

District III

San Juan County, New Mexico

DEPUTY OIL & GAS INSPECTOR

DEC 17 1998

State of New Mexico
Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. PACHECO
Santa Fe, New Mexico 87505Submit 1 copy to
Appropriate District
and 1 copy to
Santa Fe Office

PIT REMEDIATION AND CLOSURE REPORT

RECEIVED
JUL 6 1998Operator: Apache Corporation Telephone: 505-325-0318 **OIL CON. DIV.**
DIST. 3Address: 2855 Southside River Road, Suite A, Farmington, NM 87401Facility or Well Name: Apache # 155 Pit #1Location: Unit or Qtr/Qtr Sec H Sec 3 T 24 N R 4W County Rio ArribaPit Type: Separator: XX Dehydrator Other Land Type: Jicarilla TribalBeginning Pit Dimensions: Length 28' Width 28' Depth 6'Pit Location: Ending Pit Dimensions: Length 28' Width 28' Depth 10'

(Attach diagram)

Reference: Wellhead XXX Other Footage from reference: 130'Direction from reference: 184 Degrees East North
of X West South XX

Depth To Groundwater:

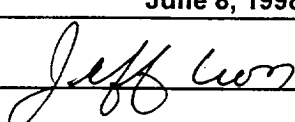
(vertical distance from
contaminants to seasonal
high water elevation of
groundwater)Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points) 0

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) 0RANKING SCORE (TOTAL POINTS) 0

Date Remediation Started:		<u>11/27/95</u>	Date Completed:		<u>12/14/95</u>
Remediation Method: (Check all appropriate sections)		Excavation	<u>XXX</u>	Approx. cubic yards	<u>116</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>12/14/95</u>	Sample Time		<u>4:10 P.M.</u>
Sample results					
Benzene		(ppm)	<u>ND</u>		
Total BTEX		(ppm)	<u>ND</u>		
Field Headspace		(ppm)	<u>7.46</u>		
TPH			<u>740</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		<u></u>	AND TITLE		<u>Project Manager</u>

State of New Mexico
Energy, Minerals and Natural Resources Department

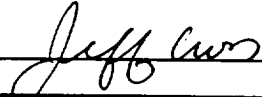
*Submit 1 copy to
Appropriate District
and 1 copy to
Santa Fe Office*

2040 S. PACHECO
Santa Fe, New Mexico 87505

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, NM 87401</u>					
Facility or Well Name:		<u>Apache # 155 Pit #2</u>					
Location: Unit or Qtr/Qtr Sec		<u>H</u>	<u>Sec 3</u>	<u>T 24 N</u>	<u>R 4W</u>	County	<u>Rio Arriba</u>
Pit Type:	Separator:			Dehydrator	Other		<u>Drip Pit</u>
Land Type:		<u>Jicarilla Tribal</u>					
Beginning Pit Dimensions:		Length	<u>21'</u>	Width	<u>21'</u>	Depth	<u>3'</u>
Pit Location: (Attach diagram)	Ending Pit Dimensions:	Length	<u>21'</u>	Width	<u>21'</u>	Depth	<u>10'</u>
Reference:		Wellhead	<u>XXX</u>	Other			
Footage from reference:		<u>130'</u>					
Direction from reference:		<u>300</u>	Degrees		<u> </u>	East	North
					<u>XX</u>	West	South
							<u>X</u>
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)		<u>0</u>	
high water elevation of groundwater)							
Wellhead Protection Area:				Yes		(20 points)	
(Less than 200 feet from a private				No		(0 points)	
domestic water source, or; less than						<u>0</u>	
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)		<u>0</u>	
irrigation canals and ditches)							
		RANKING SCORE (TOTAL POINTS)				<u>0</u>	

Date Remediation Started:		<u>11/27/95</u>	Date Completed:		<u>11/28/95</u>
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>	Approx. cubic yards	<u>114</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>11/28/95</u>	Sample Time	<u>8:30 A.M.</u>	
	Sample results				
	Benzene	(ppm)	<u>ND</u>		
	Total BTEX	(ppm)	<u>ND</u>		
	Field Headspace	(ppm)	<u>23.14</u>		
	TPH		<u>86</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>

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 # 155 PIT # 1</u>																												
Location:	Unit or Qtr/Qtr	Sec	H SEC 3 T 24N R 4W County <u>RIO ARRIBA</u>																									
Pit Type:	Separator: <u>XX</u>	Dehydrator	Other																									
Land Type:	<u>JIC. TRIBAL</u>																											
<table border="0" style="width: 100%;"> <tr> <td>Pit Location:</td> <td>Pit Dimensions:</td> <td>Length <u>28'</u></td> <td>Width <u>28'</u></td> <td>Depth <u>10'</u></td> </tr> <tr> <td>(Attach diagram)</td> <td>Reference:</td> <td>Wellhead <u>XXX</u></td> <td>Other</td> <td></td> </tr> <tr> <td></td> <td>Footage from reference:</td> <td><u>130'</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Direction from reference:</td> <td><u>184</u> Degrees</td> <td>East</td> <td>North</td> </tr> <tr> <td></td> <td></td> <td></td> <td><u>X</u> West</td> <td>South <u>XX</u></td> </tr> </table>				Pit Location:	Pit Dimensions:	Length <u>28'</u>	Width <u>28'</u>	Depth <u>10'</u>	(Attach diagram)	Reference:	Wellhead <u>XXX</u>	Other			Footage from reference:	<u>130'</u>				Direction from reference:	<u>184</u> Degrees	East	North				<u>X</u> West	South <u>XX</u>
Pit Location:	Pit Dimensions:	Length <u>28'</u>	Width <u>28'</u>	Depth <u>10'</u>																								
(Attach diagram)	Reference:	Wellhead <u>XXX</u>	Other																									
	Footage from reference:	<u>130'</u>																										
	Direction from reference:	<u>184</u> Degrees	East	North																								
			<u>X</u> West	South <u>XX</u>																								
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) <u>0</u>																									
high water elevation of																												
groundwater)																												
Distance to an Ephemeral Stream:		Less than 100 feet	(10 points)																									
(Downgradient dry wash greater than		Greater than 100 feet	(0 points) <u>0</u>																									
ten feet in width																												
Distance to Nearest Lake, Playa, or Watering Pond:		Less than 100 feet	(10 points)																									
(Downgradient lakes, playas and		Greater than 100 feet	(0 points) <u>0</u>																									
livestock or wildlife watering ponds)																												
Wellhead Protection Area:		Yes	(20 points)																									
(Less than 200 feet from a private		No	(0 points) <u>0</u>																									
domestic water source, or less than																												
1000 feet from all other water sources)																												
Distance To Surface Water:		Less than 100 feet	(20 points)																									
(Horizontal distance to perennial		100 feet to 1000 feet	(10 points)																									
lakes, ponds, rivers, streams, creeks,		Greater than 1000 feet	(0 points) <u>0</u>																									
irrigation canals and ditches)																												
		RANKING SCORE (TOTAL POINTS)	<u>0</u>																									

Date Remediation Started: 11/27/95 Date Completed: 12/14/95

Remediation Method: Excavation XXX Approx. cubic yards 116
(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. 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 12/14/95 Sample Time 4:10 Pm.
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>7.46</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>740</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 5/28/98 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: Karl C. 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: APACHE CORPORATION Telephone 505-325-0318

Address: 2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMINGTON N.M. 87401-7947

Facility or Well Name: APACHE # 155 PIT # 2

Location: Unit or Qtr/Qtr Sec H SEC 3 T 24N R 4W County RIO ARRIBA

Pit Type: Separator: Dehydrator Other DRIP PIT

Land Type: JIC. TRIBAL

Pit Location: Pit Dimensions: Length 21' Width 21' Depth 10'
(Attach diagram)

Reference: Wellhead XXX Other

Footage from reference: 130'

Direction from reference: 300 Degrees East North X
XX West of South

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:		<u>11/27/95</u>		Date Completed:		<u>11/28/95</u>	
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>		Approx. cubic yards		<u>114</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. spread soil on location for remediation. Took soil samples. Backfilled pit w/ fill dirt</u>							
Groundwater Encountered:		No <u>XXX</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 side walls, 10" into pit bottom.</u>					
		Sample Date <u>11/28/95</u>		Sample Time		<u>8:30AM</u>	
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>23.14</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>86</u>		Total Xylenes	(ppb)	<u>NA</u>
Groundwater Sample:		Yes		No <u>XXX</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>5/28/98</u>		PRINTED NAME		<u>JEFF CROSS</u>	
SIGNATURE		<u>Jeff Cross</u>		AND TITLE		<u>PROJECT MANAGER</u>	
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.							
APPROVED:		YES <u>X</u>		NO		(REASON)	
SIGNED:		<u>Kevin C Mammill</u>		DATE:		<u>6-2-98</u>	

APACHE CORPORATION FARMINGTON DISTRICT
PIT EXCAVATION AND CLOSURE REPORT

LOCATION: APACHE 155

PIT COUNT: 2

JICARILLA APACHE TRIBAL EPO
REVIEW AND APPROVAL

EPO REPRESENTATIVE KCM
DATE OF REVIEW: 12-27-95

				EXCAVATION				
DIMENSIONS		START		FINISH				
	W	L	D		W	L	D	CU.YDS.
PIT 1	28'	28'	6'	PIT 1	28'	28'	10'	116.0
PIT 2	21'	21'	3'	PIT 2	21'	21'	10'	114.0
PIT 3				PIT 3				
DATE: 11/27/95		PIT1@10'	PIT2@07'	PIT3@_ '	DATE:	PIT1@_ '	PIT2@_ '	PIT3@_ '
P. I. D.	CENTER	20.0	610.0		P. I. D.	CENTER		
	NW CORNER	3.7	517.0			NW CORNER		
	NE CORNER	38.9	312.0			NE CORNER		
	SW CORNER	0.0	>2500			SW CORNER		
	SE CORNER	5.5	95.6			SE CORNER		

NOTES:

11/27/95 - PIT 1 - Staining to 7'. No odor @ 10'
PIT 2 - Black sand w/strong odor to 7'.

12/05/95 PIT 2 - Excavate to 10'

SOIL SAMPLING									
DATE: 11/27/95		PIT1@10'	PIT2@07'	PIT3@_ '	ANALYSIS RESULTS			PER LAB:	ASSAIGAI
P. I. D.	CENTER	20.0	610.0		PIT	TPH	BETEX	WITNESS	DATE
	NW CORNER	3.7	517.0		NO.				
	NE CORNER	38.9	312.0		1	ND	ND	IF&S	11/27/95
	SW CORNER	0.0	>2500		2	86	ND	IF&S	11/27/95
	SE CORNER	5.5	95.6		3				

RE-SAMPLE OR CELL(S) SAMPLE

DATE: 12/14/95		PIT1@10'	PIT2@10'	PIT3@	ANALYSIS RESULTS		PER LAB:	ASSAIGAI	
P. I. D.	CENTER	4.5	28.0		PIT	TPH	BETEX	WITNESS	DATE
	NW CORNER	16.8	23.2		NO.				
	NE CORNER	7.6	15.4	740	1	ND	ND	JDT	12/14/95
	SW CORNER	4.6	21.7		2	120	.41	JDT	12/14/95
	SE CORNER	3.8	27.4		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				



SAMPLE DATE 12/14/95

[illegible]



SAMPLE DATE 12/14/95

[illegible]

Lab ID: 9512195-11B
Sample ID: AP #123

Collected: 12/14/95 15:55:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	2400	mg/Kg	5.0	250	01/05/96	SLFTD57
HCs DSL XT/CAL DHS 8015M	12/21/95	N/A				

Lab ID: 9512195-12A
Sample ID: ~~AP #123~~ pit #1

Collected: ~~12/14/95~~ 12/14/95 16:10:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
Toluene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
Ethylbenzene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
P-&m-Xylene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
O-Xylene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097

Lab ID: 9512195-12B
Sample ID: ~~AP #123~~ pit #1

Collected: ~~12/14/95~~ 12/14/95 16:10:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	1400	mg/Kg	5.0	250	01/06/96	SLFTD57
HCs DSL XT/CAL DHS 8015M	12/21/95	N/A				

Lab ID: 9512195-13A
Sample ID: AP #123

Collected: 12/04/95 12:15:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/18/95	SBTXME095
Toluene	ND	mg/Kg	0.0010	500	12/18/95	SBTXME095
Ethylbenzene	ND	mg/Kg	0.0010	500	12/18/95	SBTXME095
P-&m-Xylene	ND	mg/Kg	0.0010	500	12/18/95	SBTXME095
O-Xylene	ND	mg/Kg	0.0010	500	12/18/95	SBTXME095

Lab ID: 9512195-13B
Sample ID: AP #123

Collected: 12/04/95 12:15:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	1400	mg/Kg	5.0	250	12/22/95	SLFTD56
HCs DSL XT/CAL DHS 8015M	12/21/95	N/A				



Chain of Custody Record

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87110
(505) 345-8964

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

1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 570-1116

Client Apache Corporation

Address 304 N. Behrend

City / State / Zip FARMINGTON, NM 87401

Project Name / Number Oil Remediation - 45017

Contract / Purchase Order / Quote -

Project Manager / Contact John Taylor

Telephone No. (505) 325-0318

Fax No. (505) 325-0325

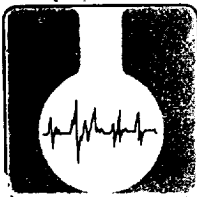
Samplers: (Signature) -

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		
07A	AP # 154	12/14	3:05	501	4 OZ. Glass		JCE		
B	AP # 154		3:05						
08A	AP # 103		3:20						
B	AP # 103		3:20						
09A	AP # 102-H		3:30						
B	AP # 102-H		3:30						
10A	AP # 102-C		3:40						
B	AP # 102-C		3:40						
11A	AP # 123		3:55						
B	AP # 123		3:55						
12A	AP # 155-H		4:10						
B	AP # 155-H		4:10						

Relinquished by: Signature <u>Scott Dugan</u> Printed <u>Scott Dugan</u> Company <u>Apache</u> Reason <u>Testing</u>	Received by: Signature <u>Laura M. Campbell</u> Printed <u>Laura M. Campbell</u> Company <u>APC</u> Reason <u>Testing</u>	Date <u>12/18/95</u> Time <u>10:45 AM</u>	Date <u>12/18/95</u> Time <u>12:10 PM</u>
Method of Shipment: _____		After analysis, samples are to be:	
Shipment No. _____		<input type="checkbox"/> Disposed of (additional fee)	
Special Instructions: _____		<input type="checkbox"/> Stored (30 days max)	
		<input type="checkbox"/> Stored over 30 days (additional fee)	
		<input type="checkbox"/> Returned to customer	

COURIER



ASSAIGAI ANALYTICAL LABORATORIES

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

Report Generated:

December 14, 1995 16:34

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

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

WORKORDER # : 9512030
WORK ID : PIT REMEDIATION
CLIENT CODE : APA01
DATE RECEIVED : 12/04/95

ATTN: JOHN TAYLOR

Page: 1

Lab ID: 9512030-01A
Sample ID: AP #155-H

Collected: 11/28/95 08:10:00
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	12/08/95	SLFTD054
HCs DSL XT/CAL DHS 8015M	12/06/95	N/A				

Lab ID: 9512030-01B
Sample ID: AP #155-H

Collected: 11/28/95 08:10:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/07/95	SBTXXME094
Toluene	ND	mg/Kg	0.0010	500	12/07/95	SBTXXME094
Ethylbenzene	ND	mg/Kg	0.0010	500	12/07/95	SBTXXME094
P-&m-Xylene	ND	mg/Kg	0.0010	500	12/07/95	SBTXXME094
O-Xylene	ND	mg/Kg	0.0010	500	12/07/95	SBTXXME094

Lab ID: 9512030-02A
Sample ID: AP #155-C, *pt #2*

Collected: 11/28/95 08:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M Diesel	36B	mg/Kg	5.0	5.0	12/07/95	SLFTD054
HCs DSL XT/CAL DHS 8015M	12/06/95	N/A				

Lab ID: 9512030-02B
Sample ID: AP #155-C

Collected: 11/28/95 08:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						



Lab ID: 9512030-02B

Sample ID: AE [REDACTED] pit #2

Collected: 11/28/95 08:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
Toluene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
Ethylbenzene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
P-&m-Xylene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
O-Xylene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094

Lab ID: 9512030-03A

Sample ID: AP #104-H

Collected: 11/28/95 13:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	ND	mg/Kg	5.0	250	12/08/95	SLFTD054
HCs DSL XT/CAL DHS 8015M	12/06/95	N/A				

Lab ID: 9512030-03B

Sample ID: AP #104-H

Collected: 11/28/95 13:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
Toluene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
Ethylbenzene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
P-&m-Xylene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
O-Xylene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094

Lab ID: 9512030-04A

Sample ID: AP #154-H

Collected: 11/29/95 17:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	1500	mg/Kg	5.0	250	12/08/95	SLFTD054
HCs DSL XT/CAL DHS 8015M	12/06/95	N/A				

Lab ID: 9512030-04B

Sample ID: AP #154-H

Collected: 11/29/95 17:30:00

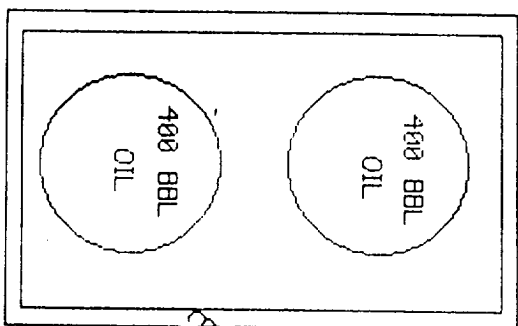
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094
Toluene	ND	mg/Kg	0.0010	500	12/07/95	SBTXME094

GENERAL DRAINAGE

NORTH

APACHE
APACHE NUMBER 155 Lessee # JAT 127
SE/4 NE/4 (H)
SECTION 3, TOWNSHIP 24N, RANGE 4W
RIO ARriba COUNTY, NM
Revised 6/1/97 MG



Pit #1
Reclaimed
184' 55" W
130' FLOW

SEPARATOR

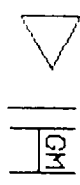


Cell
90' x 80' x 12'

WELL HEAD



Pit 130' Flow
#2 300' WSW
Reclaimed



LINE DRIP

3' X 30' APACHE METER RUN

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 # 155</u>	
Location: Unit or Qtr/Qtr Sec <u>H</u> Sec <u>3</u> T <u>24N</u> R <u>4W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>11/27/95</u> Date Completed: <u>5/12/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>230</u>	
Composted _____	
Other _____	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling Sampling Date: <u>5/12/98</u> Time: <u>1:45PM</u> Sample Results: Field Headspace (ppm) <u>ND</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>5/28/98</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 _____ (REASON) _____	
SIGNED: <u>Karen C Marshall</u>	DATE: <u>6-2-98</u>

APACHE CORPORATION/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE APACHE # 155

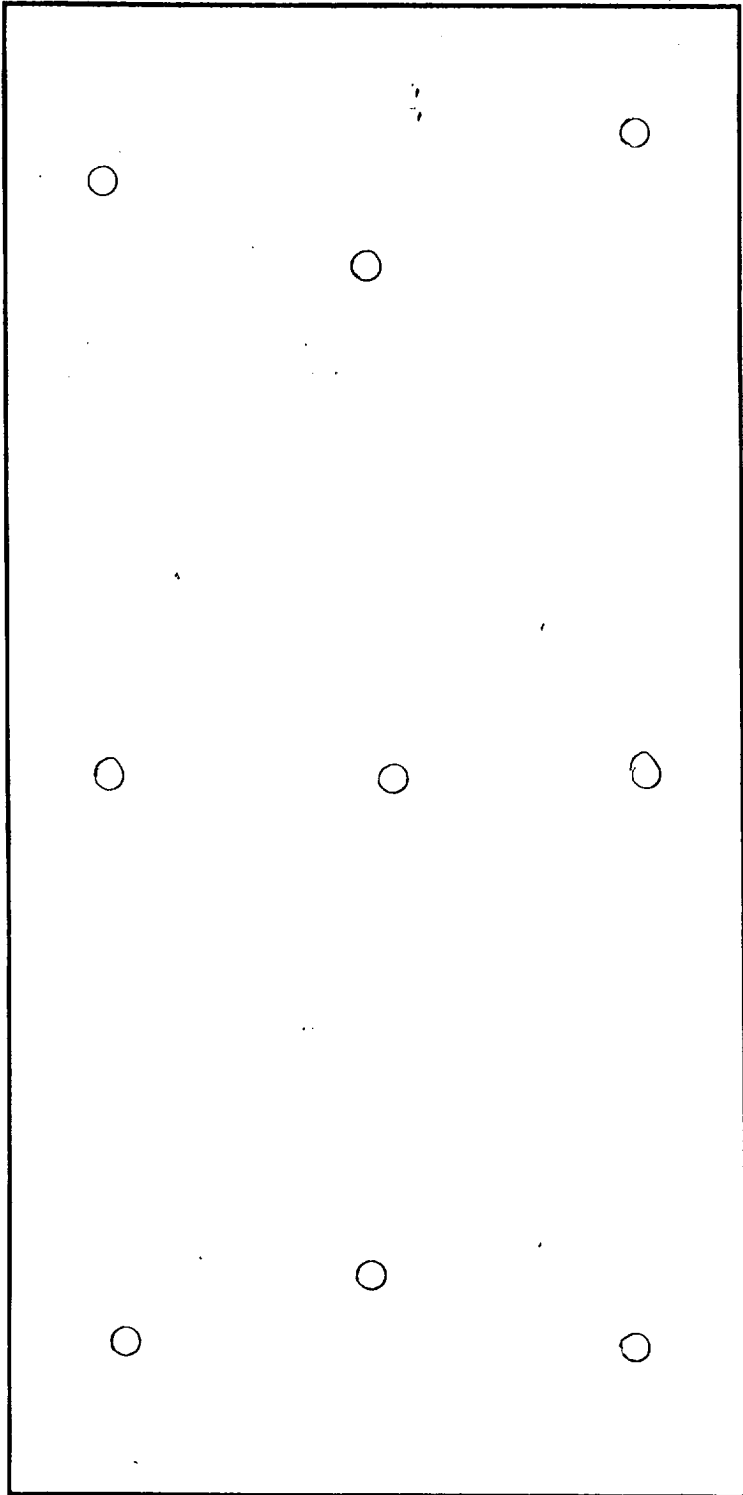
* AMOUNT OF SOIL UNDERGOING REMEDIATION 230 Yds.

CELL No. <u>1</u>	SampDATE 5/12/98	TPH ND	BTEX ND
DIMENSIONS(LxWxH) <u>90' X 80' X 12"</u>			
CELL LOCATION (dir. from well head) <u>SOUTH</u>			
* DATE BEGAN: <u>11/27/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>5/12/98</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)			
12/2/95 TREAT SOIL WITH 28-4-4 FERTILIZER,PLOW AND TILL SOIL.			
6/3/97 TREAT SOIL WITH 46-0-0 FERTILIZER,WATER,PLOW AND TILL SOIL.			
6/23/97 PLOW AND TILL SOIL.			
7/14/98 WATER,PLOW AND TILL SOIL.			
8/12/98 TREAT SOIL WITH 18LBS PHOSPHORUS,36LBS LIME,WATER,PLOW AND TILL SOIL.			
4/30/98 PLOW SOIL.			
5/9/98 TILL SOIL.			

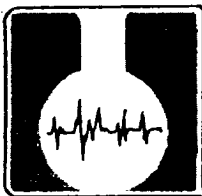
From excavation reports.

WELL NAME: Apache #155
SAMPLE DATE: 5-12-98
DIMENSIONS: 90' X 80' X 12"

○ = SAMPLE AREA



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

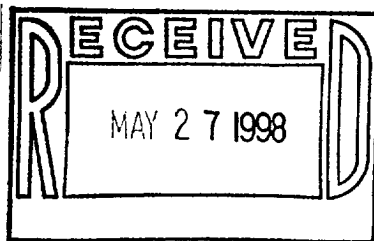


ASSAIGAI ANALYTICAL LABORATORIES, INC.

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: 9805123 JICARILLA PIT CLOSURE

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

Client Sample ID: APACHE #155 CELL

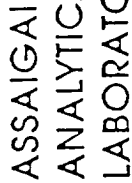
Sample Matrix: SOIL

Sample Collected: 05/12/98 13:45:00

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	*	Sequence	Run Date
SW846-8020 Volatiles									
9805123-01A	X98267	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.464-14	05/14/98
	X98267	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.464-14	
	X98267	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.464-14	
	X98267		p/m Xylenes	ND	mg / Kg	50	0.01	XG.1998.464-14	
	X98267	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.464-14	
SW846-8015 Modified TPH									
9805123-01B	X98268		Diesel Range Organics	ND	mg / Kg	25	25	XG.1998.465-13	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

Lab job no.: 5123 Date: 05/15/98

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

Page _____ of _____

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) John Woz

Contract / Purchase Order / Quote _____

[illegible]

Relinquished by: Signature <u>Jeff Cross</u> Printed <u>JEFF CROSS</u> Company <u>Apache Corp.</u> Reason _____	Date <u>5-15-98</u> Time <u>9:30</u>	Received by: Signature <u>Scott Pratt</u> Printed <u>SCOTT PRATT</u> Company <u>AAL</u> Reason _____	Relinquished by: Signature <u>Scott Pratt</u> Printed <u>SCOTT PRATT</u> Company <u>AAL</u> Reason _____	Received by: Signature <u>Scott Pratt</u> Printed <u>SCOTT PRATT</u> Company <u>AAL</u> Reason _____	Date <u>15 May 98</u> Time <u>11:30</u>	Received by: Signature <u>Rick Chubb</u> Printed <u>Rick Chubb</u> Company <u>AMU</u> Reason <u>Analysis</u>
Method of Shipment: _____	Comments: _____	After analysis, samples are to be: <input type="checkbox"/> Disposed of (additional fee) <input type="checkbox"/> Stored (30 days max) <input type="checkbox"/> Stored over 30 days (additional fee) <input type="checkbox"/> Returned to customer				
Shipment No. _____						
Special Instructions: _____						

LABORATORY