Appendix E

Air Monitoring Reports

Northeast Drainage Ditch Removal Action
Hattiesburg, Mississippi

DAVID

October 22, 2003

Mr. Richard Ellis
Singley Construction Company, Inc.
P.O. Box 389
Columbia, Mississippi 39429

Re: EarthCon Project No. S149.001
Ambient Air Monitoring and Sampling
September 10-22, 2003
Kerr McGee Creosote Site
Hattiesburg, Mississippi

Dear Mr. Ellis:

This report summarizes ambient air monitoring and sampling activities conducted by Earth Consulting Group, Inc. (EarthCon) at the above-referenced location from September 10 through September 22, 2003. The ambient air monitoring and sampling activities were conducted by Matthew Courtney and Michael Scarbrough, EarthCon Air Monitoring Technicians, with oversight provided by W. Hal Moore, EarthCon Senior Project Manager. Air monitoring and sampling was conducted to quantify and document ambient air concentrations of Coal Tar Pitch Volatiles (CTPV) in and near the work area during excavation of creosote-contaminated soil from an intermittent stream (storm water drainage ditch).

The main chemicals of concern in CTPVs are polycyclic aromatic hydrocarbons (PAHs), which are also known as polynuclear aromatic hydrocarbons (PNAs). Possible health hazards associated with PAH exposure include cancer, skin problems, immunodeficiency, and reproductive difficulties for both the exposed and their offspring. More than 100 different chemicals are compiled into the general category of polycyclic aromatic hydrocarbons, including benzo[a]pyrene and dibenz[a]anthracene, which are known to cause cancer, and pyrene, acridine, chrysene, phenanthrene, and anthracene. The U.S. Department of Labor Occupational Safety & Health Administration (OSHA) has not established a substance-specific standard for occupational exposure to CTPVs. Exposures are regulated under OSHA's Air Contaminants Standard.

4110 Westside Drive
Tupelo, Mississippi 38801
(662) 840-3728 Fax: (662) 844-9666

110 Weisenberger Road
Post Office Box 1246
Madison, Mississippi 39130
(601) 853-2134 Fax: (601) 856-3978

404 Ferrill Avenue
Post Office Box 29
Quitman, Mississippi 39355
(601) 776-4504 Fax: (775) 242-6650

The following table presents exposure limits established for CTPVs and related substances:

Substance	OSHA PEL	NIOSH REL	ACGIH TLV
CTPVs	0.2 mg/m^3 (benzene-soluble fraction)	0.1 mg/m^3 (cyclohexane-extractable fraction)	0.2 mg/m^3 (benzene-soluble fraction)
PAHs	0.2 mg/m^3	0.1 mg/m^3 (10 hour exposure)	*not established*

Note: Values are for an 8 hour time-weighted-average (TWA) exposure, except for the NIOSH REL for PAHs, which is based on a 10 hour TWA exposure.

Summary of Field Activity

EarthCon provided ambient air monitoring during mobilization, start-up, and excavation activities using a Thermo Environmental Instruments, Inc. Model 680 Portable Hydrocarbon Vapor Meter, which utilizes a flame ionization detector (FID), and a Thermo Environmental Instruments, Inc. Model 580B Organic Vapor Meter (OVM). A summary of the direct readings and locations is included in Appendix A.

EarthCon also collected two (2) air samples per day at selected locations near the active excavation areas utilizing Gilian BDX II air sampling pumps. The pumps were initially calibrated to 2 Liters/minute (LPM) using a mini-Buck Primary Flow Calibrator and then calibrated prior to each use using a low-flow rotameter that was also calibrated to the mini-Buck Primary Flow Calibrator. The air samples were collected by drawing known amounts of air through cassettes containing glass fiber filters (GFF). The filters were shipped to Entek Environmental Laboratories, Inc., Baton Rouge, Louisiana, to be analyzed for CTPVs by OSHA Method 58. According to OSHA Method 58, the filters are analyzed by extracting with benzene and gravimetrically determining the benzene-soluble fraction (BSF). If the BSF exceeds the appropriate PEL (0.2 mg/m^3), then the sample is analyzed by high performance liquid chromatography (HPLC) with a fluorescence (µL) or ultraviolet (UV) detector to determine the presence of selected polynuclear aromatic hydrocarbons PAHs.

The following Table summarizes the analytical results of the air samples collected and analyzed during excavation activities occurring September 10 through September 22, 2003. Please refer to the attached Site Location Map and Site Plan for sampling locations, and Appendix B for laboratory reports.

TABLE
SUMMARY OF ANALYTICAL RESULTS
KERR MCGEE CREOSOTE SITE
HATTIESBURG, MISSISSIPPI

Sample No.	Date	Benzene-soluble Fraction (mg/m^3)	OSHA PEL (mg/m^3)
91501	09/15/03	0.02	0.2
91502	09/15/03	0.02	0.2
91601	09/16/03	0.01	0.2
91602	09/16/03	0.01	0.2
91701	09/17/03	0.02	0.2
91702	09/17/03	0.03	0.2
91801	09/18/03	0.02	0.2
91802	09/18/03	0.04	0.2
91901	09/19/03	0.02	0.2
91902	09/19/03	0.01	0.2

Discussion of Results

All of the air sample results were well below the OSHA PEL for BSF of 0.2 mg/m^3. Based on a review of the air sample analytical results and direct readings collected in and around the excavated areas, workers in areas were not exposed to CTPVs in excess of regulatory limits.

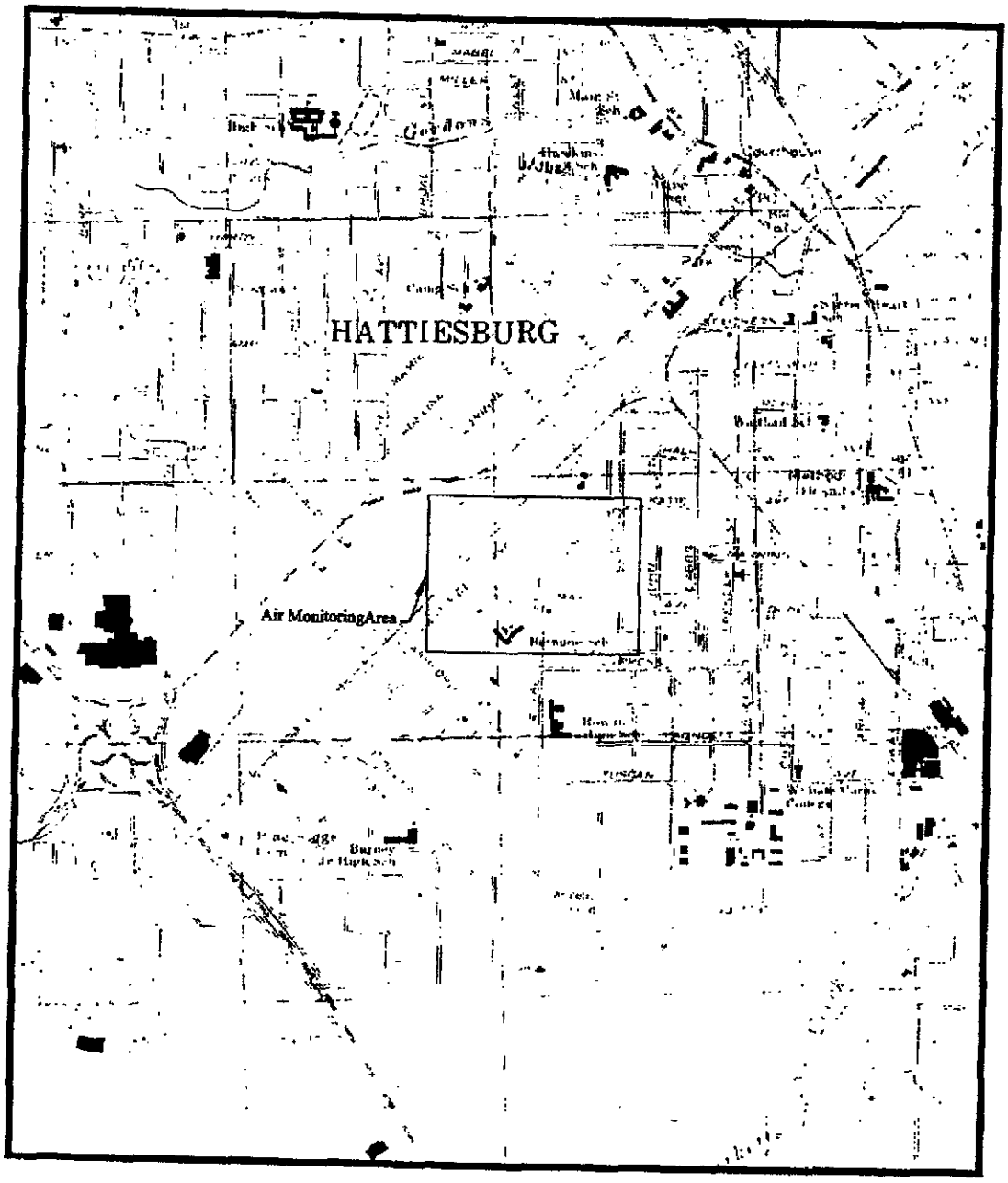
Should you have any questions concerning the contents of this report, please contact us at your convenience at (601) 853-2134. EarthCon appreciates the opportunity to provide you with environmental consulting services.

Sincerely,

Earth Consulting Group, Inc.

Kirk L. Giessinger
Certified Indoor Air Quality Consultant

Attachments



SOURCE: USGS 7.5' MAP - HATTIESBURG QUADRANGLE - 1996

Forrest County

EarthCon

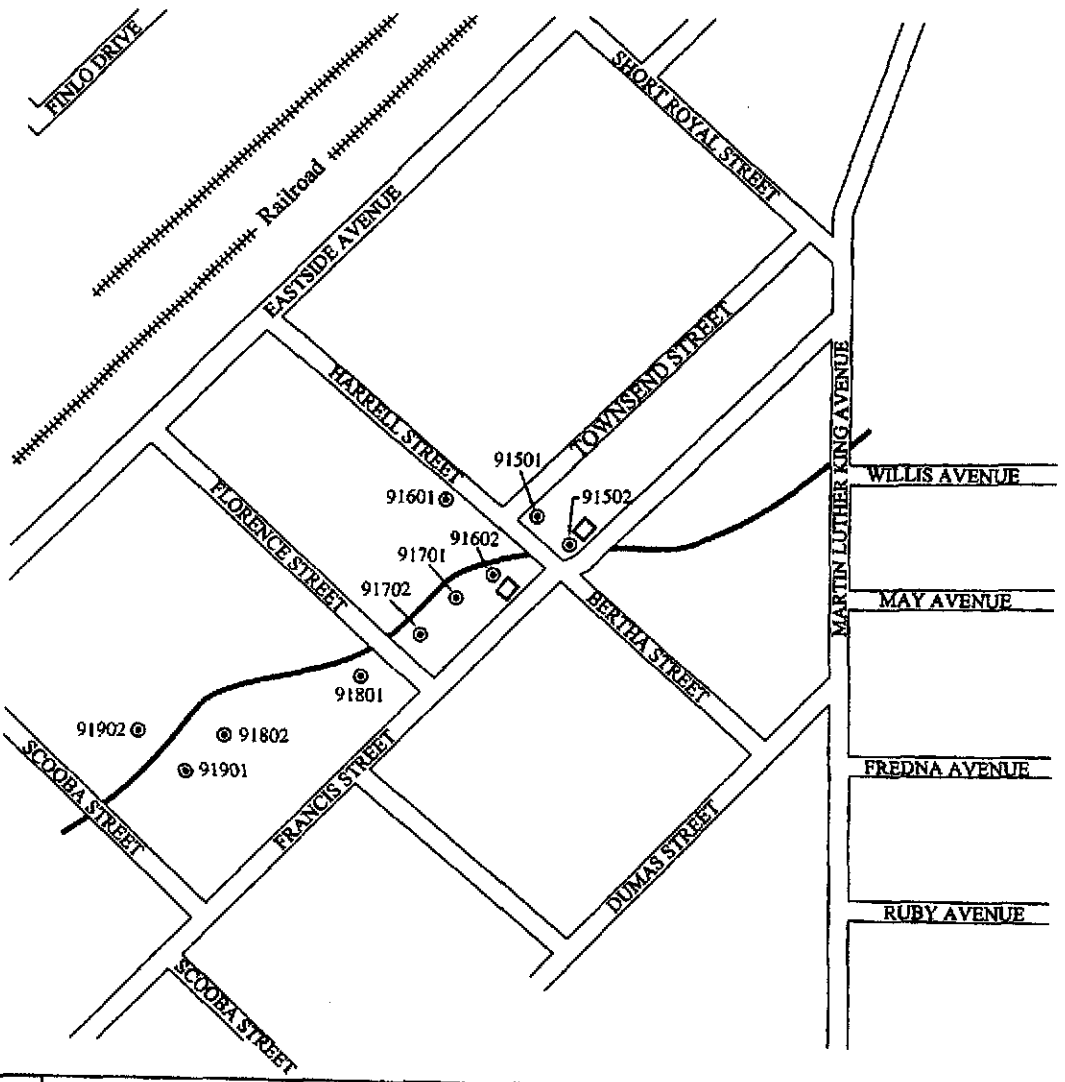
Earth Consulting Group, Inc.
P.O. Box 1246 Madison, MS 39130 Tel:(601)853-2134 Fax:(601)856-3978

DRAWN BY	CHECKED BY	SCALE	DATE	PROJECT NO
Glen Ivey	Kirk Giesinger	1" = 2000'	10/22/03	S149.001

PROJECT: Singley Construction - Air Monitoring - Hattiesburg, Mississippi

TITLE: SITE LOCATION MAP

FIGURE: 1



149 001 2.DWG

EarthCon

LEGEND:

◉ Sample Location

Earth Consulting Group, Inc.

P.O. Box 1246 Madison, MS 39130 Tel:(601)853-2134 Fax:(601)856-3978

DRAWN BY.	CHECKED BY.	SCALE:	DATE:	PROJECT NO
Glen Ivey	Kirk Gleasinger	NTS	10/22/03	S149.001

PROJECT: Singley Construction - Air Monitoring - Hattiesburg, Mississippi

TITLE: SITE PLAN

FIGURE 2

Data For Singley - Kerr McGee, Project #:S149.001
Compiled by Matthew Courtney

Date:	PID Reading	Time	Location/Wind
09/10/2003	3	1050	East of MLK in Ditch, SW @ 2 mph
	2	1100	Intersection of Bertha & Francis
	2	1120	East of MLK in Ditch
	2	1200	East of MLK in Ditch
	0.7	1220	Intersection of Bertha & Francis
	0.7	1230	East of MLK in Ditch
	0.7	1300	"
	0.7	1330	"
	0	1342	Intersection of Bertha & Francis
	0	1400	East of MLK in Ditch
	0	1450	Intersection of Bertha & Francis
	0.7	1500	East side of MLK, N @ 2mph
	0.7	1530	"
	0	1600	"
	0	1605	Intersection of Bertha & Francis
	0.7	1630	East of MLK
	0.7	1700	"

Date:	PID Reading	Time	Location/Wind
09/11/2003	0	730	Intersection of Bertha & Francis, SE @ ~2mph
	0.4	745	East of MLK
	0	940	Intersection of Bertha & Francis
	0.7	945	East of MLK
	0	1230	Bertha & Francis
	0	1235	East of MLK
	0	1445	"
	FID Reading		
	0	1700	East of MLK
	0	1705	Bertha & Francis
	2.9	1800	East of MLK

Date:	FID Reading	Time	Location/Wind
09/12/2003	0	800	Francis & Harrell St/swirling
	0	830	"
	0	900	"
	0.4	930	East of MLK
	0	945	Francis & Harrell
	0	1000	East of MLK
	0	1015	Francis & Harrell
	0	1030	East of MLK
	0	1045	Francis & Harrell
	0.3	1100	East of MLK
	0.7	1115	Francis & Harrell
	0	1130	East of MLK
	0.6	1145	Francis & Harrell
	0	1300	East of MLK
	0	1315	Francis & Harrell
	0	1330	East of MLK
	0.3	1345	Francis & Harrell
	1.1	1400	East of MLK
	0.9	1419	Francis & Harrell
	0	1430	East of MLK

Date:	FID Reading	Time	Location/Wind
	0.1	1500	East of MLK
	0.8	1530	East of MLK
09/15/2003	0	800	Harrell St/Swirling W to E ~2mph
	0	830	"
	1.9	900	"
	0.5	915	East of MLK
	0	930	Harrell St
	0	1000	"
	0	1030	"
	0	1100	East of MLK
	0.2	1100	Harrell St
	0.4	1130	"
	0	1200	"
	0.4	1230	"
	1	1330	"
	4.1	1400	"
	1	1430	"
	0.9	1500	"
	7.3	1530	"
	3.3	1600	"
	0	1630	"
	2.2	1700	"
Date:	**FID Reading**	**Time**	**Location/Wind**
09/16/2003	0	750	W. of Harrell St./Swirling E to W ~2-5mph
	0	820	"
	0	850	"
	1.5	920	"
	0	950	"
	0	1020	"
	0	1050	"
	6.1	1120	"
	12.6	1150	"
	0	1220	"
	0	1250	"
	2.9	1320	Center of Harrell & Townsend
	2.7	1350	W. of Harrell St.
	3.3	1420	"
	1.7	1450	"
	1.9	1520	"
	2.4	1550	"
	2.4	1620	"
	1.7	1650	"
Date:	**FID Reading**	**Time**	**Location/Wind**
09/17/2003	0	800	B/W Florence & Harrell/no wind
	0	830	"
	0.9	900	"
	5.7	930	"
	0	1000	"
	0	1030	"
	0.7	1100	"
	0.9	1130	B/W Florence & Harrell/SSE ~ 3mph
	1.9	1200	"
	2.7	1300	"

	1.1	1330	"
	2.9	1400	"
	1.4	1430	"
	1.7	1500	"
	1.3	1530	"
	1.7	1600	"
	1.4	1630	"
	0.7	1700	"

Date:	FID Reading	Time	Location/Wind
09/18/2003	0.1	730	
	0.5	800	
	6.6	830	
	11.3	900	
	0.3	930	
	0.3	1000	
	0.3	1030	
	8.9	1100	
	0.2	1130	
	3.4	1200	
	2.6	1230	
	2.6	1300	
	4.1	1330	
	1.5	1400	
	1.2	1430	
	9.1	1500	
	1.5	1530	
	6.4	1600	
	2.7	1630	
	3.3	1700	

Date:	FID Reading	Time	Location/Wind
09/19/2003	0	730	W. Side of Florence St.
	1	800	"
	3	830	"
	0	900	not digging
	16.9	930	W. Side of Florence St.
	3.5	1000	W. Side of Florence St.
	0	1030	not digging
	0	1100	W. Side of Florence St.
	8.4	1130	W. Side of Florence St.
	0	1200	not digging
	2	1300	W. Side of Florence St.
	4	1330	W. Side of Florence St.
	1	1400	W. Side of Florence St.
	1.5	1430	W. Side of Florence St.
	1	1500	not digging

9/22: did not work due to rain

ENTEK
ENVIRONMENTAL LABORATORIES, INC
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE: (225) 752-2900 FAX (225) 756-2706
Email: cntcklabs@att.net

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

INDUSTRIAL HYGIENE
KERR - McGEE / HATTIESBURG, MS SAMPLES
COAL TAR VOLATILE ANALYSES

Samples Received: 09/25/03

FOR

EARTH CONSULTING GROUP
POST OFFICE BOX 1246
MADISON, MS 39130

ATTENTION: C. THOMAS

OCTOBER 14, 2003
PROJECT NO.: 3-3285

ENTEK
ENVIRONMENTAL LABORATORIES, INC
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE. (225) 752-2900 FAX (225) 756-2706
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AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: C. Thomas

October 14, 2003
Project No.: 3-3285

Ten cassette samples were received September 25, 2003. The samples were analyzed for Coal Tar Volatiles by OSHA Method 58, as requested.

Entek is pleased to have had the opportunity to provide analytical services for parameters as requested. Please do not hesitate to contact our office if you have any questions or require additional information concerning this report.

This information has been reviewed by:

Sayi Malineni
QA Coordinator

Sham L. Sachdev, Ph.D., CHCM
Laboratory Director

kns

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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: C. Thomas

October 14, 2003
Project No.: 3-3285

Entek Sample ID: 03-15105
Sample ID: 91501
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.001	156.013	3.0	1.5	0.024	1080.00	0.02

Entek Sample ID: 03-15106
Sample ID: 91502
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.448	155.457	3.0	1.5	0.018	1080.00	0.02

Entek Sample ID: 03-15107
Sample ID: 91601
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.220	155.225	3.0	1.5	0.010	1040.00	0.01

Entek Sample ID: 03-15108
Sample ID: 91602
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.758	156.764	3.0	1.5	0.012	1040.00	0.01

Entek Sample ID: 03-15109
Sample ID: 91701
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	154.628	154.641	3.0	1.5	0.026	1140.00	0.02

ENTEK
ENVIRONMENTAL LABORATORIES, INC
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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: C. Thomas

October 14, 2003
Project No.: 3-3285

Entek Sample ID: 03-15110
Sample ID: 91702
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.983	155.999	3.0	1.5	0.032	1140.00	0.03

Entek Sample ID: 03-15111
Sample ID: 91801
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	154.950	154.964	3.0	1.5	0.028	1140.00	0.02

Entek Sample ID: 03-15112
Sample ID: 91802
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.618	156.639	3.0	1.5	0.042	1140.00	0.04

Entek Sample ID: 03-15113
Sample ID: 91901
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.872	155.882	3.0	1.5	0.020	960.00	0.02

Entek Sample ID: 03-15114
Sample ID: 91902
Sample Date: 09/15-19/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.254	156.261	3.0	1.5	0.014	960.00	0.01

ENTEK
ENVIRONMENTAL LABORATORIES, INC
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE: (225) 752-2900 FAX (225) 756-2706
Email: enteklabs@att net

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

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Earth Consulting Group
Madison, MS
Attention: C. Thomas

October 14, 2003
Project No.: 3-3285

Quality Control

	Method Number	Quant. Limit (mg)	QA/QC
BSF*	OSHA 58	0.01	199.45/200.0

	Run 1 (mg)	Run 2 (mg)	%RPD
BSF*	199.448	199.446	0.001

DTA Start 10/10/03/0900/AJ
DTA Finish 10/10/03/1600/AJ

* BSF - Benzene Soluble Fraction.
The sample results were all below the PEL of 0.20mg/m^3 for the BSF. Subsequently, the analysis for individual PAH's was not required.

CHAIN OF CUSTODY RECORD

COMPANY:
Earth Consulting Group
P.O. Box 1246
Madison, MS 39130

ATTN: C. Thomas
PHONE: 601-853-2134
FAX: 601-856-3978
P.O.# S149.001

SAMPLE LOCATION:
Kerr-McGee
Hattiesburg, MS

ENTEK PROJECT NUMBER: 3ECG3285

TURNAROUND TIME: (circle one) Reg / Rush
NEED BY DATE:

~Sampler Must Complete~

Sampler's Name:	Mathew Courtney
Number of Sample(s):	10
Date/Time Sampled:	9/5 thru 9/19
Number & Type of Containers:	
Matrix:	filters
Transporting Cooler Temperature:	N/A

SAMPLE IDENTIFICATION	PRSVD Y / N	SAMPLE NOTES: ACCEPTABLE** CONTAINER, PACKING, ETC.	ANALYSES REQUESTED	STORAGE #
91501	N		OSHA 58	
91502			Coal Tar Volatiles	
91601			Air	
91602				
91701				
91702				
91801				
91802				
91901				
91902				

SPECIAL INSTRUCTIONS:

**Acceptable headspace criteria for VOC samples Yes___ No___

CHAIN OF POSSESSION: SAMPLE TEMPERATURE AT SAMPLE RECEIPT: N/A

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME:
W. [signature]	Kristen N. Stevens-Entek	09.25.03
	Reed FedEx	1030

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

Client	Singley Construction		
City	Hattiesburg, MS	Location:	Hattiesburg, MS
EarthCon Project #	5199.001	Area:	Francis & Townsend St.
Contractor	Singley Construction	Removal Type:	Dry
Collected By	Matthew Courtney	Date:	9/15/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Ty
91501	Fence on Harrell St. Intersection of Townsend	Area
91502	Fence on Harrell St.	Area

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	8:00AM	8:00AM					
End Time	5:00PM	5:00PM					
Down Time (min)							
Total Time (min)	540	540					
Flow Rate (L/min)	2.0	2.0					
Total Volume (L)	1080	1080					
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

Client	Singley Construction		
City	Hattiesburg, MS	Location:	Hattiesburg, MS
EarthCon Project #	5189.001	Area:	Harrell & Florence St.
Contractor	Singley Constructor	Removal Type:	Dry
Collected By	Matthew Courtney	Date:	9/16/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Ty
9/601	Harrell & Florence Street	Hous
9/602	" & " "	Blan

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	7:50AM	7:50AM					
End Time	4:30PM	4:30PM					
Down Time (min)	—	—					
Total Time (min)	~~480~~ 520	~~480~~ 520					
Flow Rate (L/min)	2.0	2.0					
Total Volume (L)	1040	1040					
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

Client	Singley Construction		
City	Hattiesburg, MS	Location:	Hattiesburg, MS
EarthCon Project #	5139.001	Area:	Harvell & Florence St.
Contractor	Singley Construction	Removal Type:	Drg
Collected By	Matthew Courtney	Date:	9/17/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Ty
91701	Harvell & Florence St.	Area
91702	" & " West	"

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	8:00AM	8:00AM					
End Time	5:30PM	5:30PM					
Down Time (min)	-	-					
Total Time (min)	570	570					
Flow Rate (L/min)	2.0	2.0					
Total Volume (L)	1140	1140					
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

Client	Singley Construction		
City	Hattiesburg, MS	Location:	
EarthCon Project #	5149001	Area:	Harvell & Scooba St.
Contractor	Singley Construction	Removal Type:	D.S
Collected By	~~Kevin~~ Evey Kevin	Date:	9/19/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Ty
91801	Florence & Scooba St.	Area
91802	1 " & " - West	"

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	7:30AM	7:30AM					
End Time	5:00PM	5:00PM					
Down Time (min)	-	-					
Total Time (min)	570	570					
Flow Rate (L/min)	2.0	2.0					
Total Volume (L)	1140	1140					
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

Client	Singley Construction		
City	Ht. Hattiesburg MS	Location:	
EarthCon Project #	B149.001	Area:	Florence & Scuba St.
Contractor	Singley Construction	Removal Type:	D/S
Collected By	Matthew Courtney	Date:	9/15/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Ty
91401	Florence & Scuba St. Ditch	Area
91402	" " " West	Area

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	7:30 AM	7:30am					
End Time	3:30 PM	3:30PM					
Down Time (min)	—	—					
Total Time (min)	480	480					
Flow Rate (L/min)	2.0	2.0					
Total Volume (L)	960	960					
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

December 9, 2003

Mr. Richard Ellis
Singley Construction Company, Inc.
P.O. Box 389
Columbia, Mississippi 39429

EarthCon
Earth Consulting Group, Inc.

Re: EarthCon Project No. S149.001
Ambient Air Monitoring and Sampling
September 23 - November 3, 2003
Kerr McGee Creosote Site
Hattiesburg, Mississippi

Dear Mr. Ellis:

This report summarizes ambient air monitoring and sampling activities conducted by Earth Consulting Group, Inc. (EarthCon) at the above-referenced location from September 23 through November 3, 2003. The ambient air monitoring and sampling activities were conducted by Matthew Courtney and Kevin Ivy, EarthCon Air Monitoring Technicians, with oversight provided by W. Hal Moore, EarthCon Senior Project Manager. Air monitoring and sampling was conducted to quantify and document ambient air concentrations of Coal Tar Pitch Volatiles (CTPV) in, and near, the work area during excavation of creosote-contaminated soil from an intermittent stream (storm water drainage ditch).

The main chemicals of concern in CTPVs are polycyclic aromatic hydrocarbons (PAHs), which are also known as polynuclear aromatic hydrocarbons (PNAs). Possible health hazards associated with PAH exposure include cancer, skin problems, immunodeficiency, and reproductive difficulties for both the exposed and their offspring. More than 100 different chemicals are compiled into the general category of polycyclic aromatic hydrocarbons, including benzo[a]pyrene and dibenz[a]anthracene, which are known to cause cancer, and pyrene, acridine, chrysene, phenanthrene, and anthracene. The U.S. Department of Labor Occupational Safety & Health Administration (OSHA) has not established a substance-specific standard for occupational exposure to CTPVs. Exposures are regulated under OSHA's Air Contaminants Standard.

4110 Westside Drive
Tupelo, Mississippi 38801
(662) 840-3728 Fax: (662) 844-9666

110 Weisenberger Road
Post Office Box 1246
Madison, Mississippi 39130
(601) 853-2134 Fax: (601) 856-3978
Toll Free: (877) 389-6476

404 Ferrill Avenue
Post Office Box 29
Quitman, Mississippi 39355
(601) 776-4504 Fax: (775) 242-6650

The following table presents exposure limits established for CTPVs and related substances:

Substance	OSHA PEL	NIOSH REL	ACGIH TLV
CTPVs	0.2 mg/m^3 (benzene-soluble fraction)	0.1 mg/m^3 (cyclohexane-extractable fraction)	0.2 mg/m^3 (benzene-soluble fraction)
PAHs	0.2 mg/m^3	0.1 mg/m^3 (10 hour exposure)	*not established*

Note: Values are for an 8 hour time-weighted-average (TWA) exposure, except for the NIOSH REL for PAHs, which is based on a 10 hour TWA exposure.

Summary of Field Activity

EarthCon provided ambient air monitoring during mobilization, start-up, and excavation activities using a Thermo Environmental Instruments, Inc. Model 680 Portable Hydrocarbon Vapor Meter, which utilizes a flame ionization detector (FID). A summary of the direct readings is included in Appendix A.

EarthCon also collected air samples at selected locations near the active excavation areas utilizing *Gilian BDX II* air sampling pumps. The pumps were initially calibrated to 2 Liters/minute (LPM) using a mini-Buck Primary Flow Calibrator and then calibrated prior to each use using a low-flow rotameter that was also calibrated to the mini-Buck Primary Flow Calibrator. The air samples were collected by drawing known amounts of air through cassettes containing glass fiber filters (GFF). The filters were shipped to Entek Environmental Laboratories, Inc., Baton Rouge, Louisiana, to be analyzed for CTPVs by OSHA Method 58. According to OSHA Method 58, the filters are analyzed by extracting with benzene and gravimetrically determining the benzene-soluble fraction (BSF). If the BSF exceeds the appropriate PEL (0.2 mg/m^3), then the sample is analyzed by high performance liquid chromatography (HPLC) with a fluorescence (µL) or ultraviolet (UV) detector to determine the presence of selected PAHs.

The following Table 1 summarizes the analytical results of the air samples collected during excavation activities which occurred from September 23 through November 3, 2003. Please refer to the attached Figure 1 - Site Location Map and Figure 2 - Site Plan for air sampling areas and Appendix B for laboratory reports. Specific air sampling locations are described in the field data sheets attached to the laboratory reports.

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
KERR MCGEE CREOSOTE SITE
HATTIESBURG, MISSISSIPPI

Sample No.	Date	Benzene-soluble Fraction (mg/m^3)	OSHA PEL (mg/m^3)
92301	09/23/03	0.07	0.2
92302	09/23/03	0.04	0.2
92401	09/24/03	0.03	0.2
92402	09/24/03	0.03	0.2
92501	09/25/03	0.02	0.2
92502	09/25/03	0.02	0.2
92901	09/29/03	<0.01	0.2
92902	09/29/03	0.01	0.2
92903	09/29/03	0.02	0.2
92904	09/29/03	<0.01	0.2
93001	09/30/03	0.02	0.2
93002	09/30/03	0.02	0.2
93003	09/30/03	0.04	0.2
93004	09/30/03	0.01	0.2
1011	10/01/03	<0.01	0.2
1012	10/01/03	0.01	0.2
1013	10/01/03	0.04	0.2
1014	10/01/03	0.03	0.2
10201	10/02/03	0.01	0.2
10202	10/02/03	0.03	0.2
10203	10/02/03	0.07	0.2
10204	10/02/03	0.19	0.2
10601	10/06/03	0.017	0.2

TABLE 1 (continued)
SUMMARY OF ANALYTICAL RESULTS
KERR MCGEE CREOSOTE SITE
HATTIESBURG, MISSISSIPPI

Sample No.	Date	Benzene-soluble Fraction (mg/m^3)	OSHA PEL (mg/m^3)
10602	10/06/03	0.030	0.2
10603	10/06/03	0.013	0.2
10604	10/06/03	0.022	0.2
10605	10/06/03	<0.01	0.2
10701	10/07/03	0.017	0.2
10702	10/07/03	0.015	0.2
10703	10/07/03	0.078	0.2
10704	10/07/03	<0.01	0.2
10801	10/08/03	0.013	0.2
10802	10/08/03	<0.01	0.2
10803	10/08/03	0.026	0.2
10804	10/08/03	**0.302**	0.2
10805	10/08/03	<0.01	0.2
10901	10/09/03	0.011	0.2
10902	10/09/03	0.030	0.2
10903	10/09/03	0.015	0.2
10904	10/09/03	0.015	0.2
101301	10/13/03	0.074	0.2
101302	10/13/03	0.032	0.2
101303	10/13/03	0.042	0.2
101304	10/13/03	0.019	0.2
101401	10/14/03	0.041	0.2
101402	10/14/03	0.017	0.2
101403	10/14/03	0.028	0.2
101404	10/14/03	0.033	0.2
101501	10/15/03	<0.037	0.2
101502	10/15/03	0.052	0.2

0.302 - bold value exceeds OSHA PEL for BSF

TABLE 1 (continued)
SUMMARY OF ANALYTICAL RESULTS
KERR MCGEE CREOSOTE SITE
HATTIESBURG, MISSISSIPPI

Sample No.	Date	Benzene-soluble Fraction (mg/m^3)	OSHA PEL (mg/m^3)
101503	10/15/03	0.033	0.2
101504	10/15/03	<0.009	0.2
101601	10/16/03	<0.009	0.2
101602	10/16/03	<0.009	0.2
101603	10/16/03	0.030	0.2
101604	10/16/03	0.059	0.2
101605	10/16/03	<0.009	0.2
101606	10/16/03	0.024	0.2
101607	10/16/03	0.011	0.2
101608	10/16/03	0.091	0.2
101701	10/17/03	0.054	0.2
101702	10/17/03	0.067	0.2
101703	10/17/03	0.020	0.2
101704	10/17/03	0.043	0.2
102101	10/21/03	0.031	0.2
102102	10/21/03	0.041	0.2
102103	10/21/03	0.033	0.2
102104	10/21/03	0.030	0.2
102201	10/22/03	0.031	0.2
102202	10/22/03	0.011	0.2
102203	10/22/03	0.009	0.2
102204	10/22/03	<0.009	0.2
102205	10/22/03	<0.021	0.2
102206	10/22/03	<0.021	0.2
102207	10/22/03	<0.021	0.2
102208	10/22/03	<0.021	0.2
102301	10/23/03	0.009	0.2
102302	10/23/03	<0.009	0.2
102303	10/23/03	<0.009	0.2

TABLE 1 (continued)
SUMMARY OF ANALYTICAL RESULTS
KERR MCGEE CREOSOTE SITE
HATTIESBURG, MISSISSIPPI

Sample No.	Date	Benzene-soluble Fraction (mg/m^3)	OSHA PEL (mg/m^3)
102304	10/23/03	<0.009	0.2
102401	10/24/03	<0.012	0.2
102402	10/24/03	<0.012	0.2
102403	10/24/03	<0.012	0.2
102404	10/24/03	<0.012	0.2
102901	10/24/03	<0.009	0.2
102902	10/24/03	<0.009	0.2
102903	10/24/03	0.015	0.2
102904	10/24/03	<0.009	0.2
103001	10/30/03	0.031	0.2
103002	10/30/03	0.013	0.2
103003	10/30/03	0.017	0.2
103004	10/30/03	0.039	0.2
103101	10/31/03	0.017	0.2
103102	10/31/03	0.011	0.2
103103	10/31/03	0.011	0.2
103104	10/31/03	0.011	0.2
110301	11/03/03	<0.009	0.2
110302	11/03/03	<0.009	0.2
110303	11/03/03	0.011	0.2
110304	11/03/03	0.022	0.2

Sample number 10804 exceeded the BSF PEL; therefore, HPLC analysis for individual PAHs were was performed. The following Table 2 summarizes the analytical results of the HPLC analysis.

TABLE 2
SUMMARY OF HPLC ANALYSIS
KERR MCGEE CREOSOTE SITE
HATTIESBURG, MISSISSIPPI

PAH	Sample No.	Concentration (ppb)	OSHA Target Concentration (ppm)
Phenanthrene	10804	<0.095	1.22
Anthracene	10804	<0.095	0.11
Pyrene	10804	<0.084	1.09
Chrysene	10804	<0.074	0.35
Benzo(a)pyrene	10804	<0.067	0.24

Discussion of Results

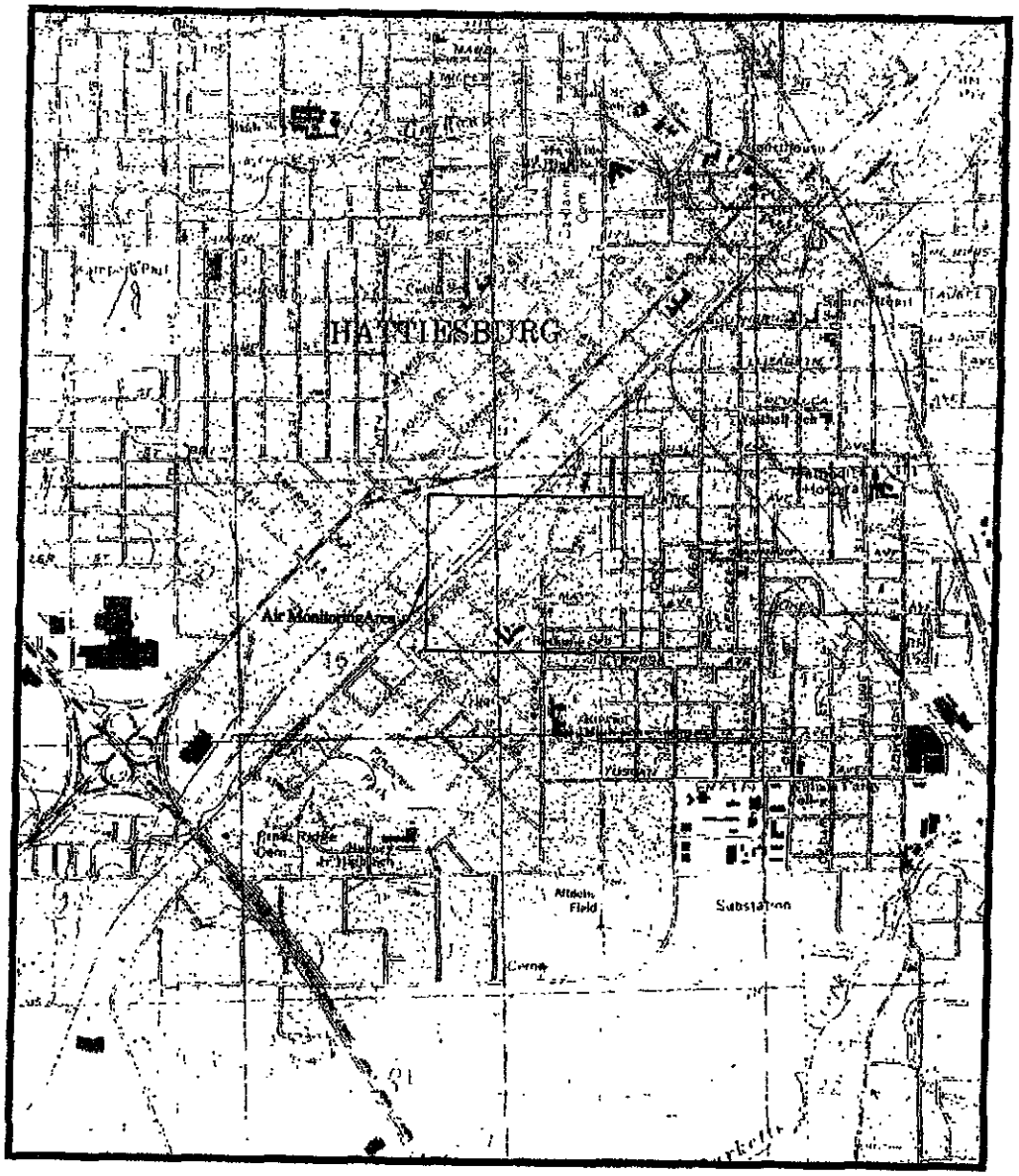
With the exception of sample number 10804, all of the air sample results were well below the OSHA PEL for BSF of 0.2 mg/m^3. Although the BSF analysis of sample number 10804 exceeded the OSHA PEL, the results of the HPLC analysis were below the OSHA Target Concentrations for each individual PAH constituent.

Based on a review of the air sample analytical results and direct readings collected in, and around, the excavated areas, workers in areas were not exposed to CTPVs in excess of regulatory limits. Should you have any questions concerning the contents of this report, please contact us at your convenience at (601) 853-2134. EarthCon appreciates the opportunity to provide you with environmental consulting services.

Sincerely,
Earth Consulting Group, Inc.

Kirk L. Giessinger
Certified Indoor Air Quality Consultant

Attachments



SOURCE: USGS 7.5' MAP - HATTIESBURG QUADRANGLE - 1956

Forrest County

EarthCon

Earth Consulting Group, Inc.

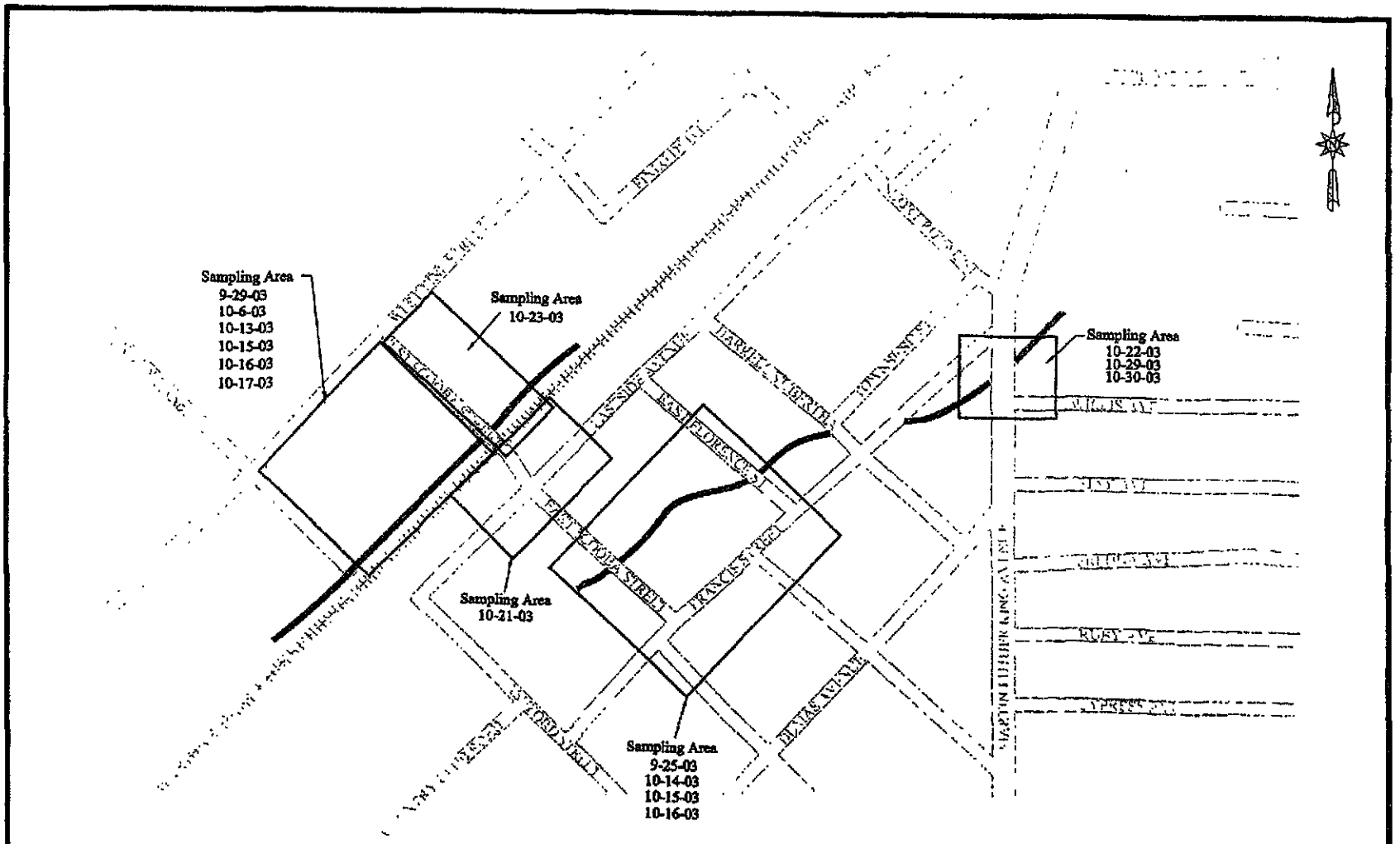
P.O. Box 1246 Madison, MS 39130 Tel:(601)853-2134 Fax:(601)856-3978

DRAWN BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:
Glen Ivey	Kirk Gessinger	1" = 2000'	12/01/03	S149.001

PROJECT: Singley Construction - Air Monitoring - Hattiesburg, Mississippi

TITLE: SITE LOCATION MAP

FIGURE 1



149.001 2.DWG

EarthCon

LEGEND:

Earth Consulting Group, Inc.

P.O. Box 1246 Madison, MS 39130 Tel:(601)853-2134 Fax:(601)856-3978

DRAWN BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:
Glen Ivey	Kirk Giesinger	NTS	12/01/03	S149.001

PROJECT: Singley Construction - Air Monitoring - Hattiesburg, Mississippi

TITLE: SITE PLAN

FIGURE 2

Singley-Kerr McGee project
Hattiesburg, MS

Data For Singley - Kerr McGee, Project #:S149.001
Compiled by Matthew Courtney

Date	HLB Reading	Time	Location/Wind
09/23/2003		730	
		800	
		830	
		900	
		930	
		1000	
		1030	
		1100	
		1130	
		1200	
		1300	
		1330	
		1400	
		1430	
		1500	
		1530	
		1600	
		1630	
		1700	

Date	HLB Reading	Time	Location/Wind
09/24/2003	0	730	W. Side of Florence St., Wind Still
	0	800	"
	0.8	830	"
	3.8	900	"
	0.5	930	"
	7.9	1000	"
	10.4	1030	"
	17.2	1100	"
	12.3	1130	"
	4.3	1200	"
	0	1300	"
	0	1330	"
	12.1	1400	"
	3	1430	"
	4	1500	Wind NE @~5MPH
	1.8	1530	"
	1.2	1600	"
	3	1630	"
	0	1700	"

Date	HLB Reading	Time	Location/Wind
09/25/2003		730	
		800	
		830	

Singley-Kerr McGee project
Hattiesburg, MS

		900
		930
		1000
		1030
		1100
		1130
		1200
		1300
		1330
		1400
		1430
		1500
		1530
		1600
		1630
		1700

Date	PID Reading	Time	Location/Wind
09/29/2003	0	730	Not Digging
	0	800	"
	0	830	"
	0	900	"
	0	930	Lot behind Ford Dealership Between Road & Body Shop
	0.17	1000	"
	0.22	1030	"
	0	1100	"
	0	1130	"
	0	1200	"
	2.17	1230	"
	0	1300	"
	0	1330	"
	0.22	1400	"
	0.29	1430	"
	2.8	1500	"
	6.25	1530	"
	15.9	1600	"
	1.37	1630	"
	0	1700	"

Date	PID Reading	Time	Location/Wind
09/30/2003		730	
	0.86	800	
	1.22	830	
	1.57	900	
	0.62	930	
	0	1000	
	0.94	1030	
	0.63	1100	
	0.47	1130	
	6.27	1200	

Singley-Kerr McGee project
Hattiesburg, MS

	2.38	1230
	1.49	1300
	0.65	1330
	0	1400
	0	1430
	2.61	1500
	1.64	1530
	0	1600
	0	1630
	0	1700

Date	FID Reading	Time	Location/Wind
10/01/2003	0	730	Not Digging
	0	800	"
	0	830	"
	0	900	"
	0	930	Lot Behind Ford Dealership/N @~2-5mph
	4.67	1000	"
	2.56	1030	"
	5.07	1100	"
	5.08	1130	"
	2.17	1200	"
	1.07	1230	"
	7.05	1300	"
	4.68	1330	"
	5.32	1400	"
	6.63	1430	"
	0	1500	not digging
	0	1530	not digging
	0	1600	not digging
	0	1630	not digging
	2.13	1700	Lot Behind Ford Dealership/N @~2-5mph

Date	FID Reading	Time	Location/Wind
10/02/2003		730	
	0	800	
	0	830	
	1.26	900	
	1.59	930	
	0	1000	
	0	1030	
	0	1100	
	0	1130	
	0	1200	
	0	1230	
	9.46	1300	
	0	1330	
	0	1400	
	2.11	1430	
	2.65	1500	

Singley-Kerr McGee project
Hattiesburg, MS

	0	1530
	0	1600
	0	1630
		1700

Date	PID Reading	Time	Location/Wind
10/06/2003	10.07	915	Lot Behind Ford Dealership in second containment site/l
	9348	945	"
	5.38	1015	"
	5.8	1045	"
	6.38	1115	"
	5.75	1145	"
	0	1215	not digging
	0	1245	not digging
	0	1315	not digging
	4.86	1330	Lot Behind Ford Dealership in second containment site/l
	3.75	1400	"
	6.21	1430	"
	0	1500	not digging
	0	1530	not digging
	0	1600	not digging
	2.29	1630	"
	4.07	1700	"

Date	PID Reading	Time	Location/Wind
10/07/2003	0	730	Second Containment
	2.7	800	
	8.16	830	
	3.41	900	
	1.04	930	
	1.28	1000	
	2.65	1030	
	2.05	1100	
	0	1130	
	2.41	1200	
	1.76	1230	
	1.01	1300	
	0	1330	
	0	1400	
	0	1430	
	1.78	1500	
	2.12	1530	
	0	1600	
	0	1630	
	0	1700	

Date	PID Reading	Time	Location/Wind
10/08/2003	0	730	Second Containment/Wind NE @~2-5mph
	1.07	800	"
	0.72	830	"

Singley-Kerr McGee project
Hattlesburg, MS

	0	900 "
	0	930 "
	0	1000 "
	1.47	1030 "
	0	1100 "
	0	1130 "
	0	1200 "
	0	1300 "
	0	1330 "
	0	1400 "
	0	1430 "
	0	1500 "
	0	1530 "
	0	1600 "
	0	1630 "
	0	1700 "

Date	PID Reading	Time	Location/Wind
10/09/2003	0	730	Second Containment
	0	800	"
	0	830	"
	1.21	900	"
	1.49	930	"
	0	1000	"
	0	1030	"
	0	1100	"
	0	1130	"
	0	1200	"
	0	1300	"
	0	1330	"
	0	1400	off site

Did not work on 10/10/03

Date	PID Reading	Time	Location/Wind
10/13/2003	na	730	
	na	800	
	na	830	
	na	900	
	34.07(*)	945	Florence Street/N ~2-5mph
	0.26	1015	"
	0	1045	"
	9.37	1215	"
	0	1245	"
	0	1315	"
	0	1345	"
	5.93	1445	"
	0	1515	"
	0	1545	"
	12.15	1615	"

Notes: 0730-0945: Singley
a big pile of dirt that had be
excavated- no new digging
(*)likely due to natural gas

Singley-Kerr McGee project
Hattiesburg, MS

Date:	FID Reading	Time	Location/Wind
10/13/03(cont'd)	0	1045	Ditch behind Courtesy Ford/N~2-5mph
	0	1115	"
	0	1145	"
	2.79	1345	"
	0.87	1415	"
	0.99	1445	"

Date:	FID Reading	Time	Location/Wind
10/14/2003		730	
	0	800	
	0	830	
	2.75	900	
	1.32	930	
	0	1000	
	0	1030	
	3.76	1100	
	0	1130	
	0	1200	
	0	1300	
	1.49	1330	
	0	1400	
	0	1430	
	0	1500	
	0	1530	

Date:	FID Reading	Time	Location/Wind
10/15/2003		730	
	0	800	"
	0	830	"
	0	900	"
	0	930	"
	0.74	1000	"
	0	1030	"
	1.64	1100	"
	2.75	1130	"
	0	1200	"
	0	1300	"
	0	1330	"
	0	1400	"
	0	1430	"
	1.12	1500	"
	0	1530	"
	0	1600	"
	0	1630	"

Date:	FID Reading	Time	Location/Wind
10/16/2003		730	
	0	800	

Singley-Kerr McGee project
Hattiesburg, MS

1.27	830
0	900
0	930
2.68	1000
1.01	1030
0	1100
0	1130
2.49	1200
0	1230
0	1300
0	1330
2.24	1400
0	1430
1.51	1500
0	1530
0	1600
0	1630
0	1700

Date	PID Reading	Time	Location/Wind
10/17/2003	na	730	Ditch behind Body Shop/Wind calm
	0	800	"
	0	830	"
	3.28	900	"
	6.87	930	"
	1.08	1000	Ditch behind Body Shop/wind SW ~5-10mph
	0.23	1030	"
	4.79	1100	"
	9.09	1130	"
	0	1200	"
	0	1300	"
	4.46	1330	"
	3.61	1400	"

did not dig from 1200-1300

Date	PID Reading	Time	Location/Wind
10/22/2003	na	730	Intersection of Scooba & East Side/N@~5mph
	0	800	"
	1.72	830	"
	2.75	900	"
	0.55	930	"
	0	1000	"
	0	1030	"
	0	1100	"
	0	1130	"
	0	1200	"
	0	1300	MLK/Wind from North West @5-10mph

Singley-Kerr McGee project
Hattiesburg, MS

0	1330	"
0	1400	"
0	1430	"
0	1500	"
0	1530	"
0	1600	"
0	1630	"
0	1700	"

did not dig from 1400-1500&1430-1500

Date	PID Reading	Time	Location/Wind
10/23/2003		730	
	0	800	
	1.8	830	
	2.24	900	
	1.95	930	
	2.67	1000	
	2.21	1030	
	3.1	1100	
	0	1130	
	0	1200	
	1.65	1230	
	1.04	1300	
	2.71	1330	
	1.52	1400	
	0	1430	
	3.22	1500	
	3.68	1530	
	1.46	1600	
	0	1630	
		1700	

Date	PID Reading	Time	Location/Wind	
10/24/2003	na	730	Ditch Behind Courtesy Ford Body Shop/Wind Calm	
	0	800	"	
	0	830	"	
	0	900	"	
	0	930	"	
	0	1000	"	
	0	1030	"	
	11.16	1100	Ditch behind Body Shop/S@~5mph	
	0	1130	"	
	0	1200	"	
	0	1300	"	
	1.35	1330	"	
	0	1400	"	
	0	1430	"	
	0	1500	"	

Singley-Kerr McGee project
Hattiesburg, MS

**did not dig from 0800-1000&1400-1500*

Date	PID Reading	Time	Location/Wind
10/29/2003	na	730	North side of MLK, digging towards school/wind calm
	0	800	"
	0	830	"
	0	900	"
	2.69	930	North side of MLK/S@~2mph
	0.56	1000	"
	0	1030	"
	0	1100	"
	0	1130	"
	0	1200	"
	1.65	1300	"
	0	1330	"
	0	1400	"
	0	1430	"
	0	1500	"
	0	1530	"
	0	1600	"
	0	1630	"
	0	1700	"

**not digging from 0800-0830, 0930-1130, 1300-1400, and 1500-1700*

Date	PID Reading	Time	Location/Wind
10/31/2003		730	
	0	800	
	0	830	
	1.65	900	
	2.39	930	
	1.24	1000	
	0	1030	
	0	1100	
	0	1130	
	0	1200	
	0	1230	
	0	1300	
	2.61	1330	
	1.41	1400	
	1.95	1430	
	0	1500	
	0	1530	
	0	1600	
	0	1630	
	0	1700	

Singley-Kerr McGee project
Hattiesburg, MS

Date:	FID Reading	Time	Location/Wind
10/31/2003	na	730	MLK/S@~2mph
	0	800	"
	0	830	"
	2.98	900	"
	0	930	"
	0	1000	"
	0	1030	"
	0	1100	"
	1.25	1130	"
	1.2	1200	"
	0	1300	"
	0	1330	"
	0	1400	"
	0	1430	"

Date:	FID Reading	Time	Location/Wind
11/03/2003	na	730	MLK/wind calm
	0	800	"
	0	830	"
	0	900	"
	0	930	"
	0	1000	"
	0	1030	"
	0	1100	"
	0	1130	"
	0	1200	"
	1.16	1300	"
	0.76	1330	"
	0	1400	"
	0	1430	"
	0	1500	"
	0	1530	"
	0	1600	"
	0	1630	"
	0	1700	"

**not digging from 0800-1000 and 1430-1500*

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AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

INDUSTRIAL HYGIENE
KERR - McGEE / HATTIESBURG, MS SAMPLES
COAL TAR VOLATILE ANALYSES

Samples Received: 10/03/03

FOR

EARTH CONSULTING GROUP
POST OFFICE BOX 1246
MADISON, MS 39130

ATTENTION: C. THOMAS

OCTOBER 22, 2003
PROJECT NO.: 3-3383

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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: C. Thomas

October 22, 2003
Project No.: 3-3383

Eight cassette samples were received October 3, 2003. The samples were analyzed for Coal Tar Volatiles by OSHA Method 58, as requested.

Entek is pleased to have had the opportunity to provide analytical services for parameters as requested. Please do not hesitate to contact our office if you have any questions or require additional information concerning this report.

This information has been reviewed by:

Sayi Malineni
QA Coordinator

Sham L. Sachdev, Ph.D., CHCM
Laboratory Director

ddk

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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: C. Thomas

October 22, 2003
Project No.: 3-3383

Entek Sample ID: 03-15561
Sample ID: 92301
Sample Date: 9/23-25/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.952	155.983	3.0	1.5	0.062	900.00	0.07

Entek Sample ID: 03-15562
Sample ID: 92302
Sample Date: 9/23-25/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.369	155.387	3.0	1.5	0.036	900.00	0.04

Entek Sample ID: 03-15563
Sample ID: 92303 Blank
Sample Date: 9/23-25/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.189	155.196	3.0	1.5	0.014	-	-

Entek Sample ID: 03-15564
Sample ID: 92401
Sample Date: 9/23-25/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.737	156.751	3.0	1.5	0.028	1080.00	0.03

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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: C. Thomas

October 22, 2003
Project No.: 3-3383

Entek Sample ID: 03-15565
Sample ID: 92402
Sample Date: 9/23-25/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	154.617	154.632	3.0	1.5	0.030	1080.00	0.03

Entek Sample ID: 03-15566
Sample ID: 92501
Sample Date: 9/23-25/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.973	155.986	3.0	1.5	0.026	1140.00	0.02

Entek Sample ID: 03-15567
Sample ID: 92502
Sample Date: 9/23-25/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	154.941	154.952	3.0	1.5	0.022	1140.00	0.02

Entek Sample ID: 03-15568
Sample ID: 92503
Sample Date: 9/23-25/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.595	156.603	3.0	1.5	0.016	-	-

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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: C. Thomas

October 22, 2003
Project No.: 3-3383

Quality Control

	Method Number	Quant. Limit (mg)	QA/QC
BSF*	OSHA 58	0.01	199.45/200.0

	Run 1 (mg)	Run 2 (mg)	%RPD
BSF*	199.446	199.45	0.002

DTA Start 10/16/03 0900 AJ
DTA Finish 10/20/03 1500 AJ

* BSF - Benzene Soluble Fraction.

The sample results were all below the PEL of 0.20mg/m^3 for the BSF. Subsequently, the analysis for individual PAH's was not required.

CHAIN OF CUSTODY RECORD

COMPANY:
Earth Consulting Group
P.O. Box 1246
Madison, MS 39130

ATTN: C. Thomas
PHONE: 601-853-2134
FAX: 601-856-3978
P.O.# S149.001

SAMPLE LOCATION:
Kerr-McGee
Hattiesburg, MS

ENTEK PROJECT NUMBER: 3ECG3383

TURNAROUND TIME: (circle one) Reg. / Rush
NEED BY DATE:

~Sampler Must Complete~

Sampler's Name:	Mathew Courtney
Number of Sample(s):	(8)
Date/Time Sampled:	9/23 9/24 9/25/03
Number & Type of Containers:	8 cassette filters
Matrix:	cassette
Transporting Cooler Temperature:	Room Temp

SAMPLE IDENTIFICATION	# OF CONTAINERS	PRESERVATIVE	ANALYSES REQUESTED	STORAGE
92301			Method #5S	
92302				
92303 BLANK				
92401				
92402				
92501				
92502				
92503 BLANK				

SPECIAL INSTRUCTIONS:

**Acceptable headspace criteria for VOC samples Yes___ No___

CHAIN OF POSSESSION: SAMPLE TEMPERATURE AT SAMPLE RECEIPT: Room Temp.

SIGNATURE	RECEIVED BY	DATE/TIME
	Kristen N. Stevens-Entek	10.03.03
	Fed Ex	1030

Entek Environmental Laboratories, Inc., 14285 Airline Highway, Baton Rouge, LA 70817
Phone: (225) 752-2900 Fax: (225) 756-2706

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

3ECG3383

Client	Singley Construction		
City	Hattiesburg, MS	Location:	Kerr
EarthCon Project #	S1Y9001	Area:	Florence & Scooba St.
Contractor	Singley Construction	Removal Type:	Dig
Collected By	By Keoin Duey UAM	Date:	9/23/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Ty
92301	Ditch Florence & Scooba Street	Air
92302	" " & " " west	Air
92303	BLANK	BLANK

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	7:30AM	7:30AM	B				
End Time	3:00PM	3:00PM	L				
~~Down Time (min)~~			A				
Total Time (min)	450	450	N				
Flow Rate (L/min)	2.0	2.0	K				
Total Volume (L)	900	900					
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

3ECG3383

Client	Singley Construction		
City	Hattiesburg, MS	Location:	Kerr McGee
EarthCon Project #	8149.001	Area:	Florence & Scooba St.
Contractor	Singley Construction	Removal Type:	bic
Collected By	G. McMoore	Date:	9/25/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Ty
92501	Ditch Between Florence & Scooba St.	Amb
92502	" " " " " West	Amb
92503	BLANK	Amb

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	7:30AM	7:30AM	B				
End Time	5:00PM	5:00PM	L				
~~Down Time (min)~~			A				
Total Time (min)	570	570	N				
Flow Rate (L/min)	2.0	2.0	K				
Total Volume (L)	1140	1140					
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

3ECG3383

Client	Singley Construction		
City	Hattiesburg MS	Location:	Kerr Magee
EarthCon Project #	5149.001	Area:	Florence & Scooba St.
Contractor	Singley Construction	Removal Type:	Dig
Collected By	Matthew Courtney	Date:	9/24/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Ty
92401	Florence & Scooba Street (Ditch)	Air
92402	" " " " west	Area

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	8:00AM	8:00AM					
End Time	8:00PM	8:00PM					
Down Time (min)	-	-					
Total Time (min)	540	540					
Flow Rate (L/min)	2.0	2.0					
Total Volume (L)	1080	1080					
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

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AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

INDUSTRIAL HYGIENE
KERR - McGEE / HATTIESBURG, MS SAMPLES
COAL TAR VOLATILE ANALYSES

Samples Received: 11/05/03

FOR

EARTH CONSULTING GROUP
POST OFFICE BOX 1246
MADISON, MS 39130

ATTENTION: W. HAL MOORE

DECEMBER 3, 2003
PROJECT NO.: 3-3698

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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: W. Hal Moore

December 3, 2003
Project No.: 3-3698

Thirteen cassette samples were received November 5, 2003. The samples were analyzed for Coal Tar Volatiles by OSHA Method 58, as requested.

Entek is pleased to have had the opportunity to provide analytical services for parameters as requested. Please do not hesitate to contact our office if you have any questions or require additional information concerning this report.

This information has been reviewed by:

Sayi Malineni
QA Coordinator

Sham L. Sachdev, Ph.D., CHCM
Laboratory Director

ddk

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Earth Consulting Group
Madison, MS
Attention: W. Hal Moore

December 3, 2003
Project No.: 3-3698

Entek Sample ID: 03-17284
Sample ID: 102901
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	160.233	160.233	3.0	1.5	<0.010	1080	<0.009

Entek Sample ID: 03-17285
Sample ID: 102902
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.520	156.520	3.0	1.5	<0.010	1080	<0.009

Entek Sample ID: 03-17286
Sample ID: 102903
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.165	156.173	3.0	1.5	0.016	1080	0.015

Entek Sample ID: 03-17287
Sample ID: 102904
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.578	155.579	3.0	1.5	<0.010	1080	<0.009

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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: W. Hal Moore

December 3, 2003
Project No.: 3-3698

Entek Sample ID: 03-17288
Sample ID: 103001
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.395	155.412	3.0	1.5	0.034	1080	0.031

Entek Sample ID: 03-17289
Sample ID: 103002
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.932	156.939	3.0	1.5	0.014	1080	0.013

Entek Sample ID: 03-17290
Sample ID: 103003
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	154.811	154.820	3.0	1.5	0.018	1080	0.017

Entek Sample ID: 03-17291
Sample ID: 103004
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.230	156.251	3.0	1.5	0.042	1080	0.039

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Earth Consulting Group
Madison, MS
Attention: W. Hal Moore

December 3, 2003
Project No.: 3-3698

Entek Sample ID: 03-17292
Sample ID: 103005
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.074	155.075	3.0	1.5	<0.010	-	-

Entek Sample ID: 03-17293
Sample ID: 103101
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.810	156.819	3.0	1.5	0.018	1080	0.017

Entek Sample ID: 03-17294
Sample ID: 103102
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.015	156.021	3.0	1.5	0.012	1080	0.011

Entek Sample ID: 03-17295
Sample ID: 103103
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.407	156.413	3.0	1.5	0.012	1080	0.011

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Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: W. Hal Moore

December 3, 2003
Project No.: 3-3698

Entek Sample ID: 03-17296
Sample ID: 103104
Sample Date: 10/29-31/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	160.233	160.239	3.0	1.5	0.012	1080	0.011

Quality Control

	Method Number	Quant. Limit (mg)	QA/QC
BSF*	OSHA 58	0.01	199.68/200.0

	Run 1 (mg)	Run 2 (mg)	%RPD
BSF*	199.679	199.675	0.002

DTA Start 11/18/03 1200 AJ
DTA Finish 11/24/03 1200 AJ

* BSF - Benzene Soluble Fraction.

The sample results were all below the PEL of $0.20 mg/m^3$ for the BSF. Subsequently, the analysis for individual PAH's was not required.

CHAIN OF CUSTODY RECORD

COMPANY:
Earth Consulting Group
P.O. Box 1246
Madison, MS 39130

ATTN: W. Hal Moore
PHONE: 601-853-2134
FAX: 601-856-3578
P.O.# SN9.001

SAMPLE LOCATION:
Hattiesburg, MS

ENTEK PROJECT NUMBER: 3ECG3698

TURNAROUND TIME: (circle one) Reg. / Rush
NEED BY DATE:

~Sampler Must Complete~

Sampler's Name:	Matthew Courtney
Number of Sample(s):	13
Date/Time Sampled:	10/29 10/30 10/31/03
Number & Type of Containers:	
Matrix:	
Transporting Cooler Temperature:	

SAMPLE IDENTIFICATION	QA/QC	NOTES	ANALYSIS REQUESTED	STORET
102901			OSHA 58	
102902			Coal Tar Volatile	
102903			Arc	
102904				
103001				
103002				
103003				
103004				
103005	QAQC	BLANK		
103101				
103102				
103103				
103104				

SPECIAL INSTRUCTIONS:

**Acceptable headspace criteria for VOC samples Yes___ No___

CHAIN OF POSSESSION:

SAMPLE TEMPERATURE AT SAMPLE RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE/TIME
W Hal Moore	Kristen N. Stevens-Entek	11.05.03 @ 1000

Entek Environmental Laboratories, Inc., 14285 Airline Highway, Baton Rouge, LA 70817
Phone: (225) 752-2900 Fax: (225) 756-2706

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

Client	Single - Kerr McGee		
City	Hattiesburg	Location:	Hattiesburg, MS
EarthCon Project #	S149.001	Area:	Ditch
Contractor	Single	Removal Type:	Excavation
Collected By	MC	Date:	10/29/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Type
102901	N of MLK, E side of ditch	Area
102902	S of MLK, E side of ditch	"
102903	S of MLK, W side of ditch	"
102904	N of MLK, W side of ditch	"

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	0800	0800	0800	0800			
End Time	1700	1700	1700	1700			
Down Time (min)	-	-	-	-			
Total Time (min)	540	540	540	540			
Flow Rate (L/min)	2	2	2	2			
Total Volume (L)	1080	1080	1080	1080			
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

Client	SINGLEY / KERR MCGEE		
City	HATTIESBURG MS	Location:	MLK AVE
EarthCon Project #	S149.001	Area:	
Contractor	SINGLEY	Removal Type:	DIG
Collected By	KTL	Date:	10/30/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Type
103001	NORTHEAST CORNER OF DIG AREA	AREA
103002	SOUTH EAST CORNER " "	
103003	SOUTHWEST CORNER " "	
103004	NORTHWEST CORNER " "	
103005	BLANK	QA/QC

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	0800	0800	0800	0800			
End Time	1700	1700	1700	1700			
Down Time (min)							
Total Time (min)	540	540	540	540			
Flow Rate (L/min)	2.0	2.0	2.0	2.0			
Total Volume (L)	1080	1080	1080	1080			
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

Analyst/Date

EARTH CONSULTING GROUP, INC.
AIR SAMPLING FIELD DATA SHEET

Client	Singley / Kerr McGee		
City	Hattiesburg, MS	Location:	MLK AVE
EarthCon Project #	S149.001	Area:	Ditch
Contractor	Singley	Removal Type:	Excavation
Collected By	MPE	Date:	10/31/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Type
103101	N.E. Corner of Dig Area	Area
103102	S.E. corner of Dig Area	"
103103	S.W. Corner of Dig Area	"
103104	N.W. corner of Dig Area	"

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04			
Begin Time	0800	0800	0800	0800			
End Time	1700	1700	1700	1700			
Down Time (min)							
Total Time (min)	540	540	540	540			
Flow Rate (L/min)	2.0	2.0	2.0	2.0			
Total Volume (L)	1080	1080	1080	1080			
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

* All pump locations are carbon-copys of 10/30/03 & 10/29/03.

Analyst/Date

ENTEK
ENVIRONMENTAL LABORATORIES, INC.
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE: (225) 752-2900 FAX (225) 756-2706
Email: enteklabs@att.net

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

INDUSTRIAL HYGIENE
KERR - McGEE / HATTIESBURG, MS SAMPLES
COAL TAR VOLATILE ANALYSES

Samples Received: 11/24/03

FOR

EARTH CONSULTING GROUP
POST OFFICE BOX 1246
MADISON, MS 39130

ATTENTION: W. HAL MOORE

DECEMBER 12, 2003
PROJECT NO.: 3-3885

ENTEK
ENVIRONMENTAL LABORATORIES, INC.
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE: (225) 752-2900 FAX (225) 756-2706
Email: enteklabs@att.net

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: W. Hal Moore

December 12, 2003
Project No.: 3-3885

Five cassette samples were received November 24, 2003. The samples were analyzed for Coal Tar Volatiles by OSHA Method 58, as requested.

Entek is pleased to have had the opportunity to provide analytical services for parameters as requested. Please do not hesitate to contact our office if you have any questions or require additional information concerning this report.

This information has been reviewed by:

Sayi Malineni
QA Coordinator

Sham L. Sachdev, Ph.D., CHCM
Laboratory Director

ddk

ENTEK
ENVIRONMENTAL LABORATORIES, INC.
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE: (225) 752-2900 FAX (225) 756-2706
Email: enteklabs@att.net

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: W. Hal Moore

December 12, 2003
Project No.: 3-3885

Entek Sample ID: 03-18136
Sample ID: 110301
Sample Date: 11/03/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.169	156.169	3.0	1.5	<0.010	1080	<0.009

Entek Sample ID: 03-18137
Sample ID: 110302
Sample Date: 11/03/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.590	155.593	3.0	1.5	<0.010	1080	<0.009

Entek Sample ID: 03-18138
Sample ID: 110303
Sample Date: 11/03/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	155.360	155.366	3.0	1.5	0.012	1080	0.011

ENTEK
ENVIRONMENTAL LABORATORIES, INC.
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE: (225) 752-2900 FAX (225) 756-2706
Email: enteklabs@att.net

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Louisiana Environmental Laboratory LELAP 02039 Accreditation Program

Earth Consulting Group
Madison, MS
Attention: W. Hal Moore

December 12, 2003
Project No.: 3-3885

Entek Sample ID: 03-18139
Sample ID: 110304
Sample Date: 11/03/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	156.903	156.915	3.0	1.5	0.024	1080	0.022

Entek Sample ID: 03-18140
Sample ID: 110305
Sample Date: 11/03/03

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	154.783	154.782	3.0	1.5	<0.010	-	-

Quality Control

	Method Number	*Quant. Limit (mg)*	*QA/QC*
BSF*	OSHA 58	0.01	199.67/200.00

	Run 1 (mg)	*Run 2 (mg)*	*%RPD*
BSF*	199.672	199.683	0.006

DTA Start 12/02/03 1000 JK
DTA Finish 12/05/03 1200 JK

* BSF - Benzene Soluble Fraction.

The sample results were all below the PEL of 0.20mg/m^3 for the BSF. Subsequently, the analysis for individual PAH's was not required.

ENTEK

ENVIRONMENTAL LABORATORIES, INC.
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817

Please Remit to:
P.O. Box 83412
Baton Rouge, LA 70884-3412

INVOICE

PHONE: (225) 752-2900
FAX: (225) 756-2706
Email: enteklabs@att.net

Invoice Date: 12/12/03
Invoice No: 3-3885
Sample Rec'd: 11/24/03

ACCOUNTS PAYABLE
EARTH CONSULTING GROUP
POST OFFICE BOX 1246
MADISON, MS 39130

P.O. No.: 5149.001
Notice: Report Mailed To:
W. HAL MOORE

OFFICE USE ONLY: IH: 200.00

QUANTITY ORDERED	DESCRIPTION	UNIT PRICE	AMOUNT
5	COAL TAR VOLATILES - OSHA 58	40.00	$200.00
		SUB-TOTAL	200.00
TERMS: NET 30 DAYS		TOTAL AMOUNT DUE	$200.00

Most major credit cards accepted. To pay by credit card call 1-225-752-2900.
1.5% Interest per month will be applied to delinquent accounts.

CHAIN OF CUSTODY RECORD

COMPANY:
Earth Consulting Groupe
P.O. Box 1246
Madison, MS 39130

ATTN: W. Hal Moore
PHONE: 601-853-2134
FAX: 601-856-3978
P.O.# SN9.001

SAMPLE LOCATION:
Hattiesburg, MS

ENTEK PROJECT NUMBER: 3ECG3885

TURNAROUND TIME: (circle one) Reg. / Rush
NEED BY DATE:

~Sampler Must Complete~

Sampler's Name:	Matthew Courtney
Number of Sample(s):	5
Date/Time Sampled:	11/3/03
Number & Type of Containers:	5
Matrix:	Air Sampling
Transporting Cooler Temperature:	N.A.

SAMPLE IDENTIFICATION			ANALYSIS REQUESTED	STORAGE
110301			OSHA 58	
110302			Coal Tar Volatile	
110303			Air	
110304				
110305		BLANK	QA-12C	

SPECIAL INSTRUCTIONS:

**Acceptable headspace criteria for VOC samples Yes___ No___

CHAIN OF POSSESSION:

RELEASED BY	RECEIVED BY	DATE/TIME
W. Hal Moore	M Stevens/Entek	11/24/03 1030

SAMPLE TEMPERATURE AT SAMPLE RECEIPT: N/A

Entek Environmental Laboratories, Inc., 14285 Airline Highway, Baton Rouge, LA 70817
Phone: (225) 751-2900 Fax: (225) 756-2706

EARTH CONSULTING GROUP, INC.

AIR SAMPLING FIELD DATA SHEET

3ECG 3885

Client	Snapp - Kerr McGee		
City	Hattiesburg	Location:	McK Ave
EarthCon Project #	5149.001	Area:	
Contractor	Singley	Removal Type:	Excavation
Collected By	MFC	Date:	11/3/03

FIELD SAMPLE IDENTIFICATION

Sample #	Sample Location	Sample Type
110301	Same as ~~10/31/03~~ 11/3/03 at N.E. Corner of Dig Area	
110302	" S.E. Corner of Dig Area	
110303	" S.W. Corner of Dig Area	
110304	" N.W. Corner of Dig Area	
110305	BLANK	QA QC

SAMPLING AND ANALYTICAL DATA

Sample #	01	02	03	04	05		
Begin Time	0800	0800	0800	0800	B		
End Time	1700	1700	1700	1700	L		
Down Time (min)					A		
Total Time (min)	540	540	540	540	N		
Flow Rate (L/min)	2	2	2	2	K		
Total Volume (L)	1080	1080	1080	1080			
Fibers Counted							
Fields Counted							
Fiber Conc.(fibers/cm3)							
Detection Limit(fibers/cm3)							
Time Weighted Average							
8 Hour TWA							
QC Fibers Counted							

Analyses Conducted in Accordance with NIOSH Method 7400

* All pump locations same as 10/31/03

Analyst/Date

PZJ2

October 6, 2006

Mr. Corey Milton,
Project Manager
Singley Environmental & Remediation Services
Post Office Box 389
Columbia, Mississippi 39429

Re: EarthCon Project No. S149.004
Air Quality Monitoring
Excavation of Creosote-contaminated Soil
Former Kerr McGee Site
Hattiesburg, Mississippi

Dear Mr. Milton:

Earth Consulting Group, Inc. (EarthCon) performed Air Quality Monitoring during the excavation of creosote-contaminated soil from the former Kerr McGee site in Hattiesburg, Mississippi on May 15, 16, and 17, 2006, and on September 8, 9, and 11, 2006. Project oversight services included monitoring of total volatile organic concentrations at the active excavation sites with a Flame Ionization Detector (FID); point-of-compliance monitoring of Coal Tar Pitch Volatiles for the duration of excavation activities; and preparation of a summary report of the monitoring activities, data, and observations.

Field Activities

Excavation activities performed by Singley Environmental & Remediation Services (Singley) on May 15, 16, and 17, 2006, were focused on the east corner of the intersection of Townsend Avenue with Harrell Street, and on the northeast side of Francis Avenue, approximately 100 feet northeast of the intersection of Francis Avenue with Harrell Street. The excavation involved removing storm drains and contaminated soil surrounding the storm drains at both sites. Mr. Alan Burchett, Senior Project Manager performed the field air quality monitoring and testing during the excavation activities. A Thermo Environmental Instruments Inc., Model 680 Flame

Ionization Detector (FID) was utilized for field measurements of total volatile organic vapor concentrations in the air surrounding the active excavation area. The FID was calibrated daily to a 500 parts-per-million (ppm) Methane calibration standard. The perimeter of the excavation area was scanned for total volatile organic vapor concentrations at 30 minute intervals, with the highest reading recorded for each perimeter check. A Thermo Environmental Instruments Inc. Model 580B Photo Ionization Detector (PID) was utilized simultaneously with the FID to obtain total volatile organic vapor concentrations for organic vapors heavier than Methane, as a check on the field measurements. The field data were tabulated and are presented in Appendix A – Air Monitoring Data Summary. Stand-mounted vacuum pumps, calibrated to 2.0 liters-per-minute of air flow were deployed at the downwind point of compliance to collect cassette-filtered samples over the duration of the excavation activities (daily) for analysis of the benzene soluble fraction of Coal Tar Pitch Volatiles by OSHA Method 58.

Excavation activities performed by Singley on September 8, 9, and 11, 2006, were focused on the west corner of the intersection of Eastside Avenue with East Scooba Street. The excavation involved removing storm drains and contaminated soil surrounding the storm drains from the east side of the Down Home Cooking Restaurant and the west side of the Salon 46 building. The section of concrete culvert beneath the two (2) buildings was filled with concrete. Mr. Tommy Moody, Senior Technician performed the field air quality monitoring and testing during the excavation activities. Field sampling procedures included regular FID readings and collection of OSHA Method 58 cassette samples. A Photovac Micro FID was utilized for field readings, and was calibrated daily to a standard of 500 ppm of Methane. The field data are summarized in Appendix A – Air Monitoring Data Summary. The OSHA Method 58 cassette sample filters were removed from the cassettes at the conclusion of sampling, placed in preserved vials, preserved on ice, and transported to the Entek Environmental Laboratories, Inc. located in Baton Rouge, Louisiana for analysis of the benzene soluble fraction of Coal Tar Pitch Volatiles. The analytical laboratory results are presented in Appendix B – Laboratory Analytical Data.

Data Analysis

An analysis of historic data from previous air quality monitoring events indicated that the Coal Tar Pitch Volatiles by OSHA Method 58 represented approximately 3% to 5% of the total volatile organic concentrations measured by the FID. The daily time weighted average concentrations of total volatile organics (measured with the FID) were calculated for the sampling data from the May 15-17, 2006 excavation activities at values ranging from 0.631 ppm to 0.921 ppm. The corresponding calculated concentrations of Coal Tar Pitch Volatiles ranged from 0.032 ppm to 0.046 ppm. Since these estimated values were approximately one (1) order of magnitude below the OSHA Permissible Exposure Limit (PEL) of 0.200 ppm, the cassette samples from the May 15-17, 2006 air monitoring program were not analyzed. The cassette samples from the September 8-11, 2006 air monitoring program were analyzed as a check on the calculations. The Coal Tar Pitch Volatile concentrations conformed to the estimating algorithm at 3.02% to 3.11% of the total volatile organic concentrations, compared to the FID field measurements.

Observations and Conclusions

The field sampling and laboratory analytical data collected by EarthCon during the excavation monitoring activities at the former Kerr McGee site in Hattiesburg, Mississippi on May 15-17, 2006 and September 8, 9, and 11, 2006 indicated that benzene soluble Coal Tar Pitch Volatile concentrations in the air did not exceed the applicable OSHA PEL during the excavation activities.

If you have any questions concerning the contents of this report, please contact us, toll free, at (877) 389-6476.

Sincerely,
Earth Consulting Group, Inc.

Michael J. Brady, P.E.
Senior Engineer

Attachments

Air Monitoring Data Summary
Singley Environmental Services, Inc.
Former Kerr McGee Site
Hattiesburg, Mississippi
May 17, 2006

Date	Time	Maximum FID Reading (ppm)	Maximum PID Reading (ppm)	Prevailing Wind Condition	Field Sampling Location	Notes
5/17/2006	7:30	0.00	0.0	Variable Lt Wind, Lt. Rain	Excavation perimeter along Harrell Street	Excavating
	8:00	2 86	0.4	"	Excavation perimeter along Harrell Street and Townsend Ave.	Excavating- approximately three (3) feet deep
	8:30	0.00	0.0	"	Excavation perimeter along Harrell Street and Townsend Ave.	Excavating
	9:00	1.63	0.9	"	Excavation perimeter along Harrell Street	Excavating
	9:30	3.41	0.0	"	Excavation perimeter along Townsend Avenue	Excavating - approximately seven (7) feet deep
	10:00	0.00	0.1	"	Excavation perimeter along Townsend Avenue	Excavating
	10:30	2.19	0.2	"	Excavation perimeter along Harrell Street and Townsend Ave.	Excavating - approximately eight (8) feet deep
	11:00	0.00	0.0	"	Excavation perimeter along Harrell Street	Idle
	11:30	0 00	0.0	"	Excavation perimeter along Townsend Avenue	Idle
	12:00	0.00	0.0	"	Excavation perimeter along Townsend Avenue	Idle
	12:30	0.00	0.0	"	Excavation perimeter along Townsend Avenue	Idle
	1:00	0.00	0.0	"	Excavation perimeter along Harrell Street	Backfilling with clean soil
	1:30	0.00	0.0	"	Excavation perimeter along Harrell Street and Townsend Ave.	Backfilling with clean soil
	2:00	0.00	0.0	"	Excavation perimeter along Harrell Street and Townsend Ave	Backfilling with clean soil
	2:30	0.00	0 0	"	Excavation perimeter along Harrell Street	Backfilling with clean soil
	3:00	0 00	0.0	"	Excavation perimeter along Harrell Street and Francis Avenue	Backfilling with clean soil

FID: Flame Ionization Detector
PID: Photo Ionization Detector
ppm: parts-per-million

EarthCon
Earth Consulting Group, Inc.

October 20, 2006

Mr. Corey Milton,
Project Manager
Singley Environmental & Remediation Services
Post Office Box 389
Columbia, Mississippi 39429

Re: EarthCon Project No. S149.004
Air Quality Monitoring
Excavation of Creosote-Contaminated Soil
Former Kerr McGee Site
Hattiesburg, Mississippi

Dear Mr. Milton:

Earth Consulting Group, Inc. (EarthCon) is pleased to transmit the attached final lab report for the Air Quality Monitoring samples that were collected during the excavation of creosote-contaminated soil from the former Kerr McGee site in Hattiesburg, Mississippi on September 8, 9, and 11, 2006. Please substitute these for the provisional lab report that was appended to the Air Quality Monitoring Report. Please contact us, toll free, at (877) 389-6476 if you have any questions concerning these data.

Sincerely,
Earth Consulting Group, Inc.

Michael J. Brady, P.E.
Senior Engineer

Attachment

ENTEK

Industrial Hygiene
ACCREDITED
LABORATORY

INDUSTRIAL HYGIENE SAMPLES
BSF ANALYSES
SAMPLES RECEIVED: 09/13/06

FOR

EARTH CONSULTING GROUP, INC.
110 WEISEMBERGER ROAD
MADISON, MS 39110

ATTENTION: MIKE BRADY

OCTOBER 4, 2006
PROJECT NO.: IH6-0273

ENTEK

LABORATORY

Earth Consulting Group, Inc.
Madison, MS
Attention: Mike Brady

Project No.:	IH6-0273
Report Date:	10/04/06
Date Received:	09/13/06

Sample Location: Kerr McGee Site, Hattiesburg, MS

Seven industrial hygiene cassettes were received and analyzed for Benzene Soluble Fraction, as requested.

Entek is pleased to have had the opportunity to provide analytical services for parameters as requested. Please do not hesitate to contact our office if you have any questions or require additional information concerning this report.

This information has been reviewed by:

Sayi Malineni
QA Coordinator

Sham L. Sachdev Ph. D., CHCM
Laboratory Director

vm

ENTEK

Industrial Hygiene
ACCREDITED
LABORATORY

Earth Consulting Group, Inc.
Madison, MS
Attention: Mike Brady

Project No.: IH6-0273
Report Date: 10/04/06
Date Rec'd: 09/13/06

Entek Sample ID: 06-10637
Sample ID: 09-08-06-01
Sample Date: 09/08/06

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	0.893	0.906	3.0	1.5	0.026	398	0.065

Entek Sample ID: 06-10638
Sample ID: 09-08-06-02
Sample Date: 09/08/06

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	0.323	0.318	3.0	1.5	<0.010	398	<0.025

Entek Sample ID: 06-10639
Sample ID: 09-09-06-01
Sample Date: 09/09/06

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	0.114	0.125	3.0	1.5	<0.010	214	<0.047

Entek Sample ID: 06-10640
Sample ID: 09-09-06-02
Sample Date: 09/09/06

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	1.654	1.675	3.0	1.5	0.028	214	0.131

Entek Sample ID: 06-10641
Sample ID: 09-09-06-Blank
Sample Date: 09/09/06

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	-0.479	-0.472	3.0	1.5	<0.010	214	<0.047

ENTEK

Industrial Hygiene ACCREDITED LABORATORY

Earth Consulting Group, Inc.
Madison, MS
Attention: Mike Brady

Project No.: IH6-0273
Report Date: 10/04/06
Date Rec'd: 09/13/06

Entek Sample ID: 06-10642
Sample ID: 09-11-06-01
Sample Date: 09/11/06

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	0.958	0.956	3.0	1.5	<0.010	514	<0.019

Entek Sample ID: 06-10643
Sample ID: 09-11-06-02
Sample Date: 09/11/06

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	-0.176	-0.149	3.0	1.5	0.054	514	0.105

Quality Control

	Method Number	Quant. Limit (mg)	QA/QC (obs/act)
BSF*	OSHA 58	0.01	10.017/10.000

	Run 1 (mg)	Run 2 (mg)	%RPD
BSF*	1.552	1.547	0.323

DTA Start: 09/29/06 1200 AJ
DTA Finish: 10/03/06 1200 AJ

Samples 06-10639 and 06-10640 were corrected with the corresponding blank sample 06-10641.

* BSF - Benzene Soluble Fraction.
The sample results were all below the PEL of 0.20mg/m^3 for the BSF. Subsequently, the analysis for individual PAH's was not required.

INDUSTRIAL HYGIENE
CHAIN OF CUSTODY RECORD

COMPANY:
Earth Consulting Group, Inc
110 Weisemberger Road
Madison, MS 39110

ATTN Mike Brady
PHONE (601) 853-2134
FAX (601) 853-3978
P O.# S149 004

ENTEK PROJECT NUMBER:

TURNAROUND TIME: REG. / RUSH (circle one)
NEED BY DATE:

SAMPLE LOCATION: Kerr Magee Site Hattiesburg, MS.

Sampler Must Complete

Sampler's Name:	Tommy Moody
Date Sampled:	Sept. 8, 9, and 11, 2006
Number of Sample(s):	7
Number & Type of Containers:	7 - 4ml Glass

SAMPLE IDENTIFICATION	COLLECTION DATE	START TIME	FINISH TIME	ANALYSIS REQUESTED
09-08-06-01	9-8-06	1104	1423	OSHA 58
09-08-06-02	9-8-06	1104	1423	" "
09-09-06-01	9-9-06	0943	1130	OSHA 58
09-09-06-02	9-9-06	0943	1130	" "
09-09-06-Blank	9-9-06	—	—	" "
09-11-06-01	9-11-06	0943	1400	OSHA 58
09-11-06-02	9-11-06	0943	1400	" "
Sample rate - 2 L per Minute; Gels removed from Cassettes & placed in 4ml sealed vials. Samples preserved at 4°C.				

CHAIN OF POSSESSION

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
Tommy Moody 9-12-06 15:00		

Latick Environmental Laboratories, Inc , 14285 Airline Highway, Baton Rouge, LA 70817
Phone (225) 752-2900 Fax. (225) 756-2706

EarthCon
Earth Consulting Group, Inc.

May 21, 2007

Mr. Corey Milton, Project Manager
Singley Environmental & Remediation Services, Inc.
Post Office Box 389
Columbia, Mississippi 39429

Re: EarthCon Project No. S149.005
Air Quality Monitoring
Excavation of Creosote-Contaminated Soil
Former Kerr McGee Site
Hattiesburg, Mississippi

Dear Mr. Milton:

Earth Consulting Group, Inc. (EarthCon) performed Air Quality Monitoring during the excavation of creosote-contaminated soil from the former Kerr McGee site in Hattiesburg, Mississippi on April 23, 2007. Project oversight services included monitoring of total volatile organic concentrations at the active excavation site with a Flame Ionization Detector (FID); point-of-compliance monitoring of Coal Tar Pitch Volatiles for the duration of excavation activities; and preparation of a summary report of the monitoring activities, data, and observations.

Field Activities

Excavation activities performed by Singley Environmental & Remediation Services, Inc. (Singley) on April 23, 2007, were focused at the 106 East Scooba Street location. Mr. Timothy Carter, Staff Scientist, performed the field air quality monitoring and testing during the excavation activities. A Detecto-Pak 4 Flame Ionization Detector (FID) was utilized for field measurements of total volatile organic vapor concentrations in the air surrounding the active excavation area. The FID was calibrated to a 100 parts-per-million (ppm) Methane calibration standard prior to field monitoring activities. The perimeter of the excavation area was scanned for total volatile organic vapor concentrations at approximate 30-minute intervals, with the highest reading recorded for each perimeter check. The field data is presented in Appendix A – Field Data Sheet. Two (2) stand-mounted vacuum pumps, calibrated to 2.0 liters-per-minute

of air flow, were deployed at the upwind and downwind point of compliance to collect cassette-filtered samples over the duration of the excavation activities. The OSHA Method 58 cassette sample filters were removed from the cassettes at the conclusion of sampling. placed in preserved vials, preserved on ice, and transported to the Entek Environmental Laboratories, Inc. located in Baton Rouge, Louisiana for analysis. The cassettes were analyzed for the benzene soluble fraction of Coal Tar Pitch Volatiles by OSHA Method 58. The analytical results are presented in Appendix B – Laboratory Analytical Data.

Observations and Conclusions

The field sampling and laboratory analytical data collected by EarthCon during the excavation monitoring activities at the former Kerr McGee site in Hattiesburg, Mississippi on April 23, 2007 indicated that volatile organic vapor concentrations ranged from 19 ppm to 32 ppm in the work areas. Benzene soluble Coal Tar Pitch Volatile concentrations in air ranged from 0.013 mg/m^3 in the upwind sample to 0.018 mg/m^3 in the downwind sample. Both results are indicated as below the 0.20 mg/m^3 permissible exposure limit for the benzene soluble fraction in the sample report. If you have any questions concerning the contents of this report, please contact us, toll free, at (877) 389-6476.

Sincerely,
Earth Consulting Group, Inc.

Timothy D. Carter
Staff Scientist

Attachments

Air Monitoring Data Summary
Singley Environmental Services, Inc.
Former Kerr McGee Site
Hattiesburg, Mississippi
April 23, 2007

Date	Time	Maximum FID Reading (ppm)	Prevailing Wind Condition	Field Sampling Location	Notes
4/23/2007	9:00	N/A	Southerly Wind	N/A	Detecto-Pak 4 FID Calibrated at 100ppm Methane
	9:56	19	"	Excavation perimeter along 106 East Scooba Street	Excavating Contaminated Pipeline
	10:26	24	"	"	Excavating north end of contaminated ditch
	10:57	32	"	"	Excavating south end of contaminated ditch
	11:28	32	"	"	Idle
	12:02	32	"	"	Idle
	12:33	30	"	"	Idle
	1:03	23	"	"	Excavating
	1:37	22	"	"	Excavating
	2:07	22	"	"	Excavating - ditch approximately 60 feet long
	2:37	24	"	"	Backfilling with clean soil
	3:08	28	"	"	Backfilling with clean soil
	3:36	24	"	"	Idle

FID Flame Ionization Detector
ppm parts-per-million

Earth Consulting Group
Attn: Mike Brady

7-0101

Entek Sample ID: 07-05029
Sample ID: 04-23-07-01
Sample Date: 04/23/07

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	0.453	0.459	3.0	1.5	0.012	920	0.013

Entek Sample ID: 07-05030
Sample ID: 04-23-07-02
Sample Date: 04/23/07

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	0.817	0.825	3.0	1.5	0.016	906	0.018

Quality Control

	Method Number	Quant. Limit (mg)	QA/QC
BSF*	OSHA 58	0.01	5.008/5.00

	Run 1 (mg)	Run 2 (mg)	%RPD
BSF*	10.012	10.014	0.020

DTA Start 05/10/07 0830 AJ
DTA Finish 05/11/07 1600 AJ

* BSF - Benzene Soluble Fraction.

The sample results were all below the PEL of 0.20mg/m^3 for the BSF. Subsequently, the analysis for individual PAH's was not required.

EarthCon
Earth Consulting Group, Inc.

May 25, 2007

Mr. Corey Milton, Project Manager
Singley Environmental & Remediation Services
Post Office Box 389
Columbia, Mississippi 39429

Re: EarthCon Project No. S149.005
Air Quality Monitoring
Excavation of Creosote-Contaminated Soil
Former Kerr McGee Site
Hattiesburg, Mississippi

Dear Mr. Milton:

Earth Consulting Group, Inc. (EarthCon) is pleased to transmit the attached final lab report for the Air Quality Monitoring samples that were collected during the excavation of creosote-contaminated soil from the former Kerr McGee site in Hattiesburg, Mississippi on April 23, 2007. Please contact us, toll free, at (877) 389-6476 if you have any questions concerning these data.

Sincerely,
Earth Consulting Group, Inc.

Timothy D. Carter
Staff Scientist

Attachment

ENTEK
ENVIRONMENTAL LABORATORIES, INC.
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE (225) 752-2900 FAX (225) 756-2706
Email: entek@entekla.com

AIHA Industrial Hygiene ACCREDITED LABORATORY

INDUSTRIAL HYGIENE SAMPLES
BSF ANALYSES
SAMPLES RECEIVED: 04/26/07

FOR

EARTH CONSULTING GROUP, INC.
110 WEISENBERGER ROAD
MADISON, MS 39110

ATTENTION: MIKE BRADY

MAY 18, 2007
PROJECT NO.: IH7-0101

ENTEK

ENVIRONMENTAL LABORATORIES, INC.
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE (225) 752-2900 FAX (225) 756-2706
Email: entekbr@att.net

AIHA Industrial Hygiene ACCREDITED LABORATORY

Earth Consulting Group, Inc.
Madison, MS
Attention: Mike Brady

Project No.:	IH7-0101
Report Date:	05/18/07
Date Received:	04/26/07
P.O. No.:	S149.005

Sample Location: Former Kerr McGee Site, Hattiesburg, MS

Two industrial hygiene cassettes were received and analyzed for Benzene Soluble Fraction, as requested.

Entek is pleased to have had the opportunity to provide analytical services for parameters as requested. Please do not hesitate to contact our office if you have any questions or require additional information concerning this report.

This information has been reviewed by:

Sayi Malineni
QA Coordinator

Sham L. Sachdev Ph. D., CHCM
Laboratory Director

ms

ENTEK

ENVIRONMENTAL LABORATORIES, INC.
14285 AIRLINE HIGHWAY
BATON ROUGE, LOUISIANA 70817
PHONE (225) 752-2900 FAX (225) 756-2706
Email: enteklabs@aol.net

Industrial Hygiene
ACCREDITED
LABORATORY

Earth Consulting Group, Inc.
Madison, MS
Attention: Mike Brady

Project No.: IH7-0101
Report Date: 05/18/07
Date Rec'd: 04/26/07
P.O. No.: S149.005

Entek Sample ID: 07-05029
Sample ID: 04-23-07-01
Sample Date: 04/23/07

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	0.453	0.459	3.0	1.5	0.012	920	0.013

Entek Sample ID: 07-05030
Sample ID: 04-23-07-02
Sample Date: 04/23/07

	Initial Wt. (mg)	Final Wt. (mg)	Desorption (mLs)	Analysis Vol (mLs)	Total (mg/filter)	Air Vol (L)	Conc. (mg/m^3)
BSF*	0.817	0.825	3.0	1.5	0.016	906	0.018

Quality Control

	Method Number	Quantitation Limit (mg)	LCS QC (obs/true)
BSF*	OSHA 58	0.01	5.008/5.00

	Run 1 (mg)	Run 2 (mg)	%RPD
BSF*	10.012	10.014	0.020

DTA Start 05/10/07 0830 AJ
DTA Finish 05/11/07 1600 AJ

* BSF - Benzene Soluble Fraction.

The sample results were all below the PEL of $0.20 mg/m^3$ for the BSF. Subsequently, the analysis for individual PAH's was not required.