WALTER ENERGY
WALTER COKE

Walter Coke, Inc.
3500 35th Avenue North
Birmingham, Alabama 35207

www.walterenergy.com

August 19, 2011

Jeffrey T. Pallas, Chief
Restoration and Underground Storage Tank Branch
U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, S.W.
Atlanta, GA 30303-8960

Subject: Walter Coke, Inc., Birmingham, AL
EPA ID No. ALD 000 828 848
Residential Soil Remedial Action Work Plan (June 2011)
Progress Report #2 – August 19, 2011

Dear Mr. Pallas:

Attached is Progress Report # 2 for August 19, 2011, specified by the *Residential Soil Remedial Action Work Plan (RAWP)-Phase 1*, approved by EPA in June 2011. As mentioned in our July progress report, despite significant effort Walter Coke has not been able to obtain access to all 23 properties, and appreciates EPA's assistance during the last reporting period in obtaining access to one property. We currently have clear access to 8 properties, and to date have completed or are well under way with remediation of 5 of these 8 properties.

We had previously asked EPA to complete the progress chart indicating its concurrence with tasks completed to date, but so far we have received no such concurrence. We would appreciate your looking into this issue for us.

If you have any questions, please call me at (205) 808-7972.

Sincerely,

Don Wiggins

enc:

Residential Soil Remedial Action Work Plan (RAWP)
Progress Report #2 – August 19, 2011

Walter Coke, Inc., Birmingham, Alabama
EPA ID No. ALD 000 828 848

1. **A description of the work completed during the reporting period**

Table 1 provides an update of the RAWP scheduled activities and our progress toward completion. Work activities consisted of the following:

- Obtaining access agreements – the details of the efforts to obtain access agreements for the 23 properties are provided in Table 2. A summary follows:
  - Per Progress Report #1, EPA offered to assist Walter Coke with those properties for which Walter Coke was unsuccessful in obtaining access. EPA has been able to obtain access for one of these properties (ID 11), and also has obtained information to contact the owner of ID 20. The remaining properties that EPA is assisting with include 3 properties (IDs 3, 15, 17) whose owners have specifically declined access or are undecided with no reason being given, and property ID 13, which despite repeated attempts, contact with the owner has yet to be made.
  - To date, signed and cleared access agreements have been obtained for a total of 8 properties; this total now includes the named plaintiff (ID 22) in the filed toxic tort class action against Walter Coke following the owners' consent through her legal counsel, as well as ID 11 for which EPA was able to obtain access.
  - 10 properties are on hold per instruction from the Hare Wynn law firm. This law firm represents these, and other, owners and has requested that any soil removal be delayed until the law firm completes its own sampling of the properties. The law firm indicated it expected to complete its sampling by August 31, 2011, but Walter Coke has received no update from the law firm. Walter Coke will not be able to perform soil removals at these properties until notified by the law firm. Note that, before being notified of their representation by this law firm, 5 of the 10 property owners had already given Walter Coke signed access agreements, but these 5 agreements are on hold pending the law firm's completion of sampling. Walter Coke has requested that the Hare Wynn law firm provide signed access agreements for the remaining 5 properties.
- Conducting initial property inspections, once signed access was obtained – 6 property inspections were completed this reporting period; a total of 11 inspections completed to date (see Table 2 for specifics).
- Analytical results of the backfill source were obtained on July 20 (preliminary data package); final data package obtained on August 3. The source was confirmed suitable for use as backfill.
- ADEM Waste Certification # SW-073113-0053, for disposal of excavated soils from various yards and gardens near the Walter Coke facility, was obtained July 27, 2011.

- Remediation began on August 2, 2011, and proceeded as follows:
  - **Property No. 12** was excavated August 2-3, backfill was completed August 3-4, and landscaping/sod work was completed August 4. The mailbox was cemented back in place and the post-inspection walk-thru was conducted with the owner/resident on August 5. The owner/resident was happy with the work done, and signed off on the post inspection report with no additional requests or comments.
  - Excavation and backfill (with topsoil) at the Garden at **Property No. 6** was completed August 4. Slag, iron, and coke fragments were found in excavated soil at Property No. 6; fragments (some baseball-sized) were catalogued. On August 5, the post-inspection was conducted; the owner/resident was happy with the work, and signed off on the post inspection report with no additional requests or comments.
  - On August 3, in preparation for excavation, the large tree at **Property No. 19** was cut down and the stump removed by the tree service hired by Walter Coke. Owner was very happy with result. Excavation was completed August 5-9. Approximately 25% of the excavated material at Property No. 19 contained what appeared to be construction debris (roofing tar, asphalt, bricks, etc.), slag, tires, bottles, iron fragments, concrete pilings, and a drum bottom. Backfill was completed August 9-10; sod work was completed on August 11. On August 18, the post-inspection was conducted; the owner/resident was happy with the work, and signed off on the post inspection report with no additional requests or comments.
  - Excavation and backfill of **Property No. 8** was completed August 11-17. After excavation of the left yard, a post-excavation sample was collected on August 12 per the approved RAWP, and submitted to the lab for quick turnaround analysis. A copy of the analytical results for this confirmation sampling event is enclosed. The results indicate that the BaP TEQ concentration in the excavation area composite sample was 3.6 mg/kg which exceeds the cleanup level of 1.5 mg/kg. Pursuant to the RAWP, therefore, an additional 1 foot of soil was removed from the left yard on August 17. Backfill and sod work were completed on August 18. Following replacement of the driveway, the post-excavation inspection will be scheduled.
  - Excavation of **Property No. 10** was initiated on August 18.

2. Summary of problems or potential problems encountered during the reporting period

- After obtaining access to Property ID 7, and completing the initial property inspection and utility clearance, Walter Coke was notified by the owner that he is now represented by the Hare Wynn law firm. Therefore, 10 properties are now on hold per instruction from the Hare Wynn law firm. Of these 10 properties, Walter Coke had already obtained access to 4, which access is now on hold pending further instructions from the Hare Wynn law firm.
- Property IDs 3, 15, and 17 have either denied access or are undecided at this time – these properties were identified for EPA assistance.

- To our knowledge, despite multiple attempts, contact has not yet been made with the owner of Property IDs 13 – refer to Table 2; this property is unrelated to the Hare Wynn law firm.
- During excavation of Property IDs 6 and 19, the excavated soil contained construction debris (roofing tar, asphalt, bricks, etc.), slag, iron, and coke fragments, tires, bottles, concrete piling, and a drum bottom – several of these materials represent potential sources of PAH and arsenic contamination unrelated to any air deposition.

3. Actions being taken to rectify problems

- EPA was able to assist with access at one property (ID 11), and has obtained contact information for property ID 20.
- Walter Coke will maintain contact with the Hare Wynn law firm for their assistance in obtaining access at the 5 properties whose owners they represent, for which the owner had not previously granted access (IDs 1, 5, 14, 16, and 23), and to encourage the law firm to complete as soon as possible its testing of the properties included in the RAWP so that the RAWP schedule is not adversely affected. Despite multiple requests, the Hare Wynn law firm has not advised Walter Coke of its schedule.
- Walter Coke has completed its best efforts to obtain access to the remaining 4 properties (IDs 3, 13, 15, 17). Walter Coke assumes EPA will notify it of any efforts it chooses to make with the owners of these properties for access.

4. Changes in personnel involved with RAWP implementation during the reporting period

No changes noted.

5. Projected work for the next reporting period

Continue with initial property inspections, site preparation, utility clearance, and remediation, on those properties for which Walter Coke or EPA has obtained access.

Although each property is unique and the volume of soil removal required has varied, the field time to complete inspections, site preparation, soil removal, soil replacement, and landscaping repairs/replacement has ranged between 3 to 9 days per property. Using 5 as the average number of days it takes complete the RAWP work at each property based on actual field experience to date, and assuming access is obtained to the remaining RAWP properties, completing the work for the 23 RAWP properties will require 115 business days, or 23 weeks. Applying this time period to the schedule results in the completion of the RAWP field work well after November 4, 2011 - the date specified by EPA in the RAWP schedule. Walter Coke is not aware of any means by which to expedite the actual field work, but will continually look for ways to do so, without sacrificing safety or the quality of the field work.

Although Walter Coke hopes that the remaining properties scheduled for soil replacement can be completed more timely and that the RAWP schedule will not be delayed, Walter Coke is advising EPA now of this issue, and will notify EPA through these progress reports of any other delays or schedule implications.

TABLE 1
Schedule Status and EPA Concurrence
Residential Soil Remedial Action Work Plan, Walter Coke, Inc., Birmingham, Alabama

Item	Due	Status/Completed	Completed	EPA Concurrence
Initiate Preparation Activities	June 27	Completed	June 27	
Distribute Community Flyer	July 1	Completed	July 1 (mailed)	
Submit to EPA HSP	July 15	Completed	July 15	
Submit to EPA CIP	July 15	Completed	July 15	
Complete Preparation Activities listed next:				
Obtain Consents to Access	July 22	In progress – refer to Table 2		
Obtain ADEM Waste Disposal Approval	July 22	Completed	July 27	
Confirm backfill source availability, suitability	July 22	Completed	July 20	
Utility Locate (ongoing as work progresses)	July 22	Initiated on July 26; On-going as work progresses		
Mobilize Contractor and Initiate Site Preparation	Aug 1	Completed	August 1	
Progress Report #1	July 15	Completed	July 15	
Progress Report #2	Aug 19	Completed	August 19	
Progress Report #3	Sept 16			
Progress Report #4	Oct 14			
Complete Excavation and Disposal, De-Mobilize	Nov 4	*Notice – based on the actual field time required per property to date, this deadline may not be achievable if all 23 properties grant access for removal. Walter Coke will provide EPA with schedule updates through the progress reporting process.*		
Progress Report #5	Nov 11			
Submit to EPA Draft of Final Report	Nov 28			
Submit to EPA Final Report	Jan 6			
Community Meeting	Jan 19			

Table 2. Progress Update Summary Table - August 19, 2011

Residential Soil Remedial Action Work Plan; Walter Coke, Inc. Birmingham, Alabama

RAWP Property ID	Address	Access Packet Sent	Certified Receipt	Access Agreements	Occupant	EPA Access Support - Comments	Property Inspection	Excavation Order	Excavation Complete	Backfill Complete	Landscaping Complete
Harriman Park											
1	4509 37th St. N.	✓	Unclaimed	7/12: 1250 - No answer; 7/12: 1750 - owner will not sign at this time, will talk to siblings; 7/14: 1705 - notified by daughter that owner is in the hospital; 7/18: 0900 - No answer	owner	Hare Wynn law firm (delay)					
2	3637 44th Ave. N	✓	✓	7/12: 0920 - Return after 5pm; 7/12: 1730 - talked to owners, need time to read packet; 7/14: 1710 - Access granted; 7/15: 0900 - Owner called D. Wiggins to rescind access "in light of information received" (information unknown)	owner	Agreement signed, but on hold per Hare Wynn law firm					
3	3669 43rd Ave. N.	✓	✓	7/12: 0910 - resident/part owner gave access then contacted D. Wiggins to inform him that sister co-owns property and denied access; original access rescinded	part owner	EPA to assist with access per July 21 conference call					
4	3554 41st Ave. N	✓	Unclaimed	7/12: 0900 - Access granted	owner	Agreement signed, but on hold per Hare Wynn law firm	Completed 7/14: 0830-0930				
Collegeville											
5	4024 FL Shuttlesworth Dr.	✓	Unclaimed	7/11: 1450 - No answer; 7/12: 0840 - packet given to adult daughter. Will give to father (owner); 7/14: 1653 - friend of daughter says she is at work 7/18: 0842 - No car is on the property	daughter of owner	Hare Wynn law firm (delay)					
6	3472 33rd St. N	✓	✓	7/11: 1345 - Access granted	owner	---------->	Completed 7/12: 1730 - 1830	2	✓ (8/4)	✓ (8/4)	NA (Garden)
7	3144 34th Terrace Pl. N.	✓	✓	7/11: 1320 - No answer; 7/11: 1735 - Access granted	owner	Agreement signed, but on hold per Hare Wynn law firm	Completed 7/18: 1030-1100				
8	3145 34th Terrace Pl N	✓	✓	7/11: 1311 - Access granted	owner	---------->	Completed 7/26: 1200-1300	4	✓ (8/17)	✓ (8/17)	✓ (8/18)
9	3137 34th Terrace Pl. N.	✓	✓	7/11: 1325 - owner to decide 7/12; 7/13 - Access granted via return mail	owner	---------->	Completed 8/17: 1400-1445	6			
10	3460 31st Way N	✓	Unclaimed	7/11: 1335 - No answer; 7/11: 1725 - Access granted by rentor - owner contact info obtained 7/14: 1525 - Talked to owner via phone 7/14: 1630 - Met with owner - access granted by owner	rentor	---------->	Completed 8/2: 1350-1430	5			
11	3145 34th Ct. N.	✓	✓	7/11: 1400 - No answer; 7/12: 0830 - No answer, 7/14: 1106 - No answer, no evidence of resident present 8/1: EPA met with resident/owner - access granted	unknown (EPA visit)	---------->	Completed 8/9: 1030-1110	7			
12	3389 33rd St. N.	✓	✓	7/11: 1405 - Access granted	owner	---------->	Completed 7/15: 0845 - 0930	1	✓ (8/3)	✓ (8/4)	✓ (8/4)
13	3409 31st Way N.	✓	Unclaimed	7/11: 1352 - No answer; 7/11: 1718 - No answer; 7/12: 1810 - No answer, appears no one is getting mail 7/14: 1103 - No answer, still old mail in box		EPA to assist with access per July 21 conference call					
14	3441 31st St N	✓	✓	7/11: 1240 - denied access	owner	Hare Wynn law firm (delay)					
15	3452 30th Way N	✓	✓	7/11: 1245 - No answer - told by owner's stated temporary caretaker (driving by) that owner is staying with her (elsewhere) and will not provide access 7/11: 1750 - Visited property again to see if owner might be home - no answer	owner	EPA to assist with access per July 21 conference call					

Highlights notes: Gray - remediation complete or in progress. Green - access granted, pending remediation. Yellow - Hare Wynn delay. No highlight - access process in-progress with EPA assistance.

Table 2. Progress Update Summary Table - August 19, 2011

Residential Soil Remedial Action Work Plan; Walter Coke, Inc. Birmingham, Alabama

RAWP Property ID	Address	Access Packet Sent	Certified Receipt	Access Agreements	Occupant	EPA Access Support - Comments	Property Inspection	Excavation Order	Excavation Complete	Backfill Complete	Landscaping Complete
16	3456 30th Way N.	✓	✓	7/11: 1250 - met resident who will contact owner (cousin) & call D. Wiggins; 7/14: 1635 - resident not home, owner nearby stated that he will sign if resident (cousin) signs 7/18: 0842 - Clairified ownership with resident, owner is Sanford Wright - Dwight Wright was contacted on 7/14, he was referring to brother's approval, not resident's approval (cousin). According to resident, Sanford Wright will not sign - resident stated that they were contacted by an attoney who is asking the resident/owners not to allow Walter Coke to "remove the evidence".	rentor	Hare Wynn law firm (delay)					
17	3347 30th Pl. N	✓	✓	7/11: 1300 - notified a decision had not been made - asked to return Tu-Fr, 9-1; 7/12: 1150 - No answer 7/14: 1040 - met owner (Pastor), no decision until legal advice	owner	EPA to assist with access per July 21 conference call					
18	3361 31st St N.	✓	✓	7/11: 1230 - No answer; 7/11: 1755 - Access granted	owner	Agreement signed, but on hold per Hare Wynn law firm					
19	3377 33rd Pl. N	✓	✓	7/11: 1420 - Access granted	owner	---------->	Completed 7/12: 0900-1100	3	✓ (8/9)	✓ (8/10)	✓ (8/11)
20	3369 33rd Pl. N.	✓	Unclaimed	7/11: 1415 - No answer; 7/11: 1800 - No answer; 7/14: 1111 - No answer, powerlines cut, no meters (photo) 7/18: EPA has obtained owner contact information		EPA to assist with access per July 21 conference call					
21	3364 34th St. N	✓	Unclaimed	7/11: 1440 - Access granted	owner	Agreement signed, but on hold per Hare Wynn law firm	Completed 7/12: 1300-1500				
22	3360 34th St. N.	✓	✓	Listed plaintiff in pending law suit; access provided through her lawyer	owner	---------->	Completed 8/17: 1100-1200				
23	3348 34th St. N	✓	✓	7/11: 1435 - No answer; 7/11: 1810 - No answer; 7/12: 1800 - No answer; 7/14: 1117 - Daughter home, Son (Alfonso McClaney) has POA and denies access	owner	Hare Wynn law firm (delay)					

Highlights notes: Gray - remediation complete or in progress. Green - access granted, pending remediation. Yellow - Hare Wynn delay. No highlight - access process in-progress with EPA assistance.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

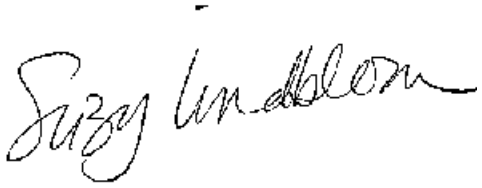
ANALYTICAL REPORT

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).

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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

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

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

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	Analysis Batch:	700-104565	Instrument ID:	SMB
Client Matrix:	Solid	Prep Batch:	700-104489	Lab File ID:	B081517.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	08/15/2011 2225	Units:	ug/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	08/14/2011 1930			Injection Volume:	1 uL
Leach Date:	N/A				

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

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	Analysis Batch:	700-104565	Instrument ID:	SMB
Client Matrix:	Solid	Prep Batch:	700-104489	Lab File ID:	B081515.D
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	08/15/2011 2121	Units:	ug/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	08/14/2011 1930			Injection Volume:	1 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 700-104489/3-A	Analysis Batch:	700-104565	Instrument ID:	SMB
Client Matrix:	Solid	Prep Batch:	700-104489	Lab File ID:	B081516.D
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	08/15/2011 2153	Units:	ug/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	08/14/2011 1930			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
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	Units:	ug/Kg	LCSD Lab Sample ID:	LCSD 700-104489/3-A
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	5.0			Dilution:	5.0
Analysis Date:	08/15/2011 2121			Analysis Date:	08/15/2011 2153
Prep Date:	08/14/2011 1930			Prep Date:	08/14/2011 1930
Leach Date:	N/A			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

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				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
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

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	MSD Lab Sample ID:	700-60476-1	
Client Matrix:	Solid		Client Matrix:	Solid	
Dilution:	5.0		Dilution:	5.0	
Analysis Date:	08/16/2011 0208		Analysis Date:	08/16/2011 0240	
Prep Date:	08/14/2011 1930		Prep Date:	08/14/2011 1930	
Leach Date:	N/A		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

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

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

Report Basis
T = Total

General Chemistry

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
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

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

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	QC LIMITS 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 8270D LL

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	QC LIMITS 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 III 8270D LL

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 = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D LL

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 = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D LL

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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
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 Mobile Job No.: 700-60476-1

SDG No.:

Instrument ID: SMB Start Date: 08/15/2011 14:30

Analysis Batch Number: 104565 End 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, Tevich

Batch 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	Lab Sample ID
0811-POSTEXL-RAWP8-L	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	

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	Type	Time	Analytes: %Sol	Moist																		
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 K

Batch 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

Serial Number

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Mobile

TA Mobile
900 Lakeside Drive
Mobile, AL 36693
www.testamericainc.com
Phone: (251) 666-6633
Fax: (251) 666-6696

Alternate Laboratory Name/Location:
Phone:
Fax:

TAL-8240 (1007)

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Walter Coke-RAWP		
(LAB) PROJECT MANAGER	P. O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
CLIENT NAME	CLIENT EMAIL	
Kaye Walker	KayeWalker@CH2M.com	
CLIENT ADDRESS		
COMPANY CONTRACTING THIS WORK (if applicable)	SAMPLER'S SIGNATURE	
CH2MHILL	J. Adrian Dale	

PAGE 1 OF 1

STANDARD REPORT DELIVERY ○
DATE DUE
EXPEDITED REPORT DELIVERY (SURCHARGE) 24HR X
DATE DUE 8/15

NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 1

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT...)	REQUIRED ANALYSES: 8270D-SIM TCL	8270D LL PAH	8151A Best/PCB/Herb	PRESERVATIVE	NUMBER OF CONTAINERS SUBMITTED	REMARKS
								4°C	4°C	4°C			
8/12/11	1420	0811-POSTEXC-RAWP8-L	C		S							2 2 2	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS			J. Adrian Dale	8/12/11	1700			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS								

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	LOG NO.	LABORATORY REMARKS:
	8/13/11	9:00	YES ○ NO ○		700-60476	2.0°C (5592)

Original - Return to Laboratory with Sample(s)

08/16/2011

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 700-60476-1

Login Number: 60476
List Number: 1
Creator: Hughes, Nicky C

List Source: TestAmerica Mobile

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	