

District III

1000 Pecos Rd

DEPUTY OIL &amp; GAS INSPECTOR

DEC 17 1998

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

RECEIVED  
JUL 6 1998

Operator: Apache Corporation

Telephone:

505-325-6318

OIL CON. DIV.  
DIST. 3

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

Facility or Well Name:

Apache # 147 Pit #1

Location: Unit or Qtr/Qtr Sec

GSec 13T 24 NR 4W

County

Rio Arriba

Pit Type: Separator:

XX

Dehydrator

Other

Land Type:

Jicarilla Tribal

Beginning Pit Dimensions:

Length

18'

Width

18'

Depth

5'

Pit Location:

Ending Pit Dimensions:

Length

18'

Width

18'

Depth

10'

(Attach diagram)

Reference:

Wellhead

XXX

Other

Footage from reference:

145'

Direction from reference:

256

Degrees

East

North

of

XX

West

South

X**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)

0**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)

0**Distance To Surface Water:**

(Horizontal distance to perennial  
lakes, ponds, rivers, streams, creeks,  
irrigation canals and ditches)

Less than 200 feet

(20 points)

200 feet to 1000 feet

(10 points)

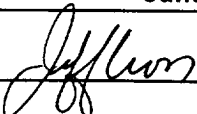
Greater than 1000 feet

(0 points)

0

RANKING SCORE (TOTAL POINTS)

0

<b>Date Remediation Started:</b>		<u>10/5/95</u>	<b>Date Completed:</b>		<u>11/29/95</u>
<b>Remediation Method:</b> (Check all appropriate sections)		Excavation <u>XXX</u>	Approx. cubic yards		<u>60</u>
		Landfarmed <u>XX</u>	Insitu Bioremediation		
		Other _____			
<b>Remediation Location:</b> (i.e. landfarmed onsite, name and location of offsite facility)		Onsite <u>XX</u>	Offsite _____		
<b>General Description of Remedial Action:</b> <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>					
<b>Groundwater Encountered:</b> No <u>XX</u> Yes _____ Depth _____					
<b>Final Pit:</b> Sample location <u>5 point composite taken from pit sidewalls and pit bottom center</u>					
<b>Closure Sampling:</b> (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>12:18 P.M.</u>
Sample results					
Benzene		(ppm)	<u>ND</u>		
Total BTEX		(ppm)	<u>ND</u>		
Field Headspace		(ppm)	<u>3.42</u>		
TPH			<u>ND</u>		
<b>Groundwater Sample:</b> Yes _____ No <u>XX</u> (If yes attach sample results)					
<b>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.</b>					
<b>DATE</b>		<u>June 8, 1998</u>	<b>PRINTED NAME</b>		<u>Jeff Cross</u>
<b>SIGNATURE</b>			<b>AND TITLE</b>		<u>Project Manager</u>

District III  
1000 Rio Brazos Rd  
Aztec, 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**

Operator: <b>Apache Corporation</b>		Telephone: <b>505-325-0318</b>	
Address: <b>2855 Southside River Road, Suite A, Farmington, NM 87401</b>			
Facility or Well Name:		<b>Apache # 147 Pit #2</b>	
Location: Unit or Qtr/Qtr Sec	<b>G</b>	<b>Sec 13</b>	<b>T 24 N R 4W</b> County <b>Rio Arriba</b>
Pit Type: Separator:		Dehydrator	Other <b>Line Drip</b>
Land Type: <b>Jicarilla Tribal</b>			
<hr/>			
Beginning Pit Dimensions:		Length <b>18'</b>	Width <b>18'</b> Depth <b>4'</b>
Pit Location: Ending Pit Dimensions:	Length <b>18'</b>	Width <b>18'</b>	Depth <b>9'</b>
(Attach diagram)			
Reference:	Wellhead <b>XXX</b>	Other	
Footage from reference:		<b>100'</b>	
Direction from reference:		<b>74</b> Degrees <b>XX</b> East	North <b>X</b>
			of West South
<hr/>			
<b>Depth To Groundwater:</b>		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) <b>0</b>
high water elevation of			
groundwater)			
<b>Wellhead Protection Area:</b>		Yes	(20 points)
(Less than 200 feet from a private		No	( 0 points) <b>0</b>
domestic water source, or; less than			
1000 feet from all other water sources)			
<b>Distance To Surface Water:</b>		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) <b>0</b>
irrigation canals and ditches)			
		<b>RANKING SCORE (TOTAL POINTS)</b>	<b>0</b>

<b>Date Remediation Started:</b>		<u>11/27/95</u>	<b>Date Completed:</b>		<u>11/29/95</u>
<b>Remediation Method:</b> (Check all appropriate sections)		Excavation <u>XXX</u>	Approx. cubic yards	<u>60</u>	
		Landfarmed <u>XX</u>	Insitu Bioremediation		
		Other _____			
<b>Remediation Location:</b> (i.e. landfarmed onsite, name and location of offsite facility)		Onsite <u>XX</u>	Offsite _____		
<b>General Description of Remedial Action:</b>		<u>Excavate pit to 9', took PID readings.</u>			
		<u>Spread soil on location for remediation. Took soil samples. Pit back filled w/ fill dirt</u>			
		_____			
		_____			
		_____			
<b>Groundwater Encountered:</b>		No <u>XX</u>	Yes _____	Depth _____	
<b>Final Pit:</b>		<u>5 point composite taken from pit sidewalls and pit bottom center</u>			
<b>Closure Sampling:</b> (in multiple samples, attach sample results and diagram of sample locations and depths)		_____			
Sample location		<u>5 point composite taken from pit sidewalls and pit bottom center</u>			
Sample depth <u>9'</u>		<u>8 to 10" into pit sidewalls 10" into pit bottom</u>			
Sample Date		<u>11/29/95</u>	Sample Time	<u>12:03 P.M.</u>	
Sample results					
Benzene		(ppm)	<u>ND</u>		
Total BTEX		(ppm)	<u>49</u>		
Field Headspace		(ppm)	<u>73.42</u>		
TPH			<u>520</u>		
<b>Groundwater Sample:</b>		Yes _____	No <u>XX</u>	(If yes attach sample results)	
<b>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.</b>					
<b>DATE</b>		<u>June 8, 1998</u>	<b>PRINTED NAME</b>	<u>Jeff Cross</u>	
<b>SIGNATURE</b>		<u>Jeff Cross</u>	<b>AND TITLE</b>	<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>2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMINGTON N.M. 87401-7947</u>			
Facility or Well Name: <u>APACHE # 147 PIT # 1</u>			
Location:	Unit or Qtr/Qtr	Sec <u>G</u>	SEC 13 T 24N R 4W County <u>RIO ARRIBA</u>
Pit Type:	Separator: <u>XX</u>	Dehydrator	Other
Land Type: <u>JIC. TRIBAL</u>			
<div style="border: 1px solid black; padding: 5px;"> Pit Location: (Attach diagram) Pit Dimensions: Length <u>18'</u> Width <u>18'</u> Depth <u>10'</u>  Reference: Wellhead <u>XXX</u> Other  Footage from reference: <u>145'</u>  Direction from reference: <u>256</u> Degrees East of North  <u>XX</u> West of South <u>X</u> </div>			
<b>Depth To Groundwater:</b> (vertical distance from contaminants to seasonal high water elevation of groundwater)		Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) ( 0 points) <u>0</u>
<b>Distance to an Ephemeral Stream:</b> (Downgradient dry wash greater than ten feet in width)		Less than 100 feet Greater than 100 feet	(10 points) ( 0 points) <u>0</u>
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (Downgradient lakes, playas and livestock or wildlife watering ponds)		Less than 100 feet Greater than 100 feet	(10 points) ( 0 points) <u>0</u>
<b>Wellhead Protection Area:</b> (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)		Yes No	(20 points) ( 0 points) <u>0</u>
<b>Distance To Surface Water:</b> (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) ( 0 points) <u>0</u>
		<b>RANKING SCORE (TOTAL POINTS)</b>	<u>0</u>

Date Remediation Started: 10/5/95 Date Completed: 11/29/95

Remediation Method: (Check all appropriate sections)  
 Excavation XXX Approx. cubic yards 60  
 Landfarmed XX Insitu Bioremediation \_\_\_\_\_  
 Other \_\_\_\_\_

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

General Description of Remedial Action: Excavate pit to 10', 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 10' 8" to 10" into pit side walls, 10" into pit bottom.

Sample Date 11/29/95 Sample Time 12:18PM

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>3.42</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>ND</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 C. Mamm* 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 # 147 PIT # 2</u>			
Location:	Unit or Qtr/Qtr	Sec <u>G</u>	SEC 13 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>18'</u>	Width <u>18'</u> Depth <u>9'</u>
	Reference:	Wellhead <u>XXX</u>	Other <u>                                </u>
	Footage from reference:	<u>100'</u>	
	Direction from reference:	<u>74</u> Degrees <u>XX</u> East	North <u>X</u>
		<u>          </u> West	of South <u>          </u>
<b>Depth To Groundwater:</b> (vertical distance from contaminants to seasonal high water elevation of groundwater)		Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) <u>          </u> (10 points) <u>          </u> ( 0 points) <u>0</u>
<b>Distance to an Ephemeral Stream:</b> (Downgradient dry wash greater than ten feet in width)		Less than 100 feet Greater than 100 feet	(10 points) <u>          </u> ( 0 points) <u>0</u>
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (Downgradient lakes, playas and livestock or wildlife watering ponds)		Less than 100 feet Greater than 100 feet	(10 points) <u>          </u> ( 0 points) <u>0</u>
<b>Wellhead Protection Area:</b> (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)		Yes No	(20 points) <u>          </u> ( 0 points) <u>0</u>
<b>Distance To Surface Water:</b> (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) <u>          </u> (10 points) <u>          </u> ( 0 points) <u>0</u>
		RANKING SCORE (TOTAL POINTS)	<u>0</u>

Date Remediation Started: 11/27/95 Date Completed: 11/29/95

Remediation Method: Excavation XXX Approx. cubic yards 60  
(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 9', 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 9' 8" to 10" into pit side walls, 10" into pit bottom.

Sample Date 11/29/95 Sample Time 12:03PM  
Sample results

Soil:	Benzene	(ppm)	<u>ND</u>	Water:	Benzene	(ppb)	<u>NA</u>
	Total BTEX	(ppm)	<u>49</u>		Toluene	(ppb)	<u>NA</u>
	Field Headspace	(ppm)	<u>73.42</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>520</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: Keith Mammell DATE: 6-2-98



APACHE CORPORATION FARMINGTON DISTRICT  
PIT EXCAVATION AND CLOSURE REPORT

JICARILLA APACHE TRIBAL EPO  
REVIEW AND APPROVAL

LOCATION: APACHE 147

PIT COUNT: 2

EPO REPRESENTATIVE \_\_\_\_\_

DATE OF REVIEW: \_\_\_\_\_

				EXCAVATION				
DIMENSIONS		START		FINISH				
	W	L	D		W	L	D	CU.YDS.
PIT 1	18'	18'	5'	PIT 1	18'	18'	10'	60
PIT 2	18'	18'	4'	PIT 2	18'	18'	8'9"(11/30)	60
PIT 3				PIT 3				
DATE:10/05/95 --		PIT1@10'	PIT2@_ _ _ '	PIT3@_ _ _ '	DATE:11/28/95	PIT1@10'	PIT2@08'	PIT3@_ _ _ '
P. I. D.	CENTER	8.0	94.5		P. I. D.	CENTER	6.0	94.5
	NW CORNER	60.0	90.5			NW CORNER	3.2	90.5
	NE CORNER	7.4	127.0			NE CORNER	7.9	127.0
	SW CORNER	70.8	89.1			SW CORNER	0.0	89.1
	SE CORNER	142.0	83.5			SE CORNER	0.0	83.5

NOTES:

10/05/95 - PIT 1 - Black sandy soil to 6', dark to lt. brown 6'-10'.

11/27/95 - PIT 2 - Gray sand w/t. odor, no staining.

11/30/95 - PIT 2 - Excavate additional 1'.

(11/27/95) SOIL SAMPLING									
DATE:10/05/95		PIT1@10'	PIT2@08'	PIT3@_ '	ANALYSIS RESULTS			PER LAB:	ASSAIGAI
P. I. D.	CENTER	8.0	94.5		PIT	TPH	BETEX	WITNESS	DATE
	NW CORNER	60.0	90.5		NO.				
	NE CORNER	7.4	127.0		1	ND	ND	IF&S	10/05/95
	SW CORNER	70.8	89.1		2			IF&S	11/27/95
	SE CORNER	142.0	83.5		3				

RE-SAMPLE OR CELL(S) SAMPLE

DATE:11/30/95		PIT1@10'	PIT2@09'	PIT3@	ANALYSIS RESULTS			PER LAB:	ASSAIGAI
P. I. D.	CENTER	6.0	79.6		PIT	TPH	BETEX	WITNESS	DATE
	NW CORNER	3.2	81.9		NO.				
	NE CORNER	7.9	90.3		1	ND	ND	JDT	11/30/95
	SW CORNER	0.0	82.7		2	520.0	ND 4/9	JDT	11/30/95
	SE CORNER	0.0	32.6		3				

RE-SAMPLE OR CELL(S) SAMPLE

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



SIDEWALL AND PIT BOTTOM CENTER.

[illegible]

Lab ID: 9512029-05A  
Sample ID: AP #122

Collected: 11/29/95 11:43:00  
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	1.0	mg/Kg	0.0010	500	12/05/95	SBTXME092
Ethylbenzene	2.0	mg/Kg	0.0010	500	12/05/95	SBTXME092
P-&m-Xylene	9.7	mg/Kg	0.0010	500	12/05/95	SBTXME092
O-Xylene	3.1	mg/Kg	0.0010	500	12/05/95	SBTXME092

Lab ID: 9512029-05B  
Sample ID: AP #122

Collected: 11/29/95 11:43:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	7700	mg/Kg	5.0	500	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

Lab ID: 9512029-06A  
Sample ID: ~~AP #147~~ p.t #2

Collected: ~~11/29/95~~ 12:03:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	5000	12/05/95	SBTXME092
Toluene	ND	mg/Kg	0.0010	5000	12/05/95	SBTXME092
Ethylbenzene	ND	mg/Kg	0.0010	5000	12/05/95	SBTXME092
P-&m-Xylene	ND	mg/Kg	0.0010	5000	12/05/95	SBTXME092
O-Xylene	ND	mg/Kg	0.0010	5000	12/05/95	SBTXME092

Lab ID: 9512029-06B  
Sample ID: ~~AP #147~~ p.t #2

Collected: ~~11/29/95~~ 12:03:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	ND	mg/Kg	5.0	25	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

Lab ID: 9512029-07A  
Sample ID: ~~AP #147~~ p.t #1

Collected: ~~11/29/95~~ 12:18:00  
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

Lab ID: 9512029-07A

Sample ID: AP #117-H

Collected: 11/29/95 12:18:00

Matrix: SOIL

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

Lab ID: 9512029-07B

Sample ID: AP #147-H

Collected: 11/29/95 12:18:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	ND	mg/Kg	5.0	50	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

Lab ID: 9512029-08A

Sample ID: AP #112-C

Collected: 11/29/95 12:38:00

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	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
P-&m-Xylene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
O-Xylene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092

Lab ID: 9512029-08B

Sample ID: AP #112-C

Collected: 11/29/95 12:38:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	260	mg/Kg	5.0	25	12/07/95	SLFTD053
HCs DSL XT/CAL DHS 8015M	12/05/95	N/A				

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						
Benzene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
Toluene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
Ethylbenzene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
P-&m-Xylene	2.5	mg/Kg	0.0010	500	12/05/95	SBTXME092

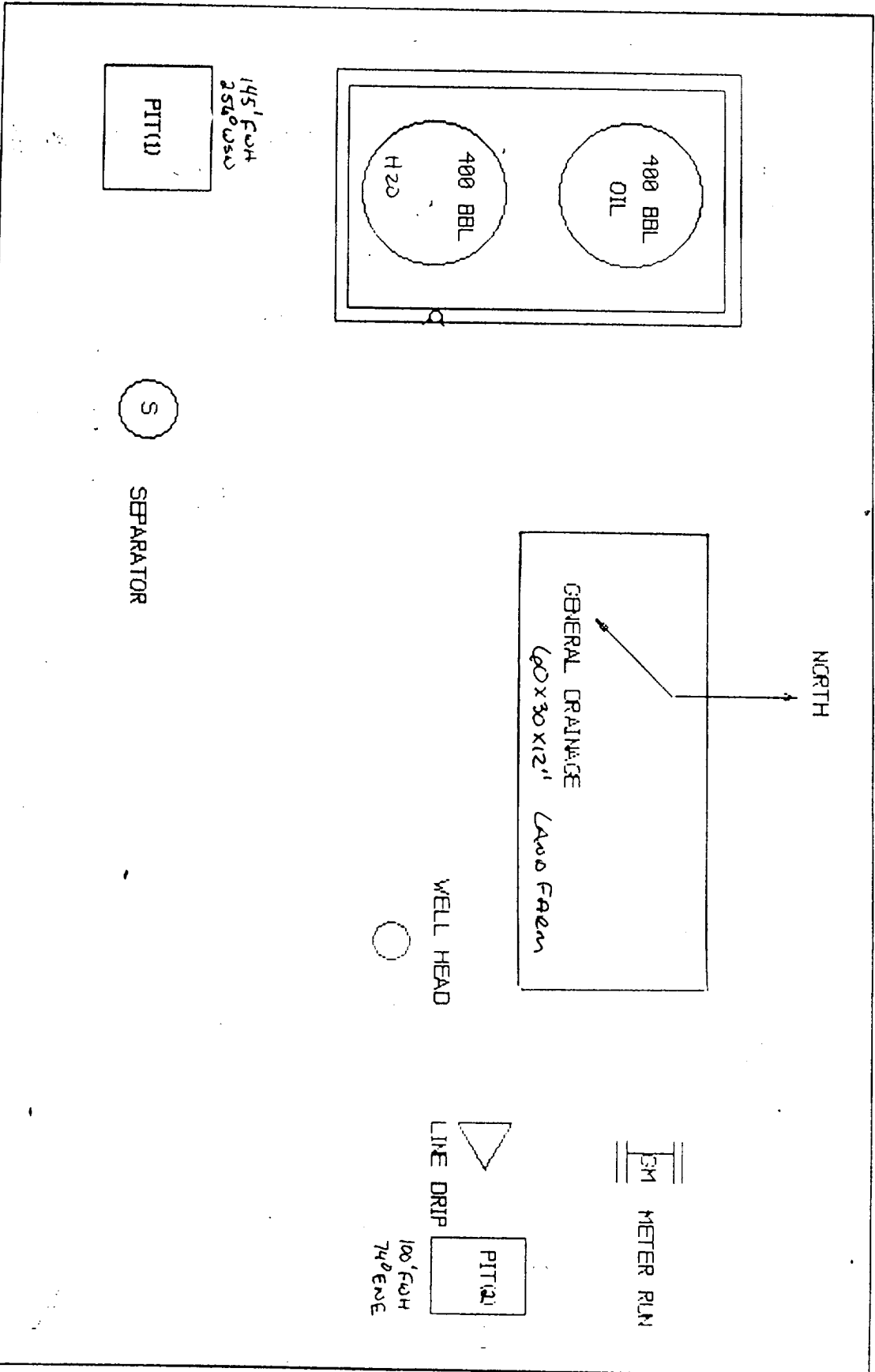
APACHE

APACHE NUMBER 147 Lease # JAT 129

SW/4 NE/4 (G)

SECTION 13, TOWNSHIP 24N, RANGE 4W  
RIO ARriba COUNTY, NM

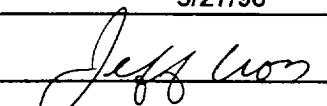
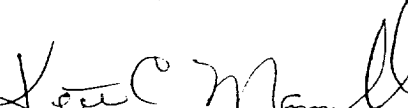
Revised 6/1/97 MG



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 # 147</u>	
Location: Unit or Qtr/Qtr Sec <u>G</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>10/5/95</u> Date Completed: <u>5/14/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>120</u>	
Composted _____	
Other _____	
Depth to Groundwater: (pts) <u>0</u>	<b>Final Closure Sampling</b>
Distance to an Ephemeral Stream: (pts) <u>0</u>	Sampling Date: <u>5/14/98</u> Time: <u>2:15PM</u>
Distance to Nearest Lake, Playa, or Watering Pond: (pts) <u>0</u>	Sample Results:
Wellhead Protection Area: (pts) <u>0</u>	Field Headspace (ppm) <u>ND</u>
Distance To Surface Water: (pts) <u>0</u>	TPH (ppm) <u>ND</u> Method <u>M8015</u>
<b>RANKING SCORE (TOTAL POINTS)</b> <u>0</u>	Other <u>BTEX \ SW846 , 8020A ( ND )</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></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></u> DATE: <u>6-2-98</u>	

# APACHE CORPORATION/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE APACHE # 147

\* AMOUNT OF SOIL UNDERGOING REMEDIATION 120 Yds.

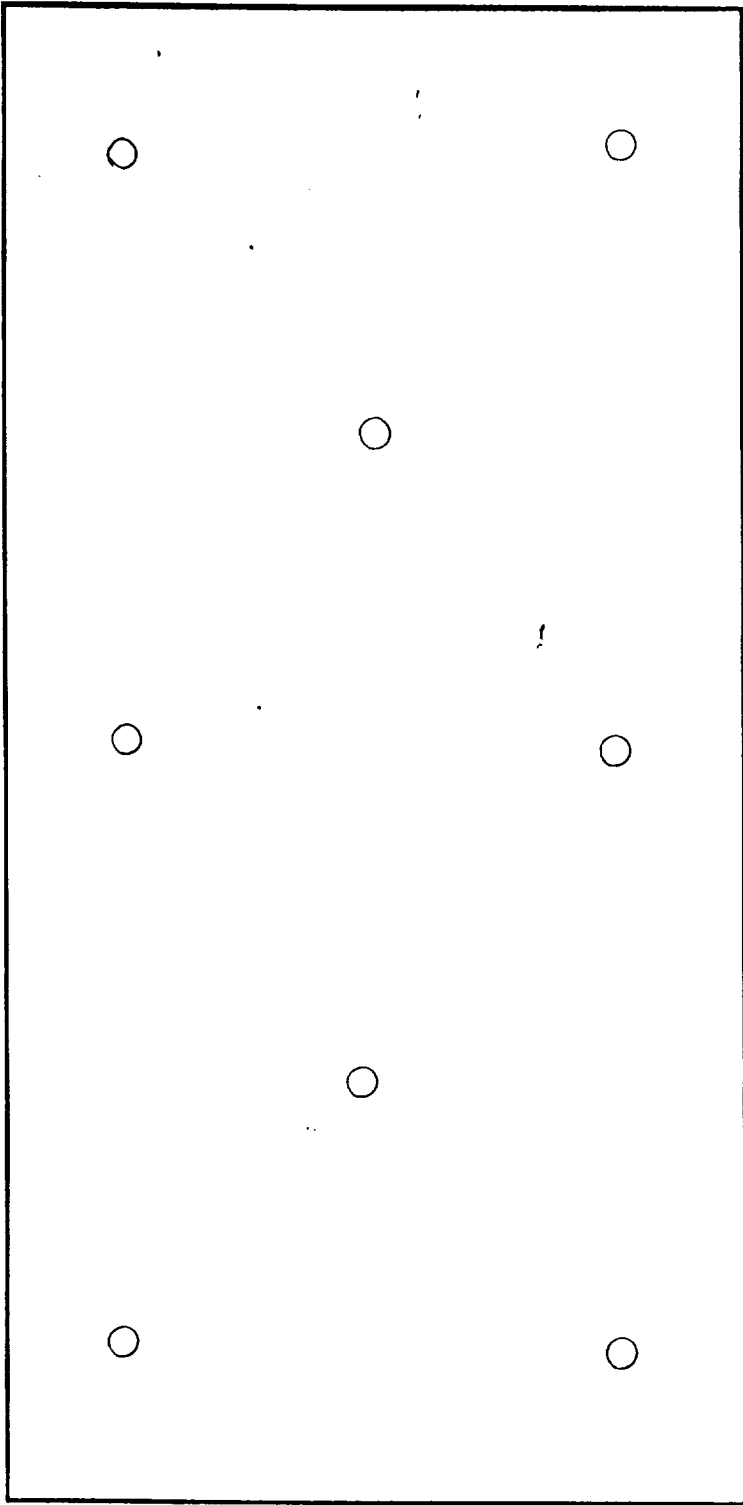
CELL No. <u>1</u>	SampDATE <b>5/14/98</b>	TPH <b>ND</b>	BTEX <b>ND</b>
DIMENSIONS(LxWxH) <u>60' X 30' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTH</u>			
* DATE BEGAN: <u>10/5/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>5/14/98</u>			
CELL No. <u>2</u>	SampDATE	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) _____			
<b>REMEDIATION RECORD: (Date, Treatment, Tilling)</b> 10/17/95 TREAT SOIL WITH 28-4-4 FERTILIZER,WATER, PLOW, TILL SOIL 6/10/97 TREAT SOIL WITH 46-0-0 FERTILIZER,WATER , PLOW AND TILL SOIL. 6/13/97 TILL SOIL. 7/15/97 WATER , PLOW , TILL SOIL. 8/25/97 TREAT SOIL WITH 10LBS PHOSPHORUS, 3LBS LIME, WATER ,TILL SOIL. 5/5/98 PLOW SOIL. 5/10/98 TILL SOIL.			

From excavation reports.

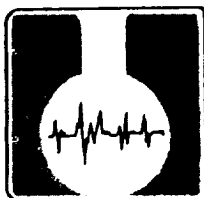


WELL NAME: Apache #147  
SAMPLE DATE: 5-14-98  
DIMENSIONS: 60' x 30' x 12"

○ = SAMPLE AREA



NOTES: ALL SAMPLES TAKEN 10" TO 12" INTO CELL  
8 point composite sample

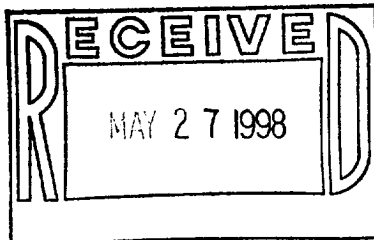


# ASSAIGAI ANALYTICAL LABORATORIES, INC.

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



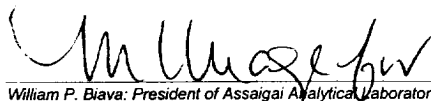
### \* explanation of codes

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: **9805132 JICARILLA PIT CLOSURE**

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

Client Sample ID: **APACHE #147 CELL** Sample Matrix: **SOIL** Sample Collected: **05/14/98 14:15:00**

<u>Fraction</u>	<u>QC Group</u>	<u>CAS #</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>Detection Limit</u>	<u>*</u>	<u>Sequence</u>	<u>Run Date</u>
SW846-8020 Volatiles									
9805132-01A	X98267	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.464-23	05/15/98
	X98267	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.464-23	
	X98267	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.464-23	
	X98267		p/m Xylenes	ND	mg / Kg	50	0.01	XG.1998.464-23	
	X98267	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.464-23	
SW846-8015 Modified TPH									
9805132-01B	X98268		Diesel Range Organics	ND	mg / Kg	25	25	XG.1998.465-23	05/15/98

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





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

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

Project Manager / Contact Jeff Cross

Telephone No. (505) 774-6643

Fax No. (505) 774-6624

Samplers: (Signature) 

Contract / Purchase Order / Quote

[illegible]