



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Mark E. Fesmire, P.E.**  
Director  
Oil Conservation Division

1/16/2007

Randy Barnes  
Hess Corp.  
POB 840  
Seminole, TX 79360

Re: Phillips "H" Culp Battery #19

Dear Mr. Barnes:

New Mexico Oil Conservation Division (OCD) personnel reviewed the closure report submitted by Hess Corporation (Hess) for the site referenced above. The closure is hereby approved according to information provided.

Please be advised that OCD approval does not relieve Hess of liability should operations result in contamination of surface water, groundwater, or the environment. In addition, OCD approval does not relieve Hess of responsibility for compliance with other federal, state or local laws and or regulations.

If you have any questions or need assistance please write or call: 505-393-6161 ext. 102, or e-mail [chris.williams@state.nm.us](mailto:chris.williams@state.nm.us).

Sincerely,

*Chris Williams*  
NMOCD District 1 Supervisor



# HESS CORPORATION

## PHILLIPS "H" CULP BATTERY #19 LEA COUNTY, NEW MEXICO

### SITE CLOSURE REPORT

PREPARED BY:

**BBC INTERNATIONAL, INC.**  
WORLD-WIDE ENVIRONMENTAL SPECIALISTS  
1324 W. MARLAND BLVD.  
P. O. BOX 805  
HOBBS, NEW MEXICO 88240  
(505)397-6388 • FAX (505)397-0397  
EMAIL: [bbc@bbcinternational.com](mailto:bbc@bbcinternational.com)  
WEBSITE: [www.bbcinternational.com](http://www.bbcinternational.com)

January 12, 2006

PREPARED FOR:

**MR. RANDY BARNES**  
**HESS CORPORATION**  
P.O. BOX 840  
SEMINOLE, TX 79360

*RP#1172*

*Facility - FPACO701751933  
Incident - nPACO701752127  
Application - pPACO701752216*

# Hess Corporation

## Phillips "H" Culp Battery #19

### 1.0 INTRODUCTION

The subject site is north of Monument, New Mexico in Lea County in Unit Letter D, of Section 19, Township 19 South, and Range 37 East. The site is an abandoned tank battery. Hess Corporation (Hess) sent a remediation plan to the New Mexico Oil Conservation Division (NMOCD) and the plan was approved on December 5, 2005.

### 2.0 SITE CHARACTERIZATION

The area of the site measures approximately 20,000 square feet. There are no water sources within 1,000 horizontal feet of the site. There is no surface water within 1,000 horizontal feet of the site. Based on data from the Office of the State Engineer and the United States Geological Survey, the average depth to groundwater is greater than 50 feet. Bedrock in the Monument area is very shallow and it is approximately one foot below the surface of the topsoil.

### 3.0 SITE ACTIVITIES

Hess retained E.D. Walton Construction (E.D. Walton) to excavate the site and haul contaminated soil to a landfarm approved by NMOCD. BBC International, Inc. (BBC) was also retained by Hess to collect soil samples for laboratory analysis.

On June 26, 2006, BBC collected four (4) soil samples from test holes excavated with a trackhoe. The samples were tested for total petroleum hydrocarbons (TPH) – gasoline range organics (GRO)/diesel range organics (DRO), chloride, and benzene-toluene-ethylbenzene-xylene (BTEX). All samples were non-detect for BTEX. The Flare Line 3' sample was collected from the bottom of the flare line excavation on the northeast side of the site at three (3) feet below ground surface (bgs). The sample was non-detect for GRO, and had 52.0 parts per million (ppm) DRO and 32 ppm chloride. Two (2) samples were collected from a trench in the burn pit located on the northwest side of the site. Both of these samples were non-detect for GRO. The Burn Pit 1' sample at one (1) foot bgs had 101 ppm DRO and 16 ppm chloride. The Burn Pit 4' sample at four (4) feet bgs had 18.0 ppm DRO and 16 ppm chloride. The Tank Pad 4' sample was collected from a trench in the tank pad of the battery area located on the south end of the site at four (4) feet bgs. The sample was non-detect for GRO and DRO and chloride content was 176 ppm. All site diagrams depicting sample

points can be found in **Appendix I**, laboratory analyticals can be found in **Appendix II**, and site photographs can be viewed in **Appendix III**.

Samples were collected on July 6, 2006 from the battery area and burn pit. The Junction Box 6' sample was taken from the southeast corner of the tank battery area at six (6) feet bgs in the former location of a junction box. The sample had 46.7 ppm GRO, 968 ppm DRO, and was non-detect for chloride and BTEX. The Battery 1 3' sample from the northeast side of the battery excavation at three (3) feet bgs was non-detect for GRO and BTEX, and had 24.3 ppm DRO and 32 ppm chloride. The Battery 2 4' sample from the center of the battery excavation at four (4) feet bgs was non-detect for GRO and BTEX, and had 67.7 ppm DRO and 16 ppm chloride. The Battery 3 4' sample from the southwest corner of the battery excavation at four (4) feet bgs was non-detect for GRO, DRO, and BTEX, and had 32 ppm chloride. The Burn Pit NW 4' sample from the center of the burn pit at four (4) feet bgs had 236 ppm GRO and 1,370 ppm DRO, and was non-detect for chloride and BTEX.

On July 7, 2006, BBC collected samples from the burn pit spoils pile and the bottom of a trench excavated in the center of the burn pit. The Burn Pile Composite sample was non-detect for GRO and BTEX, and had 106 ppm DRO and 16 ppm chloride. The Burn Pit 20' sample from the trench excavated to twenty (20) feet bgs in the burn pit contained 789 ppm GRO, 4,070 ppm DRO, 144 ppm chloride, 0.010 ppm ethylbenzene, and 0.227 ppm total xylenes.

BBC drilled two (2) boreholes on July 11, 2006 in the burn pit to collect soil samples. Two (2) soil samples were submitted to a laboratory from the first soil boring, SB1. The SB1-3' sample at three (3) feet bgs was non-detect for GRO, DRO, and BTEX, and had 32 ppm chloride. The SB1-30' sample at thirty (30) feet bgs was non-detect for GRO, DRO, and BTEX, and had 208 ppm chlorides. At the second soil boring, SB2, three samples were collected. The SB2-3' sample at three (3) feet bgs had 318 ppm GRO, 1,600 ppm DRO, 32 ppm chloride, 0.139 ppm ethylbenzene, and 0.331 ppm total xylenes. The SB2-5' sample at five (5) feet bgs contained 56.4 ppm GRO, 1,350 ppm DRO, 48 ppm chloride, 0.036 ppm ethylbenzene, and 0.095 ppm total xylenes. The SB2-20' sample at twenty (20) feet bgs was non-detect for GRO, DRO, and BTEX, and had 176 ppm chloride.

After the site was fully excavated, BBC collected samples on July 25, 2006 from the former location of the junction box in the tank battery excavation, the bottom of the burn pit, and the spoils piles for each of these excavations. The Junction Box 18' sample at eighteen (18) feet bgs was non-detect for GRO and BTEX, and had 651 ppm DRO and 160 ppm chloride. The Burn Pit 20' sample had 20.3 ppm GRO, 1,830 ppm DRO, 128 ppm chloride, 0.048 ppm ethylbenzene, and 0.114 ppm total xylenes. The composite Burn Pit Spoils sample was non-detect for GRO, and contained 1,350 ppm DRO, 32 ppm chloride, and 0.018 total

xylenes. The composite Junction Box Spoils sample was non-detect for GRO and BTEX, and contained 1,030 ppm DRO and 192 ppm chloride.

Site excavation was completed on July 20, 2006. A total of 4,820 cubic yards of contaminated soil was hauled to NMOCD approved landfarms located in Monument, NM. BBC transported 2,744 cubic yards of soil to C & C Landfarm and 2,076 cubic yards to J & L Landfarm.

NMOCD approved the backfill and closure of the site after reviewing soil sample laboratory analytical results with the condition that a one foot thick clay liner be placed in the burn pit excavation and the excavation in the former location of the junction box. NMOCD approval by email correspondence can be reviewed in **Appendix IV**.

Backfilling and contouring of the site was completed on November 9, 2006 with a total of 3,912 cubic yards of clean soil. The burn pit and junction box excavation were backfilled with caliche to four (4) feet bgs. A one foot thick clay liner was installed in each excavation to three (3) feet bgs. Caliche was placed in all other excavated areas to three (3) feet bgs, and the entire site was completed with topsoil and contoured to grade. The site will be reseeded in the spring of 2007.

#### **4.0 CONCLUSION**

According to the Office of the State Engineer and the United States Geological Survey, depth to groundwater is greater than 50 feet. There are no water sources and no surface water bodies within 1,000 horizontal feet. After reviewing groundwater levels and soil sample laboratory analytical results, backfill and closure of the site was approved by NMOCD with the installation of clay liners in the burn pit and junction box excavation.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Hess Corporation	Contact Randy Barnes
Address P.O. Box 840, Seminole, TX 79360	Telephone No. (432) 758-6778
Facility Name Phillips H Culp Battery #19	Facility Type Abandoned Tank Battery

Surface Owner Jim Cooper Fee	Mineral Owner	Lease No.
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	19	19S	37E					

57'

Latitude 32° 38.406' Longitude 103° 17.172'

**NATURE OF RELEASE**

Type of Release Historical	Volume of Release Unknown	Volume Recovered Unknown
Source of Release Unknown	Date and Hour of Occurrence Unk	Date and Hour of Discovery Unknown
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
Hydrocarbon contamination of soil by oil production activities. Site investigation was conducted in preparation for cleanup activities. A remediation plan was developed.

Describe Area Affected and Cleanup Action Taken.\*  
Contaminated soil was removed from the site and taken to a NMOCD approved landfarm. Before backfilling, samples were collected to confirm compliance to guidelines. The site was backfilled with clean soil, contoured, and will be reseeded.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

**OIL CONSERVATION DIVISION**

Signature:	Approved by District Supervisor:	
Printed Name: Amy C. Ruth	Approval Date:	Expiration Date:
Title: Environmental Scientist	Conditions of Approval:	
E-mail Address: amy@bbcinternational.com	Attached <input type="checkbox"/>	
Date: 01/10/07 Phone: (505) 397-6388		

\* Attach Additional Sheets If Necessary

# **APPENDIX I**

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## **Site Diagrams**

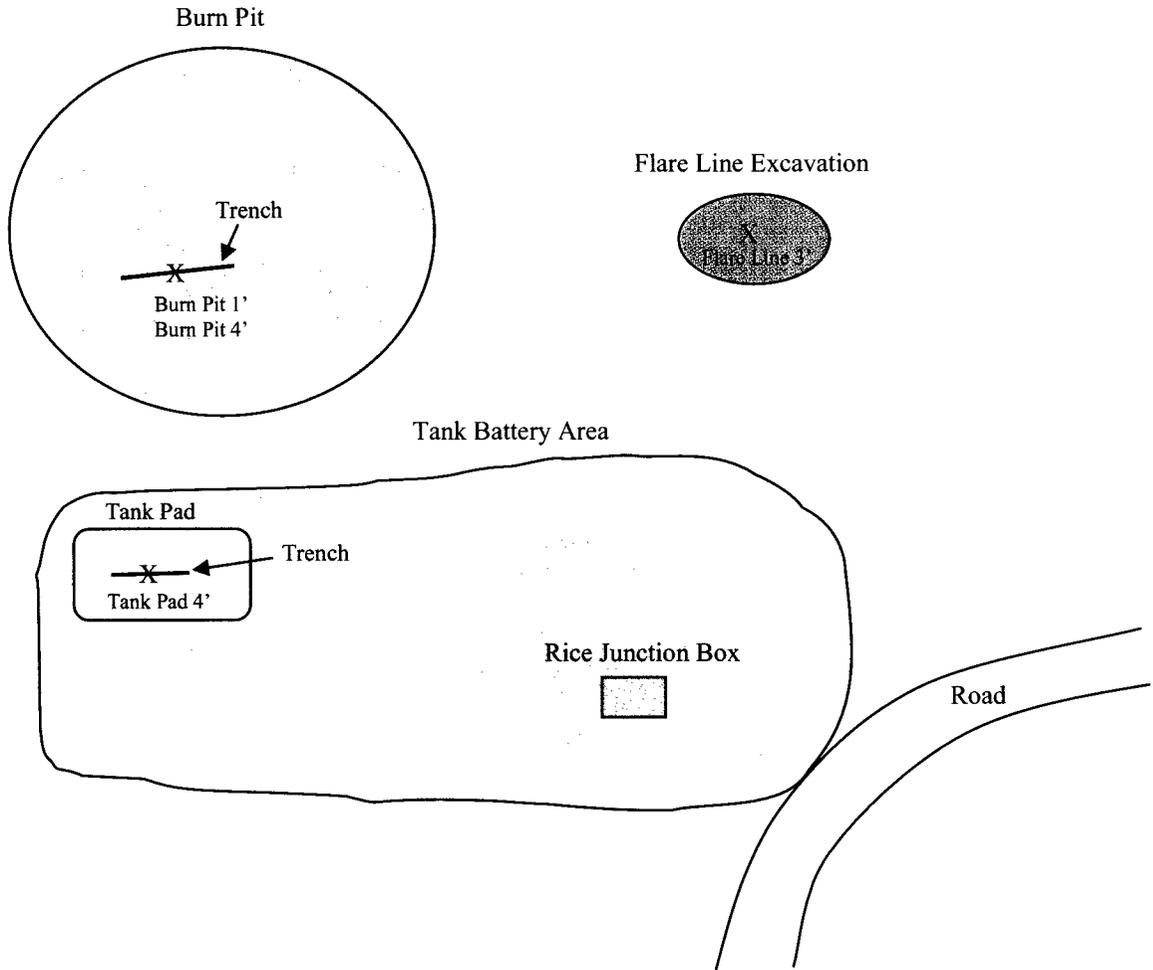
### **Phillips "H" Culp Battery #19 Monument, New Mexico**

Prepared for:  
Hess Corporation  
Seminole, Texas

**January, 2007**

Prepared by:  
BBC International, Inc.

# HESS CORPORATION PHILLIPS "H" CULP BATTERY #19



## LEGEND

X Sample Points

□ Areas to be excavated

■ Excavated to 3 feet below ground surface

BBC INTERNATIONAL, INC.

**HESS CORPORATION**  
**Phillips "H" Culp Battery #19**

Date: 1-11-07

Drawn By: AR

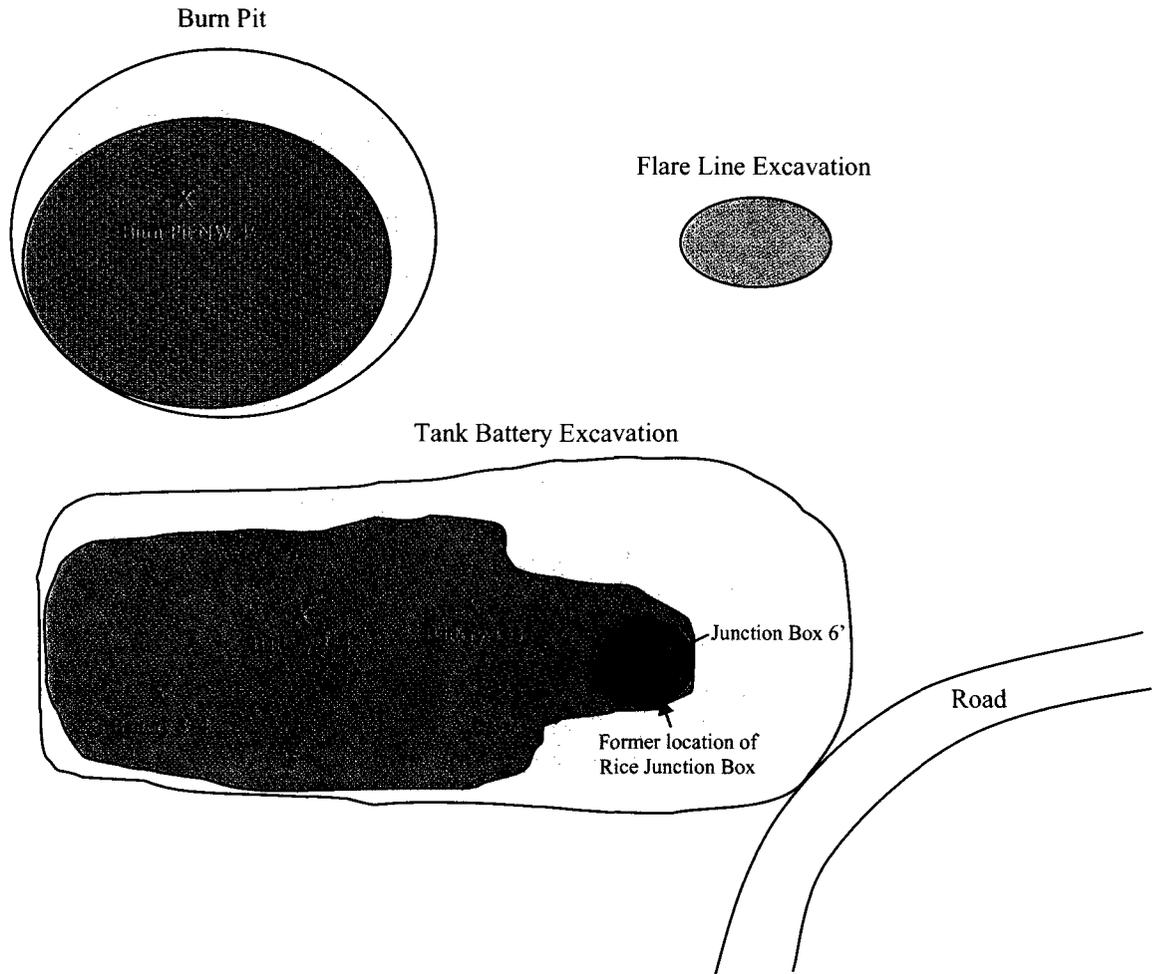
Disk:

Sheet 1 of 1 Sheets

Scale: Not to Scale

File Name

# HESS CORPORATION PHILLIPS "H" CULP BATTERY #19



## LEGEND

- X Sample Points
- Area to be excavated
- Area excavated to 3 to 4 feet below ground surface
- Area excavated to 6 feet below ground surface

BBC INTERNATIONAL, INC.

**HESS CORPORATION**  
**Phillips "H" Culp Battery #19**

Date: 1-12-07

Drawn By: AR

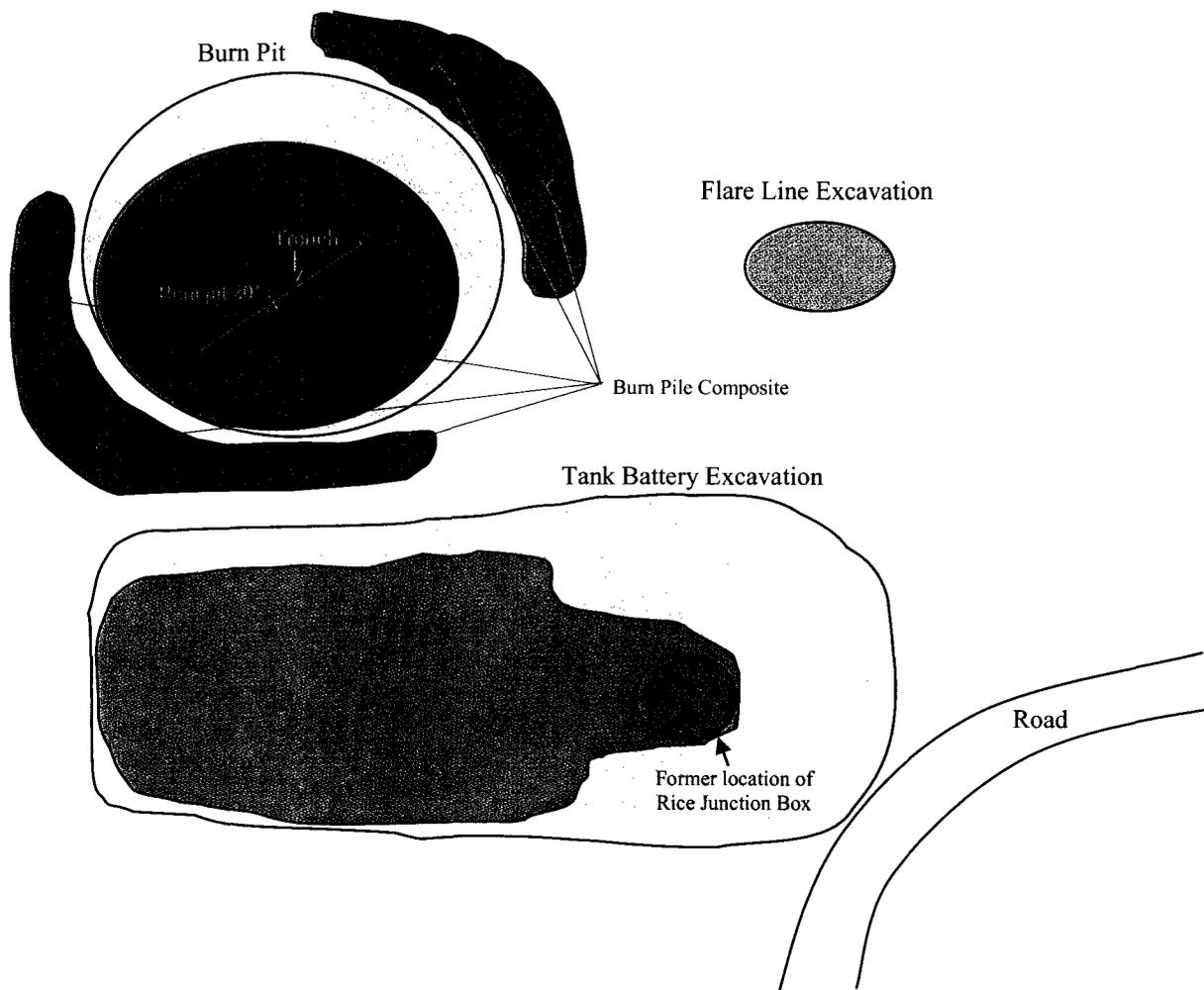
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Sheet 1 of 1 Sheets

Scale: Not to Scale

File Name

# HESS CORPORATION PHILLIPS "H" CULP BATTERY #19



## LEGEND

X Sample Points

 Area to be excavated

 Area excavated to 3 to 4 feet below ground surface

 Area excavated to 6 feet below ground surface

 Burn pit spoils piles

BBC INTERNATIONAL, INC.

HESS CORPORATION  
Phillips "H" Culp Battery #19

Date: 1-12-07

Drawn By: AR

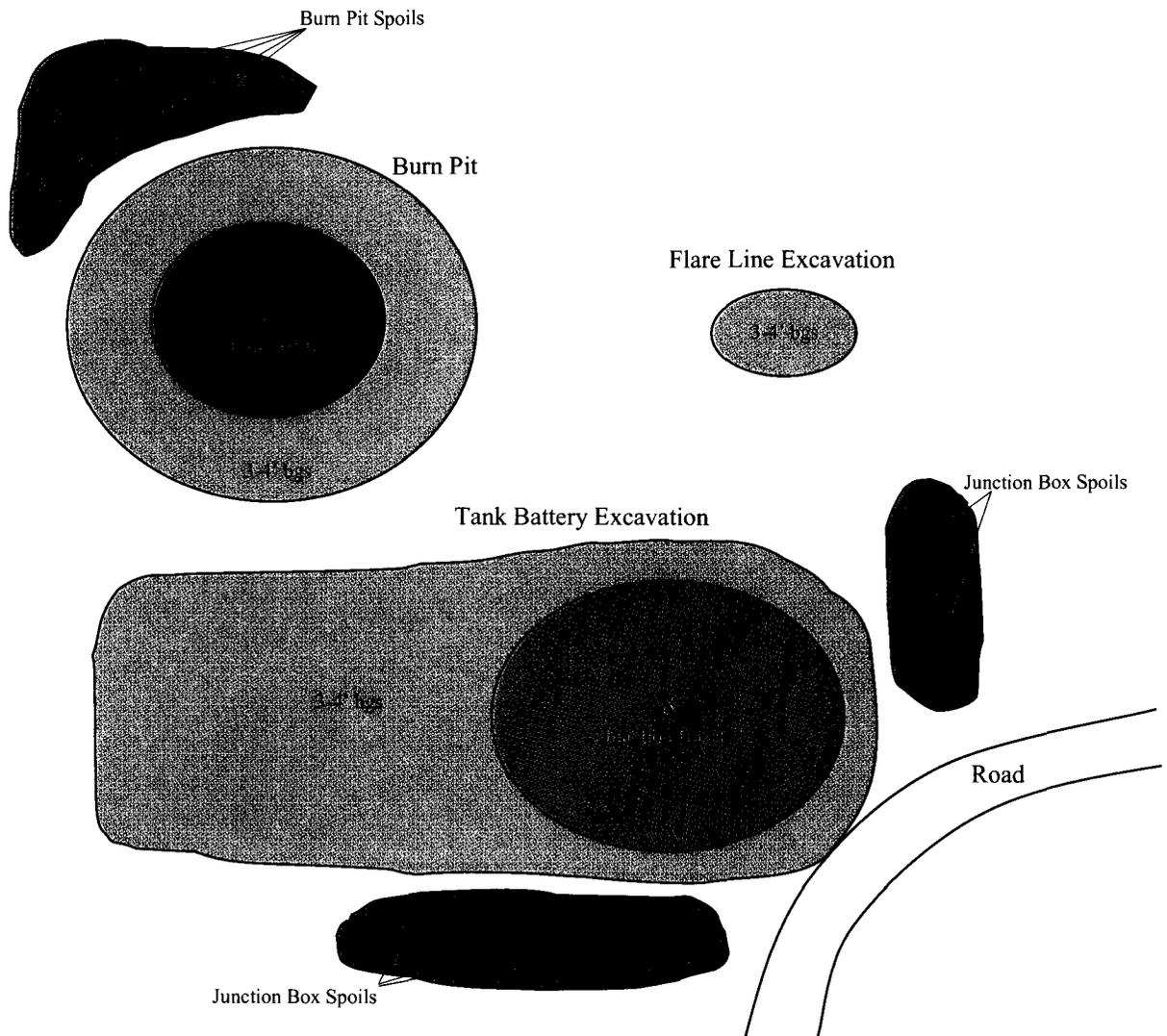
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Sheet 1 of 1 Sheets

Scale: Not to Scale

File Name

# HESS CORPORATION PHILLIPS "H" CULP BATTERY #19



## LEGEND

X Sample Points



Area excavated 3 to 4 feet below ground surface



Area excavated 18 to 20 feet below ground surface



Spoils piles

BBC INTERNATIONAL, INC.

HESS CORPORATION  
Phillips "H" Culp Battery #19

Date: 1-12-07

Drawn By: AR

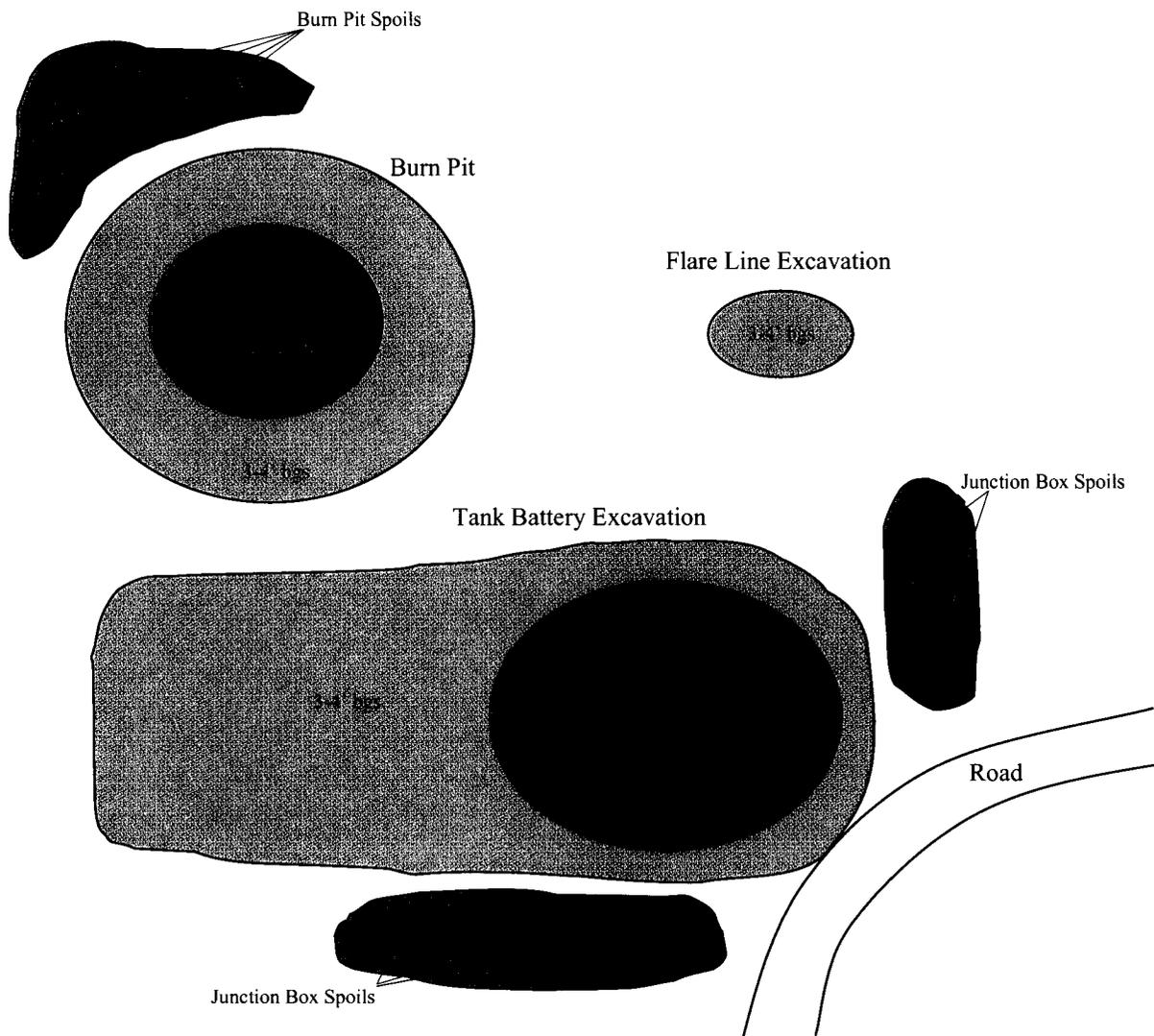
Disk:

Sheet 1 of 1 Sheets

Scale: Not to Scale

File Name

# HESS CORPORATION PHILLIPS "H" CULP BATTERY #19



## LEGEND

X Sample Points

 Area excavated 3 to 4 feet below ground surface

 Area excavated 18 to 20 feet below ground surface

 Spoils piles

BBC INTERNATIONAL, INC.

HESS CORPORATION  
Phillips "H" Culp Battery #19

Date: 1-12-07

Drawn By: AR

Disk:

Sheet 1 of 1 Sheets

Scale: Not to Scale

File Name

# **APPENDIX II**

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## **Laboratory Analytical Results**

**Phillips "H" Culp Battery #19  
Monument, New Mexico**

Prepared for:  
Hess Corporation  
Seminole, Texas

**January, 2007**

Prepared by:  
BBC International, Inc.



# ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: CLIFF BRUNSON  
P.O. BOX 805  
HOBBS, NM 88241  
FAX TO: (505) 397-0397

Receiving Date: 06/27/06  
Reporting Date: 06/30/06  
Project Number: MONUM 06ES001  
Project Name: PHILLIPS CULP  
Project Location: MONUMENT, NM

Sampling Date: 06/26/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: HM  
Analyzed By: BC/HM

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		06/28/06	06/28/06	06/29/06
H11287-1	FLARE LINE 3'	<10.0	52.0	32
H11287-2	BURN PIT 4'	<10.0	18.0	16
H11287-3	TANK PAD 4'	<10.0	<10.0	176
H11287-4	BURN PIT 1'	<10.0	101	16
Quality Control		738	748	960
True Value QC		800	800	1000
% Recovery		92.3	93.0	96.0
Relative Percent Difference		4.2	1.5	3.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-Cl'B

\*Analyses performed on 1:4 w:v aqueous extracts.

  
Chemist

6/30/06  
Date

H11287A

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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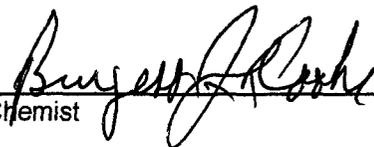
ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: CLIFF BRUNSON  
P.O. BOX 805  
HOBBS, NM 88241  
FAX TO: (505) 397-0397

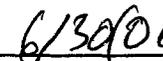
Receiving Date: 06/27/06  
Reporting Date: 06/30/06  
Project Number: MONUM 06ES001  
Project Name: PHILLIPS CULP  
Project Location: MONUMENT, NM

Sampling Date: 06/26/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: HM  
Analyzed By: BC

LAB NUMBER   SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE	06/29/06	06/29/06	06/29/06	06/29/06
H11287-1 FLARE LINE 3'	<0.005	<0.005	<0.005	<0.015
H11287-2 BURN PIT 4'	<0.005	<0.005	<0.005	<0.015
H11287-3 TANK PAD 4'	<0.005	<0.005	<0.005	<0.015
H11287-4 BURN PIT 1'	<0.005	<0.005	<0.005	<0.015
Quality Control	0.091	0.098	0.092	0.300
True Value QC	0.100	0.100	0.100	0.300
% Recovery	91	98.1	92	100
Relative Percent Difference	9.8	1.7	5.9	1.9

METHOD: EPA SW-846 8260

  
Chemist

  
Date

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ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: CLIFF BRUNSON  
P.O. BOX 805  
HOBBS, NM 88241  
FAX TO: (505) 397-0397

Receiving Date: 07/06/06  
Reporting Date: 07/10/06  
Project Number: MONUM 06ES001  
Project Name: PHILLIPS H CULP BATTERY 19  
Project Location: MONUMENT, NM

Sampling Date: 07/06/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: HM  
Analyzed By: BC/HM

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		07/08/06	07/08/06	07/07/06
H11322-1	JUNCTION BOX 6'	46.7	968	<16
H11322-2	BATTERY 1 3'	<10.0	24.3	32
H11322-3	BATTERY 2 4'	<10.0	67.7	16
H11322-4	BATTERY 3 4'	<10.0	<10.0	32
H11322-5	BURN PIT NW 4'	236	1370	<16
Quality Control		771	793	960
True Value QC		800	800	1000
% Recovery		96.4	99.2	96.0
Relative Percent Difference		3.5	0.9	4.2

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-Cl'B

\*Analyses performed on 1:4 w:v aqueous extracts.

Burgess J. Cook  
Chemist

7/10/06  
Date

H11322A

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Receiving Date: 07/06/06  
Reporting Date: 07/10/06  
Project Number: MONUM 06ES001  
Project Name: PHILLIPS H CULP BATTERY 19  
Project Location: MONUMENT, NM

Sampling Date: 07/06/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: HM  
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		07/08/06	07/08/06	07/08/06	07/08/06
H11322-1	JUNCTION BOX 6'	<0.005	<0.005	<0.005	<0.015
H11322-2	BATTERY 1 3'	<0.005	<0.005	<0.005	<0.015
H11322-3	BATTERY 2 4'	<0.005	<0.005	<0.005	<0.015
H11322-4	BATTERY 3 4'	<0.005	<0.005	<0.005	<0.015
H11322-5	BURN PIT NW 4'	<0.005	<0.005	<0.005	<0.015
Quality Control		0.102	0.101	0.102	0.292
True Value QC		0.100	0.100	0.100	0.300
% Recovery		102	101	102	97.5
Relative Percent Difference		2.0	1.2	1.7	2.6

METHOD: EPA SW-846 8260

  
Chemist

7/10/06  
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable analyses. Cardinal shall be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.





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 BBC INTERNATIONAL, INC.  
 ATTN: CLIFF BRUNSON  
 P.O. BOX 805  
 HOBBS, NM 88241  
 FAX TO: (505) 397-0397

Receiving Date: 07/07/06  
 Reporting Date: 07/12/06  
 Project Number: MONUM 06ES001  
 Project Name: PHILLIPS H CULP BATTERY 19  
 Project Location: MONUMENT, NM

Sampling Date: 07/07/06  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: NF  
 Analyzed By: BC/AB

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		07/11/06	07/11/06	07/10/06
H11324-1	BURN PILE COMPOSITE	<10.0	106	16
H11324-2	BURN PIT 20'	789	4070	144
Quality Control		769	801	1010
True Value QC		800	800	1000
% Recovery		96.1	100	101
Relative Percent Difference		2.1	2.3	5.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB  
 \*Analyses performed on 1:4 w:v aqueous extracts.

Bryant J. Cooke  
 Chemist

7/12/06  
 Date

H11324A

PLEASE NOTE **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 BBC INTERNATIONAL, INC.  
 ATTN: CLIFF BRUNSON  
 P.O. BOX 805  
 HOBBS, NM 88241  
 FAX TO: (505) 397-0397

Receiving Date: 07/07/06  
 Reporting Date: 07/12/06  
 Project Number: MONUM 06ES001  
 Project Name: PHILLIPS H CULP BATTERY 19  
 Project Location: MONUMENT, NM

Sampling Date: 07/07/06  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: NF  
 Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		07/11/06	07/11/06	07/11/06	07/11/06
H11324-1	BURN PILE COMPOSITE	<0.005	<0.005	<0.005	<0.015
H11324-2	BURN PIT 20'	<0.005	<0.005	0.010	0.227
Quality Control		0.093	0.094	0.094	0.281
True Value QC		0.100	0.100	0.100	0.300
% Recovery		93.3	94.4	93.8	93.8
Relative Percent Difference		9.3	7.3	8.5	3.9

METHOD: EPA SW-846 8260

  
 Chemist

7/12/06  
 Date

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H11324B





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ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: CLIFF BRUNSON  
P.O. BOX 805  
HOBBS, NM 88241  
FAX TO: (505) 397-0397

Receiving Date: 07/12/06  
Reporting Date: 07/13/06  
Project Number: MONUM 06ES001  
Project Name: PHILLIPS H CULP BATTERY 19  
Project Location: MONUMENT, NM

Sampling Date: 07/11/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: NF  
Analyzed By: BC/AB

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	Cl* (mg/Kg)
------------	-----------	--	--	----------------

ANALYSIS DATE		07/12/06	07/12/06	07/12/06
H11335-1	SB1-3'	<10.0	<10.0	32
H11335-2	SB1-30'	<10.0	<10.0	208
H11335-3	SB2-3'	318	1600	32
H11335-4	SB2-5'	56.4	1350	48
H11335-5	SB2-20'	<10.0	<10.0	176
Quality Control		769	801	1000
True Value QC		800	800	1000
% Recovery		96.1	100	100
Relative Percent Difference		2.1	2.3	0.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB

\*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

Date

7/13/06

H11335A

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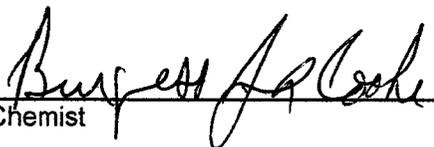
ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: CLIFF BRUNSON  
P.O. BOX 805  
HOBBS, NM 88241  
FAX TO: (505) 397-0397

Receiving Date: 07/12/06  
Reporting Date: 07/13/06  
Project Number: MONUM 06ES001  
Project Name: PHILLIPS H CULP BATTERY 19  
Project Location: MONUMENT, NM

Sampling Date: 07/11/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: NF  
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		07/12/06	07/12/06	07/12/06	07/12/06
H11335-1	SB1-3'	<0.005	<0.005	<0.005	<0.015
H11335-2	SB1-30'	<0.005	<0.005	<0.005	<0.015
H11335-3	SB2-3'	<0.005	<0.005	0.139	0.331
H11335-4	SB2-5'	<0.005	<0.005	0.036	0.095
H11335-5	SB2-20'	<0.005	<0.005	<0.005	<0.015
Quality Control		0.093	0.102	0.098	0.280
True Value QC		0.100	0.100	0.100	0.300
% Recovery		93.4	102	98.3	93.4
Relative Percent Difference		<0.1	7.7	4.5	0.5

METHOD: EPA SW-846 8260

  
Chemist

7/13/06  
Date

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H11335B

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page      of     

**CARDINAL LABORATORIES, INC.**  
 2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240  
 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2478

Company Name: BBC International, Inc. **BILL TO**

Project Manager: Cliff Brunson P.O. # 45-157156

Address: 1324 W. Marland City: Hess Corp.

City: Hobbs State: NM Zip: 88240 Attn:     

Phone #: 505-397-6388 Fax #: 505-397-0397 Address:     

Project #: MONUM 06ES001 Project Owner: Hess Corp. City: Seminole

Project Name: Phillips H Cup Bakery 19 State: TX Zip:     

Project Location: Monument Phone #:     

Sampler Name: Amy Ruth Fax #:     

Lab I.D.	Sample I.D.	MATRIX		PRESERV.		SAMPLING							
		(K) RAB OR (C) OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	GRUDE OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE
H11335-1	SB1 - 3'	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	7-11-06	10:43
-2	SB1 - 30'	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	7-11-06	11:43
-3	SB2 - 3'	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	7-11-06	14:22
-4	SB2 - 5'	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	7-11-06	14:25
-5	SB2 - 20'	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	7-11-06	14:55

Chloride ✓  
 TPH (GRO/PRD) 8015 M ✓  
 BTEX ✓

PLEASE NOTE: Samples will be analyzed for any claim unless otherwise noted in contract or list. This is subject to the amount paid by the client for the analysis. All claims regarding these samples are the responsibility of the client. Samples must be analyzed within 30 days after completion of the analysis. In no event will Cardinal be liable for reanalysis or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or dependent parties as a result of any analysis performed by Cardinal. (Signatures of sampler must match a listed signatory of the above listed person or persons.)

Sampler Requisitioned: Amy Ruth Date: 7-12-06 Time: 8:00

Received By: Jennifer Culley

Sampler Requisitioned: Amy Ruth Date: 7-12-06 Time: 8:05

Received By: Cliff Brunson

Delivered By: Jennifer Culley Time: 8:05

Checked By: A.F.

Sample Condition:  Cool  Intact

Checked BY: (in time)

Phone Result:  Yes  No Add'l Phone #:     

Fax Result:  Yes  No Add'l Fax #:     

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2478.



# ARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: CLIFF BRUNSON  
P.O. BOX 805  
HOBBS, NM 88241  
FAX TO: (505) 397-0397

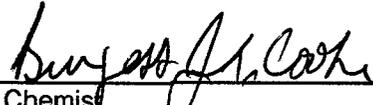
Receiving Date: 07/26/06  
Reporting Date: 07/28/06  
Project Number: MONUM 06ES001  
Project Name: PHILLIPS H CULP  
Project Location: MONUMENT, NM

Sampling Date: 07/25/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: NF  
Analyzed By: BC/AB

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		07/27/06	07/27/06	07/26/06
H11387-1	JUNCTION BOX 18'	<10.0	651	160
H11387-2	BURN PIT 20'	20.3	1830	128
H11387-3	BURN PIT SPOILS	<10.0	1350	32
H11387-4	JUNCTION BOX SPOILS	<10.0	1030	192
Quality Control		780	770	990
True Value QC		800	800	1000
% Recovery		97.5	96.2	99.0
Relative Percent Difference		0.9	7.2	1.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB

\*Analyses performed on 1:4 w:v aqueous extracts.

  
\_\_\_\_\_  
Chemist

7/28/06  
\_\_\_\_\_  
Date

H11387A

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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 BBC INTERNATIONAL, INC.  
 ATTN: CLIFF BRUNSON  
 P.O. BOX 805  
 HOBBS, NM 88241  
 FAX TO: (505) 397-0397

Receiving Date: 07/26/06  
 Reporting Date: 07/28/06  
 Project Number: MONUM 06ES001  
 Project Name: PHILLIPS H CULP  
 Project Location: MONUMENT, NM

Sampling Date: 07/25/06  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: NF  
 Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		07/27/06	07/27/06	07/27/06	07/27/06
H11387-1	JUNCTION BOX 18'	<0.005	<0.005	<0.005	<0.015
H11387-2	BURN PIT 20'	<0.005	<0.005	0.048	0.114
H11387-3	BURN PIT SPOILS	<0.005	<0.005	<0.005	0.018
H11387-4	JUNCTION BOX SPOILS	<0.005	<0.005	<0.005	<0.015
Quality Control		0.095	0.101	0.100	0.294
True Value QC		0.100	0.100	0.100	0.300
% Recovery		94.8	101	100	98.1
Relative Percent Difference		5.9	4.0	0.2	1.5

METHOD: EPA SW-846 8260

Burgess J. Cooke  
 Chemist

7/28/06  
 Date

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

H11387B



# **APPENDIX III**

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## **Site Photographs**

### **Phillips "H" Culp Battery #19 Monument, New Mexico**

Prepared for:  
Hess Corporation  
Seminole, Texas

**January, 2007**

Prepared by:  
BBC International, Inc.



Phillips H Culp Tank Battery area



Phillips H Culp Tank Battery area



View to the northwest from Phillips H Culp tank battery area to the burn pit in background



View from Phillips H Culp tank battery area to the burn pit in background



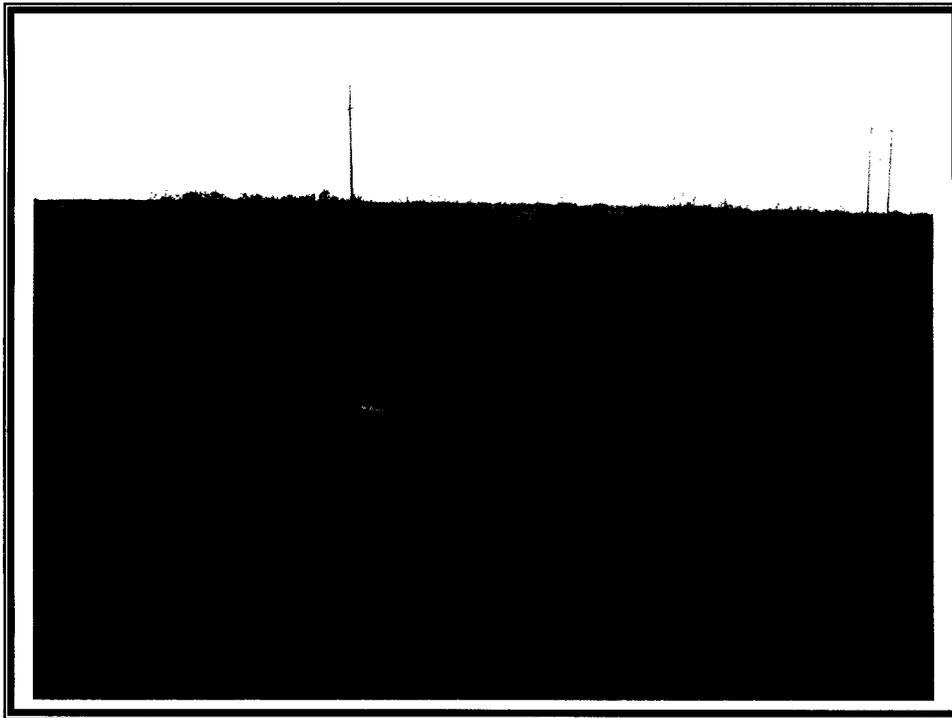
View from Phillips H Culp tank battery area to the burn pit on the left and the flare line area to the right



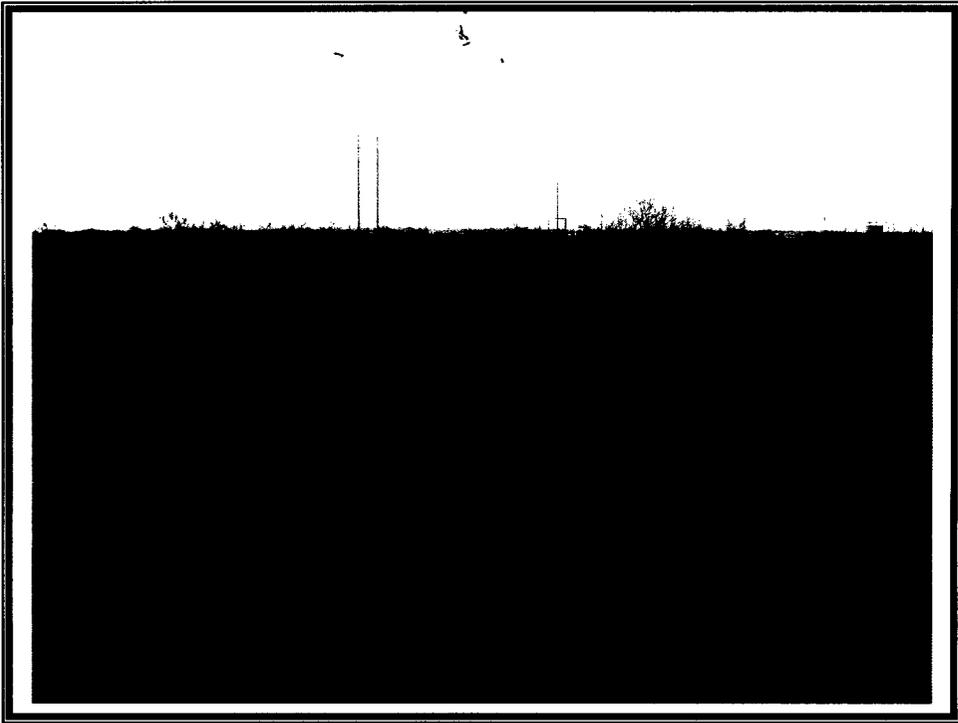
View from Phillips H Culp tank battery area north to the flare line area



Southeast end of the flare line area



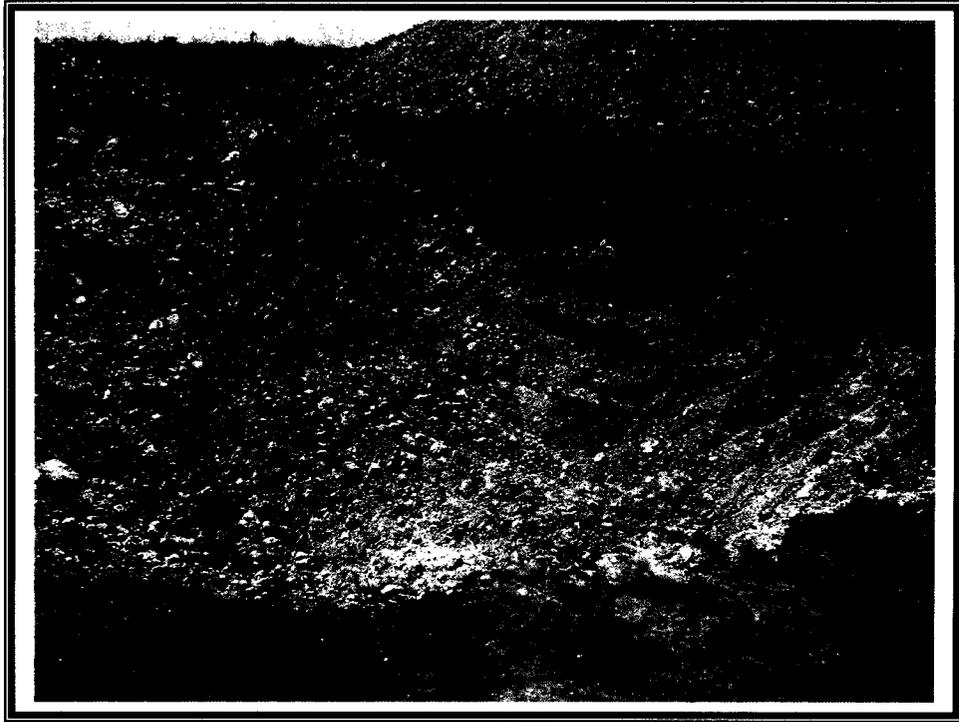
Burn pit excavated to 4 feet below ground surface



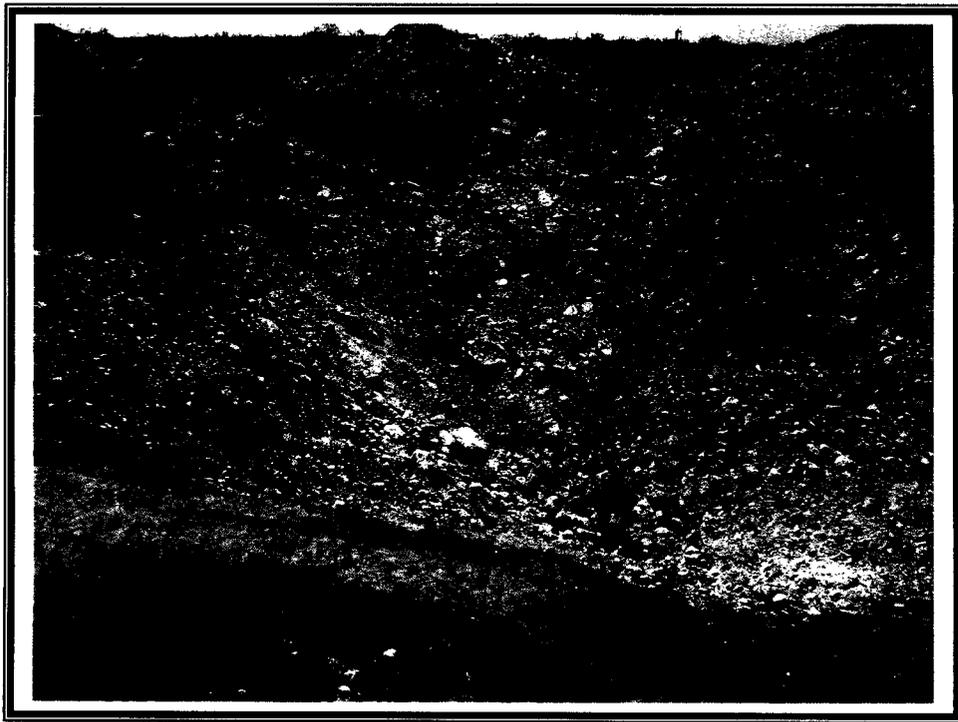
Burn pit excavated to 4 feet below ground surface



Burn pit – Locations of 2 soil borings within the pit



Burn pit after full excavation



Burn pit after full excavation



Tank battery area after excavation of soil in former location of Rice Junction Box in foreground – View location of burn pit at top right



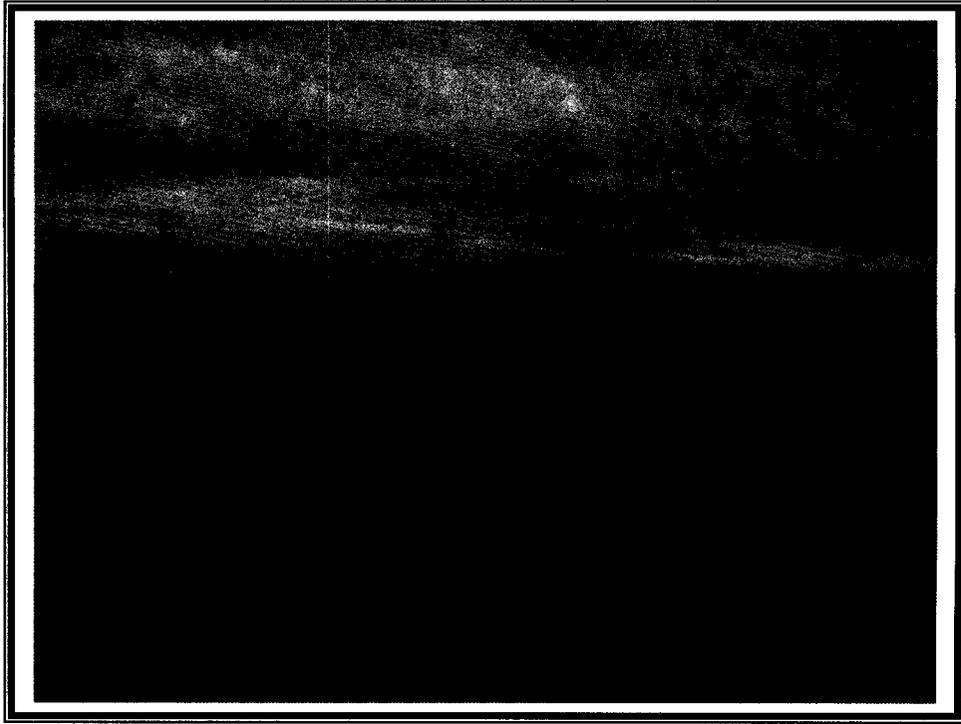
Flare line area excavation



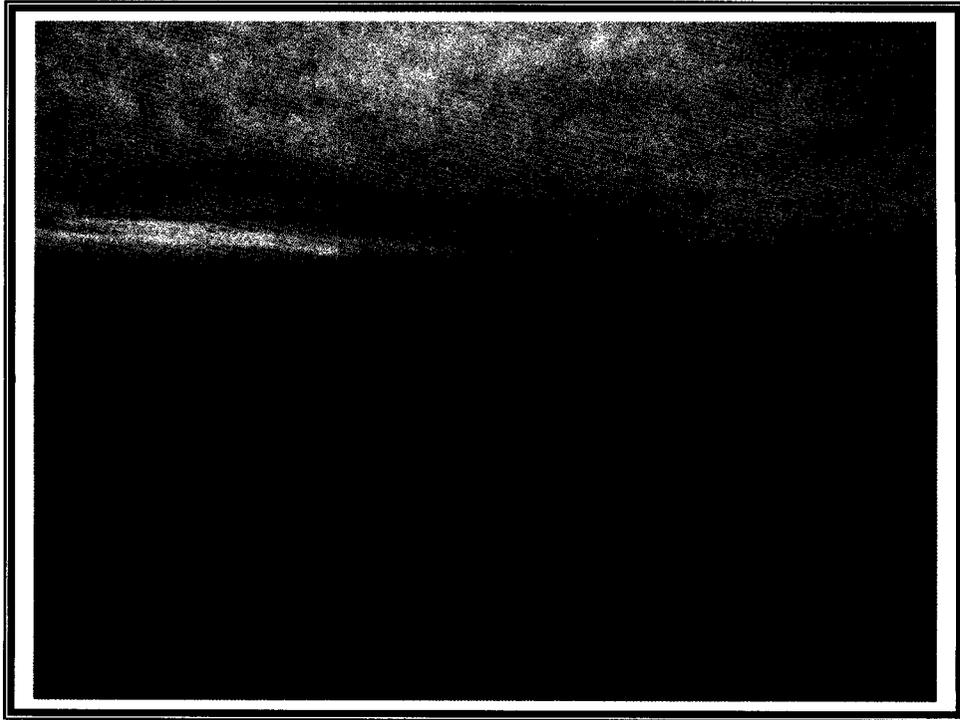
Tank battery excavation at front left, burn pit at top left, and flare line excavation at top right



Phillips H Culp Tank Battery after backfill and contour



Phillips H Culp Burn Pit area after backfill and contour



Phillips H Culp Flare line area after backfill and contour

# **APPENDIX IV**

---

## **Correspondences**

### **Phillips "H" Culp Battery #19 Monument, New Mexico**

Prepared for:  
Hess Corporation  
Seminole, Texas

**January, 2007**

Prepared by:  
BBC International, Inc.

**Amy C. Ruth**

**From:** Williams, Chris, EMNRD [chris.williams@state.nm.us]  
**Sent:** Tuesday, August 08, 2006 2:41 PM  
**To:** Amy C. Ruth  
**Subject:** RE: Phillips H Culp Battery 19 Closure Agreement

The site is approved for closure. Approval does not relieve Amerada Hess of future liability as it pertains to future contamination problems with this site.

*Chris Williams*  
*District 1 Supervisor*

---

**From:** Amy C. Ruth [mailto:Amy@bbcinternational.com]  
**Sent:** Tue 8/8/2006 12:11 PM  
**To:** Williams, Chris, EMNRD  
**Cc:** 'Barnes, Randy'; drewhall@hess.com; 'Cliff P. Brunson'; Jennifer  
**Subject:** Phillips H Culp Battery 19 Closure Agreement

Chris,

Per our conversation this morning, Hess will close the Phillips H Culp Battery 19 which consists of two excavation sites. These are the burn pit and the Rice junction box. Per our agreement these two sites will be backfilled with caliche, capped with a clay liner, and finished with 3' of topsoil.

I will send a follow up message that will include lab data, diagrams, and related information for your reference.

*If you have any questions, please contact me. Thank you.*

**Amy C. Ruth**  
Environmental Scientist  
BBC International, Inc.  
**Phone:** 505-397-6388  
**Cell:** 505-441-5252

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