

District III
1000 Rio Brazos Rd
Artes, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
2040 S. PACHECO
Santa Fe, New Mexico 87505

Submit 1 copy to
Appropriate District
and 1 copy to
Santa Fe Office

PIT REMEDIATION AND CLOSURE REPORT

Approved
Operator: Apache Corporation Telephone: 505-325-0318

Address: 2855 Southside River Road, Suite A, Farmington, NM 87401

Facility or Well Name: Apache # 111

Location: Unit or Qtr/Qtr Sec K Sec 13 T 24 N R 4W County Rio Arriba

Pit Type: Separator: _____ Dehydrator _____ Other BLOW PIT

Land Type: Jicarilla Tribal

BEGINNING DIMENSIONS
Pit Location: END Pit Dimensions: Length 33' Width 27' Depth 10'
(Attach diagram)

Reference: Wellhead X Other _____

Footage from reference: 150'

Direction from reference: 190' Degrees _____ East _____ North _____
_____ West _____ South XX

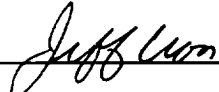
Depth To Groundwater: Less than 50 feet (20 points) _____
(vertical distance from 50 feet to 99 feet (10 points) _____
contaminants to seasonal Greater than 100 feet (0 points) 0
high water elevation of
groundwater)

Wellhead Protection Area: Yes (20 points) _____
(Less than 200 feet from a private No (0 points) 0
domestic water source, or; less than
1000 feet from all other water sources)

Distance To Surface Water: Less than 200 feet (20 points) _____
(Horizontal distance to perennial 200 feet to 1000 feet (10 points) _____
lakes, ponds, rivers, streams, creeks, Greater than 1000 feet (0 points) 0
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS) 0

RECEIVED
DEC 10 1997
OIL CON. DIV.
DIST. 3

Date Remediation Started:		<u>9/5/95</u>	Date Completed:		<u>7/31/97</u>
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>	Approx. cubic yards		<u>264</u>
		Landfarmed <u>XX</u>	Insitu Bioremediation		
		Other			
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)		Onsite <u>XX</u>	Offsite		
General Description of Remedial Action:		<u>Excavate pit to 10', took PID readings.</u>			
		<u>Spread soil on location for remediation. Took soil samples.</u>			
Groundwater Encountered:		No <u>X</u>	Yes	Depth	
Final Pit:	Sample location	<u>5 point composite taken from pit sidewalls and pit bottom center</u>			
Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)					
	Sample depth	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>			
	Sample Date	<u>9/15/95</u>	Sample Time	<u>4:40 P.M.</u>	
	Sample results				
	Benzene	(ppm)	<u>ND</u>		
	Total BTEX	(ppm)	<u>3.14</u>		
	Field Headspace	(ppm)	<u>71.64</u>		
	TPH		<u>3700</u>		
Groundwater Sample:		Yes	No <u>X</u>	(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		<u>November 5, 1997</u>	PRINTED NAME		<u>Jeff Cross</u>
SIGNATURE			AND TITLE		<u>Project Manager</u>

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P. O. BOX 507
DULCE, NEW MEXICO 87528

Submit 1 copy to
Natural Resource Dept.
and Oil & Gas Administration

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>APACHE CORPORATION</u>		Telephone <u>505-325-0318</u>	
Address: <u>304 N. BEHREND, FARMINGTON, N.M. 84701</u>			
Facility or Well Name: <u>APACHE # 111</u>			
Location:	Unit or Qtr/Qtr	Sec <u>K</u>	SEC 13 T 24N R 4W County <u>RIO ARRIBA</u>
Pit Type:	Separator: _____	Dehydrator _____	Other <u>BLOW PIT</u>
Land Type: <u>JIC. TRIBAL</u>			
Pit Location: Pit Dimensions: Length <u>33'</u> Width <u>27'</u> Depth <u>10'</u>			
(Attach diagram)			
Reference: Wellhead <u>XXX</u> Other _____			
Footage from reference: <u>150'</u>			
Direction from reference: <u>190</u> Degrees _____ East North _____			
_____ X West of South <u>XX</u>			
Depth To Groundwater:			
(vertical distance from contaminants to seasonal high water elevation of groundwater)		Less than 50 feet	(20 points) _____
		50 feet to 99 feet	(10 points) _____
		Greater than 100 feet	(0 points) <u>0</u>
Distance to an Ephemeral Stream:			
(Downgradient dry wash greater than ten feet in width)		Less than 100 feet	(10 points) _____
		Greater than 100 feet	(0 points) <u>0</u>
Distance to Nearest Lake, Playa, or Watering Pond:			
(Downgradient lakes, playas and livestock or wildlife watering ponds)		Less than 100 feet	(10 points) _____
		Greater than 100 feet	(0 points) <u>0</u>
Wellhead Protection Area:			
(Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)		Yes	(20 points) _____
		No	(0 points) <u>0</u>
Distance To Surface Water:			
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Less than 100 feet	(20 points) _____
		100 feet to 1000 feet	(10 points) _____
		Greater than 1000 feet	(0 points) <u>0</u>
RANKING SCORE (TOTAL POINTS)			<u>0</u>

Date Remediation Started: 9/5/95 Date Completed: 7/31/97

Remediation Method: Excavation XXX Approx. cubic yards 264
(Check all appropriate sections) Landfarmed XX Insitu Bioremediation _____

Other _____

Remediation Location: Onsite XX Offsite _____
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavate pit to 10', took PID readings. spread soil on location for remediation. Took soil samples.

Groundwater Encountered: No XXX Yes _____ Depth _____

Final Pit: Sample location 5 point composite taken from pit sidewalls and pit bottom center.

Closure Sampling:

(in multiple samples, attach sample results

and diagram of sample locations and depths)

Sample depth 8" to 10" into pit side walls, 10" into pit bottom.

Sample Date

9/15/95

Sample Time

4:40PM

Sample results

Soil:	Benzene	(ppm)	<u>ND</u>	Water:	Benzene	(ppb)	<u>NA</u>
	Total BTEX	(ppm)	<u>3.14</u>		Toluene	(ppb)	<u>NA</u>
	Field Headspace	(ppm)	<u>71.64</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>3700</u>		Total Xylenes	(ppb)	<u>NA</u>

Groundwater Sample: Yes _____ No XXX (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 7/25/97 PRINTED NAME JEFF CROSS

SIGNATURE Jeff Cross AND TITLE PROJECT MANAGER

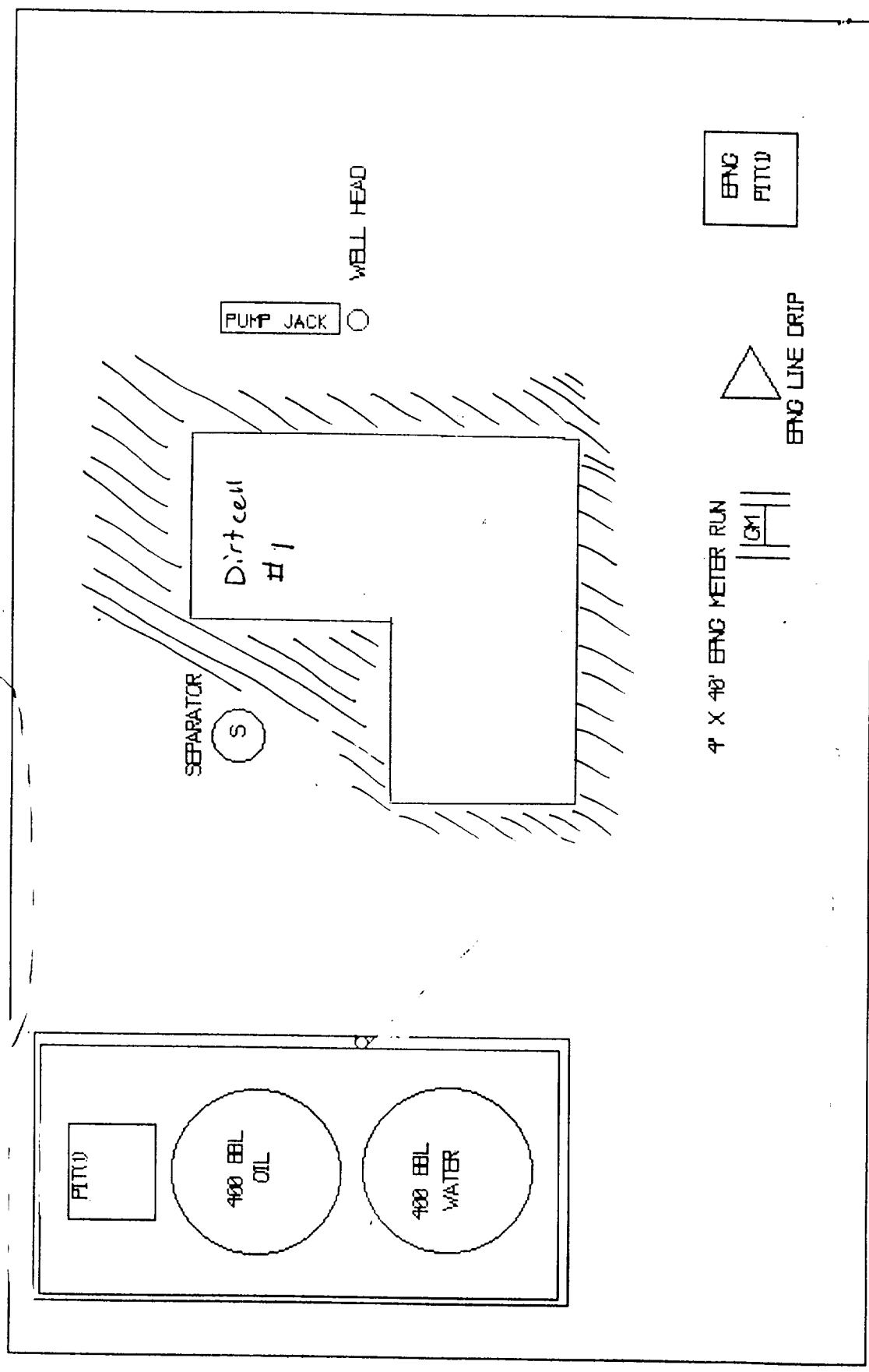
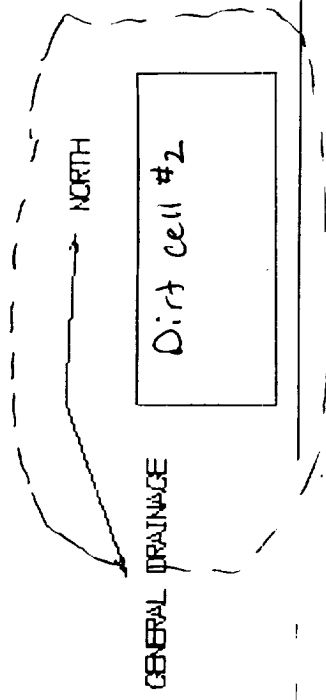
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) _____

SIGNED: Kurt C Mamm DATE: 9-2-97

(---) = SEEP AREA
 (///) = SPREAD AREA

APACHE
 APACHE NUMBER 111 Lease # JAT 129
 NE/4 SW/4 (K)
 SECTION 13, TOWNSHIP 24N, RANGE 4W
 RIO ARriba COUNTY, NM
 Revised 8/1/97 MG



APACHE CORPORATION FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

JICARILLA APACHE TRIBAL EPO
REVIEW AND APPROVAL

EPO REPRESENTATIVE K.C.
DATE OF REVIEW: 11/29/95

LOCATION: APACHE 111

PIT COUNT: 1

EXCAVATION								
DIMENSIONS		START		FINISH				CU.YDS.
	W'	L'	D'		W'	L'	D'	
PIT 1	20'	20'	2'	PIT 1	27'	33'	10'	264.0
PIT 2				PIT 2				
PIT 3	9-5-95			PIT 3	9-15-95			
DATE: 09/06/95		PIT 1@ 06'	PIT 2@	PIT 3@	DATE: 09/18/95		PIT 1@ 10'	PIT 2@
P. I. D.	CENTER	770.0			P. I. D.	CENTER	203.0	
	NW CORNER	21.9				NW CORNER	18.2	
	NE CORNER	243.0				NE CORNER	128.0	
	SW CORNER	7.3				SW CORNER	5.0	
	SE CORNER	13.4				SE CORNER	4.0	

NOTES:

09/06/95 Excavate to 10', spotted staining, unable to remove some staining without ramping.

10/30/95 EPO requested further excavation to remove staining and reduce PID readings.

10/31/95 Ramp down for additional dig reach. Remove stained soil.

11/29/95 PID readings- C-0.0/NW-0.0/NE-2.5/SW-0.0/SE-3.2

SOIL SAMPLING								
DATE: 09/18/95		PIT 1@ 10'	PIT 2@	PIT 3@	ANALYSIS RESULTS		PER LAB: ASSAIGAI	
P. I. D.	CENTER	203.0			PIT NO.	TPH	BTEX	WITNESS
	NW CORNER	18.2						DATE
	NE CORNER	128.0			1	3700.0	3.1	JDT
	SW CORNER	5.0						
	SE CORNER	4.0						

RE-SAMPLE OR CELL(S) SAMPLE

DATE:		PIT 1@	PIT 2@	PIT 3@	ANALYSIS RESULTS		PER LAB:	
P. I. D.	CENTER				PIT NO.	TPH	BTEX	WITNESS
	NW CORNER							DATE
	NE CORNER							
	SW CORNER							
	SE CORNER							

RE-SAMPLE OR CELL(S) SAMPLE

DATE:		PIT 1@	PIT 2@	PIT 3@	ANALYSIS RESULTS		PER LAB:	
P. I. D.	CENTER				PIT NO.	TPH	BTEX	WITNESS
	NW CORNER							DATE
	NE CORNER							
	SW CORNER							
	SE CORNER							

**PIT CLOSURE STATUS REPORT
(CONFIDENTIAL)**

Date:	09/05/95	Well Number:	APACHE #111	Proj. Number:	95017
Date Start:	09/05/95	Number of Pits: 1		Date Finished:	09/06/95

DIMENSIONS & YARDAGE

1	Type:	H	X	C	Dimensions Pit 1 Start:	20' X 20' X 2'	Dimensions Pit 1 Finished:	27' X 33' X 10'
2	Type:	H		C	Dimensions Pit 2 Start:		Dimensions Pit 2 Finished:	
3	Type:	H		C	Dimensions Pit 3 Start:		Dimensions Pit 3 Finished:	
Total Cu. Yards Removed:						264	Total Liquids Removed:	55

TPH & BTEX ANALYSIS

[illegible]

Notes: Further excavation on 9/18/95.

PID READINGS						Site Number: 111	Notes:
Date	Pit No.	Interval (Depth)	Location	Reading (ppm)			
09/05/95	1	6'	Center		33.0	Starting Depth, 2'. Vacuum truck picked up approximately 55 gallons of liquids. Excavated 4', took 5-part composite samples and readings.	
09/05/95	1	6'	Bottom, N.W. Corner		20.1		
09/05/95	1	6'	Bottom, N.E. Corner		21.6		
09/05/95	1	6'	Bottom, S.W. Corner		2.6		
09/05/95	1	6'	Bottom, S.E. Corner		222.0		
09/06/95	1	6'	Center		770.0	Removed fence. Excavated to 10 feet. Finished site at 10:30.	
09/06/95	1	6'	Bottom, N.W. Corner		21.9		
09/06/95	1	6'	Bottom, N.E. Corner		243.0		
09/06/95	1	6'	Bottom, S.W. Corner		7.3		
09/06/95	1	6'	Bottom, S.E. Corner		13.4		
09/15/95	1	6'	Bottom, NW. Corner		39.3	PID reading of sample before sending to lab.	
09/18/95	1	10'	Center		203	Excavated out stain in the center of the pit, had to slope down 2' to reach the center, put fence back in place.	
09/18/95	1	10'	Bottom, N.W. Corner		18.2		
09/18/95	1	10'	Bottom, N.E. Corner		128		
09/18/95	1	10'	Bottom, S.W. Corner		5.0		
09/18/95	1	10'	Bottom, S.E. Corner		4.0		

[illegible]

ID: 9509143-18A
Sample ID: AP# 151H

Collected: 09/15/95 16:05:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A O-Xylene	ND	mg/Kg	0.0010	5.0	09/25/95	SBTXME077

Lab ID: 9509143-18B
Sample ID: AP# 151H

Collected: 09/15/95 16:05:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M Diesel	210	mg/Kg	5.0	20	09/26/95	SLFTD45
HCs DSL XT/CAL DHS 8015M	09/20/95	N/A				

Lab ID: 9509143-19A
Sample ID: AP# 151C

Collected: 09/15/95 16:16:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	250	09/26/95	SBTXME077
Toluene	ND	mg/Kg	0.0010	250	09/26/95	SBTXME077
Ethylbenzene	0.66	mg/Kg	0.0010	250	09/26/95	SBTXME077
P-&m-Xylene	ND	mg/Kg	0.0010	250	09/26/95	SBTXME077
O-Xylene	ND	mg/Kg	0.0010	250	09/26/95	SBTXME077

Lab ID: 9509143-19B
Sample ID: AP# 151C

Collected: 09/15/95 16:16:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M Diesel	92	mg/Kg	5.0	5.0	09/25/95	SLFTD45
HCs DSL XT/CAL DHS 8015M	09/20/95	N/A				

Lab ID: 9509143-20A
Sample ID: AP# 111

Collected: 09/15/95 16:40:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	250	09/25/95	SBTXME077
Toluene	ND	mg/Kg	0.0010	250	09/25/95	SBTXME077
Ethylbenzene	0.94	mg/Kg	0.0010	250	09/25/95	SBTXME077
p-Xylene	2.2	mg/Kg	0.0010	250	09/25/95	SBTXME077
m-Xylene	ND	mg/Kg	0.0010	250	09/25/95	SBTXME077

PIT #1

Page:10

Lab ID: 9509143-20B

Sample ID: AP# 111

PIT#1

Collected: 09/15/95 16:40:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	3700	mg/Kg	5.0	100	09/26/95	SLFTD45
HCs DSL XT/CAL DHS 8015M	09/20/95	N/A				

Lab ID: 9509143-21A

Sample ID: AP# 144

Collected: 09/15/95 17:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	5.0	09/25/95	SBTXME077
Toluene	ND	mg/Kg	0.0010	5.0	09/25/95	SBTXME077
Ethylbenzene	ND	mg/Kg	0.0010	5.0	09/25/95	SBTXME077
P-&m-Xylene	ND	mg/Kg	0.0010	5.0	09/25/95	SBTXME077
O-Xylene	ND	mg/Kg	0.0010	5.0	09/25/95	SBTXME077

Lab ID: 9509143-21B

Sample ID: AP# 144

Collected: 09/15/95 17:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	140	mg/Kg	5.0	10	09/26/95	SLFTD45
HCs DSL XT/CAL DHS 8015M	09/20/95	N/A				

Lab ID: 9509143-22A

Sample ID: AP# 127

Collected: 09/15/95 17:12:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	250	09/25/95	SBTXME077
Toluene	ND	mg/Kg	0.0010	250	09/25/95	SBTXME077
Ethylbenzene	ND	mg/Kg	0.0010	250	09/25/95	SBTXME077
P-&m-Xylene	1.4	mg/Kg	0.0010	250	09/25/95	SBTXME077
O-Xylene	0.53	mg/Kg	0.0010	250	09/25/95	SBTXME077

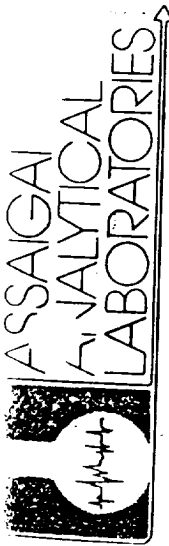
Lab ID: 9509143-22B

Sample ID: AP# 127

Collected: 09/15/95 17:12:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	200	mg/Kg	5.0	5.0	09/25/95	SLFTD45
HCs DSL XT/CAL DHS 8015M	09/20/95	N/A				



Chain of Custody Record

Lab job no.: 9143 Date: 9/13
Page 4 of 7

Client Apache Corp.

Address 3041 N. Behrend

City / State / Zip FARMINGTON NM 87401

Project Name / Number P.T Remediation

Contract / Purchase Order / Quote _____

Project Manager / Contact John Taylor

Telephone No. (505) 325-0318

Fax No. (505) 325-0325

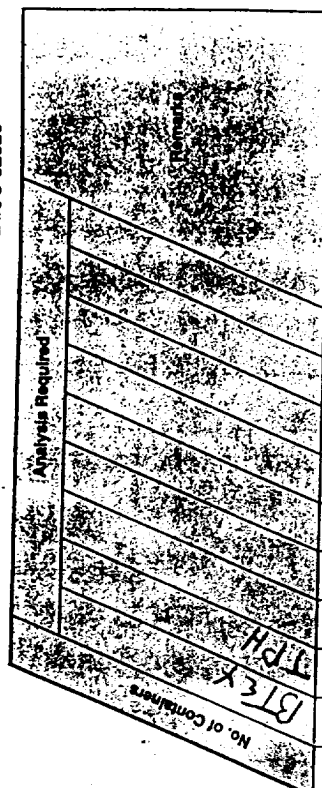
Samplers: (Signature) [Signature]

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87111
(505) 345-8964

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

MELQUIADES ALANIS
6411 LOCAL UNO

CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320
(915) 570-1116



ALL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp. Chemical
141	AP # 151C	9/15	4:16	Soil	GLASS	40° ICE
142	AP # 151C	9/15	4:16			
143	AP # 111		4:40			
144	AP # 111		4:40			
145	AP # 144		5:00			
146	AP # 144		5:00			
147	AP # 127		5:12			
148	AP # 127		5:12			
149	AP # 126		5:30			
150	AP # 126		5:30			
151	AP # 134		6:00			
152	AP # 134		6:00			

Relinquished by: Signature <u>[Signature]</u> Printed <u>John Taylor</u> Company <u>AAC</u> Reason _____	Received by: Signature <u>[Signature]</u> Printed <u>John Taylor</u> Company <u>AAC</u> Reason _____
Date <u>9/13/15</u> Time <u>7:50 PM</u>	Date <u>9/13/15</u> Time <u>7:20 AM</u>

Method of Shipment: _____
Shipment No.: _____
Special Instructions: _____

Comments: _____

After analysis, samples are to be:

☐ Disposed of (additional fee)
☐ Stored (30 days max)
☐ Stored over 30 days (additional fee)
☐ Returned to customer

COURIER

SEP 25 1995

Page: 3

Lab ID: 9509064-05A

Sample ID: AP# 24

Collected: 09/01/95 15:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	5.0	09/12/95	SMSVOA316
Toluene	ND	mg/Kg	0.0010	5.0	09/12/95	SMSVOA316
Ethylbenzene	ND	mg/Kg	0.0010	5.0	09/12/95	SMSVOA316
P-&m-Xylene	ND	mg/Kg	0.0020	5.0	09/12/95	SMSVOA316
O-Xylene	ND	mg/Kg	0.0010	5.0	09/12/95	SMSVOA316

Lab ID: 9509064-05B

Sample ID: AP# 24

Collected: 09/01/95 15:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	ND	mg/Kg	5.0	10	09/14/95	SLFTD042
HCs DSL XT/CAL DHS 8015M	09/11/95	N/A				

Lab ID: 9509064-06A

Sample ID: AP# 111

P.T

Collected: 09/05/95 15:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	5.0	09/15/95	SMSVOA318
Toluene	ND	mg/Kg	0.0010	5.0	09/15/95	SMSVOA318
Ethylbenzene	ND	mg/Kg	0.0010	5.0	09/15/95	SMSVOA318
P-&m-Xylene	ND	mg/Kg	0.0020	5.0	09/15/95	SMSVOA318
O-Xylene	ND	mg/Kg	0.0010	5.0	09/15/95	SMSVOA318

Lab ID: 9509064-06B

Sample ID: AP# 111

P.T

Collected: 09/05/95 15:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	ND	mg/Kg	5.0	100	09/15/95	SLFTD042
HCs DSL XT/CAL DHS 8015M	09/11/95	N/A				

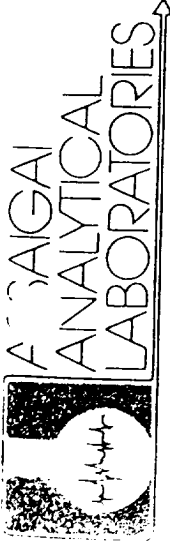
Lab ID: 9509064-07A

Sample ID: AP# 12

Collected: 09/07/95 11:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	10	09/15/95	SMSVOA318
Toluene	ND	mg/Kg	0.0010	10	09/15/95	SMSVOA318



Chain of Custody Record

Lab job no.: 9064 Date: 1 of 2

Client Apache Corp.
Address 304 W. Behrend
City / State / Zip Farlington, N.M. 87401
Project Name / Number Pit Remediation 9507
Contract / Purchase Order / Quote

Project Manager / Contact John Taylor
Telephone No. (505) 325-0318
Fax No. (505) 325-0328
Samplers: (Signature) [Signature]

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 8710
(505) 345-8964

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 570-1118

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

AAL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation		No. of Containers	Remarks
						Temp.	Chemical		
AP # 106		8/29	11:20	Sil	Gloss	500	ICE	1	
AP # 106		8/29	11:20					1	
AP # 116		8/29	3:20					1	
AP # 116		8/29	3:20					1	
AP # 127		8/30	2:45					1	
AD # 127		8/30	2:45					1	
AP # 29		9/1	1:30					1	
AP # 29		9/1	1:30					1	
AP # 24		9/1	3:30					1	
AP # 24		9/1	3:30					1	
AP # 111		9/5	3:00					1	
AP # 111		9/5	3:00					1	

RECEIVED
SEP 25 1995

Relinquished by: Signature <u>[Signature]</u> Printed <u>Jeremy Anderson</u> Company <u>Indian Fire & Safety</u> Reason <u>Testing</u>	Received by: Signature <u>[Signature]</u> Printed <u>EVAN J. CHERRY</u> Company <u>AAL</u> Reason <u>pickup / Testing</u>	Relinquished by: Signature <u>[Signature]</u> Printed <u>SCOTT PLATT</u> Company <u>AAL</u> Reason <u></u>	Received by: Signature <u>[Signature]</u> Printed <u>SCOTT PLATT</u> Company <u>AAL</u> Reason <u></u>
Date <u>9/8/95</u> Time <u>3:25 PM</u>	Date <u>08 Aug</u> Time <u>17:30</u>	Date <u>08 Aug</u> Time <u>17:30</u>	Date <u>08 Aug</u> Time <u>17:30</u>
After analysis, samples are to be: ☐ Disposed of (additional fee) ☐ Stored (30 days max) ☐ Stored over 30 days (additional fee) ☐ Returned to customer			
Comments:			

COURIER

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P. O. BOX 507
DULCE, NEW MEXICO 87528

Submit 1 copy to
Natural Resource Dept.
and Oil & Gas Administration

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>APACHE CORPORATION</u>		Telephone <u>505-325-0318</u>	
Address: <u>304 N. BEHREND, FARMINGTON, N.M. 87401</u>			
Facility or Well Name: <u>APACHE # 111</u>		CELL # <u>1</u>	
Location:	Unit or Qtr/Qtr Sec <u>K</u>	Sec <u>13</u>	T <u>24N</u> R <u>4W</u> County <u>RIO ARRIBA</u>
Land Type	<u>JIC. TRIBAL</u>		
Date Remediation Started: <u>9/5/95</u>		Date Completed: <u>7/31/97</u>	
Remediation Method:	Landfarmed <u>XXX</u>	Approx. cubic yards	<u>195</u>
	Composted <u> </u>		
	Other <u> </u>		
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>7/31/97</u> Time: <u>10:30AM</u> Sample Results: Field Headspace (ppm) <u>1.3</u> TPH (ppm) <u>ND</u> Method <u>M8015</u> Other <u>BTEX \ SW846, 8020A (ND)</u>	
Distance to an Ephemeral Stream: (pts) <u>0</u>			
Distance to Nearest Lake, Playa, or Watering Pond: (pts) <u>0</u>			
Wellhead Protection Area: (pts) <u>0</u>			
Distance To Surface Water: (pts) <u>0</u>			
RANKING SCORE (TOTAL POINTS) <u>0</u>			
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE: <u>8-22-97</u>		PRINTED NAME <u>JEFF CROSS</u>	
SIGNATURE <u>Jeff Cross</u>		TITLE <u>PROJECT MANAGER</u>	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.			
APPROVED: YES <u>X</u> NO <u> </u> (REASON) <u> </u>			
SIGNED: <u>Steve C. Marshall</u>		DATE: <u>9-2-97</u>	

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P. O. BOX 507
DULCE, NEW MEXICO 87528

Submit 1 copy to
Natural Resource Dept.
and Oil & Gas Administration

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>APACHE CORPORATION</u> Telephone <u>505-325-0318</u>	
Address: <u>304 N. BEHREND, FARMINGTON, N.M. 87401</u>	
Facility or Well Name: <u>APACHE # 111</u> CELL # <u>2</u>	
Location: Unit or Qtr/Qtr Sec <u>K</u> Sec <u>13</u> T <u>24N</u> R <u>4W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>9/5/95</u> Date Completed: <u>7/31/97</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>66</u>	
Composted _____	
Other _____	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling Sampling Date: <u>7/31/97</u> Time: <u>11:00AM</u> Sample Results: Field Headspace (ppm) <u>1.7</u> TPH (ppm) <u>1000</u> Method <u>M8015</u> Other <u>BTEX \ SW846, 8020A (ND)</u>
Distance to an Ephemeral Stream: (pts) <u>0</u>	
Distance to Nearest Lake, Playa, or Watering Pond: (pts) <u>0</u>	
Wellhead Protection Area: (pts) <u>0</u>	
Distance To Surface Water: (pts) <u>0</u>	
RANKING SCORE (TOTAL POINTS) <u>0</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE: <u>8-22-97</u> PRINTED NAME <u>JEFF CROSS</u>	
SIGNATURE <u>Jeff Cross</u> TITLE <u>PROJECT MANAGER</u>	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.	
APPROVED: YES <u>X</u> NO _____ (REASON) _____	
SIGNED: <u>Kevin C. Merrill</u> DATE: <u>9-2-97</u>	

APACHE CORPORATION/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE APACHE # 111

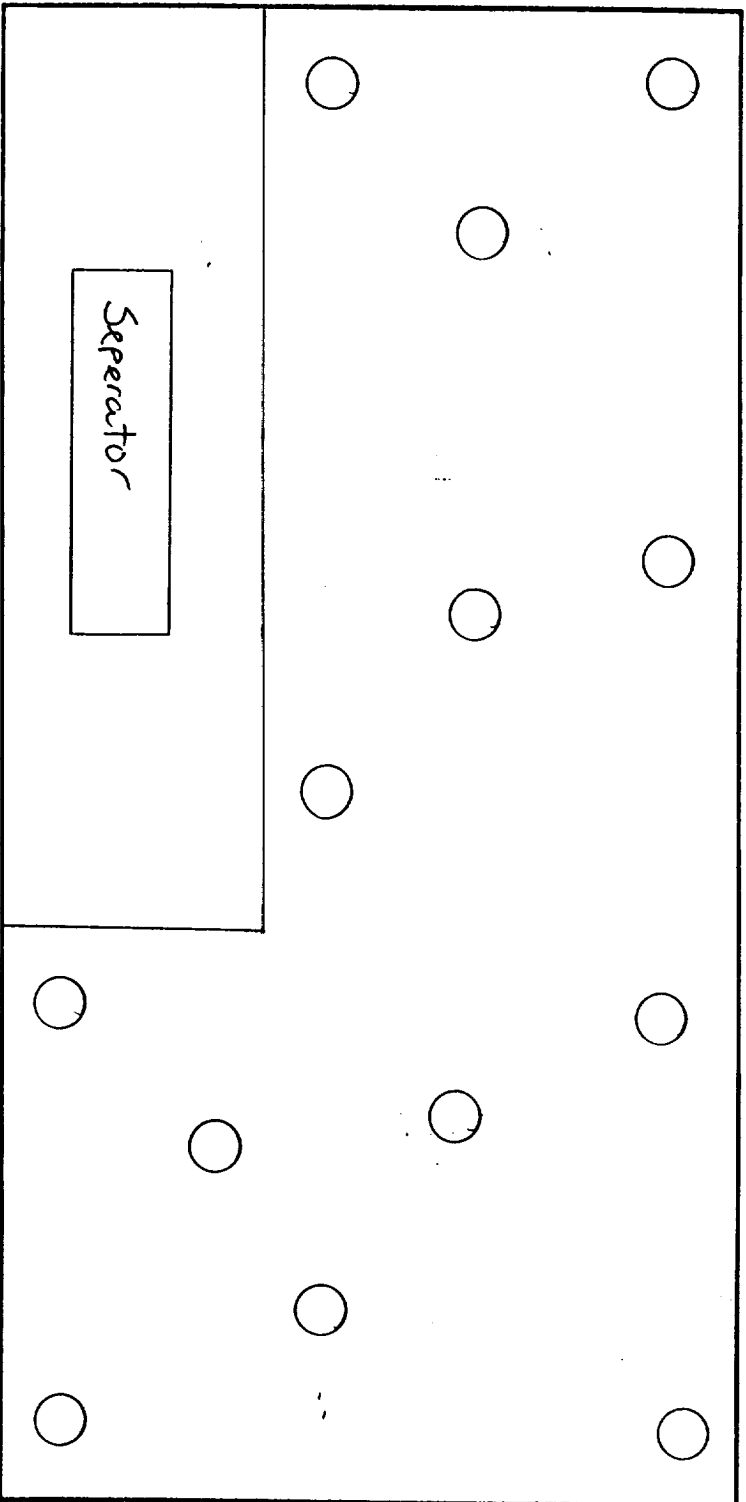
* AMOUNT OF SOIL UNDERGOING REMEDIATION 264 Yds.

CELL No. <u>#1</u>	SampDATE <u>7/31/97</u>	TPH <u>ND</u>	BTEX <u>ND</u>
DIMENSIONS(LxWxH) <u>80' L X 65' W X 12" H</u>			
CELL LOCATION (dir. from well head) <u>SOUTH</u>			
* DATE BEGAN: <u>9/5/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>7/31/97</u>			
CELL No. <u>#2</u>	SampDATE <u>6/6/97</u>	TPH <u>10000</u>	BTEX <u>ND</u>
DIMENSIONS(LxWxH) <u>60' L X 30' W X 12" H</u>	<u>7/31/97</u>	<u>1000</u>	<u>ND</u>
CELL LOCATION (dir. from well head) <u>SOUTHWEST</u>			
* DATE BEGAN: <u>9/5/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>7/31/97</u>			
CELL No. _____	SampDATE	TPH	BTEX
DIMENSIONS(LxWxH) _____			
CELL LOCATION (dir. from well head) _____			
* DATE BEGAN: _____			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) _____			
REMEDICATION RECORD: (Date, Treatment, Tilling)			
9/7/95 CELLS # 1 & # 2 TREAT WITH 28-4-4 FERTILIZER AND TILL SOIL.			
5/27/97 CELLS # 1 & #2 TREAT WITH 46-0-0 FERTILIZER, TILL			
6/30/97 CELLS # 1 & # 2 WATER,PLOW,AND TILL SOIL.			
7/17/97 CELLS # 1 & # 2 WATER , PLOW AND TILL SOIL.			
7/24/97 CELLS # 1 & # 2 WATER , PLOW AND TILL SOIL.			

From excavation reports.

WELL NAME: Apache #111 Cell #1
SAMPLE DATE: 7-31-97
DIMENSIONS: 80' L x 65' W x 1' H

○ = SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

13 Point Composite

13 point composite P10 Reading. 1.3 ppm.

WELL NAME:

Apache #111 Cell #2

SAMPLE DATE:

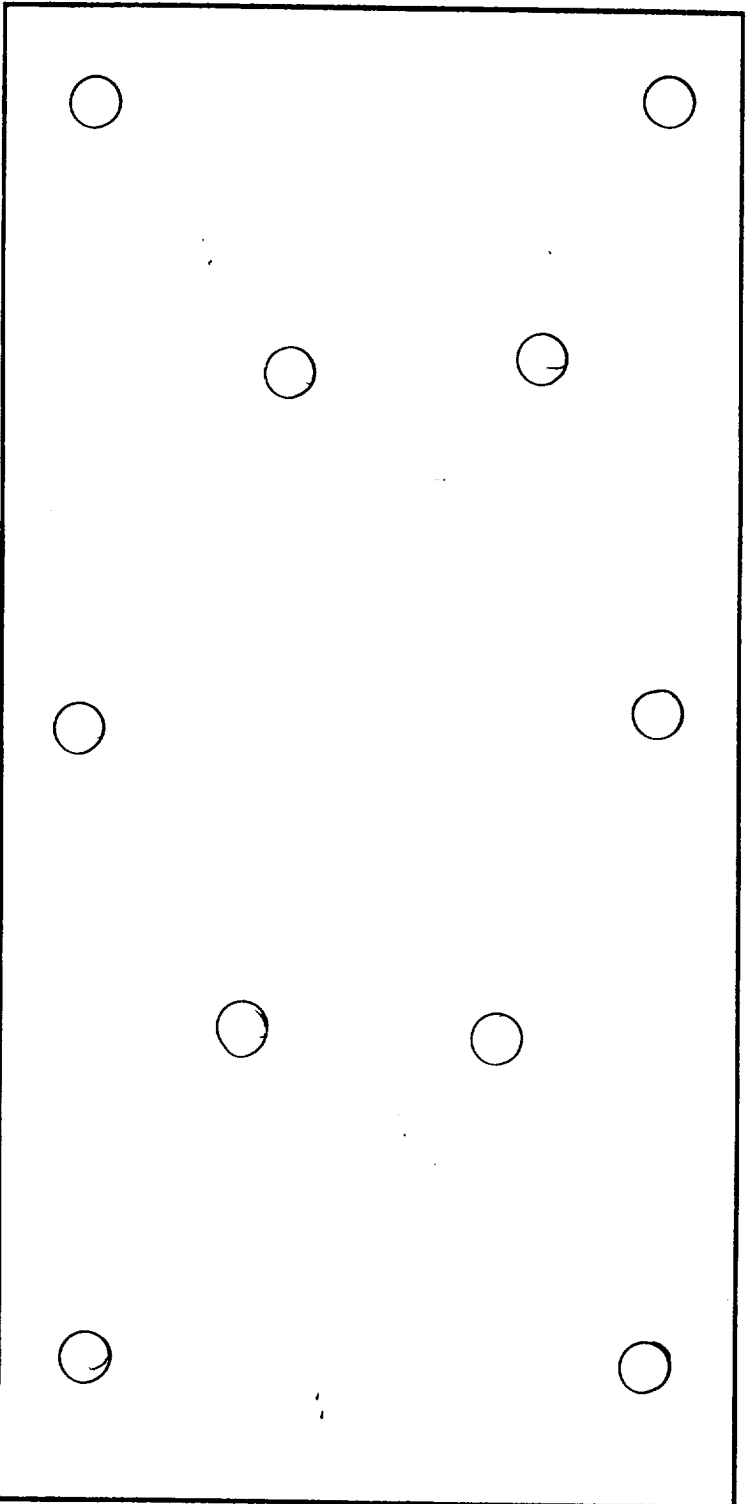
7-31-97

DIMENSIONS:

60' x 30' w x 1' H



= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

10 Point Composite Sample

PID Composite Reading 1.7 ppm.

Resampled.

WELL NAME:

Apache #111 Cell #2

SAMPLE DATE:

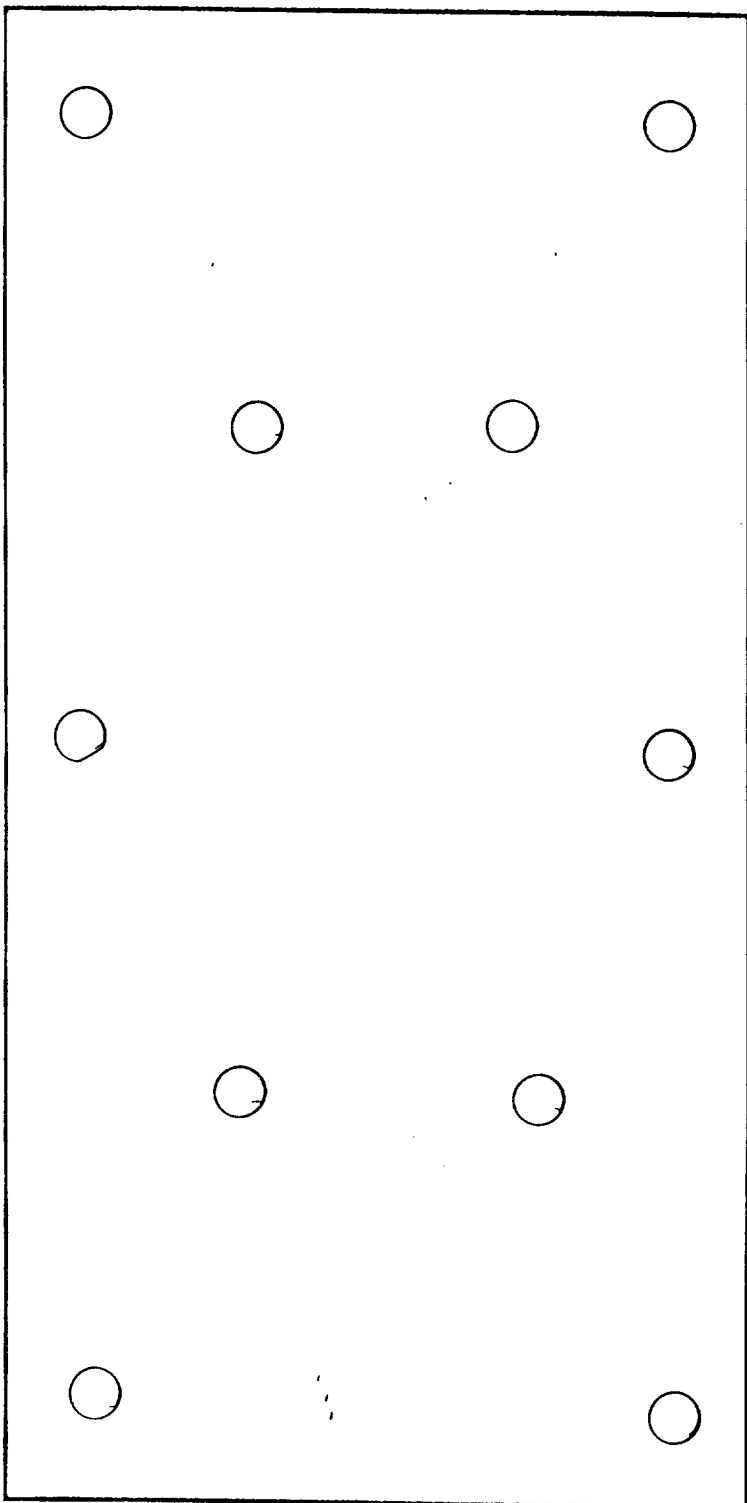
6-6-97

DIMENSIONS:

60' x 30' w x 1' H



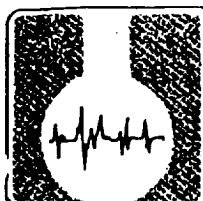
= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

10 point composite Taken for Treatment Plan Procedures



**ASSAIGAI
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3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

AUG 13 1997

Report Generated:

August 8, 1997 13:15

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

SENT APACHE CORPORATION
TO: 304 N. BEHREND
FARMINGTON, NM 87401

WORKORDER # : 9708018
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 08/01/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9708018-01A;
Sample ID: A111 CELL #1

Collected: 07/31/97 10:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	08/07/97	SBTXME182
Toluene	ND	mg/kg	0.0050	100	08/07/97	SBTXME182
Ethylbenzene	ND	mg/kg	0.0050	100	08/07/97	SBTXME182
P-&m-Xylene	ND	mg/kg	0.010	100	08/07/97	SBTXME182
O-Xylene	ND	mg/kg	0.0050	100	08/07/97	SBTXME182

Lab ID: 9708018-01B
Sample ID: A111 CELL #1

Collected: 07/31/97 10:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	ND	mg/Kg	25	25	08/05/97	SDRO45

Lab ID: 9708018-02A
Sample ID: A111 CELL #2

Collected: 07/31/97 11:00:00
Matrix: SOIL

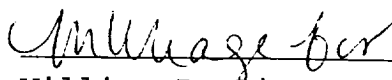
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	08/07/97	SBTXME182
Toluene	ND	mg/kg	0.0050	100	08/07/97	SBTXME182
Ethylbenzene	ND	mg/kg	0.0050	100	08/07/97	SBTXME182
P-&m-Xylene	ND	mg/kg	0.010	100	08/07/97	SBTXME182
O-Xylene	ND	mg/kg	0.0050	100	08/07/97	SBTXME182



b ID: 9708018-02B
Sample ID: A111 CELL #2

Collected: 07/31/97 11:00:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	1000	mg/Kg	25	25	08/05/97	SDRO045


William P. Biava
President

WORKORDER COMMENTS

DATE : 08/08/97

WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

ND = Analyte "not detected" in analysis at the sample specific detection limit.

D_F = Sample "dilution factor"

NT = Analyte "not tested" per client request.

B = Analyte was also detected in laboratory method QC blank.

E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.

LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

REPORT COMMENTS



Chain of Custody Record

Lab Job No. 8018 Date 8/1/97

Page 1 of 1

Client Apache Corporation

Address 304 N. Behrend

City / State / Zip Farmington, NM 87401

Project Name / Number JICARILLA PIT CLOSURES

Contract / Purchase Order / Quote

Project Manager / Contact Jeff Cross

Telephone No. (505) 774-6643

Fax No. (505) 774-6624

Samplers: (Signature) *John Mulnix*

ALBUQUERQUE, NEW MEXICO 87109

(505) 345-8963

1332 WEDGEWOOD

EL PASO, TEXAS 79925

(915) 593-5000

1910 N. BIG SPRING

MIDLAND, TEXAS 79705

(915) 570-1115

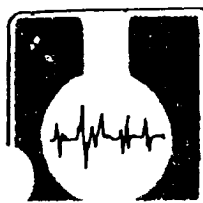
MELOQUIADES ALANIS

5111 LOCAL UNO

CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Lab Job No.	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation		Remarks
						Temp.	Chemical	
01A	A 111 Cell #1	7-31-97	10:30	Soil	40Z Glass	40	ICE	
01B	" "	"	"	"	"	"	"	
02A	A 111 Cell #2	7-31-97	11:00	"	"	"	"	
02B	" "	"	"	"	"	"	"	
8/1/97								
No. of Containers: BTEX (incl. BGS)								
Analysis Required								
Received by: <i>John Mulnix</i> Signature: <i>John Mulnix</i> Printed: <i>John Mulnix</i> Company: <i>Apache Corp.</i> Reason: <i>8/1/97</i>								
Relinquished by: <i>John Mulnix</i> Signature: <i>John Mulnix</i> Printed: <i>John Mulnix</i> Company: <i>Apache Corp.</i> Reason: <i>8/1/97</i>								
Date: 8/1/97 Time: 7:50 PM								
After analysis, samples are to be:								
☐ Disposed of (additional fee)								
☐ Stored (30 days max)								
☐ Stored over 30 days (additional fee)								
☐ Returned to customer								

LABORATORY



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259

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JUN 24 1997

Report Generated:
June 13, 1997 16:55

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

SENT APACHE CORPORATION
TO: 304 N. BEHREND
FARMINGTON, NM 87401

WORKORDER # : 9706069
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 06/09/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9706069-01A
Sample ID: JAT A111 CELL #2

Collected: 06/06/97 14:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	10000	06/13/97	SBTXME169
Toluene	ND	mg/Kg	0.0010	10000	06/13/97	SBTXME169
Ethylbenzene	ND	mg/Kg	0.0010	10000	06/13/97	SBTXME169
P-&m-Xylene	ND	mg/Kg	0.0020	10000	06/13/97	SBTXME169
O-Xylene	ND	mg/Kg	0.0010	10000	06/13/97	SBTXME169

Lab ID: 9706069-01B
Sample ID: JAT A111 CELL #2

Collected: 06/06/97 14:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	10000	mg/Kg	50	25	06/12/97	SDRO32
TKN/SM4500-N & NH3 B&C						
Total Kjeldahl Nitrogen	42.4	mg/Kg	1.0	10	06/12/97	W97252

William P. Biava

William P. Biava
President



WORKORDER COMMENTS

DATE : 06/13/97

WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

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D_F = Sample "dilution factor"

NT = Analyte "not tested" per client request.

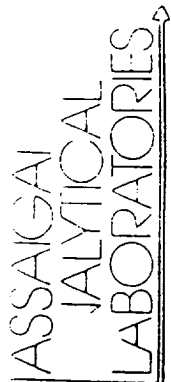
B = Analyte was also detected in laboratory method QC blank.

E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.

LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

REPORT COMMENTS



1000 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

WEDGEWOOD
O. TEXAS 79925
(5) 593-6000

1910 N. BIC
MIDLAND, TX
(915) 570-1

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA ME

[illegible]

Relinquished by: Signature <u>[Signature]</u> Printed <u>Mickey Higgins</u> Company <u>APACHE CORP</u> Reason _____	Date <u>6/6/77</u> Time <u>4:30</u>	Received by: Signature <u>[Signature]</u> Printed <u>Elvin S. Bauer</u> Company <u>AAI</u> Reason _____	Relinquished by: Signature <u>[Signature]</u> Printed <u>Elvin S. Bauer</u> Company <u>AAI</u> Reason _____	Date <u>6/5/77</u> Time <u>8:00 A</u>	Received by: Signature <u>[Signature]</u> Printed <u>SCOTT PATT</u> Company <u>AAI</u> Reason _____
Method of Shipment: _____ Shipment No. _____ Special Instructions: _____		After analysis, samples are to be: ☐ Disposed of (additional fee) ☐ Stored (30 days max) ☐ Stored over 30 days (additional fee) ☐ Returned to customer			

LABORATORY