

Jenny E. Faust
District III
DEPT. OF OIL & GAS INSPECTOR
1000 Rio Brazos Rd
Aztec, NM 87410
DEC 17 1998

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

Approved **PIT REMEDIATION AND CLOSURE REPORT**

RECEIVED
JUL 6 1998

Operator: **Apache Corporation** Telephone: **505 325-0318** **OIL CON. DIV.**

Address: **2855 Southside River Road, Suite A, Farmington, NM 87401** **DIST. 3**

Facility or Well Name: **Apache # 146 Pit #1**

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

Pit Type: Separator: _____ Dehydrator: _____ Other: **Tank Drain\Blow Pit**

Land Type: **Jicarilla Tribal**

Beginning Pit Dimensions: Length **24'** Width **30'** Depth **5.5'**
Pit Location: Ending Pit Dimensions: Length **26'** Width **30'** Depth **10'**
(Attach diagram)
Reference: Wellhead **XXX** Other: _____
Footage from reference: **95'**
Direction from reference: **110** Degrees **XX** East North
West South **X**

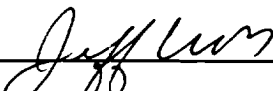
Depth To Groundwater: Less than 50 feet (20 points) _____
(vertical distance from 50 feet to 99 feet (10 points) _____
contaminants to seasonal Greater than 100 feet (0 points) **0**
high water elevation of
groundwater)

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**

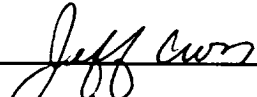
Date Remediation Started:		<u>10/16/95</u>	Date Completed:		<u>11/29/95</u>
Remediation Method: (Check all appropriate sections)		Excavation	<u>XXX</u>	Approx. cubic yards	<u>142</u>
		Landfarmed	<u>XX</u>	Insitu Bioremediation	
		Other _____			
Remediation Location: (i.e. landfarmed onsite, name and 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. Pit back filled w/ fill dirt</u>			

Groundwater Encountered:		No	<u>XX</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>10'</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>		
	Sample Date	<u>11/29/95</u>	Sample Time	<u>1:48 P.M.</u>	
	Sample results				
	Benzene	(ppm)	<u>ND</u>		
	Total BTEX	(ppm)	<u>ND</u>		
	Field Headspace	(ppm)	<u>20.38</u>		
	TPH		<u>2600</u>		
Groundwater Sample:		Yes	_____	No	<u>XX</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>June 8, 1998</u>	PRINTED NAME		<u>Jeff Cross</u>
SIGNATURE			AND TITLE		<u>Project Manager</u>

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

Operator: Apache Corporation		Telephone: 505-325-0318	
Address: 2855 Southside River Road, Suite A, Farmington, NM 87401			
Facility or Well Name:		Apache # 146 Pit #2	
Location: Unit or Qtr/Qtr Sec	G Sec 24 T 24 N R 4W	County	Rio Arriba
Pit Type: Separator:	Dehydrator	Other	Tank Drain\Blow Pit
Land Type: Jicarilla Tribal			
<div style="display: flex; justify-content: space-between;"> <div> <p>Beginning Pit Dimensions:</p> <p>Pit Location: Ending Pit Dimensions:</p> <p>(Attach diagram)</p> <p>Reference:</p> <p>Footage from reference:</p> <p>Direction from reference:</p> </div> <div> <p>Length 21' Width 24' Depth 3'</p> <p>Length 21' Width 24' Depth 6'</p> <p>Wellhead XXX Other</p> <p>95'</p> <p>180 Degrees East North West of South XX</p> </div> </div>			
Depth To Groundwater:			
(vertical distance from		Less than 50 feet	(20 points)
contaminants to seasonal		50 feet to 99 feet	(10 points)
high water elevation of		Greater than 100 feet	(0 points)
groundwater)			0
Wellhead Protection Area:			
(Less than 200 feet from a private		Yes	(20 points)
domestic water source, or; less than		No	(0 points)
1000 feet from all other water sources)			0
Distance To Surface Water:			
(Horizontal distance to perennial		Less than 200 feet	(20 points)
lakes, ponds, rivers, streams, creeks,		200 feet to 1000 feet	(10 points)
irrigation canals and ditches)		Greater than 1000 feet	(0 points)
			0
		RANKING SCORE (TOTAL POINTS)	
		0	

Date Remediation Started:		<u>10/16/95</u>	Date Completed:		<u>11/29/95</u>
Remediation Method: (Check all appropriate sections)		Excavation	<u>XXX</u>	Approx. cubic yards	<u>56</u>
		Landfarmed	<u>XX</u>	In situ 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 6', took PID readings.</u>			
		<u>Spread soil on location for remediation. Took soil samples. Pit back filled w/ fill dirt</u>			

Groundwater Encountered:		No	<u>XX</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>6'</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>		
	Sample Date	<u>11/29/95</u>	Sample Time	<u>1:32 P.M.</u>	
	Sample results				
	Benzene	(ppm)	<u>ND</u>		
	Total BTEX	(ppm)	<u>ND</u>		
	Field Headspace	(ppm)	<u>14.48</u>		
	TPH		<u>37</u>		
Groundwater Sample:		Yes	_____	No	<u>XX</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>June 8, 1998</u>	PRINTED NAME		<u>Jeff Cross</u>
SIGNATURE			AND TITLE		<u>Project Manager</u>

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

Operator: <u>APACHE CORPORATION</u>		Telephone <u>505-325-0318</u>	
Address: <u>2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMINGTON N.M. 87401-7947</u>			
Facility or Well Name: <u>APACHE # 146 PIT # 1</u>			
Location:	Unit or Qtr/Qtr	Sec	<u>G SEC 24 T 24N R 4W</u> County <u>RIO ARRIBA</u>
Pit Type:	Separator: <u></u>	Dehydrator: <u></u>	Other: <u>TANK DRAIN\BLOW PIT</u>
Land Type: <u>JIC. TRIBAL</u>			
Pit Location: (Attach diagram)			
Pit Dimensions:	Length <u>26'</u>	Width <u>30'</u>	Depth <u>10'</u>
Reference:	Wellhead <u>XXX</u>	Other: <u></u>	
Footage from reference:	<u>95'</u>		
Direction from reference:	<u>110</u> Degrees	<u>XX</u> East	North <u></u>
		<u></u> West	South <u>X</u>
Depth To Groundwater:			
(vertical distance from	Less than 50 feet	(20 points)	<u></u>
contaminants to seasonal	50 feet to 99 feet	(10 points)	<u></u>
high water elevation of	Greater than 100 feet	(0 points)	<u>0</u>
groundwater)			
Distance to an Ephemeral Stream:			
(Downgradient dry wash greater than	Less than 100 feet	(10 points)	<u></u>
ten feet in width	Greater than 100 feet	(0 points)	<u>0</u>
Distance to Nearest Lake, Playa, or Watering Pond:			
(Downgradient lakes, playas and	Less than 100 feet	(10 points)	<u></u>
livestock or wildlife watering ponds)	Greater than 100 feet	(0 points)	<u>0</u>
Wellhead Protection Area:			
(Less than 200 feet from a private	Yes	(20 points)	<u></u>
domestic water source, or less than	No	(0 points)	<u>0</u>
1000 feet from all other water sources)			
Distance To Surface Water:			
(Horizontal distance to perennial	Less than 100 feet	(20 points)	<u></u>
lakes, ponds, rivers, streams, creeks,	100 feet to 1000 feet	(10 points)	<u></u>
irrigation canals and ditches)	Greater than 1000 feet	(0 points)	<u>0</u>
RANKING SCORE (TOTAL POINTS)			<u>0</u>

Date Remediation Started: 10/16/95 Date Completed: 11/29/95

Remediation Method: Excavation XXX Approx. cubic yards 142
(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. Backfilled Pit w/ Fill Dirt

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 10' 8" to 10" into pit side walls, 10" into pit bottom.

Sample Date 11/29/95 Sample Time 1:48PM
Sample results

Soil:	Benzene	(ppm)	<u>ND</u>	Water:	Benzene	(ppb)	<u>NA</u>
	Total BTEX	(ppm)	<u>ND</u>		Toluene	(ppb)	<u>NA</u>
	Field Headspace	(ppm)	<u>20.38</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>2600</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 5/27/98 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: Kevin M... DATE: 6-2-98

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>2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMINGTON N.M. 87401-7947</u>			
Facility or Well Name: <u>APACHE # 146 PIT # 2</u>			
Location:	Unit or Qtr/Qtr	Sec <u>G</u>	SEC 24 T 24N R 4W County <u>RIO ARRIBA</u>
Pit Type:	Separator: <u> </u>	Dehydrator <u> </u>	Other <u>LINE DRIP</u>
Land Type: <u>JIC. TRIBAL</u>			
Pit Location: (Attach diagram)	Pit Dimensions:	Length <u>21'</u>	Width <u>24'</u> Depth <u>6'</u>
	Reference:	Wellhead <u>XXX</u>	Other <u> </u>
	Footage from reference:	<u>95'</u>	
	Direction from reference:	<u>180</u> Degrees	East <u> </u> North <u> </u> West <u> </u> South <u>XX</u>
Depth To Groundwater: (vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	(20 points)	<u> </u>
	50 feet to 99 feet	(10 points)	<u> </u>
	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)	<u> </u>
	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)	<u> </u>
	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)	<u> </u>
	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)	<u> </u>
	100 feet to 1000 feet	(10 points)	<u> </u>
	Greater than 1000 feet	(0 points)	<u>0</u>
RANKING SCORE (TOTAL POINTS)			<u>0</u>

Date Remediation Started: 10/16/95 Date Completed: 11/29/95

Remediation Method: Excavation XXX Approx. cubic yards 56
(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 6', took PID readings. spread soil on

location for remediation. Took soil samples. Back filled pit w/ Fill Dirt

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 6' 8" to 10" into pit side walls, 10" into pit bottom.

Sample Date 11/29/95 Sample Time 1:32PM
Sample results

Soil:	Benzene	(ppm)	<u>ND</u>	Water:	Benzene	(ppb)	<u>NA</u>
	Total BTEX	(ppm)	<u>ND</u>		Toluene	(ppb)	<u>NA</u>
	Field Headspace	(ppm)	<u>14.48</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>37</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 5/27/98 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: Loe C. Mammell DATE: 6-2-98

APACHE CORPORATION FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

JICARILLA APACHE TRIBAL EPO
REVIEW AND APPROVAL

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

LOCATION: APACHE 146

SE

PIT COUNT: 2

EXCAVATION								
DIMENSIONS		START		FINISH				CU.YDS.
	W'	L'	D'		W'	L'	D'	
PIT 1	30'	24'	5.5'	PIT 1	30'	26'	10'	142.0
PIT 2	24'	21'	3'	PIT 2	24'	21'	6'	56.0
PIT 3				PIT 3				
DATE: 10/16/95	PIT 1@ 08'	PIT 2@ 06'	PIT 3@	DATE: 11/29/95	PIT 1@ 10'	PIT 2@ 06'	PIT 3@	
P.	CENTER	1483.0	64.3	P.	CENTER	29.7	10.1	
I.	NW CORNER	701.0	27.8	I.	NW CORNER	13.9	17.3	
D.	NE CORNER	56.4	59.8	D.	NE CORNER	7.9	19.6	
	SW CORNER	988.0	50.9		SW CORNER	42.8	12.8	
	SE CORNER	314.0	49.3		SE CORNER	7.6	12.6	

NOTES:

10/16/95 PIT 1 - Excavate to 10', staining w/strong odor to 8'
PIT 2 - Excavate to 6', no staining slight odor to 4'.

SOIL SAMPLING

DATE: 10/16/95		PIT 1@ 10'	PIT 2@ 06'	PIT 3@	ANALYSIS RESULTS		PER LAB: ASSAIGAI	
P.	CENTER	not taken	64.3	PIT NO.	TPH	BTEX	WITNESS	DATE
I.	NW CORNER		27.8	1	1200.0	0.17	IF&S	10/16/95
D.	NE CORNER		59.8	2	ND	ND	IF&S	10/16/95
	SW CORNER		50.9					
	SE CORNER		49.3					

RE-SAMPLE OR CELL(S) SAMPLE

DATE: 11/29/95		PIT 1@ 10'	PIT 2@ 06'	PIT 3@	ANALYSIS RESULTS		PER LAB:	
P.	CENTER	29.7	10.1	PIT NO.	TPH	BTEX	WITNESS	DATE
I.	NW CORNER	13.9	17.3	1	2600.0	ND	JDT	11/29/95
D.	NE CORNER	7.9	19.6	2	37.0	ND	JDT	11/29/95
	SW CORNER	42.8	12.8					
	SE CORNER	7.6	12.6					

RE-SAMPLE OR CELL(S) SAMPLE

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

11-29-95 ACM

**PIT CLOSURE STATUS REPORT
(CONFIDENTIAL)**

Date: 10/16/95				Well Number: MW 146		Proj. Number: 95017	
Date Start: 10/16/95				Number of Pits: 1		Date Finished: 10/09/95	
DIMENSIONS & YARDAGE							
1	Type:	H	x	C	Dimensions Pit 1 Start:	30' x 24' x 5.5'	Dimensions Pit 1 Finished: 30' x 26' x 10' <i>14Z</i>
2	Type:	H		C x	Dimensions Pit 2 Start:	24' x 21' x 3'	Dimensions Pit 2 Finished: <i>1512</i> <i>130</i>
3	Type:	H		C	Dimensions Pit 3 Start:		Dimensions Pit 3 Finished:
Total Cu. Yards Removed:						267	Total Liquids Removed: 0 bbls.

TPH & BTEX ANALYSIS

[illegible]

Notes:

PID READINGS					Site Number: MW 146	Notes:
Date	Pit No.	Interval (Depth)	Location	Reading (ppm)		
10/16/95	1	10'	Center	1483	Began excavation, very sloppy during the first 2 feet. Following with a black to gray tight sand. Continued to excavated to 10 feet with little change. Fluffed and rolled the bottom 2 feet, took PID readings and sampled.	
10/16/95	1	10'	Bottom, N.W. Corner	701		
10/16/95	1	10'	Bottom, N.E. Corner	56.4		
10/16/95	1	10'	Bottom, S.W. Corner	988		
10/16/95	1	10'	Bottom, S.E. Corner	314		
10/16/95	2	6'	Center	64.3	Excavated 3 feet, took PID readings, pit shows light brown sand with light odor.	
10/16/95	2	6'	Bottom, N.W. Corner	27.8		
10/16/95	2	6'	Bottom, N.E. Corner	59.8		
10/16/95	2	6'	Bottom, S.W. Corner	50.9		
10/16/95	2	6'	Bottom, S.E. Corner	49.3		
11/29/95	1	10'	Center	29.7		
			NW	13.9		
			NE	7.9		
			SW	42.8		
			SE	7.6		
11/29/95	2	6'	Center	10.1		
			NW	17.3		
			NE	19.6		
			SW	12.8		
			SE	12.6		



SAMPLE DATE 11/29/95

[illegible]

[illegible]

Lab ID: 9512029-09A
Sample ID: AP #112-H

Collected: 11/29/95 12:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A O-Xylene	0.74	mg/Kg	0.0010	500	12/05/95	SBTXME092

Lab ID: 9512029-09B
Sample ID: AP #112-H

Collected: 11/29/95 12:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M Diesel	4400	mg/Kg	5.0	250	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

Lab ID: 9512029-10A
Sample ID: AP #105

Collected: 11/29/95 13:13:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
Toluene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
Ethylbenzene	0.63	mg/Kg	0.0010	500	12/05/95	SBTXME092
P-&m-Xylene	1.3	mg/Kg	0.0010	500	12/05/95	SBTXME092
O-Xylene	1.4	mg/Kg	0.0010	500	12/05/95	SBTXME092

Lab ID: 9512029-10B
Sample ID: AP #105

Collected: 11/29/95 13:13:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M Diesel	4600	mg/Kg	5.0	250	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

Lab ID: 9512029-11A
Sample ID: ~~AP #105~~ p.1 #2

Collected: ~~11/29/95~~ 13:32:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene		mg/Kg	0.0010	500	12/05/95	SBTXME092
Toluene		mg/Kg	0.0010	500	12/05/95	SBTXME092
Ethylbenzene		mg/Kg	0.0010	500	12/05/95	SBTXME092
P-&m-Xylene		mg/Kg	0.0010	500	12/05/95	SBTXME092
O-Xylene		mg/Kg	0.0010	500	12/05/95	SBTXME092

Lab ID: 9512029-11B

Sample ID: AP #146-H

pit #2

Collected: 11/29/95 13:32:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel		mg/Kg	5.0	5.0	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

Lab ID: 9512029-12A

Sample ID: AP #146-H

pit #1

Collected: 11/29/95 13:48:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093
Toluene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093
Ethylbenzene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093
P-&m-Xylene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093
O-Xylene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093

Lab ID: 9512029-12B

Sample ID: AP #146-H

pit #1

Collected: 11/29/95 13:48:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	2600	mg/Kg	5.0	250	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

Lab ID: 9512029-13A

Sample ID: AP #114

Collected: 11/29/95 14:18:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
Toluene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
Ethylbenzene	0.81	mg/Kg	0.0010	500	12/05/95	SBTXME092
P-&m-Xylene	3.7	mg/Kg	0.0010	500	12/05/95	SBTXME092
O-Xylene	2.3	mg/Kg	0.0010	500	12/05/95	SBTXME092

Lab ID: 9512029-13B

Sample ID: AP #114

Collected: 11/29/95 14:18:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	4200	mg/Kg	5.0	500	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

APACHE

APACHE NUMBER 146 Lease # JAT 129

SW/4 NE/4 (G)

SECTION 24, TOWNSHIP 24N RANGE 4W

RIO ARriba COUNTY, NM

Revised 6/1/97 MC

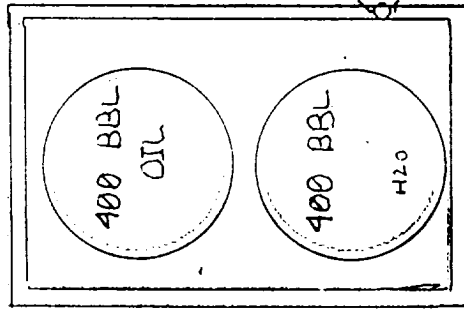
APACHE LINE DRIP

116M



PIT 95' ESE
180° South
RECLAIMED
#2

SEPARATOR



5

Dirt Farm

100' x 40' x 18"

PIT 110° ESE
#1 95' FWH
RECLAIMED



WELL HEAD



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>2855 SOUTHSIDE RIVER ROAD/SUITE A / FARMINGTON, N.M. 87401-7947</u>			
Facility or Well Name: <u>APACHE # 146</u>			
Location: Unit or Qtr/Qtr		Sec <u>G</u>	Sec 24 T 24N R 4W County <u>RIO ARRIBA</u>
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>10/16/95</u>		Date Completed: <u>5/14/98</u>	
Remediation Method: Landfarmed		<u>XXX</u>	Approx. cubic yards <u>198</u>
Composted		<u> </u>	
Other		<u> </u>	
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>5/14/98</u> Time: <u>3:00PM</u> Sample Results: Field Headspace (ppm) <u>ND</u> TPH (ppm) <u>1300</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>5/27/98</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>Kevin C. Marshall</u>		DATE: <u>6-2-98</u>	

APACHE CORPORATION/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE APACHE # 146

* AMOUNT OF SOIL UNDERGOING REMEDIATION 198 Yds.

CELL No. <u>1</u>	SampDATE	TPH	BTEX
	5/14/98	1300	ND
DIMENSIONS(LxWxH) <u>100' X 40' X 18"</u>			
CELL LOCATION (dir. from well head) <u>SOUTH</u>			
* DATE BEGAN: <u>10/16/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>5/14/98</u>			
CELL No. <u>2</u>	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) _____			
CELL No. <u>3</u>	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)			
11/3/95 TREAT SOIL WITH 28-4-4 FERTILIZER,PLOW AND TILL SOIL.			
6/17/97 TREAT SOIL WITH 46-0-0 FERTILIZER,WATER , PLOW AND TILL SOIL.			
7/25/98 WATER , PLOW AND TILL SOIL.			
8/13/98 TREAT SOIL WITH 29LBS PHOSPHORUS,15LBS LIME, WATER , PLOW AND TILL SOIL.			
5/5/98 PLOWED SOIL.			
5/11/98 TILL SOIL.			

From excavation reports.

WELL NAME:

Apache #146

SAMPLE DATE:

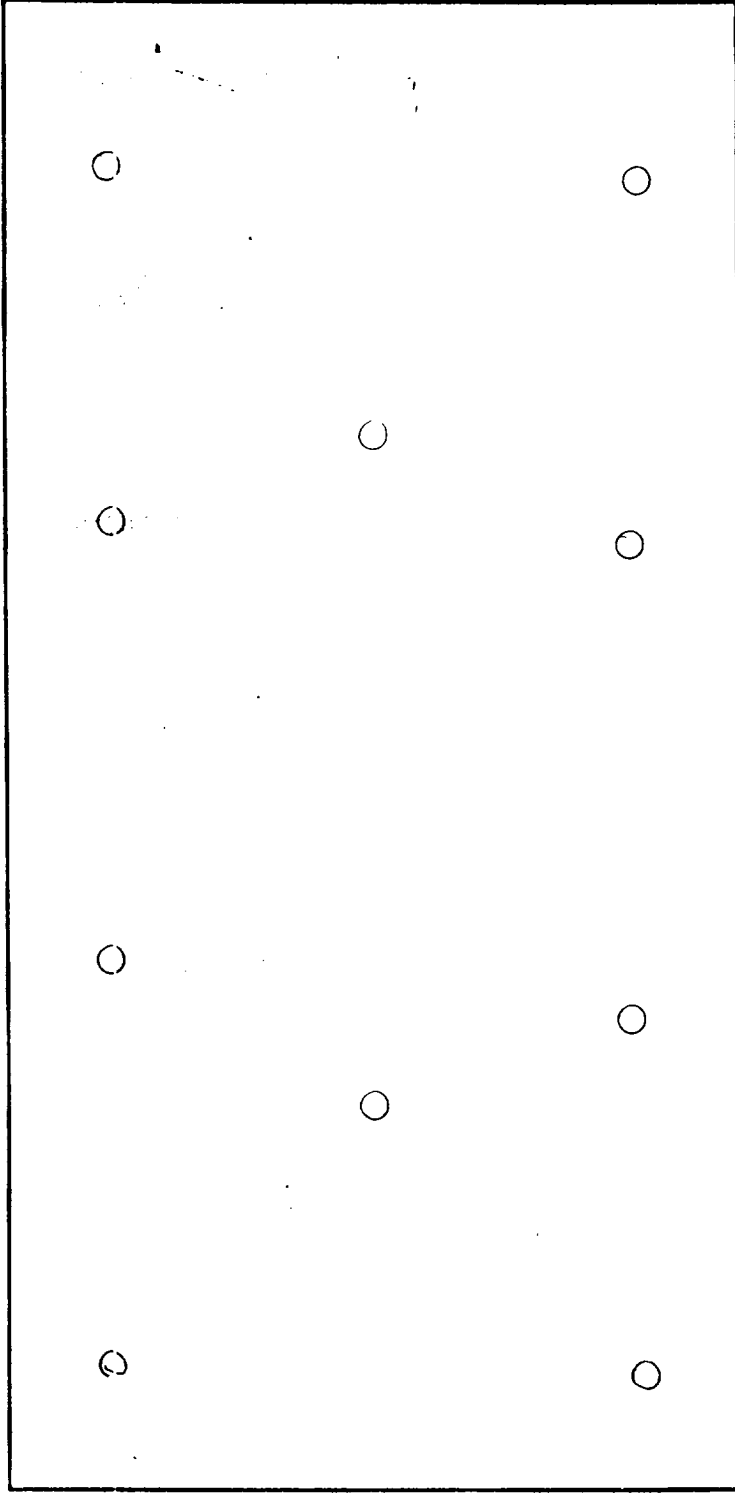
5-14-98

DIMENSIONS:

100' x 40' x 18"



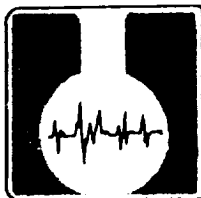
= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

10 point composite sample

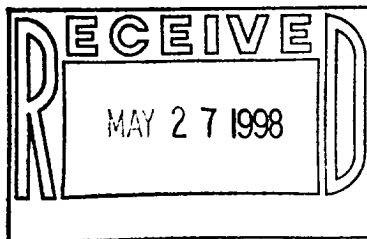


ASSAIGAI ANALYTICAL LABORATORIES, INC.

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

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

APACHE CORPORATION
attn: JEFF CROSS
2855 SOUTHSIDE RIVER RD STE A
FARMINGTON, NM 87401-7947



* explanation of codes

B	analyte detected in Method Blank
E	result is estimated
H	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **APACHE CORPORATION**
Project: **9805130 JICARILLA PIT CLOSURE**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Client Sample ID: **APACHE #146 CELL** Sample Matrix: **SOIL** Sample Collected: **05/14/98 15:00:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit *	Sequence	Run Date
SW846-8020 Volatiles								
9805130-01A	X98267	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG 1998.464-9 05/14/98
	X98267	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG 1998.464-9
	X98267	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG 1998.464-9
	X98267		p/m Xylenes	ND	mg / Kg	50	0.01	XG 1998.464-9
	X98267	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG 1998.464-9
SW846-8015 Modified TPH								
9805130-01B	X98268		Diesel Range Organics	1300	mg / Kg	25	25	XG 1998.465-21 05/15/98

*** Sample specific analytical Detection Limit is determined by multiplying the sample Dilution Factor by the listed method Detection Limit. ***



Chain of Custody Record

ASSAIGAI

ANALYTICAL

LABORATORIES, INC.

Client Apache Corporation

Project Manager / Contact **Jeff Cross**

Address 2855 Southside River RD, Ste. A Telephone No. (505) 774-6643

City/State/Zip Farmington, NM 87401-7947 Fax No. (505) 774-6624

Project Name / Number _____

Samplers. (Signature) Jeff Woz

Contract / Purchase Order / Quote _____

Contract / Purchase Order / Quote

[illegible]

Relinquished by: _____ Signature _____ Printed _____ Company _____ Reason _____	Received by: _____ Signature _____ Printed _____ Company _____ Reason _____
Date _____ Time _____	Date _____ Time _____

Relinquished by: <u>Scott Pratt</u> Signature: <u>Scott Pratt</u> Printed: <u>SCOTT PRATT</u> Company: <u>AAC</u> Reason: _____	Relinquished by: <u>Scott Pratt</u> Signature: <u>Scott Pratt</u> Printed: <u>SCOTT PRATT</u> Company: <u>AAL</u> Reason: _____
---	---

Date 15 May 98	Received by: Signature <u>R. R. Chatterjee</u>
	Printed <u>R. R. Chatterjee</u>
Time 11:30	Company <u>AAALI</u>
	Reason <u>Analysis</u>

Season _____	
Method of Shipment: _____	Comments: _____ _____ _____
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

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

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