

**PIT
REMEDIATION
&
CLOSURE
REPORT**

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: MAR. 1994 Date Completed: MAY 1995

Remediation Method: Excavation X Approx. cubic yards 100
(Check all appropriate sections) Landfarmed Insitu Bioremediation
Other WASTE MATERIAL HAULED TO OFFSITE
DISPOSAL FACILITIES

Remediation Location: Onsite Offsite SEE EXHIBIT I
(ie. landfarmed onsite, name and location of offsite facility)

General Description Of Remedial Action: WASTE MATERIALS WERE REMOVED FROM THE PIT
AND THE SURROUNDING AREA AND WERE HAULED TO OFFSITE DISPOSAL FACILITIES. BTEX, TPH AND
TCLP ANALYSES WERE PERFORMED ON SOIL SAMPLES COLLECTED IN THE PIT AND FROM THE SURROUNDING
AREA AFTER THE WASTE HAD BEEN REMOVED. THE PIT WAS BACKFILLED TO GRADE.

Ground Water Encountered: No X Yes Depth

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample location SAMPLE COLLECTION POINTS ARE
DEFINED ON EXHIBIT II
Sample depth EIGHT TO TEN INCHES
Sample date Sample time
Sample Results (SEE EXHIBIT III)
Benzene(ppm)
Total BTEX(ppm)
Field headspace(ppm)
TPH

Ground Water Sample: Yes No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 7/6/95

SIGNATURE

Samuel W. Small

PRINTED NAME
AND TITLE

SAMUEL W. SMALL, PE
ENVIRONMENTAL COORDINATOR

EXHIBIT I

DISPOSAL SITES

100 YARDS	NON-HAZARDOUS SOLID WASTE HAULED TO THE HOBBS/LEA COUNTY LANDFILL, OPERATED BY WASTE MANAGEMENT OF SOUTHEAST NEW MEXICO 11/94
UNKNOWN QUANTITY	EMPTY DRUMS, CRUSHED AND SOLD TO PERMIAN METALS FOR RECYCLING. 5/94
7 DRUMS*	HAZARDOUS LIQUID WASTE HAULED TO SMITHFIELD, KENTUCKY DISPOSAL FACILITY, OPERATED BY SAFETY- KLEEN, CORP. 4/95
4 DRUMS*	HAZARDOUS SOLID WASTE HAULED TO DENTON, TEXAS DISPOSAL FACILITY, OPERATED BY SAFETY-KLEEN CORP. 4/95
5 DRUMS*	NON-HAZARDOUS LIQUID WASTE HAULED TO DENTON, TEXAS DISPOSAL FACILITY, OPERATED BY SAFETY-KLEEN, CORP. 4/95
2 DRUMS*	NON-HAZARDOUS LIQUID WASTE HAULED TO DENTON, TEXAS DISPOSAL FACILITY, OPERATED BY SAFETY-KLEEN CORP. 5/95
2 DRUMS*	HAZARDOUS LIQUID WASTE HAULED TO DENTON, TEXAS DISPOSAL FACILITY, OPERATED BY SAFETY-KLEEN, CORP. 5/95

* MANIFEST ATTACHED



Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NM0000303255	Manifest Document No. 16187	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address Amerada Hess Oil Attn: Al Young Drawer D Monument, NM 88265				A. State Manifest Document Number 1011265	
4. Generator's Phone (505) 393-2144				B. State Generator's ID 99935	
5. Transporter 1 Company Name SAFETY-KLEEN CORP		6. US EPA ID Number ILD984908202		C. State Transporter's ID 72078	
7. Transporter 2 Company Name J.B. Hunt Spec Comm		8. US EPA ID Number IARD981908551		D. Transporter's Phone 915-563-2405	
9. Designated Facility Name and Site Address SAFETY-KLEEN CORP 000618 1722 Cooper Creek Road Denton, TX 76208		10. US EPA ID Number TXD077603371		E. State Transporter's ID 41853	
				F. Transporter's Phone 800-368-8557	
				G. State Facility's ID 65124	
				H. Facility's Phone 817-383-2611	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. ☐ Water - Not Regulated by USDOT or USEPA. Description Should be Reflective of Waste Stream.		4	DM	1832	P
b. ☒ RQ Waste Flammable Liquids, N.O.S. (Aliphatic and Aromatic Hydrocarbons) 3 UN1993 PG III (D001)(ERG#27)		7	DM	3080	P
c. ☒ RQ Hazardous Waste, Solid, N.O.S. 9 NA3077 PG III (D008)(ERG#31)		4	DM	1244	P
d. ☒ RQ Waste Flammable Liquids, N.O.S. (Aliphatic and Aromatic Hydrocarbons) 3 UN1993 PG III (D003)(ERG#27)		0	DM	0	P
J. Additional Descriptions for Materials Listed Above Control # (a) 1408167-5 (b) 1408192-2 (c) 1408224-1 (d) 1408218-8 Sample # (a) 311918 (b) 311919 (c) 311921 (d) 311923 EPA # (a) None (b) D001 (c) D008 (d) P003 D001					
K. Handling Codes for Waste A) M061					
15. Special Handling Instructions and Additional Information 6-002-02-9350 PP# H6178798 m81188 Emergency Response # 1-708-888-4660 (24 Hr) SKDOT# A: 1055 B: 3084 C: 1849 D: 3107					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Al Young by R.L. Wheeler Jr		Signature R.L. Wheeler Jr		Date 9/16/95	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Webb Dorsey		Signature Webb Dorsey		Date 9/16/95	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name Donna Sue Lawrence		Signature Donna Sue Lawrence		Date 9/16/95	
19. Discrepancy Indication Space 11B REJECTED TO ALTERNATE FACILITY: SAFETY-KLEEN CORP 3700 LA GRANGE SMITHFIELD, KY 40050 (502) 845-2453 KYD053348108					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name V. Munoz					
		Signature V. Munoz		Date 9/16/95	



Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NMD000303255		Manifest Document No. 16187		2. Page 1 2 of 2		Information in the shaded areas is not required by Federal law.	
		3. Generator's Name and Mailing Address AMERADA HESS OIL DRAWER D, MONUMENT NM 88265		ATTN: AL YOUNG		A. State Manifest Document Number 1021456		B. State Generator's ID 99935	
4. Generator's Phone (505) 393-2144		5. Transporter's Company Name CEAL CITY Cbk Co		6. US EPA ID Number ILP 981195720		C. State Transporter's ID 41015		D. Transporter's Phone 815 634 4772	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone		G. State Facility's ID	
9. Designated Facility Name and Site Address SAFETY KLEEN CORP. 3700 LAGRANGE RD. SMITHFIELD KY 40068		10. US EPA ID Number KYD053348108		H. Facility's Phone 502 7645-2453		I. State Facility's ID		J. Facility's Name	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)				12. Containers		13. Total		14. Unit	
				No. Type		Quantity		Wt/Vol	
a. RIDER TO MANIFEST NO. 1011265									
b. FOR TRANSPORTATION PURPOSES ONLY.									
c.									
d.									
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Materials					
15. Special Handling Instructions and Additional Information									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.									
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name					Signature				
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name John M Apple					Signature <i>[Signature]</i>				
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name					Signature				
19. Discrepancy Indication Space Return of 4 drum line item C -									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name B.S. Chauncey					Signature <i>[Signature]</i>				



Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NM0000303255	Manifest Document No. 82975	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address Attn: Al Young Amerada Hess Oil Drawer D Monument, NM 88265				A. State Manifest Document Number 1059146	
4. Generator's Phone (505) 393-2144				B. State Generator's ID 99935	
5. Transporter 1 Company Name SAFETY-KLEEN CORP		6. US EPA ID Number ILD984908202		C. State Transporter's ID 72078	
7. Transporter 2 Company Name J B Hunt Spec Comm		8. US EPA ID Number IARD981908551		D. Transporter's Phone 915-563-2305	
9. Designated Facility Name and Site Address SAFETY-KLEEN CORP 000618 1722 Cooper Creek Road Denton, TX 76208		10. US EPA ID Number TXD077603371		E. State Transporter's ID 41853	
				F. Transporter's Phone 800-368-8539	
				G. State Facility's ID 65124	
				H. Facility's Phone 817-383-2611	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers No. Type		13. Total Quantity	14. Unit Wt/Vol
a. ☐ HM Water Not USDOT Hazardous Material		1 DM		453	P
b.					
c.					
d.					
J. Additional Descriptions for Materials Listed Above Control#(a)1500665-8 (b) Sample#(a)311927 (b) EPA#(a)None (b)				K. Handling Codes for Hazardous Materials 1005	
15. Special Handling Instructions and Additional Information 6-002-02-9350 PP# Emergency Response # 1-708-888-4660 (24 Hr) SKDOT# A: 5468 B: C: D:					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Ray L. Wheeler Jr. Al Young		Signature [Signature]		Date 4/6/95	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Webb Dorsey		Signature [Signature]		Date 4/6/95	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name Danebur Bowens		Signature [Signature]		Date 4/6/95	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name W. Murray					
		Signature [Signature]		Date 4/27/95	

TEXAS WATER COMMISSION
P.O. Box 13087, Capitol Station
Austin, Texas 78711-3087



7165660

190197

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NM0000303255	Manifest Document No. 01469		2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Amerada Hess Oil Attn: Al Young Drawer D Monument, NM 88265				A. State Manifest Document Number 1059157			
4. Generator's Phone (505) 393-2144				B. State Generator's ID 99935			
5. Transporter 1 Company Name SAFETY-KLEEN CORP		6. US EPA ID Number ILD994908202		C. State Transporter's ID 72078			
7. Transporter 2 Company Name J. B. Hunt Spce Comm		8. US EPA ID Number LHCD981908551		D. Transporter's Phone 915-563-2305			
9. Designated Facility Name and Site Address SAFETY-KLEEN CORP 000618 1722 Cooper Creek Road Denton, TX 76203		10. US EPA ID Number LHCD077603371		E. State Transporter's ID 41853			
				F. Transporter's Phone 800-348-8539			
				G. State Facility's ID 65124			
				H. Facility's Phone 817 383-2611			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.	
a. ☐	Water - Not Regulated by USDOT or USEPA. Description Should be Reflective of Waste Stream.	2	DM	916	P	OQTS1141	
b. ☒	RQ Waste Flammable Liquids, N.O.S. (Aliphatic and Aromatic Hydrocarbons) 3 UN1993 PG III (DO01)(ERG#27)	1	DM	438	P	OQTS211H	
c. ☒	RQ Hazardous waste, Solid, N.O.S. 9-NA3077 PG III (DO08)(ERG#31)	0	DM	0	P	OQTS409H	
d. ☒	RQ Waste Flammable Liquids, N.O.S. (Aliphatic and Aromatic Hydrocarbons) 3 UN1993 PG III (FO03)(ERG#27)	1	DM	453	P	OQTS203H	
15. Special Handling Instructions and Additional Information 6-002-02-9350 PP# Emergency Response # 1-708-888-4660 (24 Hr) SRDOT# A: 1055 B: 3004 C: 1049 D: 3107 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. Printed/Typed Name _____ Signature _____ Date _____ 17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Webb Dorsey Signature _____ Date _____ 18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name Jonathan Bowens Signature _____ Date _____ 19. Discrepancy Indication Space Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							

m4/5

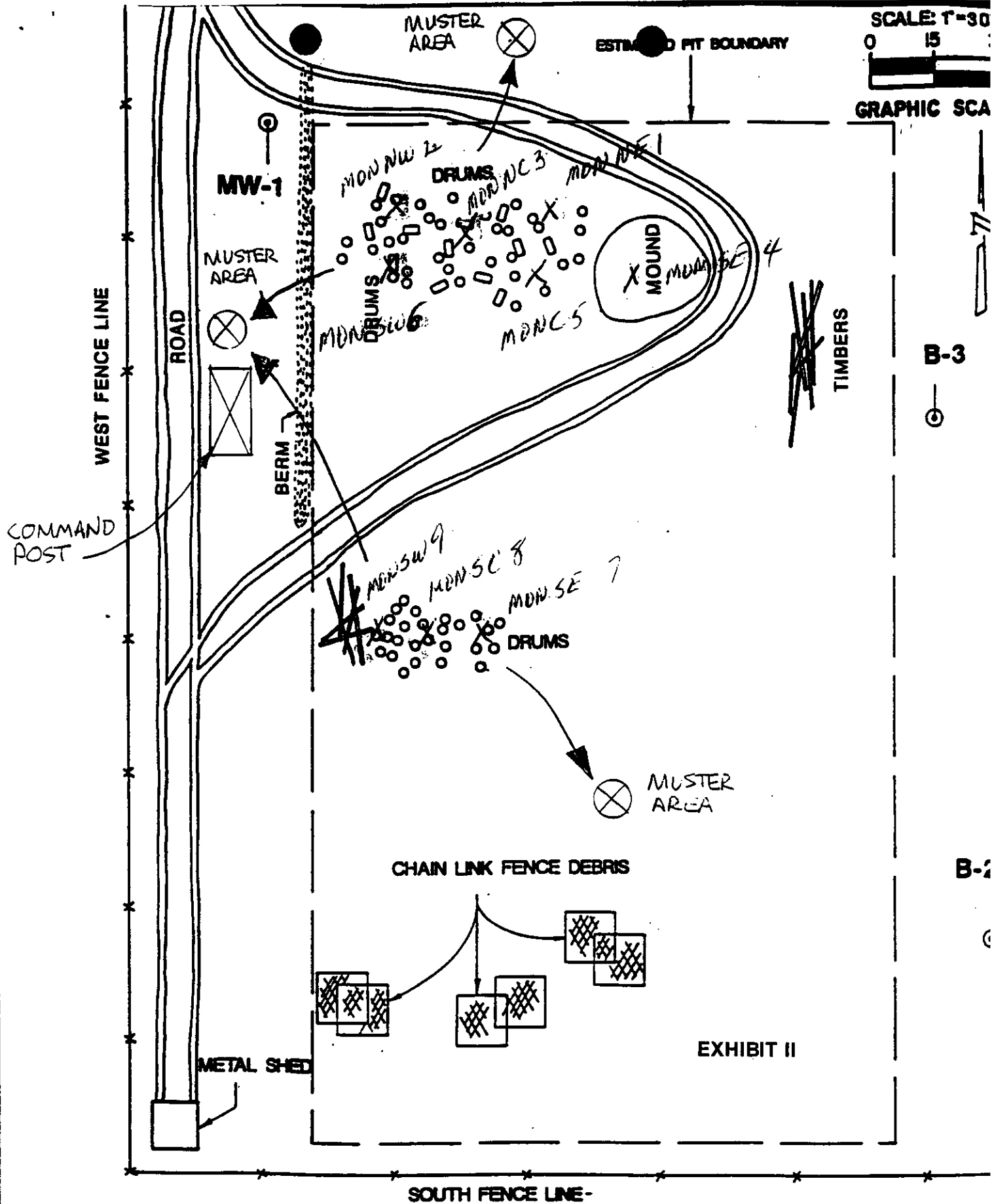


FIGURE 10.1 - EVACUATION ROUTE & MUSTER AREAS

EXHIBIT III

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 04/29/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess
Monument Disposal

TA#	Field Code	TRPHC (ppb)	MTBE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	M,P,O XYLENE (ppb)	TOTAL BTX (ppb)
T20899	MON NE 1	2,347,248	<1	<1	<1	<1	<1	<1
T20900	MON NW 2	1,992,139	<1	<1	<1	<1	<1	<1
T20901	MON NC 3	4,156,329	<1	<1	<1	<1	<1	<1
T20902	MON SE 4	1,708,223	<1	<1	<1	<1	<1	<1
T20903	MON C 5	1,381,798	<1	<1	<1	<1	<1	<1
T20904	MON SW 6	8,968,818	<1	<1	2	<1	<1	2
T20905	MON SE 7	305,287	<1	<1	<1	<1	<1	<1
T20906	MON SC 8	9,811,980	<1	<1	1	<1	<1	1
T20907	MON SW 9	161,539	<1	<1	<1	<1	<1	<1
QC	Quality Control	163,380	185	181	189	190	570	
Detection Limit		5,000	1	1	1	1	1	1
% Precision		100	100	100	101	100	106	
% Extraction Accuracy		110	93	86	81	75	70	
% Instrument Accuracy		100	93	90	95	95	95	

METHODS: EPA SW 846-8020; EPA 418.1.

BTEX SPIKE AND QC: Sample and Blank Spiked with 200 ppb EACH VOLATILE ORGANICS.

TRPHC SPIKE AND QC: Sample spiked with 327,760 ppb TRPHC and Blank spiked with 163,880 ppb TRPHC.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonnell

Date

5-17-94

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20899 MON NE 1	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	101	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	91	0.588	117
o-Cresol	200.0	0.001	ND	102	95	0.613	122
m,p-Cresol	200.0	0.001	ND	103	87	1.127	113
Total Cresol	200.0	0.001	ND	98	89	1.740	116
Hexachloroethane	3.0	0.001	ND	102	93	0.594	118
Nitrobenzene	2.0	0.001	ND	102	97	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	86	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	86	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	71	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	74	0.533	106
2,4-D	10.0	0.01	ND	103	82	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	92	0.633	126
2,4,5-TP	1.0	0.01	ND	101	109	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	84	0.439	87
Lindane	0.4	0.001	ND	99	86	0.533	106
Total Heptachlor	0.008	0.001	ND	99	88	1.067	107
Endrin	0.02	0.001	ND	107	116	0.535	107
Methoxychlor	10.0	0.001	ND	84	106	0.472	94
Chlordane	0.03	0.0002	ND	100	115	0.0017	85
Toxaphene	0.5	0.005	ND	100	125	0.0168	84

% RECOVERY

2-Fluorophenol SURR	98
Phenol-d5 SURR	95
Nitrobenzene-d5 SURR	94
2-Fluorobiphenyl SURR	83
2,4,6-Tribromophenol SURR	81
Terphenyl-d14 SURR	92

Methods: EPA SW 846-1311, 8270.

ND - Not Detected

BZ

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE

TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20899 MON NE 1	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	74	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	164	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	110	128
Chloroform	6.00	ND	0.020	0.054	118	96	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	68	90
Benzene	0.50	ND	0.002	0.063	116	112	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	88	90
Trichloroethene	0.50	ND	0.002	0.049	103	138	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	98	102
Chlorobenzene	100.00	ND	0.002	0.048	104	94	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	86	92

% Recovery

1,2-Dichloroethane
Toluene-d8
4-Bromofluorobenzene

57
101
91

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.

BS

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE


TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 05/01/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20899	MON NE 1	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	0.1	1.7	<0.01	<0.001
		5.0	1.0	5.1	1.0	5.0	98.7	5.0	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		109	109	97	96	99	98	90	100
% Instrument Accuracy									
		101	97	102	102	101	99	101	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

5-17-94

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20900 MON NW 2	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	102	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	89	0.588	117
o-Cresol	200.0	0.001	ND	102	93	0.613	122
m,p-Cresol	200.0	0.001	ND	103	85	1.127	113
Total Cresol	200.0	0.001	ND	98	88	1.740	116
Hexachloroethane	3.0	0.001	ND	102	93	0.594	118
Nitrobenzene	2.0	0.001	ND	102	96	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	82	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	86	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	85	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	88	0.533	106
2,4-D	10.0	0.01	ND	103	78	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	86	0.633	126
2,4,5-TP	1.0	0.01	ND	101	103	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	96	0.439	87
Lindane	0.4	0.001	ND	99	87	0.533	106
Total Heptachlor	0.008	0.001	ND	99	85	1.067	107
Endrin	0.02	0.001	ND	107	95	0.535	107
Methoxychlor	10.0	0.001	ND	84	80	0.472	94
Chlordane	0.03	0.0002	ND	100	115	0.0017	85
Toxaphene	0.5	0.005	ND	100	129	0.0168	84

% RECOVERY

2-Fluorophenol SURR	99
Phenol-d5 SURR	92
Nitrobenzene-d5 SURR	91
2-Fluorobiphenyl SURR	85
2,4,6-Tribromophenol SURR	77
Terphenyl-d14 SURR	91

Methods: EPA SW 846-1311, 8270.

ND - Not Detected

BS

5-17-94

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

DATE

TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20900 MON NW 2	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	82	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	112	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	82	128
Chloroform	6.00	ND	0.020	0.054	118	84	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	68	90
Benzene	0.50	ND	0.002	0.063	116	100	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	86	90
Trichloroethene	0.50	ND	0.002	0.049	103	78	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	106	102
Chlorobenzene	100.00	ND	0.002	0.048	104	96	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	92	92

% Recovery

1,2-Dichloroethane
Toluene-d8
4-Bromofluorobenzene

77
96
78

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 05/01/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20900	MON NW 2	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	0.4	1.5	<0.01	<0.001
		5.0	1.0	5.1	1.0	5.0	97.8	5.0	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		107	109	98	95	98	102	92	100
% Instrument Accuracy									
		101	97	102	102	101	98	101	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

5-17-94

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20901 MON NC 3)	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	103	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	88	0.588	117
o-Cresol	200.0	0.001	ND	102	93	0.613	122
m,p-Cresol	200.0	0.001	ND	103	84	1.127	113
Total Cresol	200.0	0.001	ND	98	87	1.740	116
Hexachloroethane	3.0	0.001	ND	102	93	0.594	118
Nitrobenzene	2.0	0.001	ND	102	95	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	81	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	85	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	95	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	88	0.533	106
2,4-D	10.0	0.01	ND	103	77	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	86	0.633	126
2,4,5-TP	1.0	0.01	ND	101	103	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	98	0.439	87
Lindane	0.4	0.001	ND	99	89	0.533	106
Total Heptachlor	0.008	0.001	ND	99	90	1.067	107
Endrin	0.02	0.001	ND	107	111	0.535	107
Methoxychlor	10.0	0.001	ND	84	100	0.472	94
Chlordane	0.03	0.0002	ND	100	115	0.0017	85
Toxaphene	0.5	0.005	ND	100	125	0.0168	84

% RECOVERY

2-Fluorophenol SURR	101
Phenol-d5 SURR	94
Nitrobenzene-d5 SURR	93
2-Fluorobiphenyl SURR	85
2,4,6-Tribromophenol SURR	73
Terphenyl-d14 SURR	87

Methods: EPA SW 846-1311, 8270.

ND - Not Detected

BS

5-17-94

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

DATE

TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20901 MON NC 13	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	84	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	94	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	112	128
Chloroform	6.00	ND	0.020	0.054	118	84	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	92	90
Benzene	0.50	ND	0.002	0.063	116	106	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	92	90
Trichloroethene	0.50	ND	0.002	0.049	103	84	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	104	102
Chlorobenzene	100.00	ND	0.002	0.048	104	102	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	94	92

% Recovery

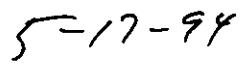
1,2-Dichloroethane 59
Toluene-d8 110
4-Bromofluorobenzene 98

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell



DATE


TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 05/01/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess
Monument Disposal

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20901	MON NC 3	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	0.3	1.7	<0.01	<0.001
		5.0	1.0	5.1	1.0	5.0	97.8	5.0	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		109	123	97	96	102	99	90	100
% Instrument Accuracy									
		101	97	102	102	101	98	101	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

5-17-94

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20902 MON SE 4	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	103	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	89	0.588	117
o-Cresol	200.0	0.001	ND	102	95	0.613	122
m,p-Cresol	200.0	0.001	ND	103	85	1.127	113
Total Cresol	200.0	0.001	ND	98	88	1.740	116
Hexachloroethane	3.0	0.001	ND	102	94	0.594	118
Nitrobenzene	2.0	0.001	ND	102	96	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	80	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	85	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	92	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	88	0.533	106
2,4-D	10.0	0.01	ND	103	77	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	85	0.633	126
2,4,5-TP	1.0	0.01	ND	101	103	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	98	0.439	87
Lindane	0.4	0.001	ND	99	89	0.533	106
Total Heptachlor	0.008	0.001	ND	99	81	1.067	107
Endrin	0.02	0.001	ND	107	82	0.535	107
Methoxychlor	10.0	0.001	ND	84	82	0.472	94
Chlordane	0.03	0.0002	ND	100	115	0.0017	85
Toxaphene	0.5	0.005	ND	100	130	0.0168	84

% RECOVERY

2-Fluorophenol SURR	104
Phenol-d5 SURR	95
Nitrobenzene-d5 SURR	95
2-Fluorobiphenyl SURR	86
2,4,6-Tribromophenol SURR	87
Terphenyl-d14 SURR	85

Methods: EPA SW 846-1311, 8270.

ND - Not Detected

BS

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE

TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20902 MON SE 4	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	82	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	86	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	104	128
Chloroform	6.00	ND	0.020	0.054	118	82	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	68	90
Benzene	0.50	ND	0.002	0.063	116	110	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	92	90
Trichloroethene	0.50	ND	0.002	0.049	103	98	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	102	102
Chlorobenzene	100.00	ND	0.002	0.048	104	96	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	84	92

% Recovery

1,2-Dichloroethane
Toluene-d8
4-Bromofluorobenzene

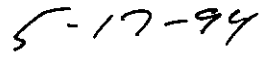
56
102
90

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell



DATE

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 05/01/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess
Monument Disposal

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20902	MON SE 4	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	<0.1	1.9	<0.01	<0.001
		5.0	1.0	5.1	1.0	5.0	97.8	5.0	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		108	115	97	96	99	100	86	100
% Instrument Accuracy									
		101	97	102	102	101	98	101	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonnell

Date

5-17-94

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20903. MON C 5	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	101	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	88	0.588	117
o-Cresol	200.0	0.001	ND	102	93	0.613	122
m,p-Cresol	200.0	0.001	ND	103	86	1.127	113
Total Cresol	200.0	0.001	ND	98	87	1.740	116
Hexachloroethane	3.0	0.001	ND	102	92	0.594	118
Nitrobenzene	2.0	0.001	ND	102	94	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	80	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	84	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	87	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	87	0.533	106
2,4-D	10.0	0.01	ND	103	79	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	87	0.633	126
2,4,5-TP	1.0	0.01	ND	101	106	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	98	0.439	87
Lindane	0.4	0.001	ND	99	89	0.533	106
Total Heptachlor	0.008	0.001	ND	99	91	1.067	107
Endrin	0.02	0.001	ND	107	109	0.535	107
Methoxychlor	10.0	0.001	ND	84	103	0.472	94
Chlordane	0.03	0.0002	ND	100	110	0.0017	85
Toxaphene	0.5	0.005	ND	100	111	0.0168	84

% RECOVERY

2-Fluorophenol SURR	102
Phenol-d5 SURR	94
Nitrobenzene-d5 SURR	93
2-Fluorobiphenyl SURR	87
2,4,6-Tribromophenol SURR	98
Terphenyl-d14 SURR	93

Methods: EPA SW 846-1311, 8270.

ND - Not Detected

BS

5-17-94

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

DATE

TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20903 MON C 5	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	106	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	128	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	121	128
Chloroform	6.00	ND	0.020	0.054	118	100	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	92	90
Benzene	0.50	ND	0.002	0.063	116	106	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	92	90
Trichloroethene	0.50	ND	0.002	0.049	103	84	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	102	102
Chlorobenzene	100.00	ND	0.002	0.048	104	94	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	82	92

% Recovery

1,2-Dichloroethane 81
Toluene-d8 111
4-Bromofluorobenzene 95

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 05/01/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess
Monument Disposal

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20903	MON C 5	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	<0.1	1.6	<0.01	<0.001
		5.0	1.0	5.1	1.0	5.0	97.8	5.0	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		110	120	98	96	100	101	93	100
% Instrument Accuracy									
		101	97	102	102	101	98	101	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

5-17-94

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess
Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20904 MON SW 6/	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	100	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	88	0.588	117
o-Cresol	200.0	0.001	ND	102	93	0.613	122
m,p-Cresol	200.0	0.001	ND	103	85	1.127	113
Total Cresol	200.0	0.001	ND	98	88	1.740	116
Hexachloroethane	3.0	0.001	ND	102	92	0.594	118
Nitrobenzene	2.0	0.001	ND	102	96	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	81	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	86	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	92	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	70	0.533	106
2,4-D	10.0	0.01	ND	103	80	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	85	0.633	126
2,4,5-TP	1.0	0.01	ND	101	109	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	81	0.439	87
Lindane	0.4	0.001	ND	99	87	0.533	106
Total Heptachlor	0.008	0.001	ND	99	90	1.067	107
Endrin	0.02	0.001	ND	107	93	0.535	107
Methoxychlor	10.0	0.001	ND	84	84	0.472	94
Chlordane	0.03	0.0002	ND	100	115	0.0017	85
Toxaphene	0.5	0.005	ND	100	115	0.0168	84

% RECOVERY

2-Fluorophenol SURR	90
Phenol-d5 SURR	79
Nitrobenzene-d5 SURR	77
2-Fluorobiphenyl SURR	84
2,4,6-Tribromophenol SURR	78
Terphenyl-d14 SURR	85

Methods: EPA SW 846-1311, 8270.

ND - Not Detected



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE


TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20904 MON SW 6	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	120	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	164	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	106	128
Chloroform	6.00	ND	0.020	0.054	118	106	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	100	90
Benzene	0.50	ND	0.002	0.063	116	106	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	92	90
Trichloroethene	0.50	ND	0.002	0.049	103	82	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	106	102
Chlorobenzene	100.00	ND	0.002	0.048	104	98	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	88	92

% Recovery

1,2-Dichloroethane
Toluene-d8
4-Bromofluorobenzene

71
94
86

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE


TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 05/01/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20904	MON SW 6	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	<0.1	1.8	<0.01	<0.001
		4.9	1.0	5.0	1.0	5.0	97.8	5.1	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		108	116	96	96	98	98	94	100
% Instrument Accuracy									
		99	96	99	102	100	98	102	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

PS

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonnell

5-17-94

Date

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess
Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20905 MON SE 7	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	93	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	84	0.588	117
o-Cresol	200.0	0.001	ND	102	86	0.613	122
m,p-Cresol	200.0	0.001	ND	103	80	1.127	113
Total Cresol	200.0	0.001	ND	98	83	1.740	116
Hexachloroethane	3.0	0.001	ND	102	88	0.594	118
Nitrobenzene	2.0	0.001	ND	102	90	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	80	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	83	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	92	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	88	0.533	106
2,4-D	10.0	0.01	ND	103	79	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	85	0.633	126
2,4,5-TP	1.0	0.01	ND	101	105	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	97	0.439	87
Lindane	0.4	0.001	ND	99	83	0.533	106
Total Heptachlor	0.008	0.001	ND	99	88	1.067	107
Endrin	0.02	0.001	ND	107	100	0.535	107
Methoxychlor	10.0	0.001	ND	84	99	0.472	94
Chlordane	0.03	0.0002	ND	100	110	0.0017	85
Toxaphene	0.5	0.005	ND	100	110	0.0168	84

% RECOVERY

2-Fluorophenol SURR	98
Phenol-d5 SURR	90
Nitrobenzene-d5 SURR	89
2-Fluorobiphenyl SURR	83
2,4,6-Tribromophenol SURR	93
Terphenyl-d14 SURR	87

Methods: EPA SW 846-1311, 8270.

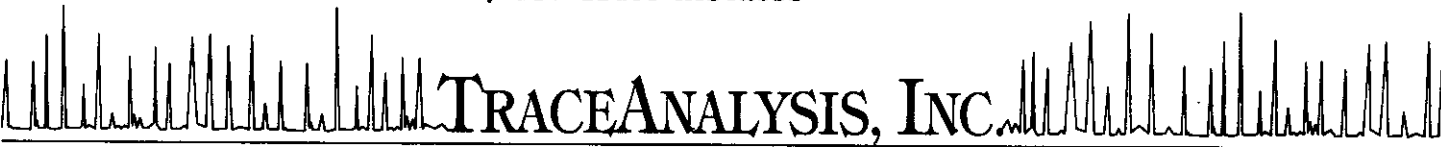
ND - Not Detected



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE


TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20905 MON SE 7	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	90	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	92	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	98	128
Chloroform	6.00	ND	0.020	0.054	118	86	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	66	90
Benzene	0.50	ND	0.002	0.063	116	98	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	88	90
Trichloroethene	0.50	ND	0.002	0.049	103	82	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	112	102
Chlorobenzene	100.00	ND	0.002	0.048	104	106	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	88	92

% Recovery

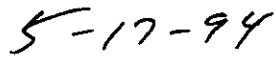
1,2-Dichloroethane 73
Toluene-d8 87
4-Bromofluorobenzene 78

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell



DATE

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 05/01/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20905	MON SE 77	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	<0.1	2.3	<0.01	<0.001
		4.9	1.0	5.0	1.0	5.0	97.8	5.1	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		108	115	96	96	99	103	94	100
% Instrument Accuracy									
		99	96	99	102	100	98	102	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

BS

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

5-17-94

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20906 MON SC 8	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	91	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	82	0.588	117
o-Cresol	200.0	0.001	ND	102	85	0.613	122
m,p-Cresol	200.0	0.001	ND	103	79	1.127	113
Total Cresol	200.0	0.001	ND	98	81	1.740	116
Hexachloroethane	3.0	0.001	ND	102	85	0.594	118
Nitrobenzene	2.0	0.001	ND	102	88	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	79	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	83	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	94	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	89	0.533	106
2,4-D	10.0	0.01	ND	103	79	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	85	0.633	126
2,4,5-TP	1.0	0.01	ND	101	106	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	80	0.439	87
Lindane	0.4	0.001	ND	99	82	0.533	106
Total Heptachlor	0.008	0.001	ND	99	85	1.067	107
Endrin	0.02	0.001	ND	107	108	0.535	107
Methoxychlor	10.0	0.001	ND	84	117	0.472	94
Chlordane	0.03	0.0002	ND	100	115	0.0017	85
Toxaphene	0.5	0.005	ND	100	120	0.0168	84

% RECOVERY

2-Fluorophenol SURR	95
Phenol-d5 SURR	89
Nitrobenzene-d5 SURR	88
2-Fluorobiphenyl SURR	87
2,4,6-Tribromophenol SURR	79
Terphenyl-d14 SURR	95

Methods: EPA SW 846-1311, 8270.

ND - Not Detected



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE


TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20906 MON SC 8	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	120	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	122	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	140	128
Chloroform	6.00	ND	0.020	0.054	118	108	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	102	90
Benzene	0.50	ND	0.002	0.063	116	106	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	88	90
Trichloroethene	0.50	ND	0.002	0.049	103	74	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	110	102
Chlorobenzene	100.00	ND	0.002	0.048	104	104	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	98	92

% Recovery

1,2-Dichloroethane
Toluene-d8
4-Bromofluorobenzene

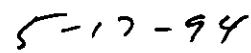
85
115
99

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell



DATE

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

Analysis Date: 05/01/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess
Monument Disposal

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20906	MON SC 8	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	<0.1	1.2	<0.01	<0.001
		4.9	1.0	5.0	1.0	5.0	101.1	5.1	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		107	118	98	96	97	107	93	100
% Instrument Accuracy									
		99	96	99	102	100	101	102	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonnell

Date

5-17-94

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903701L

Project Location: Monument, NM

ANALYTICAL RESULTS FOR

CARTER & BURGESS

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/07/94

Sampling Date: 04/27/94

Sample Condition: I & C

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

TCLP Semi-Volatiles (ppm)	EPA Limit	Detection Limit	T20907 MON SW 9	%P	%EA	QC	%IA
Pyridine	5.0	0.001	ND	101	95	0.473	94
1,4-Dichlorobenzene	7.5	0.001	ND	102	88	0.588	117
o-Cresol	200.0	0.001	ND	102	89	0.613	122
m,p-Cresol	200.0	0.001	ND	103	82	1.127	113
Total Cresol	200.0	0.001	ND	98	85	1.740	116
Hexachloroethane	3.0	0.001	ND	102	89	0.594	118
Nitrobenzene	2.0	0.001	ND	102	93	0.625	125
Hexachlorobutadiene	0.5	0.001	ND	102	83	0.557	111
2,4,6-Trichlorophenol	2.0	0.001	ND	93	83	0.457	91
2,4,5-Trichlorophenol	400.0	0.001	ND	104	70	0.492	98
2,4-Dinitrotoluene	0.13	0.001	ND	98	75	0.533	106
2,4-D	10.0	0.01	ND	103	79	0.387	77
Hexachlorobenzene	0.13	0.001	ND	101	90	0.633	126
2,4,5-TP	1.0	0.01	ND	101	109	0.501	100
Pentachlorophenol	100.0	0.001	ND	91	94	0.439	87
Lindane	0.4	0.001	ND	99	86	0.533	106
Total Heptachlor	0.008	0.001	ND	99	89	1.067	107
Endrin	0.02	0.001	ND	107	103	0.535	107
Methoxychlor	10.0	0.001	ND	84	115	0.472	94
Chlordane	0.03	0.0002	ND	100	125	0.0017	85
Toxaphene	0.5	0.005	ND	100	120	0.0168	84

% RECOVERY

2-Fluorophenol SURR	93
Phenol-d5 SURR	89
Nitrobenzene-d5 SURR	89
2-Fluorobiphenyl SURR	82
2,4,6-Tribromophenol SURR	92
Terphenyl-d14 SURR	91

Methods: EPA SW 846-1311, 8270.

ND - Not Detected



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94
DATE

TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
CARTER & BURGESS, INC.
Attention: J. D. McNamara
505 N. Big Spring, Suite 301A
Midland, TX 79701

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

Analysis Date: 05/04/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

TCLP VOLATILES (ppm)	EPA LIMIT	T20907 MON SW 9	Detection Limit	QC	%P	%EA	%IA
Vinyl chloride	0.20	ND	0.002	0.058	110	124	116
1,1-Dichloroethene	0.70	ND	0.002	0.059	104	116	118
Methyl Ethyl Ketone	200.0	ND	0.020	0.064	101	142	128
Chloroform	6.00	ND	0.020	0.054	118	106	108
1,2-Dichloroethane	0.50	ND	0.002	0.045	105	102	90
Benzene	0.50	ND	0.002	0.063	116	102	126
Carbon Tetrachloride	0.50	ND	0.020	0.045	106	86	90
Trichloroethene	0.50	ND	0.002	0.049	103	80	98
Tetrachloroethene	0.70	ND	0.002	0.051	115	102	102
Chlorobenzene	100.00	ND	0.002	0.048	104	104	96
1,4-Dichlorobenzene	7.50	ND	0.002	0.046	100	90	92

% Recovery

1,2-Dichloroethane 88
Toluene-d8 106
4-Bromofluorobenzene 95

ND = Not Detected

METHODS: EPA SW 846-1311, 8240.



Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-17-94

DATE


TRACE ANALYSIS, INC.

A Laboratory for Advanced Environmental Research and Analysis

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

Analysis Date: 05/01/94
Sampling Date: 04/27/94
Sample Condition: Intact & Cool
Sample Received by: MS
Project Name: Amerada Hess
Monument Disposal

May 16, 1994
Receiving Date: 04/29/94
Sample Type: Soil
Project No: 93903701L
Project Location: Monument, NM

TCLP METALS

TA#	Field Code	As (ppm)	Se (ppm)	Cr (ppm)	Cd (ppm)	Pb (ppm)	Ba (ppm)	Ag (ppm)	Hg (ppm)
EPA LIMIT =									
T20907	MON SW 9	5.0	1.0	5.0	1.0	5.0	100	5.0	0.20
QC	Quality Control	<0.1	<0.2	<0.1	<0.1	<0.1	1.7	<0.01	<0.001
		4.9	1.0	5.0	1.0	5.0	101.1	5.1	0.020
Detection Limit									
		0.1	0.2	0.1	0.1	0.1	1.0	0.01	0.001
% Precision									
		100	100	100	100	100	100	100	100
% Extraction Accuracy									
		111	113	100	98	99	98	89	100
% Instrument Accuracy									
		99	96	99	102	100	101	102	100

METHODS: EPA SW 846-1311, 6010, 7471.

TCLP METALS QC: Blank Spiked with 5.0 ppm As, Cr, Pb, Ag; 1.0 ppm Se, Cd; 100 ppm Ba; 0.020 ppm Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonnell

Date

5-17-94

RECEIVED
JUN 10 1994
8 50

INTER-OFFICE MEMO

To file: ~~AMERADA HESS MONUMENT AND CAPROCK LANDFILL PROJECTS~~

Date: June 6, 1994
Time: 9:00 am

Telephone call: _____ Meeting: X Other: _____

Person called or attending:

Wayne Price and Jerry Sexton- NMOCD
Al Young and Sam Small- Amerada Hess

REFERENCE: Meeting at request of Amerada Hess

Subject: Closure of two landfills
1. Monument
2. Caprock

Comments:

Monument Landfill.

Sam Small submitted analytical results (attached) of the two sites. He indicated that TCLP's have been run on both sites and both were negative. The analytical results submitted consisted of TPH, MTBE, & BTEX.

They pointed out that no ground water was found from 0-100 ft at the Monument site. There were two small spots that were over the guideline limits. This was points Mon sw 6 & Mon sc 8. These values were both around 9000 ppm for TPH. All others were well below the 5000 ppm guideline recommendations.

They requested that this facility be closed by commingling all the dirt and grade to ground level. They will submit final C-103's when complete.

They also indicated that Amerada will file "Quick Claim " deeds in order to deed record this activity.

Caprock Landfill.

This facility had one spot called Cap NE 1 that the analytical results indicated high TPH levels. They indicated they would excavate down below this spot and determine the vertical extent of the contamination. Depending upon how much material they get out will determine what type of remediation they will perform. They requested verbally if they may proceed with this approach.

They indicated they would "Quick Claim" this property also, however the original contract showed it to revert back to the original land owner. There is some question whether this land is NM State land.

They indicated that they will submit final C-103's when complete.

Conclusion:

The final procedure to be used for the final closure of the two landfills was agreed upon and Amerada will furnish a final report when completed.

They presently are waiting on an EPA ID # to ship off the solid waste that is on site at the Monument location.

Wayne Price



4/7/94

Attachments-1

cc: Jerry Sexton-District I Supervisor
Bill Olson-Environmental Bureau-Hydrogeologist

file: c:\wp51\lwpamer

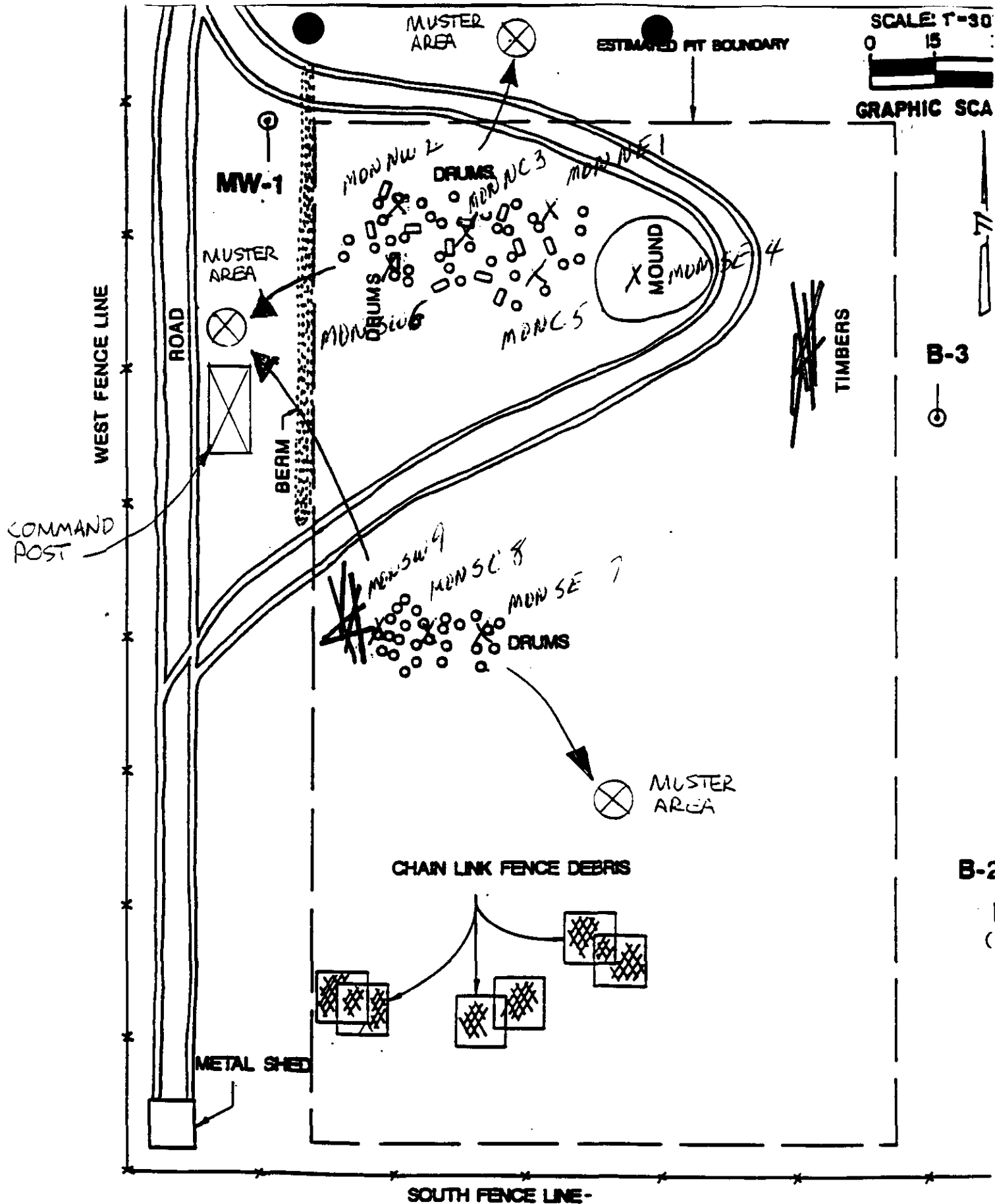


FIGURE 10.1 - EVACUATION ROUTE & MUSTER AREAS

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue

Lubbock, Texas 79424

806•794•1296

FAX 806•794•1298

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: SPILL

Project No: 93903701

Project Location: Monument, NM

Analysis Date: 04/29/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess

Monument Disposal

No 6-Row 2M EA 0-110

TA#	Field Code	TRPHC (ppb)	MTBE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	M,P,O XYLENE (ppb)	TOTAL BTX (ppb)
-----	------------	----------------	---------------	------------------	------------------	----------------------------	--------------------------	-----------------------

T20899	MON ME 1	2,347,248	<1	<1	<1	<1	<1	<1
T20900	MON ME 2	1,992,139	<1	<1	<1	<1	<1	<1
T20901	MON ME 3	4,156,329	<1	<1	<1	<1	<1	<1
T20902	MON ME 4	1,708,223	<1	<1	<1	<1	<1	<1
T20903	MON ME 5	1,381,798	<1	<1	<1	<1	<1	<1
T20904	MON SV 6	8,968,818	<1	<1	2	<1	<1	2
T20905	MON SV 7	305,287	<1	<1	<1	<1	<1	<1
T20906	MON SV 8	9,811,980	<1	<1	1	<1	<1	1
T20907	MON SV 9	161,539	<1	<1	<1	<1	<1	<1
QC	Quality Control	163,380	185	181	189	190	570	
	Detection Limit	5,000	1	1	1	1	1	
	% Precision	100	100	100	101	100	106	
	% Extraction Accuracy	110	93	86	81	75	70	
	% Instrument Accuracy	100	93	90	95	95	95	

METHODS: EPA 821-A-89-0201 EPA 418.1

BTX SPILL AND OTHER SAMPLE ANALYSIS SPILLED WITH 200 PPM EACH VOLATILE ORGANICS:
TRPHC SPILL ANALYSIS SPILLED WITH 163,380 PPM AND BLANK SPILLED WITH 163,380 PPM TRPHC;

Director: Dr. Blair Leftwich

Director: Dr. Bruce McDonnell

Date

5-12-94

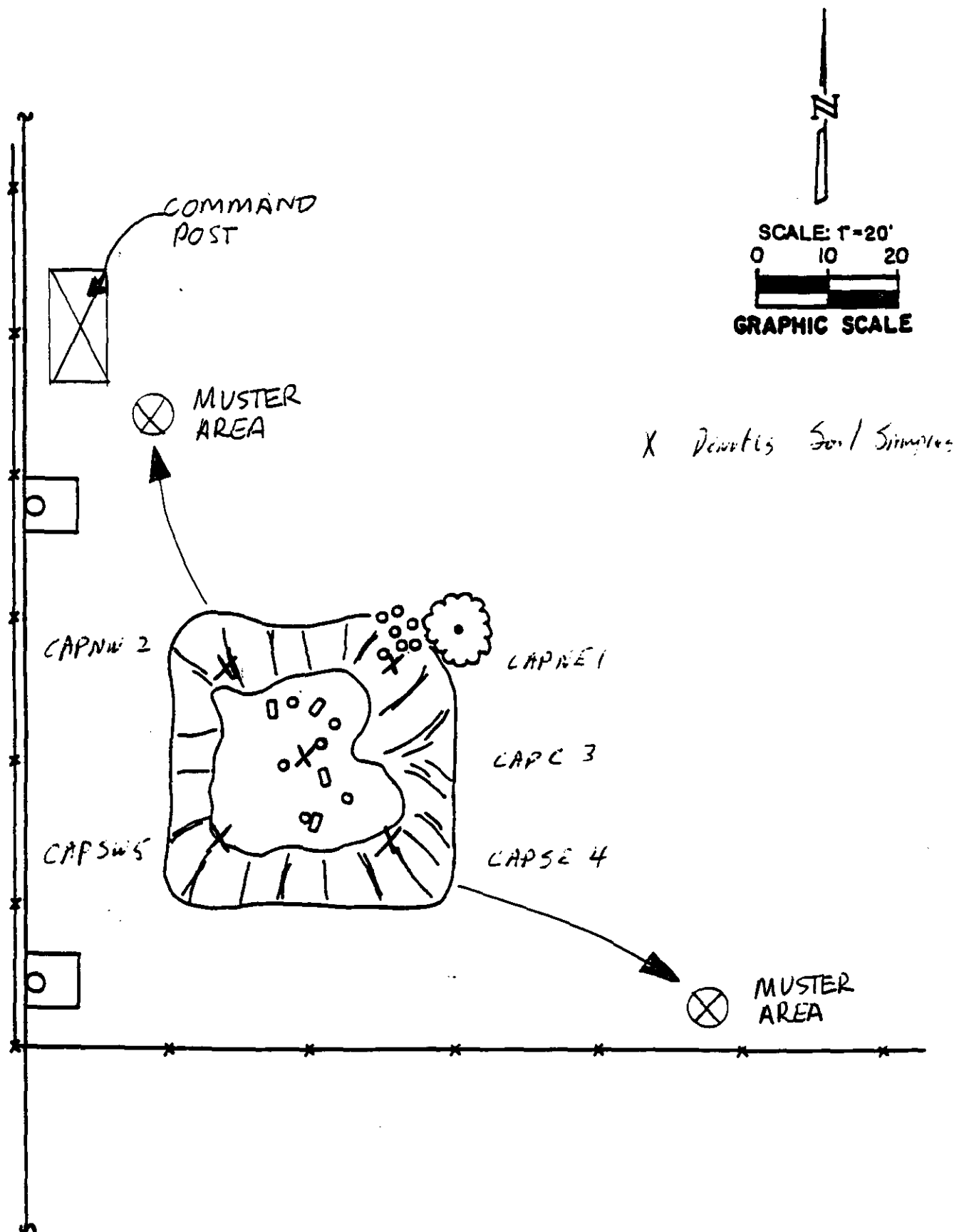


FIGURE 10.1 - SITE MAP DEPICTING EVACUATION ROUTES & MUSTER A.

TRACE ANALYSIS, INC.

5701 Aberdeen Avenue

Lubbock, Texas 79424

806-794-1200

FAX 806-794-1201

ANALYTICAL RESULTS FOR

CARTER & BURGESS, INC.

Attention: J. D. McNamara

505 N. Big Spring, Suite 301A

Midland, TX 79701

May 16, 1994

Receiving Date: 04/29/94

Sample Type: Soil

Project No: 93903601L

Project Location: Caprock, NM

Analysis Date: 04/29/94

Sampling Date: 04/27/94

Sample Condition: Intact & Cool

Sample Received by: MS

Project Name: Amerada Hess

Caprock Disposal

TA#	Field Code	TRPHC (ppb)	MTHH (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL- BENZENE (ppb)	M,P,O XYLENE (ppb)	TOTAL BTEX (ppb)
T20894	CAP NE 1 <i>with check</i>	38,150,260	21	18	7	<1	21	46
T20895	CAP NW 2	401,787	<1	1	<1	<1	21	1
T20896	CAP C 3	6,111,428	<1	18	12	4	33	67
T20897	CAP SE 4	4,309,837	<1	4	1	<1	5	10
T20898	CAP SW 5	732,877	<1	11	27	50	329	417
QC	Quality Control	163,380	185	181	189	190	570	

Detection Limit 5,000 1 1 1 1 1

% Precision 100 100 100 101 100 106
 % Extraction Accuracy 110 93 86 81 75 70
 % Instrument Accuracy 100 93 90 95 95 95

METHODS: EPA SW 846-8020; EPA 418.1,

BTEX SPIKE AND QC: Sample and Blank Spiked with 200 ppb EACH VOLATILE ORGANICS.

TRPHC SPIKE AND QC: Sample spiked with 327,760 ppb TRPHC and Blank spiked with 163,880 ppb TRPHC.

Director, Dr. Blair Leftwich

Director, Dr. Bruce McDonell

Date

5-17-94



Carter & Burgess

Consultants in Engineering, Architecture,
Planning and the Environment

U.S. CONSERVATION DIVISION

24 MAR 27 1978 8 39

B:11,
FYI
J.D.

March 22, 1994

Mr. John Tymkowych
State of New Mexico Environmental Dept.
P.O. Box 26110
Santa Fe, New Mexico 87502

Subject: Amerada Hess Caprock and Monument Soil Sampling

Dear Mr. Tymkowych:

On March 15, attempts were made to obtain soil samples at a five foot depth at both the Caprock and Monument disposal sites. The equipment used was a gasoline powered, trailer mounted, Dig-R-Mobile with a six inch auger. Due to the extremely rocky conditions, we were unable to drill past the 8"-10" depth.

Per our phone conversation on March 21, we would like to propose the following sampling plan for your consideration:

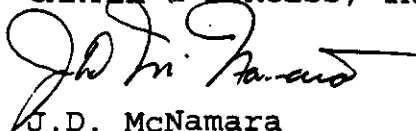
Caprock - Five composite samples would be obtained from within the perimeter of the pit walls where the surface waste was removed. These samples would be from a five-spot grid pattern consisting of the four quadrants and the center of the pit area. Each composite sample would be made up from four grab samples in the area of the sampling point at a depth of 8"-10".

Monument - Five composite samples would be obtained from within the perimeter of the pit walls where the surface waste was removed. These samples would be from a five-spot grid pattern consisting of the four quadrants and the center of the pit area. One composite sample would be taken from the mound area just east of the pit, and three composite samples would be taken from the area south of the excavated part of the pit where the drums of material were stored. Each composite sample would be made up from four grab samples in the area of the sampling point at a depth of 8"-10".

We appreciate your consideration of this matter and will proceed with the sampling per your decision. If you have any questions please call.

Sincerely,

CARTER & BURGESS, INC.

A handwritten signature in dark ink, appearing to read "J.D. McNamara", is written over the typed name.

J.D. McNamara
Project Manager

xc: Sam Small - Amerada Hess Corporation
William C. Olson - New Mexico OCD, Santa Fe
Wayne Price - New Mexico OCD, Hobbs

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Box 1980, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87503

WELL API NO.	N/A
5. Indicate Type of Lease	N/A STATE ☐ FEE ☐
6. State Oil & Gas Lease No.	N/A
7. Lease Name or Unit Agreement Name	N/A
8. Well No.	N/A
9. Pool name or Wildcat	N/A

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER ☒ Landfill	
2. Name of Operator Amerada Hess Corporation	
3. Address of Operator P.O. Box 840 Seminole, Texas 79360	
4. Well Location Unit Letter N/A : 900 Feet From The North Line and 1400 Feet From The East Line Section 36 Township 19 South Range 36 East NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3605	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☒	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☐
OTHER: ☐	PLUG AND ABANDONMENT ☐
	CASING TEST AND CEMENT JOB ☐
	OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Segregate and perform waste characterization analysis on all surface waste at the subject landfill. Dispose of non-hazardous surface materials (excluding soils) within the limits specified. Provide soil analysis after removal of surface waste to determine if further remediation is required, and recommend an appropriate course of action. All work to be performed in accordance with the Scope of Work outlined in Exhibit A and B of contract between Carter & Burgess and Amerada Hess Corporation.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Samuel W. Small TITLE Environmental Coord. DATE 2/15/91

TYPE OR PRINT NAME Samuel W. Small, P.E. TELEPHONE NO. (915) 758-6741

(This space for State Use)

APPROVED BY [Signature] TITLE Geologist DATE FEB 15 1991

CONDITIONS OF APPROVAL, IF ANY: FOR RECORD PURPOSE ONLY



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

STATE OF
NEW MEXICO
OIL
CONSERVATION
DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time 0815

Date 2/17/94

Originating Party

Bill Olson - Envir. Bureau

Other Parties

Ken Davis - Carter & Burges

Subject

Caprock & Monument Sites of Amerada Hess Corp.

Discussion

I requested copy of NMED Haz-waste approval of work plans.
I requested that they send copies of all Santa Fe correspondence to Wayne Rice.
Told me they sent copy of worker safety plan to Wayne Rice for approval.
I requested copy of health & safety plan, and told him to copy Santa Fe
on all correspondence with District.

They will drop Caprock site next week and Monument site the
week of 2/28

Conclusions or Agreements

They will send health & safety plan & NMED Haz-waste approval

Distribution

Caprock file } Amerada Hess
Monument file }
Wayne Rice - OCD Hobbs

Signed

Bill Olson



Consultants in Engineering, Architecture,
Planning and the Environment

February 11, 1994

Mr. William C. Olson
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504

RECEIVED

FEB 21 1994

**OIL CONSERVATION DIV.
SANTA FE**

Dear Mr. Olson:

Per your request on February 17, 1994, I am forwarding a copy of the site specific Safety and Health Plan for the remediation of Amerada Hess Corporation's Caprock and Monument sites. I am also enclosing a copy of the letter of concurrence from Mr. Edward L. Horst of the New Mexico Environment Department.

We appreciate the assistance that the OCD has afforded us on this project. If you have any comments or questions please call anytime.

Sincerely,

CARTER & BURGESS INC.

Kenneth L. Davis, P.E.
Associate Principal
Midland Office Manager

cc: Sam Small, Amerada Hess



Consultants in Engineering, Architecture,
Planning and the Environment

NEW MEXICO OIL CONSERVATION DIVISION
RECEIVED

1994 FEB 15 AM 8 35

February 11, 1994

Mr. William C. Olson
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504

Dear Mr. Olson:

Thank you for your review of Amerada Hess Corporation's October 5, 1993 "Phase II Proposal for Caprock and Monument Landfills" submitted on their behalf by Carter & Burgess, Inc. In compliance with your review, this letter is to provide official notice to the OCD that we are scheduled to begin the first phase of this remediation program on February 21, 1994.

Our work plan calls for the segregation and removal of all surface wastes from the pits, and begin waste characterizations on these waste materials. We will start on the waste pile at the Caprock location and proceed on the Monument location upon completion of each phase.

I have notified Mr. Wayne Price in your Hobbs office of this project and would like to coordinate all operations through him if this is acceptable with you. I will forward a copy of this letter to him for his concurrence.

We appreciate the assistance that the OCD has afforded us on this project. If you have any comments or questions please call anytime.

Sincerely,

CARTER & BURGESS, INC.

A handwritten signature in cursive script, appearing to read 'Kenneth L. Davis'.

Kenneth L. Davis, P.E.
Associate Principal
Midland Office Manager



BRUCE KING
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

November 16, 1993

Mr. Kenneth L. Davis, P.E.
Branch Manager
Carter - Burgess
505 North Big Spring
Suite 600
Midland, Texas 79701-4367

RECEIVED

FEB 21 1994

OIL CONSERVATION DIV.
SANTA FE

SUBJECT: PHASE II PROPOSAL FOR CAPROCK AND MONUMENT

Dear Mr. Davis:

Hazardous and Radioactive Materials Bureau (HRMB) has completed its review of your October 5, 1993 letter covering the captioned subject. HRMB concurs with your approach to remediate the disposal sites at Caprock and Monument, however, the samples that are to be taken are not to be taken as composite samples. All analytical work will be performed with an EPA approved testing method and all results will be provided to this agency. Once each project is complete, please provide HRMB with a final report.

If there are any questions please contact me at (505) 824-4308.

Sincerely,

A handwritten signature in dark ink, appearing to read "Edward L. Horst", written over a horizontal line.

Edward L. Horst, Program Manager
RCRA Inspection/Enforcement Section

xc: William C. Olson, OCD



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

October 26, 1993

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-402

Mr. Sam Small
Amerada Hess Corporation
P.O. Box 840
Seminole, Texas 79360

**RE: CAPROCK AND MONUMENT DISPOSAL SITES
LEA COUNTY, NEW MEXICO**

Dear Mr. Small:

The New Mexico Oil Conservation Division (OCD) has completed a review of Amerada Hess Corporation's October 5, 1993 "PHASE II PROPOSAL FOR CAPROCK AND MONUMENT LANDFILLS" which was submitted on behalf of Amerada Hess by their consultant, Carter & Burgess, Inc. This document contains recommendations for additional work related to the Amerada Hess's Caprock Disposal Site southeast of Caprock, New Mexico and Monument Disposal Site west of Monument, New Mexico.

The recommendations for additional work contained in the above referenced documents are approved with the following conditions:

1. The final soil sampling will include analysis for total concentrations of benzene, toluene, ethylbenzene, xylene and total petroleum hydrocarbons using appropriate EPA approved sampling methods.
2. Amerada Hess will submit the proposed disposal sites of any wastes to be removed for proper disposal to OCD for approval prior to removal from the site.
3. Amerada Hess will notify OCD at least 72 hours in advance of all major project activities such that OCD may have the opportunity to witness the events and/or split samples.

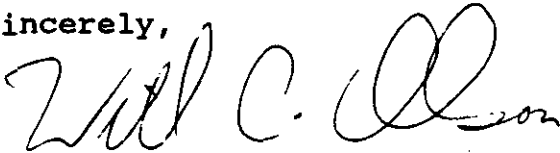
Mr. Sam Small
October 26, 1993
Page 2

4. Amerada Hess will submit a report to OCD by January 21, 1994 which describes the work performed and contains the results of all sampling activities.

Please be advised that OCD approval does not relieve Amerada Hess of liability should contamination be discovered which is beyond the scope of the work plan. In addition, OCD approval does not relieve Amerada Hess of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

A handwritten signature in black ink, appearing to read "Will C. Olson". The signature is fluid and cursive, with the first name "Will" and last name "Olson" clearly distinguishable.

William C. Olson
Hydrogeologist
Environmental Bureau

xc: OCD Hobbs District Office
Ed Horst, NMED Hazardous and Radioactive Materials Bureau
Kenneth L. Davis, Carter & Burgess, Inc.



Consultants in Engineering, Architecture,
Planning and the Environment

OIL CONSERVATION DIVISION
RECEIVED

'93 OCT 12 AM 9 16

October 5, 1993

Mr. Sam Small
Amerada Hess Corporation
P.O. Box 840
Seminole, Texas 79360

RE: Phase II Proposal for Caprock and Monument Landfills

Dear Mr. Small:

Based on our discussions with the Oil Conservation Division and the Environment Department, we have been able to develop a course of action for the disposition of the various wastes in these two facilities. The following discussion outlines the requirements of these two agencies for each of the two sites.

SCOPE OF WORK - CAPROCK AND MONUMENT SITES

1. Collect four (4) soil samples from the four sides of the landfill dike. These samples must each be analyzed using the Toxicity Characteristic Leaching Procedure, Metals Scan (TCLP, Metals) to determine if they are hazardous wastes. If they are hazardous waste, the extents of the contaminated soil must be determined, and a remediation and/or disposal methodology must be developed for these soils.
2. All surface wastes from the landfill area must be removed and segregated according to waste type and potential hazardous waste characteristics. These types should include, but not be limited to drums, metal, plastic pails and buckets, timber, waste paint cans, etc. These wastes should be inspected to determine any indication of potential hazardous waste characteristics by noticing odor, discoloration, residues, labels, staining, etc. A maximum of eight (8) waste streams of this type are assumed for this task. Since the volume and type of each waste stream is indeterminate, final costs for the disposal of these items will be determined after segregation and testing. This item does include the transport of all uncontaminated metals to a local metals recycling facility.
3. Empty and clean drums should be crushed and placed with other clean metals for transport to a metals recycling facility. A maximum of 35 drums of this type is assumed.

4. Drums and containers with any residual materials present should be emptied and triple-rinsed. Rinsate must be contained and sampled to determine waste classification, then disposed of accordingly. Rinsate analysis should be conducted for full-scan TCLP and Reactivity, Corrosivity and Ignitability (RCI). Once triple-rinsed, these drums can be disposed of as clean and empty drums. A maximum of one (1) such sample of rinsate water is assumed in this proposal. It is assumed that fifteen (15) such containers will exist. This task does include the disposal of this rinsate.
5. Other wastes, such as those outlined in Task #2, that have potential hazardous waste characteristics should be appropriately sampled and analyzed to determine waste classification for disposal. A maximum of two (2) full-scan TCLP and RCI procedures is assumed for these wastes. Disposal options for this waste will range from a municipal solid waste disposal facility to a hazardous waste facility, based upon the profile developed. This item assumes that no more than five (5) tons of such waste is generated at each site, and includes costs for disposal of that amount.
6. Drums containing significant materials should be segregated according to type of waste. Determination should be made as to whether any of the discarded chemical at the Monument site can be used by Amerada Hess, since oilfield chemicals fall under the RCRA exploration and production exemption from hazardous waste status once they have been used, within certain guidelines, in exploration and production operations. The chemicals that cannot be used must be overpacked if leakage is possible, sampled and analyzed for TCLP and RCI to determine disposal options. All wastes, regardless of whether or not they are hazardous, will require sampling, profile analyses and acceptance notification by disposal facilities before acceptance by any facility can be assured and before final disposal costs can be ascertained. A maximum of ten (10) such drums, and corresponding TCLP and RCI analyses are assumed for this item. This item specifically assumes that none of the drummed materials have over 2% solids, and that the disposal of on more than the ten (10) drums is required.
7. After all wastes have been removed from the site, soil sampling and analyses for full-scan TCLP will be required at a depth of five (5) feet below the surface in five (5) locations at the Caprock site and nine (9) locations at the Monument site. If these analyses indicate unacceptable levels of contamination, further soil remediation or waste removal may be required.
8. Based on the results of the above work, Carter & Burgess will review the regulatory requirements to determine the appropriate course of action to achieve completion of the site remediation and cleanup. The possible courses of action are:

- A. Do Nothing condition - This item will outline the likely results if no final cleanup and site remediation is undertaken. It is unlikely that this option will be acceptable to the New Mexico Environment Department or the Oil Conservation Division.
- B. Cap & Close - This item will discuss the methodology and estimated costs to remove the surface wastes as segregated and cap and cover the landfills in place. This option will be available only if the soil analyses indicate that no migration of contaminants has occurred.
- C. Total Removal - This option, although relatively simple from a regulatory perspective, would probably be the most expensive and would involve total removal of all surface and buried wastes.
- D. Solid Waste Management Unit (SWMU) - This course of action applies in general to inactive solid waste sites on active facilities and requires the delineation and characterization of the waste unit and selection of a proper closure process under Resource Conservation and Recovery Act (RCRA) regulations as applied by the New Mexico Environment Department.
- E. Remedial Investigation/Feasibility Study (RI/FS) - This course of action, which is by far the most complex from a regulatory perspective, normally applies to inactive solid waste sites at inactive facilities. We believe that it would be in Amerada Hess Corporation's best interest to avoid this regulatory avenue, if possible.

Please note that the course of action to be determined in this Task can vary greatly depending upon the results of the assessment outlined in Tasks #1-7, and the resulting requirements of the New Mexico Environment Department and the Oil Conservation Division. This task involves only the determination of the proper course of action from this point. Preparation of items to initiate the final closure are beyond the scope of this proposal.

By copy of this letter, we are requesting that the New Mexico Oil Conservation Division and the New Mexico Environment Department Hazardous Waste Division note and document their concurrence with this proposed Scope of Work.

Costs for the execution of this work are rather difficult to quantify. Because of that, we would proposed performing this work at an hourly rate times a multiplier with a maximum not-to-exceed fee based on the assumed numbers of tests and/or procedures outlined above. Based on these assumptions, the proposed maximum not-to-exceed fee for each Task is as follows:

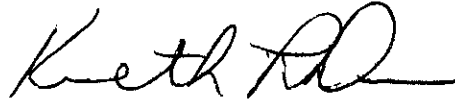
TASK NUMBER	TASK FEES		
	ITEM	CAPROCK	MONUMENT
1	Labor = Contractor = Analytical =	\$300.00 \$0 \$800.00	\$0 \$0 \$0
2	Labor = Contractor = Analytical =	\$10,000.00 \$12,500.00 \$0	\$10,000.00 \$12,500.00 \$0
3	Labor = Contractor = Analytical =	\$0 \$1,500.00 \$0	\$0 \$1,500.00 \$0
4	Labor = Contractor = Analytical =	\$0 \$800.00 \$1,000.00	\$0 \$800.00 \$1,000.00
5	Labor = Contractor = Analytical =	\$600.00 \$4,000.00 \$2,000.00	\$600.00 \$4,000.00 2,000.00
6	Labor = Contractor = Analytical =	\$0 \$0 \$0	\$600.00 \$7,200.00 \$10,000.00
7	Labor = Contractor = Analytical =	\$1,400.00 \$0 \$5,000.00	\$1,400.00 \$0 \$9,000.00
8	Labor =	\$2,500.00	\$2,500.00
TOTAL MAXIMUM NOT- TO-EXCEED FEE	Labor = Contractor = Analytical = Total =	\$14,800.00 \$18,800.00 \$8,800.00 \$42,400.00	\$15,100.00 \$26,000.00 \$22,000.00 \$63,100.00

Carter & Burgess is aware that projects of this type can be costly. Please be assured that we will do everything within our power to meet the regulatory requirements involved while providing you with the most cost-effective services possible.

It has been our pleasure serving you in the past, and we look forward to working with you again on this project. If you have any questions, or need any further information, please do not hesitate to contact either J. D. McNamara or myself.

Sincerely,

CARTER & BURGESS, INC.

A handwritten signature in black ink, appearing to read "Kenneth L. Davis". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth L. Davis, P.E.
Branch Manager

xc: ✓ Mr. William C. Olson
Hydrogeologist
Environmental Bureau
New Mexico Oil Conservation Commission

Mr. Edward Horst
Manager
Hazardous Waste Bureau
New Mexico Environment Department



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

August 25, 1993

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-379

Mr. Sam Small
District Superintendent
Amerada Hess Corporation
P.O. Drawer D
Monument, New Mexico 88265

**RE: MONUMENT DISPOSAL SITE
LEA COUNTY, NEW MEXICO**

Dear Mr. Small:

The New Mexico Oil Conservation Division (OCD) is in the process of reviewing Amerada Hess Corporation's "ENVIRONMENTAL ASSESSMENT OF MONUMENT DISPOSAL SITE" which was submitted to OCD by their consultant, Carter & Burgess, Inc. This report presents the results of an investigation of potential contaminants at an Amerada Hess disposal site west of Monument, New Mexico

The OCD has the following comments and requests for information regarding the above referenced report:

1. The OCD does not have authority to approve of the disposal of hazardous wastes contained in the onsite drums. Approval for disposal of these wastes must be obtained from the New Mexico Environment Department (NMED). The OCD directs you to discuss the disposal of hazardous wastes with Ed Horst of the NMED Hazardous and Radioactive Materials Bureau.
2. The report states that "Seven of the drums observed in the waste pile were suspected of containing liquids, but were inaccessible for sampling". These wastes are not exempt from hazardous waste classification under federal RCRA Subtitle C regulations. Therefore, it must be demonstrated that the wastes are nonhazardous in order for OCD to have approval authority for their disposal. Please provide OCD with analytical results of these wastes for all hazardous waste characteristics.

Mr. Sam Small
August 25, 1993
Page 2

3. The report recommends removal of the nonhazardous solid wastes for proper disposal but does not indicate where these wastes will be taken. Please provide OCD with the proposed disposal site for the wastes.
4. After the nonhazardous wastes have been removed for disposal, the OCD requires that soil samples from beneath any solid waste piles which have the potential to contaminate underlying soils be taken and analyzed for final remediation levels. Please provide a plan for performing these analyses.

Receipt of the above information will allow OCD to complete a review of this site assessment and remediation plan. If you have any questions, please contact me at (505) 827-5885.

Sincerely,



William C. Olson
Hydrogeologist
Environmental Bureau

xc: OCD Hobbs District Office
Ed Horst, NMED Hazardous and Radioactive Materials Bureau
Ken Davis, Carter & Burgess, Inc.

Is your RETURN ADDRESS completed on the reverse side?	SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.	I also wish to receive the following services (for an extra fee): 1. ☐ Addressee's Address 2. ☐ Restricted Delivery Consult Postmaster for fee.		
	3. Article Addressed to: Mr. Sam Small District Superintendent Amerady Hess Corporation P.O. Drawer D Monument, NM 88265	4a. Article Number P-667-242-379		
	5. Signature (Addressee) D. Kermendy	4b. Service Type ☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail ☐ Return Receipt for Merchandise		
	6. Signature (Agent)	7. Date of Delivery 8-30-93		
		8. Addressee's Address (Only if requested and fee is paid)		

PS Form 3811, December 1991 ★U.S. GPO: 1992-323-402 DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.



MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone☐ Personal

Time

2:20 P.m.

Date

3/22/93

Originating PartyKen Davis - Carter & Burgess
915-687-2425Other Parties

Kathy Brown

Subject2 Landfills of Amareda Hess
Proposed Clean-up & Offsite Disposal.Discussion

Consultant for Amareda Hess that is trying to close 2 old landfills they used. One just has solid waste such as cement, empty drums, pipe, plastic, etc... The other has ~~26~~ 26 drums of which 23 ~~have~~ are open with fluids. They have classified the drums based on knowledge of the contents and ~~taken~~ taken representative samples to test for hazardous waste characteristics. Some are hazardous. Contents include used motor oil, sludge from drip tanks, virgin emulsion breakers & scale inhibitors.

Conclusions or Agreements

Ken Davis has contacted Ed Horst with Haz Waste. He will send us their report on the sites and then OCID & ED will decide what course of action to take with respect to clean-up & offsite disposal.

Signature

Signed

Kathy Brown

LETTER OF TRANSMITTAL

AM 9 27

Attention: Mr. Roger Anderson	Date: 5/20/93	Project No: 92139701F
To: New Mexico Oil Conservation Div	Re: Amerada Hess Projects	
P.O. Box 2088		
Sante Fe, New Mexico 87504-2088		

We are sending you these items via: Mail

COPIES	DATE	DESCRIPTION
1	5/20/93	Report on Environmental Assessment at Monument Disposal Site.

☐ For approval	☒ For your use	☐ For review & comment
---------------------------------------	--	---

REMARKS:

SENDER:

Candace Reed Watkins

✓	FILE	PERSON	✓	FILE	PERSON	✓	FILE	PERSON
✓	Correspondence	N/A	✓	Environmental	CRW		Plumbing	
	Architectural			Event Facilities			Project Management	
	Civil			Mechanical			Structural	
	Electrical			Planning/LA			Survey	
			✓	Ken Davis, Midland			Transportation	