary for Multicomponent Analytes: The checked surrogates wer within GC quantitation limits. The analyses of soil samples in this data pack reported target PCBs as not detected.

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FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Lab Sample ID: CCV 480-59004/2 Calibration Date: 04/11/2012 07:09

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_164_066.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	322582		0.707	0.500	41.4*	15.0
PCB-1016 Peak 2	Ave	119908	180170		0.751	0.500	50.3*	15.0
PCB-1016 Peak 3	Ave	331581	443086		0.668	0.500	33.6*	15.0
PCB-1016 Peak 4	Ave	133756	214424		0.802	0.500	60.3*	15.0
PCB-1260 Peak 1	Ave	272257	389920		0.716	0.500	43.2*	15.0
PCB-1260 Peak 2	Ave	438611	538192		0.614	0.500	22.7*	15.0
PCB-1260 Peak 3	Ave	177029	243466		0.688	0.500	37.5*	15.0
PCB-1260 Peak 4	Ave	124111	142088		0.572	0.500	14.5	15.0
Tetrachloro-m-xylene	Lin1		5588500		0.0380	0.0300	26.7*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6280467		0.0408	0.0300	36.0*	15.0

average %D PCB-1016 = 46.4%

" " PCB-1260 = 29.5%

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-18292-1

SDG No.:

Lab Sample ID: CCV 480-59004/14 Calibration Date: 04/11/2012 10:05

Instrument ID: HP5890-12 Calib Start Date: 10/23/2011 13:54

GC Column: ZB-5 ID: 0.53(mm) Calib End Date: 10/23/2011 15:23

Lab File ID: 12_164_078.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	228124	310818		0.681	0.500	36.2*	15.0
PCB-1016 Peak 2	Ave	119908	174306		0.727	0.500	45.4*	15.0
PCB-1016 Peak 3	Ave	331581	421852		0.636	0.500	27.2*	15.0
PCB-1016 Peak 4	Ave	133756	212622		0.795	0.500	59.0*	15.0
PCB-1260 Peak 1	Ave	272257	375080		0.689	0.500	37.8*	15.0
PCB-1260 Peak 2	Ave	438611	533660		0.608	0.500	21.7*	15.0
PCB-1260 Peak 3	Ave	177029	237458		0.671	0.500	34.1*	15.0
PCB-1260 Peak 4	Ave	124111	138402		0.558	0.500	11.5	15.0
Tetrachloro-m-xylene	Lin1		5469633		0.0373	0.0300	24.3*	15.0
DCB Decachlorobiphenyl	Ave	4617528	6297500		0.0409	0.0300	36.4*	15.0

average %D PCB-1016 = 42.0%

" " PCB-1260 = 26.3%

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QA/QC Review of TAL Metals Data for
TestAmerica Buffalo, Job No: 480-18292-1

10 Soil Samples and 1 Field Duplicate
Collected April 5, 2012

Prepared by: Donald Anné
May 4, 2012

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard for AA and ICP: The percent recoveries for target metals were within laboratory QC limits (50-150%) for CRQL standard samples CRI 480-59065/7, CRI 480-59415/7, and CRA 480-58742/3.

Blanks: The analyses of initial calibration and continuing calibration, and method blanks reported TAL metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: Two of two percent recoveries (%Rs) for aluminum were above control limits (75-125%), but were not above 300% for soil MS/MSD sample RB-01 (0-6"). Since aluminum is a naturally occurring metal, positive for aluminum should be considered estimated (J) in associated soil samples.

One of two %Rs for magnesium was above control limits (75-125%) and was above 200% for soil MS/MSD sample RB-01 (0-6"). Positive for magnesium should be considered estimated (J) in associated soil samples.

One of two %Rs for barium was above control limits (75-125%), but was not above 200% for soil MS/MSD sample RB-01 (0-6"). Positive for barium should be considered estimated (J) in associated soil samples.

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Two of two %Rs for mercury were below control limits (75-125%), but were not below 10% for soil MS/MSD sample RB-01 (0-6"). Positive and "not detected" results for mercury should be considered estimated (J) in associated soil samples.

Laboratory Duplicates: The relative percent difference for magnesium was above the allowable maximum (35%) in soil MS/MSD sample RB-10 (0-6"). Positive results for magnesium should be considered estimated (J) in associated soil samples.

Field Duplicates: The relative percent differences for calcium and magnesium were above the allowable maximum (35%) for soil field duplicate pair RB-01(6"-12")/DUP-03 (attached table). Positive results for calcium and magnesium should be considered estimated (J) in samples RB-01(6"-12") and DUP-03.

Laboratory Control Sample: The percent recoveries for TAL metals were within QC limits in soil samples LCSSRM 480-58875/2-A and LCSSRM 480-58653/2-A

ICP Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for soil serial dilution sample RB-01 (0-6"), as required.

Instrument Detection Limits: The MDLs were at or below the RLs, as required.

Percent Solids: The % solids for soil samples were above 50%.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 480-18292-1

S1= RB-01(6"-12") **S2=** DUP-03

Analyte	S1	S2	RPD (%)	
aluminum	6460	4790	30%	
antimony	ND	ND	NC	
arsenic	11.5	12.7	10%	
barium	78.1	82.7	6%	
beryllium	0.39	0.37	5%	
cadmium	0.31	0.35	12%	
calcium	14100	42900	101%	*
chromium	11.9	13.8	15%	
cobalt	3.9	4.5	14%	
copper	43.5	42.3	3%	
iron	16800	17600	5%	
lead	74.6	62.2	18%	
magnesium	5320	24700	129%	*
manganese	303	255	17%	
mercury	0.14	0.12	15%	
nickel	19.5	16.4	17%	
potassium	813	760	7%	
selenium	ND	ND	NC	
silver	ND	ND	NC	
sodium	**162**	242	NC	
thallium	ND	ND	NC	
vanadium	17.4	16.7	4%	
zinc	63.1	47.2	29%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: RB-01 (0-6") MSD
Lab ID: 480-18292-5 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-18292-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 89.3

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	9996		2250	255	75-125	12.5	20	F	6010B
Antimony	40.75		44.9	89	75-125	5.09	20		6010B
Arsenic	53.02		44.9	97	75-125	4.12	20		6010B
Barium	137.6		44.9	146	75-125	12.5	20	F	6010B
Beryllium	43.65		44.9	96	75-125	5.21	20		6010B
Cadmium	44.52		44.9	98	75-125	3.59	20		6010B
Calcium	16480		2250	NA 138	75-125	13.1	20	4	6010B
Chromium	53.02		44.9	97	75-125	2.07	20		6010B
Cobalt	47.22		44.9	98	75-125	4.87	20		6010B
Copper	80.29		44.9	101	75-125	2.51	20		6010B
Iron	17440		2250	NA 129	75-125	5.09	20	4	6010B
Lead	123.0		44.9	93	75-125	3.40	20		6010B
Magnesium	6157		2250	92	75-125	44.8	20	F	6010B
Manganese	266.2		44.9	NA 139	75-125	6.74	20	4	6010B
Nickel	59.63		44.9	103	75-125	6.38	20		6010B
Potassium	3193		2250	112	75-125	3.93	20		6010B
Selenium	42.37		44.9	94	75-125	3.22	20		6010B
Silver	10.23		11.2	91	75-125	6.03	20		6010B
Sodium	2372		2250	98	75-125	6.60	20		6010B
Thallium	43.25		44.9	96	75-125	4.50	20		6010B
Vanadium	61.09		44.9	103	75-125	6.27	20		6010B
Zinc	96.59		44.9	85	75-125	5.71	20		6010B
Hg	0.523		0.379	64	75-125	6.70	20	F	7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: RB-01 (0-6") MS
Lab ID: 480-18292-5 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-18292-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 89.3

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	8822		4270		2120	215	75-125	F	6010B
Antimony	38.73		0.84	J	42.3	90	75-125		6010B
Arsenic	50.88		9.5		42.3	98	75-125		6010B
Barium	121.5		72.2		42.3	116	75-125		6010B
Beryllium	41.43		0.30		42.3	97	75-125		6010B
Cadmium	42.95		0.30		42.3	101	75-125		6010B
Calcium	18790		13400		2120	NA 255	75-125	4	6010B
Chromium	51.93		9.5		42.3	100	75-125		6010B
Cobalt	44.97		3.2		42.3	99	75-125		6010B
Copper	78.30		34.8		42.3	103	75-125		6010B
Iron	16580		14600		2120	96	75-125	4	6010B
Lead	118.9		81.1		42.3	89	75-125		6010B
Magnesium	9709		4100		2120	265	75-125	F	6010B
Manganese	248.9		204		42.3	107	75-125	4	6010B
Nickel	55.94		13.5		42.3	100	75-125		6010B
Potassium	3070		673		2120	113	75-125		6010B
Selenium	41.03		ND		42.3	97	75-125		6010B
Silver	9.63		ND		10.6	91	75-125		6010B
Sodium	2221		160		2120	97	75-125		6010B
Thallium	41.35		ND		42.3	98	75-125		6010B
Vanadium	57.38		14.9		42.3	100	75-125		6010B
Zinc	102.3		58.6		42.3	103	75-125		6010B
Hg	0.559		0.28		0.391	71	75-125	F	7471A

SSR = Spiked Sample Result

NA - Not applicable, sample concentration was greater than 4 times the spiking level; therefore, valid %Rs could not be calculated.

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN