

ANALYTICAL REPORT

Job Number: 700-60476-1

Job Description: Walter Coke RAWP

For:
CH2M Hill, Inc.
4121 Carmichael Blvd
Suite 400
Montgomery, AL 36106
Attention: Ms. Kaye Walker



Approved for release.
Suzy Lindblom
Project Manager I
8/16/2011 2:20 PM

Suzy Lindblom
Project Manager I
suzy.lindblom@testamericainc.com
08/16/2011

This statement certifies, to the best of the laboratory's knowledge, all test results meet the requirements of NELAC, except where noted in the case narrative. TestAmerica Mobile Certifications and Approvals: Alabama (Micro & DW - #40030); Arkansas (NPW - #09-028-0); Florida (DW, NPW, SCM, BT - E87089); Georgia (DW - #952); Louisiana (NPW, SCM, BT - #01992); Louisiana (DW LA090026); Mississippi (DW-CERT LETTER); North Carolina (NPW - #395); South Carolina (NPW - #75002); Tennessee (DW - #TN02979); Texas (T104704460-09A-TX); USDA (Permit # P330-08-00039); Washington (C1918).

TestAmerica Laboratories, Inc.

TestAmerica Mobile 900 Lakeside Drive, Mobile, AL 36693

Tel (251) 666-6633 Fax (251) 666-6696 www.testamericainc.com



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Job Narrative
700-60476-1

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

Method(s) 625, 8270D, 8270D LL: The continuing calibration verification (CCV) for analytical batch 104524 exceeded control criteria for few compounds which were detected in the Reporting limit standard and were not in the samples. The data have been reported less than the RL

Method(s) 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 700-104489/1-A). These results have been reported and qualified.

Method(s) 8270D LL: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 104489 was outside control limits. Non-homogeneity of the sample matrix is suspected. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

No other analytical or quality issues were noted.

SAMPLE SUMMARY

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
700-60476-1	0811-POSTEXL-RAWP8-L	Solid	08/12/2011 1420	08/13/2011 0900

EXECUTIVE SUMMARY - Detections

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
700-60476-1	0811-POSTEXL-RAWP8-L					
Benzo[k]fluoranthene		1100		18	ug/Kg	8270D LL
Benzo[b]fluoranthene		3000		18	ug/Kg	8270D LL
Benzo[a]pyrene		2300		18	ug/Kg	8270D LL
Benzo[a]anthracene		1000		18	ug/Kg	8270D LL
Chrysene		1300		18	ug/Kg	8270D LL
Dibenz(a,h)anthracene		730		18	ug/Kg	8270D LL
Indeno[1,2,3-cd]pyrene		1800		18	ug/Kg	8270D LL
Percent Moisture		26		0.10	%	Moisture
Percent Solids		74		0.10	%	Moisture

METHOD SUMMARY

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds by GC/MS - Low Level	TAL MOB	SW846 8270D LL	
Ultrasonic Extraction	TAL MOB		SW846 3550C
Percent Moisture	TAL MOB	EPA Moisture	

Lab References:

TAL MOB = TestAmerica Mobile

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Method	Analyst	Analyst ID
SW846 8270D LL	Schellinger, Eron	ES
EPA Moisture	Nguyen, Tiffany K	TKN

Analytical Data

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Client Sample ID: 0811-POSTEXL-RAWP8-L

Lab Sample ID: 700-60476-1

Date Sampled: 08/12/2011 1420

Client Matrix: Solid

% Moisture: 25.7

Date Received: 08/13/2011 0900

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	700-104565	Instrument ID:	SMB
Prep Method:	3550C	Prep Batch:	700-104489	Lab File ID:	B081523.D
Dilution:	2.0			Initial Weight/Volume:	30.0 g
Analysis Date:	08/16/2011 0136			Final Weight/Volume:	1.0 mL
Prep Date:	08/14/2011 1930			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[k]fluoranthene		1100		7.0	18
Benzo[b]fluoranthene		3000		7.5	18
Benzo[a]pyrene		2300		8.6	18
Benzo[a]anthracene		1000		5.7	18
Chrysene		1300		5.1	18
Dibenz(a,h)anthracene		730		11	18
Indeno[1,2,3-cd]pyrene		1800		8.1	18

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	58		30 - 130
Terphenyl-d14 (Surr)	75		30 - 149
2-Fluorobiphenyl	52		31 - 130

Analytical Data

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

General Chemistry**Client Sample ID:** 0811-POSTEXL-RAWP8-L

Lab Sample ID: 700-60476-1

Date Sampled: 08/12/2011 1420

Client Matrix: Solid

Date Received: 08/13/2011 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	26		%	0.10	0.10	1.0	Moisture
	Analysis Batch: 700-104515	Analysis Date: 08/15/2011 1052					DryWt Corrected: N
Percent Solids	74		%	0.10	0.10	1.0	Moisture
	Analysis Batch: 700-104515	Analysis Date: 08/15/2011 1052					DryWt Corrected: N

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Surrogate Recovery Report**8270D LL Semivolatile Organic Compounds by GC/MS - Low Level****Client Matrix: Solid**

Lab Sample ID	Client Sample ID	NBZ %Rec	FBP %Rec	TPH %Rec
700-60476-1	0811-POSTEXL-RAW P8-L	58	52	75
MB 700-104489/1-A		52	28X	103
LCS 700-104489/2-A		75	67	99
LCSD 700-104489/3-A		73	64	96
700-60476-1 MS	0811-POSTEXL-RAW P8-L MS	77	74	115
700-60476-1 MSD	0811-POSTEXL-RAW P8-L MSD	53	45	68

Surrogate	Acceptance Limits
NBZ = Nitrobenzene-d5 (Surr)	30-130
FBP = 2-Fluorobiphenyl	31-130
TPH = Terphenyl-d14 (Surr)	30-149

Quality Control Results

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Method Blank - Batch: 700-104489

Method: 8270D LL Preparation: 3550C

Lab Sample ID: MB 700-104489/1-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 08/15/2011 2225
Prep Date: 08/14/2011 1930
Leach Date: N/A

Analysis Batch: 700-104565
Prep Batch: 700-104489
Leach Batch: N/A
Units: ug/Kg

Instrument ID: SMB
Lab File ID: B081517.D
Initial Weight/Volume: 30.0 g
Final Weight/Volume: 1.0 mL
Injection Volume: 1 uL

Analyte	Result	Qual	MDL	RL
Benzo[k]fluoranthene	6.7	U	2.6	6.7
Benzo[b]fluoranthene	6.7	U	2.8	6.7
Benzo[a]pyrene	6.7	U	3.2	6.7
Benzo[a]anthracene	6.7	U	2.1	6.7
Chrysene	6.7	U	1.9	6.7
Dibenz(a,h)anthracene	6.7	U	4.1	6.7
Indeno[1,2,3-cd]pyrene	6.7	U	3.0	6.7

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	52	30 - 130
Terphenyl-d14 (Surr)	103	30 - 149
2-Fluorobiphenyl	28 X	31 - 130

Quality Control Results

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 700-104489

Method: 8270D LL
Preparation: 3550C

LCS Lab Sample ID: LCS 700-104489/2-A
Client Matrix: Solid
Dilution: 5.0
Analysis Date: 08/15/2011 2121
Prep Date: 08/14/2011 1930
Leach Date: N/A

Analysis Batch: 700-104565
Prep Batch: 700-104489
Leach Batch: N/A
Units: ug/Kg

Instrument ID: SMB
Lab File ID: B081515.D
Initial Weight/Volume: 30.0 g
Final Weight/Volume: 1.0 mL
Injection Volume: 1 uL

LCSD Lab Sample ID: LCSD 700-104489/3-A
Client Matrix: Solid
Dilution: 5.0
Analysis Date: 08/15/2011 2153
Prep Date: 08/14/2011 1930
Leach Date: N/A

Analysis Batch: 700-104565
Prep Batch: 700-104489
Leach Batch: N/A
Units: ug/Kg

Instrument ID: SMB
Lab File ID: B081516.D
Initial Weight/Volume: 30.0 g
Final Weight/Volume: 1.0 mL
Injection Volume: 1 uL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzo[k]fluoranthene	113	112	30 - 147	1	48		
Benzo[b]fluoranthene	102	98	34 - 138	4	51		
Benzo[a]pyrene	105	100	30 - 132	5	55		
Benzo[a]anthracene	101	97	39 - 134	4	43		
Chrysene	103	106	39 - 138	3	41		
Dibenz(a,h)anthracene	98	92	32 - 134	6	50		
Indeno[1,2,3-cd]pyrene	100	92	26 - 140	8	50		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
Nitrobenzene-d5 (Surr)	75		73		30 - 130		
Terphenyl-d14 (Surr)	99		96		30 - 149		
2-Fluorobiphenyl	67		64		31 - 130		

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 700-104489

Method: 8270D LL
Preparation: 3550C

LCS Lab Sample ID: LCS 700-104489/2-A
Client Matrix: Solid
Dilution: 5.0
Analysis Date: 08/15/2011 2121
Prep Date: 08/14/2011 1930
Leach Date: N/A

Units: ug/Kg

LCSD Lab Sample ID: LCSD 700-104489/3-A
Client Matrix: Solid
Dilution: 5.0
Analysis Date: 08/15/2011 2153
Prep Date: 08/14/2011 1930
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Benzo[k]fluoranthene	667	667	751	747
Benzo[b]fluoranthene	667	667	679	653
Benzo[a]pyrene	667	667	699	667
Benzo[a]anthracene	667	667	672	645
Chrysene	667	667	685	707
Dibenz(a,h)anthracene	667	667	650	614
Indeno[1,2,3-cd]pyrene	667	667	665	615

Quality Control Results

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 700-104489**

**Method: 8270D LL
Preparation: 3550C**

MS Lab Sample ID:	700-60476-1	Analysis Batch:	700-104565	Instrument ID:	SMB
Client Matrix:	Solid	Prep Batch:	700-104489	Lab File ID:	B081524.D
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	08/16/2011 0208			Final Weight/Volume:	1.0 mL
Prep Date:	08/14/2011 1930			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	700-60476-1	Analysis Batch:	700-104565	Instrument ID:	SMB
Client Matrix:	Solid	Prep Batch:	700-104489	Lab File ID:	B081525.D
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	08/16/2011 0240			Final Weight/Volume:	1.0 mL
Prep Date:	08/14/2011 1930			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzo[k]fluoranthene	117	70	30 - 147	60	48		F
Benzo[b]fluoranthene	147	-5	34 - 138	62	51	F	F
Benzo[a]pyrene	169	78	30 - 132	57	55	F	F
Benzo[a]anthracene	94	60	39 - 134	54	43		F
Chrysene	102	57	39 - 138	54	41		F
Dibenz(a,h)anthracene	104	73	32 - 134	61	50		F
Indeno[1,2,3-cd]pyrene	138	72	26 - 140	55	50		F
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
Nitrobenzene-d5 (Surr)	77		53		30 - 130		
Terphenyl-d14 (Surr)	115		68		30 - 149		
2-Fluorobiphenyl	74		45		31 - 130		

Quality Control Results

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 700-104489**

**Method: 8270D LL
Preparation: 3550C**

MS Lab Sample ID: 700-60476-1 Units: ug/Kg
Client Matrix: Solid
Dilution: 5.0
Analysis Date: 08/16/2011 0208
Prep Date: 08/14/2011 1930
Leach Date: N/A

MSD Lab Sample ID: 700-60476-1
Client Matrix: Solid
Dilution: 5.0
Analysis Date: 08/16/2011 0240
Prep Date: 08/14/2011 1930
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzo[k]fluoranthene	1100	1790	897	3190	1720 F
Benzo[b]fluoranthene	3000	1790	897	5650 F	2980 F
Benzo[a]pyrene	2300	1790	897	5300 F	2960 F
Benzo[a]anthracene	1000	1790	897	2720	1570 F
Chrysene	1300	1790	897	3090	1780 F
Dibenz(a,h)anthracene	730	1790	897	2610	1390 F
Indeno[1,2,3-cd]pyrene	1800	1790	897	4260	2420 F

Quality Control Results

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Duplicate - Batch: 700-104515

Method: Moisture Preparation: N/A

Lab Sample ID:	700-60476-1	Analysis Batch:	700-104515	Instrument ID:	BALANCE1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/15/2011 1052	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	26	25	2.0	5.0	
Percent Solids	74	75	0.6	5.0	

DATA REPORTING QUALIFIERS

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	F	RPD of the MS and MSD exceeds the control limits
	X	Surrogate is outside control limits

Quality Control Results

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 700-104489					
LCS 700-104489/2-A	Lab Control Sample	T	Solid	3550C	
LCSD 700-104489/3-A	Lab Control Sample Duplicate	T	Solid	3550C	
MB 700-104489/1-A	Method Blank	T	Solid	3550C	
700-60476-1	0811-POSTEXL-RAWP8-L	T	Solid	3550C	
700-60476-1MS	Matrix Spike	T	Solid	3550C	
700-60476-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:700-104565					
LCS 700-104489/2-A	Lab Control Sample	T	Solid	8270D LL	700-104489
LCSD 700-104489/3-A	Lab Control Sample Duplicate	T	Solid	8270D LL	700-104489
MB 700-104489/1-A	Method Blank	T	Solid	8270D LL	700-104489
700-60476-1	0811-POSTEXL-RAWP8-L	T	Solid	8270D LL	700-104489
700-60476-1MS	Matrix Spike	T	Solid	8270D LL	700-104489
700-60476-1MSD	Matrix Spike Duplicate	T	Solid	8270D LL	700-104489
General Chemistry					
Analysis Batch:700-104515					
700-60476-1	0811-POSTEXL-RAWP8-L	T	Solid	Moisture	
700-60476-1DU	Duplicate	T	Solid	Moisture	

Report Basis

T = Total

Report Basis

T = Total

Quality Control Results

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Laboratory Chronicle

Lab ID: 700-60476-1

Client ID: 0811-POSTEXL-RAWP8-L

Sample Date/Time: 08/12/2011 14:20

Received Date/Time: 08/13/2011 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550C	700-60476-A-1-A		700-104565	700-104489	08/14/2011 19:30	2	TAL MOB	TV
A:8270D LL	700-60476-A-1-A		700-104565	700-104489	08/16/2011 01:36	2	TAL MOB	ES
A:Moisture	700-60476-B-1		700-104515		08/15/2011 10:52	1	TAL MOB	TKN

Lab ID: 700-60476-1 MS

Client ID: 0811-POSTEXL-RAWP8-L

Sample Date/Time: 08/12/2011 14:20

Received Date/Time: 08/13/2011 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550C	700-60476-A-1-B MS		700-104565	700-104489	08/14/2011 19:30	5	TAL MOB	TV
A:8270D LL	700-60476-A-1-B MS		700-104565	700-104489	08/16/2011 02:08	5	TAL MOB	ES

Lab ID: 700-60476-1 MSD

Client ID: 0811-POSTEXL-RAWP8-L

Sample Date/Time: 08/12/2011 14:20

Received Date/Time: 08/13/2011 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550C	700-60476-A-1-C MSD		700-104565	700-104489	08/14/2011 19:30	5	TAL MOB	TV
A:8270D LL	700-60476-A-1-C MSD		700-104565	700-104489	08/16/2011 02:40	5	TAL MOB	ES

Lab ID: 700-60476-1 DU

Client ID: 0811-POSTEXL-RAWP8-L

Sample Date/Time: 08/12/2011 14:20

Received Date/Time: 08/13/2011 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:Moisture	700-60476-B-1 DU		700-104515		08/15/2011 10:52	1	TAL MOB	TKN

Lab ID: MB

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550C	MB 700-104489/1-A		700-104565	700-104489	08/14/2011 19:30	1	TAL MOB	TV
A:8270D LL	MB 700-104489/1-A		700-104565	700-104489	08/15/2011 22:25	1	TAL MOB	ES

Lab ID: LCS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550C	LCS 700-104489/2-A		700-104565	700-104489	08/14/2011 19:30	5	TAL MOB	TV
A:8270D LL	LCS 700-104489/2-A		700-104565	700-104489	08/15/2011 21:21	5	TAL MOB	ES

Quality Control Results

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Laboratory Chronicle

Lab ID: LCSD

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550C	LCSD 700-104489/3-A		700-104565	700-104489	08/14/2011 19:30	5	TAL MOB	TV
A:8270D LL	LCSD 700-104489/3-A		700-104565	700-104489	08/15/2011 21:53	5	TAL MOB	ES

Lab References:

TAL MOB = TestAmerica Mobile

Certification Summary

Client: CH2M Hill, Inc.
Project/Site: Walter Coke RAWP

TestAmerica Job ID: 700-60476-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Mobile	Alabama	State Program	4	40030
TestAmerica Mobile	Arkansas	State Program	6	88-0765
TestAmerica Mobile	Florida	NELAC	4	E87089
TestAmerica Mobile	Georgia	State Program	4	952
TestAmerica Mobile	Louisiana	NELAC	6	30673
TestAmerica Mobile	Louisiana	NELAC	6	LA0900026
TestAmerica Mobile	Mississippi	State Program	4	N/A
TestAmerica Mobile	North Carolina	North Carolina DENR	4	395
TestAmerica Mobile	South Carolina	State Program	4	75002
TestAmerica Mobile	Tennessee	State Program	4	2979
TestAmerica Mobile	Texas	NELAC	6	T104704460-09A-TX
TestAmerica Mobile	USDA	USDA		P330-08-00039
TestAmerica Mobile	Washington	State Program	10	C1918

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method 8270D Low Level

Semivolatile Organic Compounds
(GC/MS) Low Level by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
SDG No.: _____
Matrix: Solid Level: Low
GC Column (1): ZB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	NBZ #	FBP #	TPH #
0811-POSTEXL-RAWP8-L	700-60476-1	58	52	75
	MB 700-104489/1-A	52	28 X	103
	LCS 700-104489/2-A	75	67	99
	LCSD 700-104489/3-A	73	64	96
0811-POSTEXL-RAWP8-L MS	700-60476-1 MS	77	74	115
0811-POSTEXL-RAWP8-L MSD	700-60476-1 MSD	53	45	68

	QC LIMITS
NBZ = Nitrobenzene-d5 (Surr)	30-130
FBP = 2-Fluorobiphenyl	31-130
TPH = Terphenyl-d14 (Surr)	30-149

Column to be used to flag recovery values

FORM II 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
SDG No.: _____
Matrix: Solid Level: Low Lab File ID: B081515.D
Lab ID: LCS 700-104489/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[k]fluoranthene	667	751	113	30-147	
Benzo[b]fluoranthene	667	679	102	34-138	
Benzo[a]pyrene	667	699	105	30-132	
Benzo[a]anthracene	667	672	101	39-134	
Chrysene	667	685	103	39-138	
Dibenz (a,h) anthracene	667	650	98	32-134	
Indeno[1,2,3-cd]pyrene	667	665	100	26-140	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Matrix: Solid Level: Low Lab File ID: B081516.D
 Lab ID: LCSD 700-104489/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzo[k]fluoranthene	667	747	112	1	48	30-147	
Benzo[b]fluoranthene	667	653	98	4	51	34-138	
Benzo[a]pyrene	667	667	100	5	55	30-132	
Benzo[a]anthracene	667	645	97	4	43	39-134	
Chrysene	667	707	106	3	41	39-138	
Dibenz (a,h) anthracene	667	614	92	6	50	32-134	
Indeno[1,2,3-cd]pyrene	667	615	92	8	50	26-140	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Matrix: Solid Level: Low Lab File ID: B081524.D
 Lab ID: 700-60476-1 MS Client ID: 0811-POSTEXL-RAWP8-L MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Benzo[k]fluoranthene	1790	1100	3190	117	30-147	
Benzo[b]fluoranthene	1790	3000	5650	147	34-138	F
Benzo[a]pyrene	1790	2300	5300	169	30-132	F
Benzo[a]anthracene	1790	1000	2720	94	39-134	
Chrysene	1790	1300	3090	102	39-138	
Dibenz (a,h) anthracene	1790	730	2610	104	32-134	
Indeno[1,2,3-cd]pyrene	1790	1800	4260	138	26-140	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Matrix: Solid Level: Low Lab File ID: B081525.D
 Lab ID: 700-60476-1 MSD Client ID: 0811-POSTEXL-RAWP8-L MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzo[k]fluoranthene	897	1720	70	60	48	30-147	F
Benzo[b]fluoranthene	897	2980	-5	62	51	34-138	F
Benzo[a]pyrene	897	2960	78	57	55	30-132	F
Benzo[a]anthracene	897	1570	60	54	43	39-134	F
Chrysene	897	1780	57	54	41	39-138	F
Dibenz (a,h) anthracene	897	1390	73	61	50	32-134	F
Indeno[1,2,3-cd]pyrene	897	2420	72	55	50	26-140	F

Column to be used to flag recovery and RPD values

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
SDG No.: _____
Lab File ID: B081517.D Lab Sample ID: MB 700-104489/1-A
Matrix: Solid Date Extracted: 08/14/2011 19:30
Instrument ID: SMB Date Analyzed: 08/15/2011 22:25
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 700-104489/2-A	B081515.D	08/15/2011 21:21
	LCSD 700-104489/3-A	B081516.D	08/15/2011 21:53
0811-POSTEXL-RAWP8-L	700-60476-1	B081523.D	08/16/2011 01:36
0811-POSTEXL-RAWP8-L MS	700-60476-1 MS	B081524.D	08/16/2011 02:08
0811-POSTEXL-RAWP8-L MSD	700-60476-1 MSD	B081525.D	08/16/2011 02:40

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
SDG No.: _____
Lab File ID: B081502.D DFTPP Injection Date: 08/15/2011
Instrument ID: SMB DFTPP Injection Time: 14:30
Analysis Batch No.: 104565

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	24.7
68	Less than 2% of mass 69	0.2
70	Less than 2% of mass 69	0.3
127	10-80% of Base Peak	44.3
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	6.8
275	10-60% of Base Peak	24.1
365	Greater than 1% of mass 198	3.4
441	present but less than 24% of mass 442	15.4
442	Greater than 50% of mass 198	102.2
443	15-24% of mass 442	19.2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 700-104565/2	B081504.D	08/15/2011	15:23
	IC 700-104565/3	B081505.D	08/15/2011	15:56
	IC 700-104565/4	B081506.D	08/15/2011	16:29
	IC 700-104565/5	B081507.D	08/15/2011	17:02
	IC 700-104565/6	B081508.D	08/15/2011	17:35
	IC 700-104565/7	B081509.D	08/15/2011	18:08
	ICIS 700-104565/8	B081510.D	08/15/2011	18:41
	IC 700-104565/9	B081511.D	08/15/2011	19:13
	IC 700-104565/10	B081512.D	08/15/2011	19:45
	IC 700-104565/11	B081513.D	08/15/2011	20:17
	ICV 700-104565/12	B081514.D	08/15/2011	20:49
	LCS 700-104489/2-A	B081515.D	08/15/2011	21:21
	LCSD 700-104489/3-A	B081516.D	08/15/2011	21:53
	MB 700-104489/1-A	B081517.D	08/15/2011	22:25
0811-POSTEXL-RAWP8-L	700-60476-1	B081523.D	08/16/2011	01:36
0811-POSTEXL-RAWP8-L MS	700-60476-1 MS	B081524.D	08/16/2011	02:08
0811-POSTEXL-RAWP8-L MSD	700-60476-1 MSD	B081525.D	08/16/2011	02:40

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Sample No.: ICIS 700-104565/8 Date Analyzed: 08/15/2011 18:41
 Instrument ID: SMB GC Column: ZB-5MS ID: 0.25 (mm)
 Lab File ID (Standard): B081510.D Heated Purge: (Y/N) N
 Calibration ID: 716

	DCB		NPT		ANT	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	128685	6.17	670667	7.68	400503	9.82
UPPER LIMIT	257370	6.67	1341334	8.18	801006	10.32
LOWER LIMIT	64343	5.67	335334	7.18	200252	9.32
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 700-104565/12		118634	6.17	655948	7.68	394259 9.82
LCS 700-104489/2-A		111324	6.17	600825	7.68	396849 9.82
LCSD 700-104489/3-A		115253	6.27	598556	7.77	391583 9.91
MB 700-104489/1-A		89832	6.22	348725	7.68	266827 9.95
700-60476-1	0811-POSTEXL-RAWP8-L	130588	6.31	673761	7.80	412393 9.95
700-60476-1 MS	0811-POSTEXL-RAWP8-L MS	108249	6.18	668526	7.68	420088 9.81
700-60476-1 MSD	0811-POSTEXL-RAWP8-L MSD	106220	6.18	667702	7.68	424638 9.81

DCB = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Sample No.: ICIS 700-104565/8 Date Analyzed: 08/15/2011 18:41
 Instrument ID: SMB GC Column: ZB-5MS ID: 0.25 (mm)
 Lab File ID (Standard): B081510.D Heated Purge: (Y/N) N
 Calibration ID: 716

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		764688	11.64	843695	14.89	505007	16.70
UPPER LIMIT		1529376	12.14	1687390	15.39	1010014	17.20
LOWER LIMIT		382344	11.14	421848	14.39	252504	16.20
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 700-104565/12		723827	11.63	849933	14.89	546744	16.70
LCS 700-104489/2-A		702539	11.63	729249	14.89	446954	16.70
LCSD 700-104489/3-A		704941	11.74	741055	14.99	442970	16.83
MB 700-104489/1-A		608758	11.77	457667	14.90	311447	16.70
700-60476-1	0811-POSTEXL-RAWP8-L	767437	11.77	788359	14.91	780333	16.71
700-60476-1 MS	0811-POSTEXL-RAWP8-L MS	729195	11.64	725276	14.89	747547	16.71
700-60476-1 MSD	0811-POSTEXL-RAWP8-L MSD	734885	11.64	751593	14.89	670210	16.71

PHN = Phenanthrene-d10
 CRY = Chrysene-d12
 PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Client Sample ID: 0811-POSTEXL-RAWP8-L Lab Sample ID: 700-60476-1
 Matrix: Solid Lab File ID: B081523.D
 Analysis Method: 8270D LL Date Collected: 08/12/2011 14:20
 Extract. Method: 3550C Date Extracted: 08/14/2011 19:30
 Sample wt/vol: 30.0(g) Date Analyzed: 08/16/2011 01:36
 Con. Extract Vol.: 1.0(mL) Dilution Factor: 2
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: 25.7 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 104565 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	1100		18	7.0
205-99-2	Benzo[b]fluoranthene	3000		18	7.5
50-32-8	Benzo[a]pyrene	2300		18	8.6
56-55-3	Benzo[a]anthracene	1000		18	5.7
218-01-9	Chrysene	1300		18	5.1
53-70-3	Dibenz(a,h)anthracene	730		18	11
193-39-5	Indeno[1,2,3-cd]pyrene	1800		18	8.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	58		30-130
1718-51-0	Terphenyl-d14 (Surr)	75		30-149
321-60-8	2-Fluorobiphenyl	52		31-130

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Mobile Job No.: 700-60476-1 Analy Batch No.: 104565

SDG No.: _____

Instrument ID: SMB GC Column: ZB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/15/2011 15:23 Calibration End Date: 08/15/2011 20:17 Calibration ID: 716

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 700-104565/2	B081504.D
Level 2	IC 700-104565/3	B081505.D
Level 3	IC 700-104565/4	B081506.D
Level 4	IC 700-104565/5	B081507.D
Level 5	IC 700-104565/6	B081508.D
Level 6	IC 700-104565/7	B081509.D
Level 7	ICIS 700-104565/8	B081510.D
Level 8	IC 700-104565/9	B081511.D
Level 9	IC 700-104565/10	B081512.D
Level 10	IC 700-104565/11	B081513.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 9	LVL 5 LVL 10		B	M1	M2								
Naphthalene	1.0200 0.9745	1.0458 0.9863	1.0068 1.0162	0.9634 1.0336	0.9906 ++++	Ave		1.0041			0.1000	2.7		20.0			
2-Methylnaphthalene	0.4841 0.6679	0.5069 0.6831	0.5288 0.6862	0.5288 0.6769	0.6192 ++++	Ave		0.5980			0.1000	14.2		20.0			
1-Methylnaphthalene	0.4766 0.6502	0.5440 0.6697	0.5252 0.6765	0.5259 0.6777	0.6074 ++++	Ave		0.5948			0.1000	13.1		20.0			
Acenaphthylene	1.5014 1.8283	1.6585 1.7501	1.6862 1.7159	1.6993 1.6428	1.7888 ++++	Ave		1.6968			0.1000	5.6		20.0			
Acenaphthene	0.9580 0.9655	0.9667 0.9900	1.0737 1.0299	1.0207 1.0473	1.0069 ++++	Ave		1.0065			0.1000	4.0		20.0			
Fluorene	1.3608 1.5084	1.4480 1.4048	1.5536 1.3676	1.6283 1.3835	1.6164 ++++	Ave		1.4746			0.1000	7.2		20.0			
Phenanthrene	1.1334 1.0536	1.1421 1.1042	1.1095 1.1684	1.0626 1.2121	1.0445 ++++	Ave		1.1145			0.1000	5.0		20.0			
Anthracene	0.4674 0.7844	0.4210 0.9678	0.5111 1.0914	0.5592 1.1239	0.6418 ++++	QuaF		1.0123	-0.014					0.9988		0.9900	
Fluoranthene	0.8597 1.1335	0.8805 1.2296	0.9761 1.2828	1.0069 1.2609	1.1277 ++++	Ave		1.0842			0.1000	14.8		20.0			
Pyrene	0.7991 0.9529	0.8743 1.0897	0.8494 1.1276	0.8885 1.1402	0.8781 ++++	Ave		0.9555			0.1000	13.6		20.0			
Benzo[a]anthracene	0.8125 0.8034	0.6871 0.9564	0.6948 1.0443	0.7850 1.1081	0.8133 ++++	QuaF		1.0534	-0.017					0.9994		0.9900	
Chrysene	0.8898 0.9024	0.9773 0.9755	0.9589 0.9350	0.9533 0.9740	0.9090 ++++	Ave		0.9417			0.1000	3.6		20.0			
Benzo[b]fluoranthene	0.9503 0.8591	0.8931 0.9572	0.7854 0.9118	0.8342 1.0616	0.8655 ++++	Ave		0.9020			0.1000	9.0		20.0			

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

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Mobile Job No.: 700-60476-1 Analy Batch No.: 104565

SDG No.: _____

Instrument ID: SMB GC Column: ZB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/15/2011 15:23 Calibration End Date: 08/15/2011 20:17 Calibration ID: 716

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Benzo[k]fluoranthene	0.6812 0.7669	0.6756 0.8704	0.6989 0.8983	0.7628 0.9139	0.7720 ++++	Ave		0.7822			0.1000	11.8		20.0			
Benzo[a]pyrene	0.3642 0.4064	0.2646 0.5039	0.2526 0.5821	0.2933 0.7354	0.3254 ++++	QuaF		2.0319	-0.115						0.9992		0.9900
Indeno[1,2,3-cd]pyrene	0.9263 0.5582	0.6108 0.7386	0.5113 0.8150	0.5844 1.0309	0.5569 ++++	QuaF		1.4329	-0.056						0.9992		0.9900
Dibenz(a,h)anthracene	0.7257 0.4619	0.5339 0.6362	0.4070 0.6896	0.4958 0.8981	0.4666 ++++	QuaF		1.6940	-0.081						0.9991		0.9900
Benzo[g,h,i]perylene	0.7081 0.4365	0.4737 0.5701	0.4017 0.6680	0.4657 0.8789	0.4484 ++++	QuaF		1.7889	-0.093						0.9989		0.9900
Nitrobenzene-d5 (Surr)	0.2583 0.3566	0.3114 0.3481	0.3484 0.3543	0.3288 0.3436	0.3497 0.3648	Ave		0.3364			0.1000	9.3		20.0			
2-Fluorobiphenyl	1.6040 1.5072	1.7366 1.3682	1.6962 1.3423	1.8018 1.3389	1.6786 1.6458	Ave		1.5720			0.1000	10.9		20.0			
Terphenyl-d14 (Surr)	0.8229 0.8455	0.8795 0.8328	0.8916 0.8423	0.9473 0.8293	0.9113 1.0702	Ave		0.8873			0.1000	8.6		20.0			

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

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Mobile Job No.: 700-60476-1 Analy Batch No.: 104565

SDG No.: _____

Instrument ID: SMB GC Column: ZB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/15/2011 15:23 Calibration End Date: 08/15/2011 20:17 Calibration ID: 716

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 700-104565/2	B081504.D
Level 2	IC 700-104565/3	B081505.D
Level 3	IC 700-104565/4	B081506.D
Level 4	IC 700-104565/5	B081507.D
Level 5	IC 700-104565/6	B081508.D
Level 6	IC 700-104565/7	B081509.D
Level 7	ICIS 700-104565/8	B081510.D
Level 8	IC 700-104565/9	B081511.D
Level 9	IC 700-104565/10	B081512.D
Level 10	IC 700-104565/11	B081513.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Naphthalene	NPT	Ave	12960 658439	18662 1322956	60506 3162769	109487 6708319	236536 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
2-Methylnaphthalene	NPT	Ave	6151 451259	9045 916260	31782 2135683	60099 4393404	147845 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
1-Methylnaphthalene	NPT	Ave	6055 439285	9708 898332	31565 2105459	59768 4398653	145040 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Acenaphthylene	ANT	Ave	8659 659969	13523 1401824	47417 3315358	86736 6769576	206037 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Acenaphthene	ANT	Ave	5525 348530	7882 792982	30192 1989905	52101 4315470	115977 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Fluorene	ANT	Ave	7848 544516	11807 1125230	43689 2642260	83115 5700956	186177 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Phenanthrene	PHN	Ave	15673 826313	21334 1688763	76471 4103592	135248 8927134	292888 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Anthracene	PHN	QuaF	6463 615238	7865 1480149	35230 3833298	71173 8278035	179960 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Fluoranthene	PHN	Ave	11889 889003	16447 1880523	67278 4505395	128148 9287090	316194 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Pyrene	CRY	Ave	8557 751225	11827 1838792	50056 4618399	99026 9503341	237967 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Benzo[a]anthracene	CRY	QuaF	8700 633392	9294 1613793	40946 4277125	87485 9236113	220401 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Chrysene	CRY	Ave	9528 711392	13220 1645972	56512 3829325	106246 8118660	246334 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Benzo[b]fluoranthene	CRY	Ave	10176 677249	12081 1615126	46287 3734321	92969 8848342	234539 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Benzo[k]fluoranthene	CRY	Ave	7294 604592	9139 1468702	41187 3679306	85017 7617441	209196 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Mobile Job No.: 700-60476-1 Analy Batch No.: 104565

SDG No.: _____

Instrument ID: SMB GC Column: ZB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/15/2011 15:23 Calibration End Date: 08/15/2011 20:17 Calibration ID: 716

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Benzo[a]pyrene	CRY	QuaF	3900 320391	3579 850329	14884 2384055	32688 6129861	88174 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Indeno[1,2,3-cd]pyrene	CRY	QuaF	9919 440064	8263 1246318	30132 3337904	65131 8592608	150918 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Dibenz(a,h)anthracene	CRY	QuaF	7771 364154	7222 1073500	23989 2824330	55259 7485781	126458 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Benzo[g,h,i]perylene	CRY	QuaF	7582 344130	6408 961914	23672 2735759	51902 7325604	121512 +++++	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 +++++
Nitrobenzene-d5 (Surr)	NPT	Ave	3282 240955	5557 466880	20937 1102666	37369 2230153	83514 3451179	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 75.0
2-Fluorobiphenyl	ANT	Ave	9251 544065	14160 1095956	47697 2593562	91969 5517160	193347 8364917	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 75.0
Terphenyl-d14 (Surr)	CRY	Ave	8811 666534	11897 1405299	52547 3449661	105574 6912604	246952 11103250	0.100 5.00	0.200 10.0	0.500 20.0	1.00 40.0	2.00 75.0

Curve Type Legend:

Ave = Average ISTD

QuaF = Quadratic ISTD forced zero

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Lab Sample ID: ICV 700-104565/12 Calibration Date: 08/15/2011 20:49
 Instrument ID: SMB Calib Start Date: 08/15/2011 15:23
 GC Column: ZB-5MS ID: 0.25 (mm) Calib End Date: 08/15/2011 20:17
 Lab File ID: B081514.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.004	0.9533	0.1000	9490	10000	-2.9	30.0
2-Methylnaphthalene	Ave	0.5980	0.6651	0.1000	11100	10000	5.7	30.0
1-Methylnaphthalene	Ave	0.5948	0.7387	0.1000	12400	10000	16.6	30.0
Acenaphthylene	Ave	1.697	1.663	0.1000	9800	10000	2.0	30.0
Acenaphthene	Ave	1.007	0.9391	0.1000	9330	10000	-6.3	30.0
Fluorene	Ave	1.475	1.282	0.1000	8690	10000	11.6	30.0
Phenanthrene	Ave	1.114	1.015	0.1000	9110	10000	-5.5	30.0
Anthracene	QuaF	0.7298	0.9883	0.1000	9730	10000	-4.8	30.0
Fluoranthene	Ave	1.084	1.162	0.1000	10700	10000	13.0	30.0
Pyrene	Ave	0.9555	1.017	0.1000	10600	10000	-20.9	30.0
Benzo[a]anthracene	QuaF	0.8561	0.999	0.1000	10200	10000	-2.8	30.0
Chrysene	Ave	0.9417	0.9377	0.1000	9960	10000	-3.4	30.0
Benzo[b]fluoranthene	Ave	0.9020	0.8706	0.1000	9650	10000	3.8	30.0
Benzo[k]fluoranthene	Ave	0.7822	0.9116	0.1000	11700	10000	6.1	30.0
Benzo[a]pyrene	QuaF	0.4142	0.5920	0.1000	11200	10000	-7.2	30.0
Indeno[1,2,3-cd]pyrene	QuaF	0.7036	0.7530	0.1000	10200	10000	1.5	30.0
Dibenz(a,h)anthracene	QuaF	0.5905	0.6186	0.1000	9860	10000	-1.4	30.0
Benzo[g,h,i]perylene	QuaF	0.5612	0.5805	0.1000	9760	10000	-2.4	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3364	0.3532	0.1000	10500	10000	2.2	30.0
2-Fluorobiphenyl	Ave	1.572	1.320	0.1000	8400	10000	6.8	30.0
Terphenyl-d14 (Surr)	Ave	0.8873	0.7817	0.1000	8810	10000	-18.4	30.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 700-104489/1-A
 Matrix: Solid Lab File ID: B081517.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3550C Date Extracted: 08/14/2011 19:30
 Sample wt/vol: 30.0(g) Date Analyzed: 08/15/2011 22:25
 Con. Extract Vol.: 1.0(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 104565 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	2.6
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	2.8
50-32-8	Benzo[a]pyrene	6.7	U	6.7	3.2
56-55-3	Benzo[a]anthracene	6.7	U	6.7	2.1
218-01-9	Chrysene	6.7	U	6.7	1.9
53-70-3	Dibenz(a,h)anthracene	6.7	U	6.7	4.1
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	52		30-130
1718-51-0	Terphenyl-d14 (Surr)	103		30-149
321-60-8	2-Fluorobiphenyl	28	X	31-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 700-104489/2-A
 Matrix: Solid Lab File ID: B081515.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3550C Date Extracted: 08/14/2011 19:30
 Sample wt/vol: 30.0(g) Date Analyzed: 08/15/2011 21:21
 Con. Extract Vol.: 1.0(mL) Dilution Factor: 5
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 104565 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	751		34	13
205-99-2	Benzo[b]fluoranthene	679		34	14
50-32-8	Benzo[a]pyrene	699		34	16
56-55-3	Benzo[a]anthracene	672		34	11
218-01-9	Chrysene	685		34	9.5
53-70-3	Dibenz(a,h)anthracene	650		34	21
193-39-5	Indeno[1,2,3-cd]pyrene	665		34	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	75		30-130
1718-51-0	Terphenyl-d14 (Surr)	99		30-149
321-60-8	2-Fluorobiphenyl	67		31-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 700-104489/3-A
 Matrix: Solid Lab File ID: B081516.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3550C Date Extracted: 08/14/2011 19:30
 Sample wt/vol: 30.0(g) Date Analyzed: 08/15/2011 21:53
 Con. Extract Vol.: 1.0(mL) Dilution Factor: 5
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 104565 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	747		34	13
205-99-2	Benzo[b]fluoranthene	653		34	14
50-32-8	Benzo[a]pyrene	667		34	16
56-55-3	Benzo[a]anthracene	645		34	11
218-01-9	Chrysene	707		34	9.5
53-70-3	Dibenz(a,h)anthracene	614		34	21
193-39-5	Indeno[1,2,3-cd]pyrene	615		34	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	73		30-130
1718-51-0	Terphenyl-d14 (Surr)	96		30-149
321-60-8	2-Fluorobiphenyl	64		31-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Client Sample ID: 0811-POSTEXL-RAWP8-L MS Lab Sample ID: 700-60476-1 MS
 Matrix: Solid Lab File ID: B081524.D
 Analysis Method: 8270D LL Date Collected: 08/12/2011 14:20
 Extract. Method: 3550C Date Extracted: 08/14/2011 19:30
 Sample wt/vol: 30.0(g) Date Analyzed: 08/16/2011 02:08
 Con. Extract Vol.: 1.0(mL) Dilution Factor: 5
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: 25.7 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 104565 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	3190		45	18
205-99-2	Benzo[b]fluoranthene	5650		45	19
50-32-8	Benzo[a]pyrene	5300		45	22
56-55-3	Benzo[a]anthracene	2720		45	14
218-01-9	Chrysene	3090		45	13
53-70-3	Dibenz(a,h)anthracene	2610		45	28
193-39-5	Indeno[1,2,3-cd]pyrene	4260		45	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	77		30-130
1718-51-0	Terphenyl-d14 (Surr)	115		30-149
321-60-8	2-Fluorobiphenyl	74		31-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Mobile Job No.: 700-60476-1
 SDG No.: _____
 Client Sample ID: 0811-POSTEXL-RAWP8-L MSD Lab Sample ID: 700-60476-1 MSD
 Matrix: Solid Lab File ID: B081525.D
 Analysis Method: 8270D LL Date Collected: 08/12/2011 14:20
 Extract. Method: 3550C Date Extracted: 08/14/2011 19:30
 Sample wt/vol: 30.0(g) Date Analyzed: 08/16/2011 02:40
 Con. Extract Vol.: 1.0(mL) Dilution Factor: 5
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: 25.7 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 104565 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
207-08-9	Benzo[k]fluoranthene	1720		45	18
205-99-2	Benzo[b]fluoranthene	2980		45	19
50-32-8	Benzo[a]pyrene	2960		45	22
56-55-3	Benzo[a]anthracene	1570		45	14
218-01-9	Chrysene	1780		45	13
53-70-3	Dibenz(a,h)anthracene	1390		45	28
193-39-5	Indeno[1,2,3-cd]pyrene	2420		45	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	53		30-130
1718-51-0	Terphenyl-d14 (Surr)	68		30-149
321-60-8	2-Fluorobiphenyl	45		31-130

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica MobileJob No.: 700-60476-1

SDG No.: _____

Instrument ID: SMBStart Date: 08/15/2011 14:30Analysis Batch Number: 104565End Date: 08/16/2011 02:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 700-104565/1		08/15/2011 14:30	1	B081502.D	ZB-5MS 0.25 (mm)
IC 700-104565/2		08/15/2011 15:23	1	B081504.D	ZB-5MS 0.25 (mm)
IC 700-104565/3		08/15/2011 15:56	1	B081505.D	ZB-5MS 0.25 (mm)
IC 700-104565/4		08/15/2011 16:29	1	B081506.D	ZB-5MS 0.25 (mm)
IC 700-104565/5		08/15/2011 17:02	1	B081507.D	ZB-5MS 0.25 (mm)
IC 700-104565/6		08/15/2011 17:35	1	B081508.D	ZB-5MS 0.25 (mm)
IC 700-104565/7		08/15/2011 18:08	1	B081509.D	ZB-5MS 0.25 (mm)
ICIS 700-104565/8		08/15/2011 18:41	1	B081510.D	ZB-5MS 0.25 (mm)
IC 700-104565/9		08/15/2011 19:13	1	B081511.D	ZB-5MS 0.25 (mm)
IC 700-104565/10		08/15/2011 19:45	1	B081512.D	ZB-5MS 0.25 (mm)
IC 700-104565/11		08/15/2011 20:17	1	B081513.D	ZB-5MS 0.25 (mm)
ICV 700-104565/12		08/15/2011 20:49	1	B081514.D	ZB-5MS 0.25 (mm)
LCS 700-104489/2-A		08/15/2011 21:21	5	B081515.D	ZB-5MS 0.25 (mm)
LCSD 700-104489/3-A		08/15/2011 21:53	5	B081516.D	ZB-5MS 0.25 (mm)
MB 700-104489/1-A		08/15/2011 22:25	1	B081517.D	ZB-5MS 0.25 (mm)
ZZZZZ		08/15/2011 22:57	1		ZB-5MS 0.25 (mm)
ZZZZZ		08/15/2011 23:29	5		ZB-5MS 0.25 (mm)
ZZZZZ		08/16/2011 00:01	5		ZB-5MS 0.25 (mm)
ZZZZZ		08/16/2011 00:33	1		ZB-5MS 0.25 (mm)
700-60476-1	0811-POSTEXL-RAWP8-L	08/16/2011 01:36	2	B081523.D	ZB-5MS 0.25 (mm)
700-60476-1 MS	0811-POSTEXL-RAWP8-L MS	08/16/2011 02:08	5	B081524.D	ZB-5MS 0.25 (mm)
700-60476-1 MSD	0811-POSTEXL-RAWP8-L MSD	08/16/2011 02:40	5	B081525.D	ZB-5MS 0.25 (mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Mobile Job No.: 700-60476-1

SDG No.: _____

Batch Number: 104489 Batch Start Date: 08/14/11 19:30 Batch Analyst: Var, TevichBatch Method: 3550C Batch End Date: 08/15/11 08:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	smbasespk 00036	swsurrogat 00052		
MB 700-104489/1		3550C, 8270D LL		30.0 g	1.0 mL		1 mL		
LCS 700-104489/2		3550C, 8270D LL		30.0 g	1.0 mL	1 mL	1 mL		
LCSD 700-104489/3		3550C, 8270D LL		30.0 g	1.0 mL	1 mL	1 mL		
700-60476-A-1	0811-POSTEXL-RAW P8-L	3550C, 8270D LL	T	30.0 g	1.0 mL		1 mL		
700-60476-A-1 MS	0811-POSTEXL-RAW P8-L	3550C, 8270D LL	T	30.0 g	1.0 mL	2 mL	1 mL		
700-60476-A-1 MSD	0811-POSTEXL-RAW P8-L	3550C, 8270D LL	T	30.0 g	1.0 mL	1 mL	1 mL		

Batch Notes	
Balance ID	FX-2000i
Batch Comment	Acetone NEXTC1-4-3
Blank Soil Lot Number	NEXTC1-8-8 08/10/11
Concentration End Time	0800
Concentration Start Time	0700
Person's name who did the concentration	ST
Na2SO4 Lot Number	NEXTC1-8-8 08/10/11
Prep Solvent Lot #	NEXTC1-9-9
Prep Solvent Name	Methylene Chloride
Prep Solvent Volume Used	300 mL
Vendor of Reagent used	JT Baker
Water Bath ID	TV 1,5,6,7
Water Bath Temperature	40 Degrees C

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Mobile Job Number: 700-60476-1

SDG No.: _____

Project: Walter Coke RAWP

Client Sample ID
0811-POSTEXL-RAWP8-L

Lab Sample ID
700-60476-1

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Mobile Job Number: 700-60476-1
SDG Number: _____
Matrix: Solid Instrument ID: BALANCE1
Method: Moisture RL Date: 01/01/2005 14:21

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Mobile Job No.: 700-60476-1

SDG No.: _____

Instrument ID: BALANCE1 Method: Moisture

Start Date: 08/15/2011 10:52 End Date: 08/15/2011 10:52

Lab Sample ID	D / F	T y p e	Time	Analytes																	
				% S o l	M o i s t																
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
ZZZZZZ			10:52																		
700-60476-1	1	T	10:52	X	X																
700-60476-1 DU	1	T	10:52	X	X																

Prep Types
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Mobile Job No.: 700-60476-1

SDG No.: _____

Batch Number: 104515 Batch Start Date: 08/15/11 10:52 Batch Analyst: Nguyen, Tiffany KBatch Method: Moisture Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
700-60476-B-1	0811-POSTEXL-RAW P8-L	Moisture	T	001.2754 g	011.2879 g	008.7130 g			
700-60476-B-1 DU	0811-POSTEXL-RAW P8-L	Moisture	T	001.2747 g	011.2876 g	008.7572 g			

Batch Notes	
Balance ID	GR300 No Unit
Date samples were placed in the oven	08/15/2011
Oven Temp when samples are put in oven	105 C Degrees C
Time samples were place in the oven	1145
Date samples were removed from oven	08/15/2011
Oven Temp when samples removed from oven	105 C Degrees C
Time Samples were removed from oven	1830
Oven ID	04
ID number of the thermometer	GE0246A

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Login Number: 60476

List Source: TestAmerica Mobile

List Number: 1

Creator: Hughes, Nicky C

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0 C (5592)
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	