

Client:

Project: strict

00 Rio Brazos Rd

ztec, DEP 87110

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

RECEIVED  
AUG 24 1998

OIL CON. DIV.

DIST. 3

## PIT REMEDIATION AND CLOSURE REPORT

Operator: Apache Corporation \ MW Petroleum

Telephone:

505-325-0318

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

Facility or Well Name:

Jic Apache Tribal 396 #1 Pit #1

Location: Unit or Qtr/Qtr Sec

A

Sec 8

T 23 N

R 3W

County

Rio Arriba

Pit Type: Separator:

Dehydrator

Other

Blow Pit

Land Type:

Jicarilla Tribal

Beginning Pit Dimensions:

Length

20'

Width

20'

Depth

5'

Pit Location:

Ending Pit Dimensions:

Length

50'

Width

45'

Depth

9'

(Attach diagram)

Reference:

Wellhead

XX

Other

Separator

Footage from reference:

150'

Direction from reference:

100

Degrees

XX

East

North

of

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)

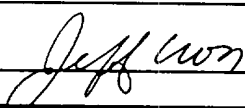
Greater than 1000 feet

(0 points)

0

RANKING SCORE (TOTAL POINTS)

0

<b>Date Remediation Started:</b>		<u>5/11/97</u>		<b>Date Completed:</b>		<u>5/12/97</u>	
<b>Remediation Method:</b> (Check all appropriate sections)		Excavation	<u>XXX</u>	Approx. cubic yards	<u>417</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 4' below pit bottom, 30' off pit sides.</u>					
		<u>Lay soil out on location in three dirt farm cells. Land farms 1,2,&amp; 3 to be spread on location.</u>					
		<u>Pits are contoured.</u>					
<b>Groundwater Encountered:</b>		No	<u>XX</u>	Yes			Depth <u>        </u>
<b>Final Pit:</b>	<u>Sample location 4 point composite sample taken 8 to 10 " into pit sidewalls,</u>						
<b>Closure Sampling:</b> (in multiple samples, attach sample results and diagram of sample locations and depths)	<u>grab sample taken 10" into pit bottom center.</u>						
	Sample depth	<u>9'</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>				
	Sample Date	<u>5/12/97</u>	Sample Time	<u>11:45 AM</u>			
	Sample results						
	Benzene	(ppm)	<u>ND</u>				
	Total BTEX	(ppm)	<u>ND</u>				
	Field Headspace	(ppm)	<u>1.48</u>				
	TPH		<u>ND\Sides</u>				
			<u>ND\BTM</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>August 10,1998</u>		<b>PRINTED NAME</b>	<u>Jeff Cross</u>			
<b>SIGNATURE</b>	<u></u>		<b>AND TITLE</b>	<u>Project Manager</u>			

District III  
1000 Rio Brazos Rd  
Aztec, NM 87410

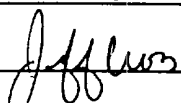
State of New Mexico  
Energy, Minerals and Natural Resources Department

**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: <u>Apache Corporation \ MW Petroleum</u>		Telephone: <u>505-325-0318</u>	
Address: <u>2855 Southside River Road, Suite A, Farmington, NM 87401</u>			
Facility or Well Name:		<u>Jic Apache Tribal 396 #1 Pit #2</u>	
Location: Unit or Qtr/Qtr Sec	<u>A</u>	<u>Sec 8</u>	<u>T 23 N R 3W</u> County <u>Rio Arriba</u>
Pit Type: Separator:	<u>XXX</u>	Dehydrator	Other
Land Type:	<u>Jicarilla Tribal</u>		
Beginning Pit Dimensions:		Length <u>15'</u>	Width <u>15'</u> Depth <u>3'</u>
Pit Location: Ending Pit Dimensions:	Length <u>20'</u>	Width <u>20'</u>	Depth <u>9'</u>
(Attach diagram)			
Reference:	Wellhead	Other	Separator
Footage from reference:		<u>75'</u>	
Direction from reference:		<u>165</u> Degrees	<u>XX</u> East North West South <u>X</u>
<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) <u>0</u>
high water elevation of			
groundwater)			
<b>Wellhead Protection Area:</b>		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)			
<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) <u>0</u>
irrigation canals and ditches)			
		RANKING SCORE (TOTAL POINTS) <u>0</u>	

<b>Date Remediation Started:</b>		<u>6/5/97</u>		<b>Date Completed:</b>		<u>6/5/97</u>	
<b>Remediation Method:</b> (Check all appropriate sections)		Excavation	<u>XXX</u>	Approx. cubic yards	<u>125</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 5' below pit bottom, 5' off pit sides.</u>					
		<u>Lay soil out on location in three dirt farm cells. Land farms 1,2,&amp; 3 to be spread on location.</u>					
		<u>Pits are contoured.</u>					
<b>Groundwater Encountered:</b>		No	<u>XX</u>	Yes			Depth <u>        </u>
<b>Final Pit:</b>	Sample location	<u>4 point composite sample taken 8 to 10 " into pit sidewalls,</u>					
<b>Closure Sampling:</b> (in multiple samples, attach sample results and diagram of sample locations and depths)		<u>grab sample taken 10" into pit bottom center.</u>					
	Sample depth	<u>9'</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>				
	Sample Date	<u>6/5/97</u>	Sample Time	<u>12:00 PM</u>			
	Sample results						
	Benzene	(ppm)	<u>ND</u>				
	Total BTEX	(ppm)	<u>ND</u>				
	Field Headspace	(ppm)	<u>19.18</u>				
	TPH		<u>ND\Sides</u>				
			<u>ND\BTM</u>				
<b>Groundwater Sample:</b>	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>August 10, 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>M W PETROLEUM</u>		Telephone <u>505-325-0318</u>	
Address: <u>304 N. BEHREND, FARMINGTON, N.M. 84701</u>			
Facility or Well Name: <u>JIC. TRIBAL 396# 1 PIT # 1</u>			
Location:	Unit or Qtr/Qtr	Sec <u>A</u>	SEC 8 T 23N R 3W County <u>RIO ARRIBA</u>
Pit Type:	Separator: <u>          </u>	Dehydrator <u>          </u>	Other <u>BLOW PIT</u>
Land Type: <u>JIC. TRIBAL</u>			

Pit Location: (Attach diagram)	Pit Dimensions:	Length <u>50'</u>	Width <u>45'</u>	Depth <u>9'</u>
	Reference:	Wellhead <u>XXX</u>	Other <u>                                </u>	
	Footage from reference:	<u>150'</u>		
	Direction from reference:	<u>100</u> Degrees	<u>XX</u> East of North	<u>          </u> West of South <u>X</u>

<b>Depth To Groundwater:</b> (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>
<b>Distance to an Ephemeral Stream:</b> (Downgradient dry wash greater than ten feet in width)	Less than 100 feet	(10 points)	
	Greater than 100 feet	( 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	(10 points)	
	Greater than 100 feet	( 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	(20 points)	
	No	( 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	(20 points)	
	100 feet to 1000 feet	(10 points)	
	Greater than 1000 feet	( 0 points)	<u>0</u>
	<b>RANKING SCORE (TOTAL POINTS)</b>		<u>0</u>

Date Remediation Started: 5/11/97 Date Completed: 5/12/97

Remediation Method: Excavation XXX Approx. cubic yards 417  
 (Check all appropriate sections) Landfarmed XXX Insitu Bioremediation \_\_\_\_\_  
 Other \_\_\_\_\_

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

General Description of Remedial Action: Excavate pit to 4' below pit bottom, 30' off pit sides.  
Lay soil out on location in three dirt farm cells. (Landfills 1, 2, 3, to be spread on loc. Pit are Contained to)

Groundwater Encountered: No XXX Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit: Sample location 4 POINT COMPOSITE SAMPLE TAKEN 10" INTO PIT SIDEWALL  
 Closure Sampling: GRAB SAMPLE TAKEN 10" INTO PIT BOTTOM CENTER.  
 (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 5/12/97 Sample Time 11:45 AM  
 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>1.48</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>ND\SIDE</u>		Total Xylenes	(ppb)	<u>NA</u>
			<u>ND\BTM</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 7/9/97 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: Kevin C. Marshall DATE: 7-30-97

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>M W PETROLEUM</u>		Telephone <u>505-325-0318</u>	
Address: <u>304 N. BEHREND, FARMINGTON, N.M. 84701</u>			
Facility or Well Name: <u>JIC. TRIBAL 396# 1 PIT # 2</u>			
Location:	Unit or Qtr/Qtr Sec <u>A</u>	<u>SEC 8</u>	T <u>23N</u> R <u>3W</u> County <u>RIO ARRIBA</u>
Pit Type:	Separator: <u>XXX</u>	Dehydrator <u>          </u>	Other <u>          </u>
Land Type: <u>JIC. TRIBAL</u>			

Pit Location: (Attach diagram)	Pit Dimensions:	Length <u>20'</u>	Width <u>20'</u>	Depth <u>9'</u>
	Reference:	Wellhead <u>XXX</u>	Other <u>          </u>	
	Footage from reference:	<u>75'</u>		
	Direction from reference:	<u>165</u> Degrees	<u>XX</u> East	North <u>          </u> of West <u>          </u> South <u>X</u>

<b>Depth To Groundwater:</b> (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>
<b>Distance to an Ephemeral Stream:</b> (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>
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (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>
<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	(20 points)	<u>          </u>
	No	( 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	(20 points)	<u>          </u>
	100 feet to 1000 feet	(10 points)	<u>          </u>
	Greater than 1000 feet	( 0 points)	<u>0</u>
<b>RANKING SCORE (TOTAL POINTS)</b>			<u>0</u>

<b>Date Remediation Started:</b>		<u>6/5/97</u>		<b>Date Completed:</b>		<u>6/5/97</u>	
<b>Remediation Method:</b> (Check all appropriate sections)		Excavation <u>XXX</u>		Approx. cubic yards		<u>125</u>	
		Landfarmed <u>XXX</u>		Insitu Bioremediation			
		Other _____					
<b>Remediation Location:</b> (i.e. landfarmed onsite, name and location of offsite facility)		Onsite <u>XXX</u>		Offsite _____			
<b>General Description of Remedial Action:</b> <u>Excavate pit to 5' below pit bottom, 5' off pit sides.</u>							
<u>Lay soil out on location in three dirt farm cells. Lavo Farms 1, 2, 3 To Be spread on Loc. Pit was Contained</u>							
<b>Groundwater Encountered:</b>		No <u>XXX</u>		Yes _____		Depth _____	
<b>Final Pit:</b>							
Sample location		<u>4 POINT COMPOSITE SAMPLE TAKEN 10" INTO PIT SIDEWALL</u>					
<b>Closure Sampling:</b> (in multiple samples, attach sample results and diagram of sample locations and depths)		<u>GRAB SAMPLE TAKEN 10" INTO PIT BOTTOM CENTER.</u>					
Sample depth		<u>9' 8" to 10" into pit side walls, 10" into pit bottom.</u>					
Sample Date		<u>6/5/97</u>		Sample Time		<u>12:00pm</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>19.18</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>ND\SIDE</u>		Total Xylenes	(ppb)	<u>NA</u>
			<u>ND\BTM</u>				
<b>Groundwater Sample:</b>		Yes _____		No <u>XXX</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>7/9/97</u>		<b>PRINTED NAME</b>		<u>JEFF CROSS</u>	
<b>SIGNATURE</b>		<u>Jeff Cross</u>		<b>AND TITLE</b>		<u>PROJECT MANAGER</u>	
<b>AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.</b>							
<b>APPROVED:</b>		YES <u>X</u>		NO _____		(REASON) _____	
<b>SIGNED:</b>		<u>Kevin C. Mamm</u>		<b>DATE:</b>		<u>7-30-97</u>	



# M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

LOCATION JIC. TRIBAL 396 #1

PIT COUNT 2

Jicarilla Apache Tribal EPO/OCD/BLM
Review and Approval
OCD-BLM
EPO Representative
Date of Review

Excavation								
DIMENSIONS			START: PIT1 5/11/97 PIT2 6/5/97			FINISH: PIT1 5/12/97 PIT2 6/5/97		
	W	L	D		W	L	D	CU YDS
Pit 1	20'	20'	5'	Pit 1	50'	45'	9'	417
Pit 2	15'	15'	3'	Pit 2	20'	20'	9'	125
Pit 3				Pit 3				
DATE: #1 5/12 #2 6/5								
	Pit 1 @ 9'	Pit 2 @ 8'	Pit 3 @		Date: #1, 5/12, #2, 6/5/97	Pit 1 @ 9'	Pit 2 @ 9'	Pit 3 @
P I D	Center	1.6	10		P I D	Center	1.6	28.5
	NW Corner	2.8	9.3			NW Corner	2.8	15.1
	NE Corner	3	4.8			NE Corner	3	3.4
	SW Corner	0	9.1			SW Corner	0	22.5
	SE Corner	0	6.2			SE Corner	0	26.4

NOTES:

5/11/97 START EXCAVATION ON PIT #1 NO ODOR DETECTED ,LIGHT STAINING  
EXCAVATE 4' BELOW PIT BOTTOM ,TAKE PID READINGS

5/12/97 PULLED 4 POINT COMPOSITE FROM SIDE WALLS  
1 POINT GRAB SAMPLE FROM BOTTOM CENTER.

6/5/97 START EXCAVATION ON PIT #2 LIGHT ODOR ,HEAVY STAINING TO 2'  
BELOW PIT BOTTOM , EXCAVATE TO 6' BELOW PIT BOTTOM ,NO ODOR ,LIGHT  
STAINING. TAKE PID READINGS @ 4' AND 6' BELOW PIT BOTTOM.

6/5/97 PULLED 4 POINT COMPOSITE FROM SIDE WALLS  
1 POINT GRAB SAMPLE FROM BOTTOM CENTER.

ALL SOILS FROM PITS #1AND #2 WERE LAID OUT ON LOCATION FOR LAND FARMING REMEDIATION

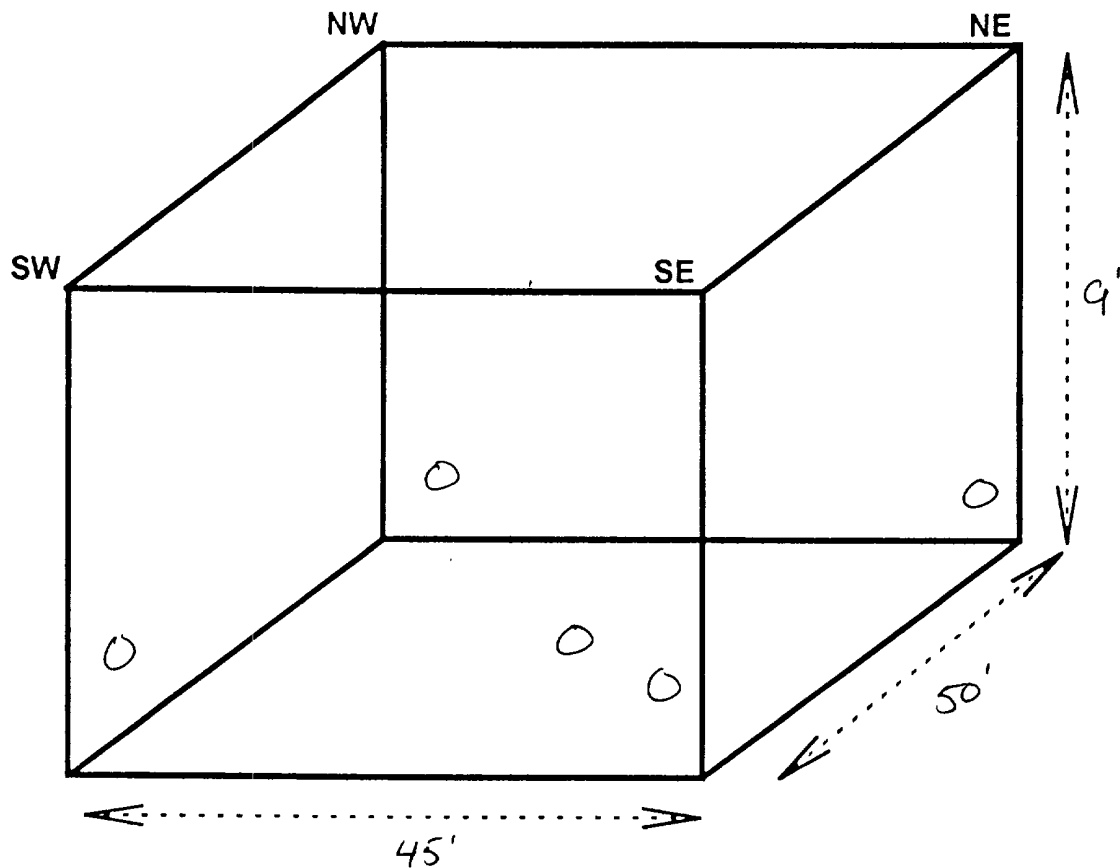
DATE: 5/12/97 6/5/97 SOIL SAMPLING									
	Pit 1 @ 9'	Pit 2 @ 9'	Pit 3 @	ANALYSIS RESULTS			PER LAB		
				PIT NO	TPH	BETEX	WITNESS	DATE	
P I D	Center	1.6	28.5						
	NW Corner	2.8	15.1						
	NE Corner	3	3.4	1	ND	ND	JEFF C.	5/15/97	
	SW Corner	0	22.5	2	ND	ND	JEFF C.	6/10/97	
	SE Corner	0	26.4	3					

## RE-SAMPLE OR CELL(S) SAMPLE

DATE: Pit 1 @ Pit 2 @ Pit 3 @									
				ANALYSIS RESULTS			PER LAB		
				PIT NO	TPH	BETEX	WITNESS	DATE	
P I D	Center								
	NW Corner								
	NE Corner			1					
	SW Corner			2					
	SE Corner			3					

## RE-SAMPLE OR CELL(S) SAMPLE

DATE: Pit 1 @ Pit 2 @ Pit 3 @									
				ANALYSIS RESULTS			PER LAB		
				PIT NO	TPH	BETEX	WITNESS	DATE	
P I D	Center								
	NW Corner								
	NE Corner			1					
	SW Corner			2					
	SE Corner			3					



○ = SAMPLE AREA

WELL NAME SAT 396 #1 Pit #1

SAMPLE DATE 5-12-97

NOTES 4 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT

SIDEWALL

1 POINT GRAB SAMPLE TAKEN 10" TO 12" INTO BOTTOM CENTER

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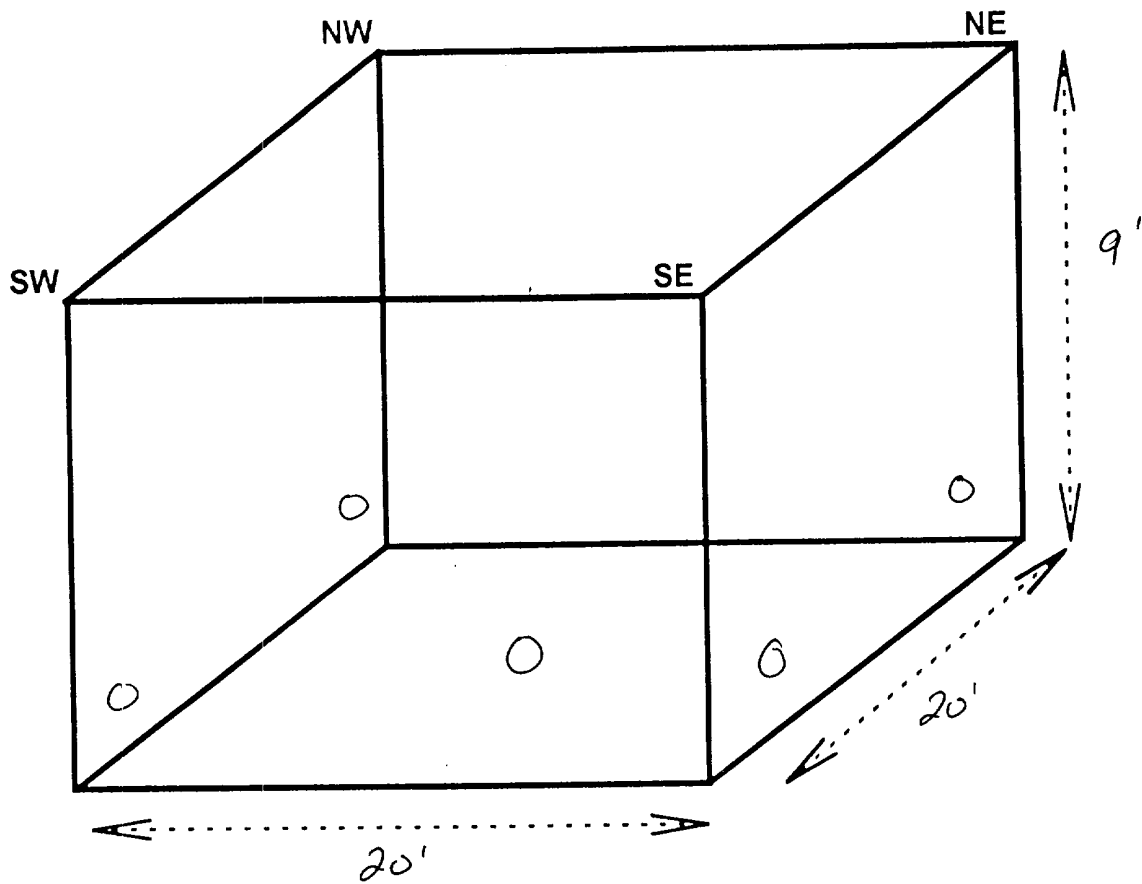
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○ = SAMPLE AREA

WELL NAME JAT 396 #7 Pit #2

SAMPLE DATE 6-5-97

NOTES 4 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT

SIDEWALL

1 POINT GRAB SAMPLE TAKEN 10" TO 12" INTO BOTTOM CENTER

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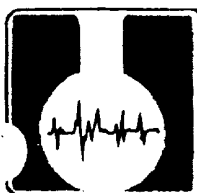
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**ASSAIGAI  
ANALYTICAL  
LABORATORIES, INC.**

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

RECEIVED  
MAY 27 1997

Report Generated:  
May 21, 1997 15:05

**CERTIFICATE OF ANALYSIS  
RESULTS BY SAMPLE**

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

WORKORDER # : 9705141  
WORK ID : JICARILLA PIT CLOSURES  
CLIENT CODE : APA01  
DATE RECEIVED : 05/14/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9705141-01A Pit #1  
Sample ID: JAT 396 #1 RES PIT BOTTOM

Collected: 05/12/97 11:45:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	05/15/97	SBTXME162
Toluene	ND	mg/Kg	0.0010	500	05/15/97	SBTXME162
Ethylbenzene	ND	mg/Kg	0.0010	500	05/15/97	SBTXME162
P-&m-Xylene	ND	mg/Kg	0.0020	500	05/15/97	SBTXME162
O-Xylene	ND	mg/Kg	0.0010	500	05/15/97	SBTXME162

Lab ID: 9705141-01B  
Sample ID: JAT 396 #1 RES PIT BOTTOM

Collected: 05/12/97 11:45:00  
Matrix: SOIL

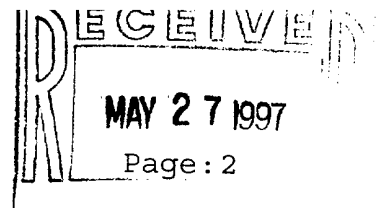
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	ND	mg/Kg	50	1.0	05/16/97	SDRO26

Lab ID: 9705141-02A  
Sample ID: JAT 396 #1 RES PIT SIDES

Collected: 05/12/97 11:30:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	05/15/97	SBTXME162
Toluene	ND	mg/Kg	0.0010	500	05/15/97	SBTXME162
Ethylbenzene	ND	mg/Kg	0.0010	500	05/15/97	SBTXME162
P-&m-Xylene	ND	mg/Kg	0.0020	500	05/15/97	SBTXME162
O-Xylene	ND	mg/Kg	0.0010	500	05/15/97	SBTXME162

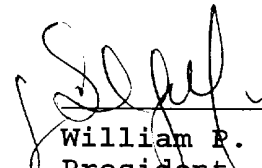


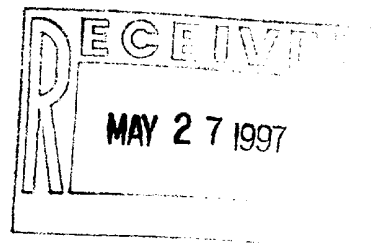


**Lab ID:** 9705141-02B  
**Sample ID:** JAT 396 #1 RES PIT SIDES

**Collected:** 05/12/97 11:30:00  
**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	50	1.0	05/16/97	SDR026

  
\_\_\_\_\_  
William P. Biava  
President



## **WORKORDER COMMENTS**

DATE : 05/21/97  
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**

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10

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

1910 N. BIG SPRING  
MIDLAND, TEXAS 79701  
(915) 570-1116

**MELQUIADES ALANIS**  
**6411 LOCAL UNO**

CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Project Manager / Contact ~~Jeff Cross~~

Telephone No. (505) 774-6643

Fax No. (505) 774-6624

**Project Name / Number: JICARILLA PIT CLOSURES**

Contract / Purchase Order / Quote

## Annals of the Royal Academy

BTX  
Bro. (and. Bns)

[illegible]

Handwritten: *Handwritten signature*  
 Printed: **Handwritten**  
 Printed: **Handwritten**  
 Printed: **Handwritten**

Time	5:50
Date	6/14/5

Received by: \_\_\_\_\_  
Signature \_\_\_\_\_  
Printed \_\_\_\_\_  
Company \_\_\_\_\_  
Reason \_\_\_\_\_

10/10/10

Indistinguishable by:  
Signature \_\_\_\_\_  
Printed \_\_\_\_\_  
Company \_\_\_\_\_  
Reason \_\_\_\_\_

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Received by: \_\_\_\_\_  
Signature \_\_\_\_\_  
Printed \_\_\_\_\_  
Company \_\_\_\_\_  
Reason \_\_\_\_\_

Method of Shipment: \_\_\_\_\_  
Shipment No. \_\_\_\_\_  
Special Instructions: \_\_\_\_\_

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Comments: \_\_\_\_\_  
\_\_\_\_\_[illegible][illegible]

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analysis, samples are to be:

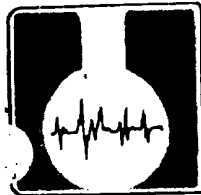
☐ Disposed of (additional fee)

☐ Stored (30 days max)

☐ Stored over 30 days (additional fee)

☐ Returned to customer

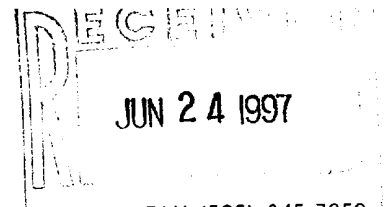
LABORATORY



**ASSAIGAI  
ANALYTICAL  
LABORATORIES, INC.**

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

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



Report Generated:  
June 13, 1997 17:23

**CERTIFICATE OF ANALYSIS  
RESULTS BY SAMPLE**

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

WORKORDER # : 9706070  
WORK ID : JICARILLA PIT CLOSURES  
CLIENT CODE : APA01  
DATE RECEIVED : 06/09/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9706070-01A

Sample ID: JAT 396 #1 PIT #2 SIDES

Collected: 06/05/97 12:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	06/10/97	SBTXME168
Toluene	ND	mg/Kg	0.0010	500	06/10/97	SBTXME168
Ethylbenzene	ND	mg/Kg	0.0010	500	06/10/97	SBTXME168
P-&m-Xylene	ND	mg/Kg	0.0020	500	06/10/97	SBTXME168
O-Xylene	ND	mg/Kg	0.0010	500	06/10/97	SBTXME168

Lab ID: 9706070-01B

Sample ID: JAT 396 #1 PIT #2 SIDES

Collected: 06/05/97 12:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	ND	mg/Kg	50	25	06/12/97	SDRO32

Lab ID: 9706070-02A

Sample ID: JAT 396 #1 PIT #2 BOTTOM

Collected: 06/05/97 12:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	06/10/97	SBTXME168
Toluene	ND	mg/Kg	0.0010	500	06/10/97	SBTXME168
Ethylbenzene	ND	mg/Kg	0.0010	500	06/10/97	SBTXME168
P-&m-Xylene	ND	mg/Kg	0.0020	500	06/10/97	SBTXME168
O-Xylene	ND	mg/Kg	0.0010	500	06/10/97	SBTXME168

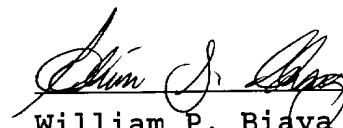




**L.D:** 9706070-02B  
**Sample ID:** JAT 396 #1 PIT #2 BOTTOM

**Collected:** 06/05/97 12:30:00  
**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	50	25	06/12/97	SDRO32

  
for 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:

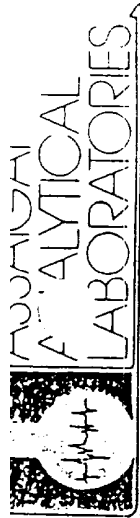
- ND = Analyte "not detected" in analysis at the sample specific detection limit.
- D\_F = Sample "dilution factor"
- NT = Analyte "not tested" per client request.
- B = Analyte was also detected in laboratory method QC blank.
- E = Analyte concentration (result) is an estimated value or exceeds analysis 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.

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### **REPORT COMMENTS**

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# CITY OF CUSTODY RECORD

Lab Job no. 6070 Date 1/97

Page 1 of 1

Client Apache Corporation Project Manager / Contact Jeff Gross

Address 304 N. Behrend Telephone No. (505) 774-6643

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

Project Name / Number JICARILLA PIT CLOSURES Samplers: (Signature) \_\_\_\_\_

Contract / Purchase Order / Quote \_\_\_\_\_

ALBUQUERQUE, NEW MEXICO 87109  
(505) 345-8964

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

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

MELQUIADES ALANIS  
6411 LOCAL UNO  
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

ANALYST LABORATORY NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation		Remarks
						Temp.	Chemical	
1A	JAT 396#1 Pit #2 Side	6-5-97	12:00	Soil	402 Glass	4°C	ICE	
1B	"	"	"	"	"	"	"	
2A	JAT 396#2 Pit #2 Bottom	"	12:30	"	"	"	"	
2B	"	"	"	"	"	"	"	
3A	"	"	"	"	"	"	"	
3B	"	"	"	"	"	"	"	
4A	"	"	"	"	"	"	"	
4B	"	"	"	"	"	"	"	
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6B	"	"	"	"	"	"	"	
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100B	"	"	"	"	"	"	"	

Received by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

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Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

Company: APACHE CORP Reason: \_\_\_\_\_

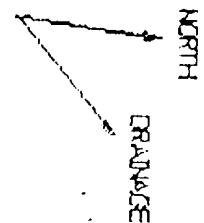
Received by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature] Printed: ELVIN J. CHENE

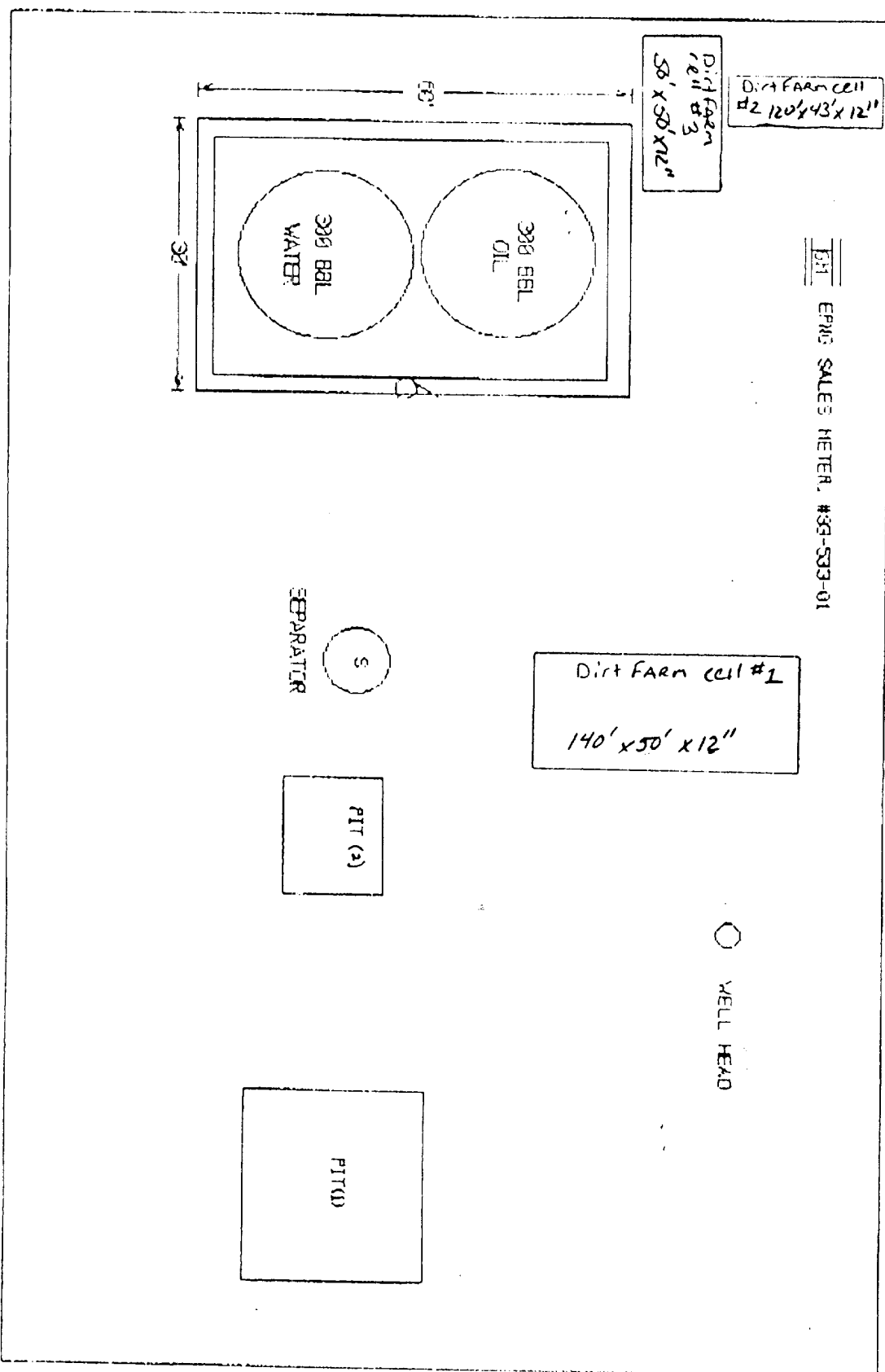
Company: APACHE CORP Reason: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 6/1/97

Signature: [Signature]



MY PETROLEUM  
 JICARILLA TRIBAL 396 NUMBER 1  
 NE/4 NE/4 Lease # JKT 396  
 SECTION 8, TOWNSHIP 23N, RANGE 3W  
 RIO ARriba COUNTY, NM  
 REMED 6/2/97 MS



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>M W PETROLUEM</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>JAT 396 # 1 CELL #1</u>	
Location: Unit or Qtr/Qtr Sec <u>A</u> Sec <u>8</u> T <u>23N</u> R <u>3W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>5/11/97</u> Date Completed: <u>6/10/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>220</u>	
Composted _____	
Other <u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>	<b>Final Closure Sampling</b> Sampling Date: <u>6/10/98</u> Time: <u>9:40AM</u> Sample Results: Field Headspace (ppm) <u>0</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>	
<b>RANKING SCORE (TOTAL POINTS)</b> <u>0</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE: <u>7/13/98</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>Kurt M...</u> DATE: <u>7-29-98</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>M W PETROLUEM</u>		Telephone <u>505-325-0318</u>	
Address: <u>1855 SOUTHSIDE RIVER ROAD /SUITE A/FARMINGTON, N.M. 87401-7947</u>			
Facility or Well Name: <u>JAT 396 # 1 CELL # 2</u>			
Location: Unit or Qtr/Qtr Sec <u>A</u> Sec <u>8</u> T <u>23N</u> R <u>3W</u> County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>5/11/97</u>		Date Completed: <u>6/10/98</u>	
Remediation Method: Landfarmed <u>XXX</u>		Approx. cubic yards <u>120</u>	
Composted <u>                    </u>			
Other <u>                    </u>		<u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>		<b>Final Closure Sampling</b> Sampling Date: <u>6/10/98</u> Time: <u>9:50AM</u> Sample Results: Field Headspace (ppm) <u>0</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>			
<b>RANKING SCORE (TOTAL POINTS)</b> <u>0</u>			
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE: <u>7/13/98</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>Kee C M</u>		DATE: <u>7-29-98</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>M W PETROLUEM</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>JAT 396 # 1 CELL # 3</u>			
Location:	Unit or Qtr/Qtr	Sec <u>A</u>	Sec <u>8</u> T <u>23N</u> R <u>3W</u> County <u>RIO ARRIBA</u>
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>6/5/97</u>		Date Completed: <u>6/10/98</u>	
Remediation Method: Landfarmed		<u>XXX</u>	Approx. cubic yards <u>200</u>
Composted			
Other		<u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>		<b>Final Closure Sampling</b> Sampling Date: <u>6/10/98</u> Time: <u>10:00AM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>1600</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>			
<b>RANKING SCORE (TOTAL POINTS)</b> <u>0</u>			
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE: <u>7/13/98</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>Kurt C. Mamm</u>		DATE: <u>7-29-98</u>	

# M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE

**JAT 396 # 1**

\* AMOUNT OF SOIL UNDERGOING REMEDIATION

**542**

Yds.

CELL No. <u>1</u>	SampDATE <b>6/10/98</b>	TPH <b>ND</b>	BTEX <b>ND</b>
DIMENSIONS(LxWxH) <u>140' X 50' X 12"</u>			
CELL LOCATION (dir. from well head) <u>WEST</u>			
* DATE BEGAN: <u>5/11/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/10/98</u>			
CELL No. <u>2</u>	SampDATE <b>6/10/98</b>	TPH <b>ND</b>	BTEX <b>ND</b>
DIMENSIONS(LxWxH) <u>120' X 43' X 12'</u>			
CELL LOCATION (dir. from well head) <u>WEST</u>			
* DATE BEGAN: <u>5/11/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/10/98</u>			
CELL No. <u>3</u>	SampDATE <b>6/10/98</b>	TPH <b>1600</b>	BTEX <b>ND</b>
DIMENSIONS(LxWxH) <u>140' X 50' X 12"</u>			
CELL LOCATION (dir. from well head) <u>WEST</u>			
* DATE BEGAN: <u>6/5/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/10/98</u>			
REMEDICATION RECORD: (Date, Treatment, Tilling)			
5/13/97 TREAT CELLS # 1, 2 WITH 46-0-0 FERTILIZER, WATER, PLOW AND TILL SOIL.			
5/22/97 PLOW AND TILL CELL # 1,2			
6/2/97 WATER, PLOW AND TILL CELL # 1,2			
6/7/97 TREAT CELL # 3 WITH 46-0-0 FERTILIZER. WATER, PLOW AND TILL CELLS # 1,2 AND 3.			
7/10/97 PLOW AND TILL ALL THREE CELLS.			
8/19/97 PLOW AND TILL ALL THREE CELLS.			
4/28/98, 4/29/98 PLOW AND TILL ALL THREE CELLS.			
6/2/98, 6/3/98 WATER, PLOW AND TILL ALL THREE CELLS.			

From excavation reports.



WELL NAME:

JAT 394 #1 Cell #1

SAMPLE DATE:

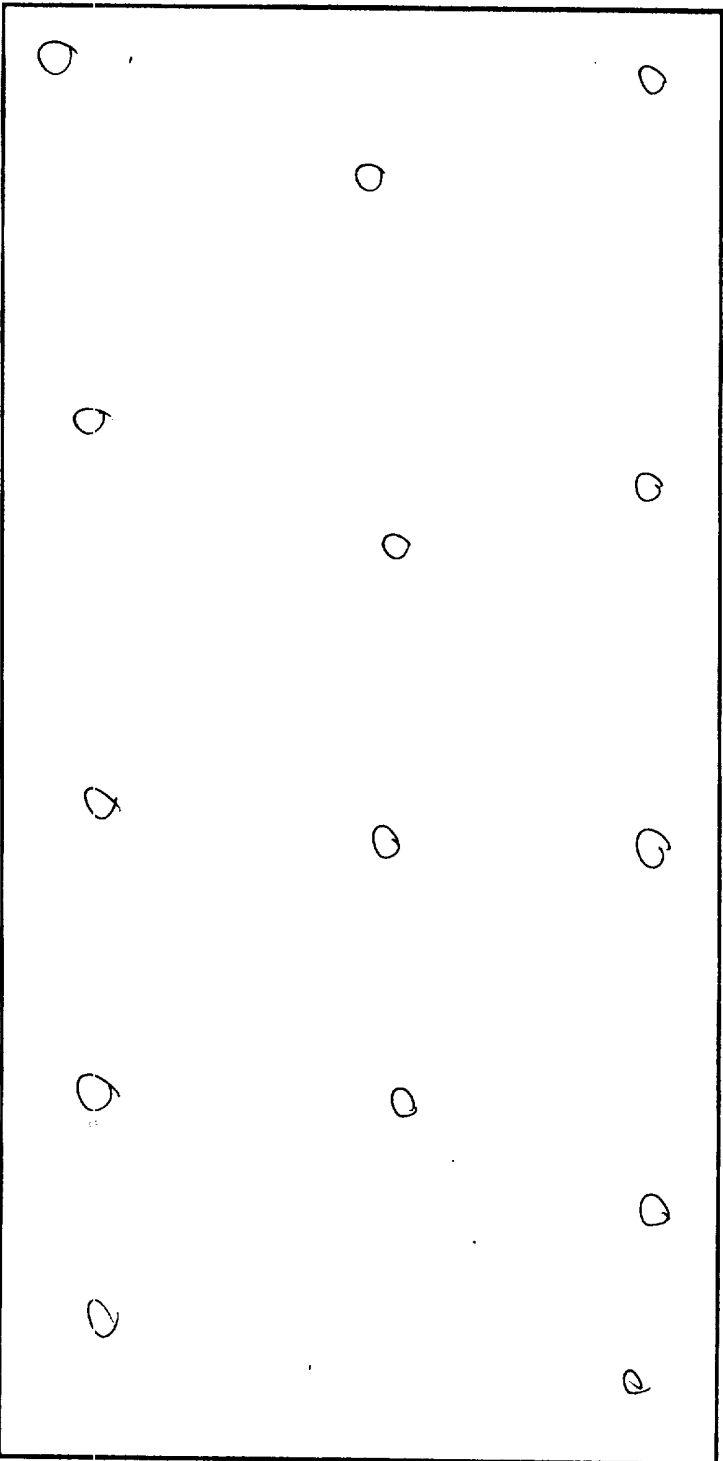
6-10-98

DIMENSIONS:

140' x 50' x 12"



= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

14 point composite sample

WELL NAME:

SAT 346 #1 CEN #2

SAMPLE DATE:

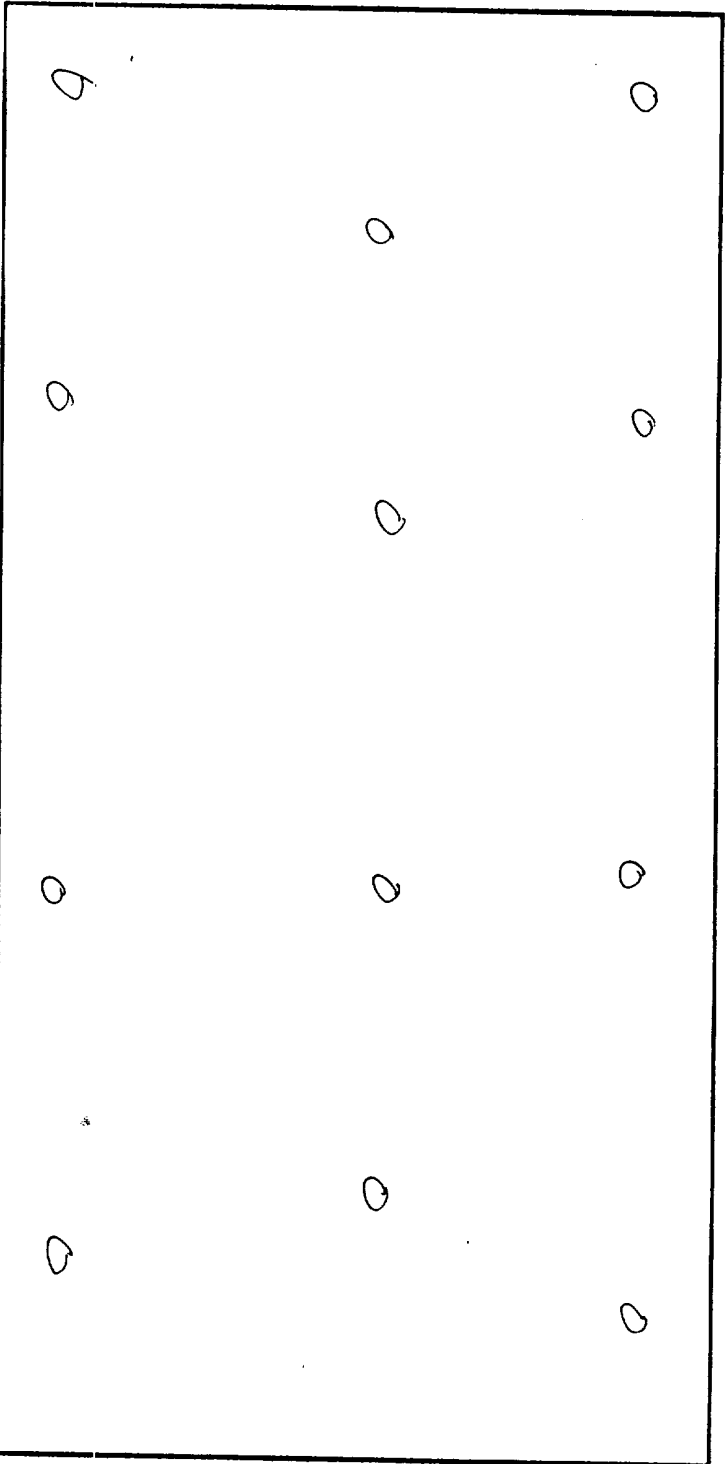
6-10-98

DIMENSIONS:

120' x 43' x 12"



= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

12 Point Composite Sample

WELL NAME:

JAT 396 #1 cell #3

SAMPLE DATE:

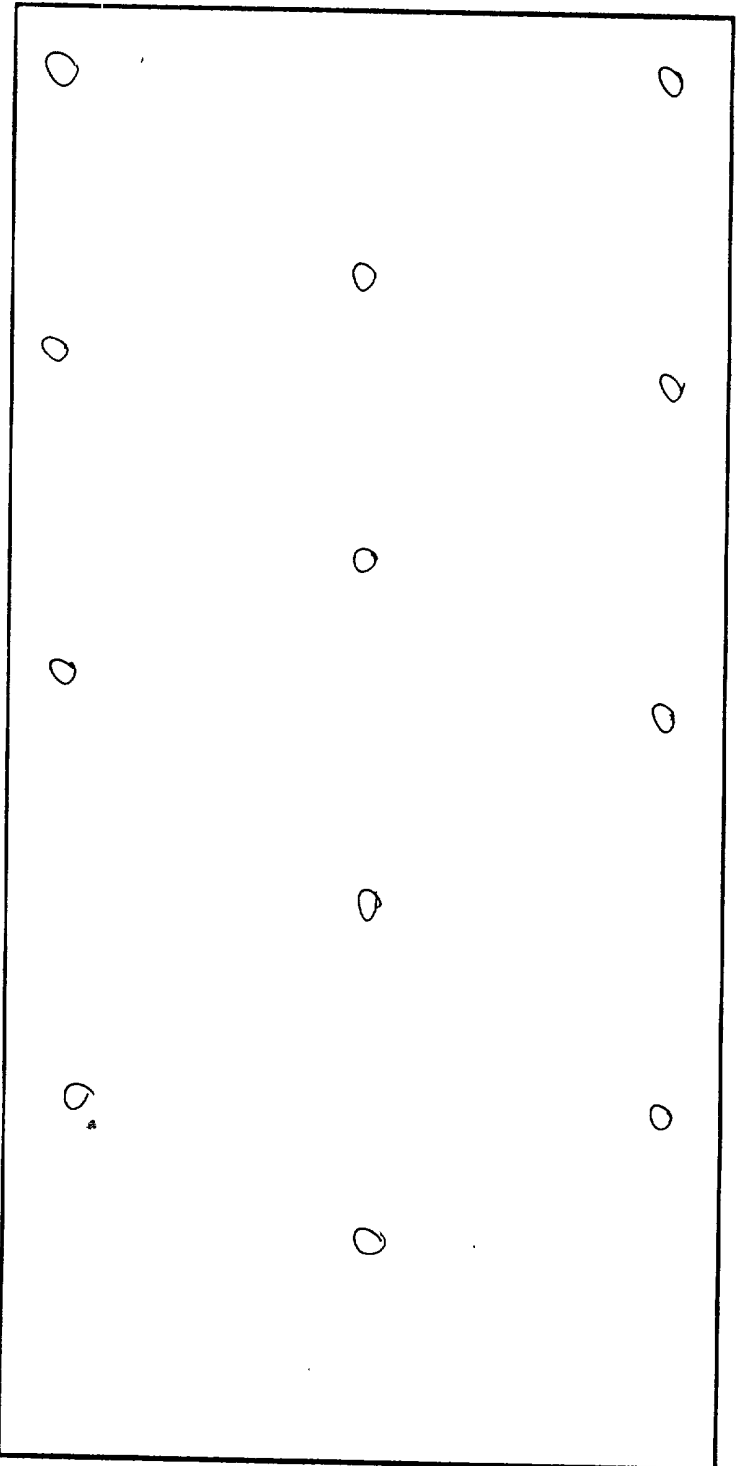
6-10-98

DIMENSIONS:

100' x 40' x 12"



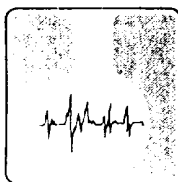
= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

12 point composite sample



# ASSAIGAI ANALYTICAL LABORATORIES, INC.

7300 Jefferson, NE • 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  
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

JUN 25 1998

**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: **9806169 JICARILLA**

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

Client Sample ID: **JAT 396 #1 CELL #1** Sample Matrix: **SOIL** Sample Collected: **06/10/98 09:40:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	Sequence	Run Date
<b>SW846-8020 Volatiles</b>								
9806169-01A	X98325	71-43-2	Benzene	ND	mg / Kg	50	0.005	06/15/98
	X98325	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	06/15/98
	X98325	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	06/15/98
	X98325		p/m Xylenes	ND	mg / Kg	50	0.01	06/15/98
	X98325	108-88-3	Toluene	ND	mg / Kg	50	0.005	06/15/98
<b>SW846-8015 Modified TPH</b>								
9806169-01B	X98321		Diesel Range Organics	ND	mg / Kg	25	25	06/20/98

Client Sample ID: **JAT 396 #1 CELL #2** Sample Matrix: **SOIL** Sample Collected: **06/10/98 09:50:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	Sequence	Run Date
<b>SW846-8020 Volatiles</b>								
9806169-02A	X98325	71-43-2	Benzene	ND	mg / Kg	50	0.005	06/15/98
	X98325	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	06/15/98
	X98325	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	06/15/98
	X98325		p/m Xylenes	ND	mg / Kg	50	0.01	06/15/98
	X98325	108-88-3	Toluene	ND	mg / Kg	50	0.005	06/15/98
<b>SW846-8015 Modified TPH</b>								
9806169-02B	X98321		Diesel Range Organics	ND	mg / Kg	25	25	06/20/98



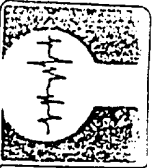
Assaigai Analytical Laboratories, Inc.  
**Certificate of Analysis**

Client: **APACHE CORPORATION**  
Project: **9806169 JICARILLA**

Client	<b>JAT 396 #1 CELL #3</b>	Sample Matrix	<b>SOIL</b>	Sample Collected	<b>06/10/98</b>
Sample ID					<b>10:00:00</b>

<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>
<b>SW846-8020 Volatiles</b>									
9806169-03A	X98325	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.536-16	06/15/98
	X98325	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.536-16	
	X98325	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.536-16	
	X98325		p/m Xylenes	ND	mg / Kg	50	0.01	XG.1998.536-16	
	X98325	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.536-16	
<b>SW846-8015 Modified TPH</b>									
9806169-03B	X98321		Diesel Range Organics	1600	mg / Kg	25	25	XG.1998.555-7	06/20/98

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



ASSAIGAI  
ANALYTICAL  
LABORATORIES, INC.

# Chain of Custody Record

Lab job no. 6169 Date 6/13/98

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

249-8734

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

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 Cross

Contract / Purchase Order / Quote \_\_\_\_\_

ANALYST FACILITY NUMBER	Field Sample Number/Location	Date	Time	Sample Type	Type / Size of Container	Temp.	Preservation Chemical	No. of Containers	Analysis Required	Remarks
1A	JAT 396 #1 cell #1	6-10-98	9:40	Soil	4 oz glass	4°C	TCC	1	X	
2A	JAT 396 #1 cell #2		9:50		4 oz glass			1	X	
2B								1	X	
3A	JAT 396 #1 cell #3		10:40					1	X	
3B								1	X	
<u>4/12/98</u>										

Relinquished by: Signature <u>Jeff Cross</u> Printed <u>Jeff Cross</u> Company <u>Apache Corp</u> Reason _____	Date <u>6/12/98</u> Time <u>5:32</u>	Received by: Signature <u>Eric D. Cross</u> Printed <u>Eric D. Cross</u> Company <u>ATI</u> Reason _____	Relinquished by: Signature <u>Eric D. Cross</u> Printed _____ Company _____ Reason _____	Date <u>6/12/98</u> Time <u>17:00</u>	Received by: Signature <u>Paul</u> Printed _____ Company _____ Reason _____
--	---	--	--	--	---

Method of Shipment: \_\_\_\_\_

Shipment No. \_\_\_\_\_

Special Instructions: \_\_\_\_\_

Comments: \_\_\_\_\_

LABORATORY

District I  
P.O. Box 1980, Hobbs, NM 88241-1980  
District II  
P.O. Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department  
**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-104  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

<sup>1</sup> Operator name and Address Apache Corporation 2000 Post Oak Blvd, Suite 100 Houston, TX 77056-4400		<sup>2</sup> OGRID Number 000873
		<sup>3</sup> Reason for Filing Code CH effective August 1, 1998
<sup>4</sup> API Number 30-039-23186	<sup>5</sup> Pool Name LINDRITH WEST - GALLUP-DAKOTA	<sup>6</sup> Pool Code 39189
<sup>7</sup> Property Code	<sup>8</sup> Property Name JICARILLA TRIBAL 396	<sup>9</sup> Well Number 3

<sup>10</sup> Surface Location

UI or lot no. C	Section 8	Township 23N	Range 3W	Lot. Idn	Feet from the 990	North/South line N	Feet from the 1690	East/West line W	County
--------------------	--------------	-----------------	-------------	----------	----------------------	-----------------------	-----------------------	---------------------	--------

<sup>11</sup> Bottom Hole Location

UI or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Lse Code F	<sup>13</sup> Producing Method Code F	<sup>14</sup> Gas Connection Date	<sup>15</sup> C-129 Permit Number	<sup>16</sup> 29 Effective Date	<sup>17</sup> C-129 Expiration Date				

III. Oil and Gas Transporters

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> POD	<sup>21</sup> O/G	<sup>22</sup> POD ULSTR Location and Description
0090108	GIANT REFINING CO P O BOX 256 FARMINGTON, NM 87499		O	
007057	EL PASO NATURAL GAS CO P O BOX 4990 FARMINGTON, NM		G	

IV Produced Water

<sup>23</sup> POD	<sup>24</sup> POD ULSTR Location and Description
-------------------	--

V. Well Completion Data

<sup>25</sup> Spud Date	<sup>26</sup> Ready Date	<sup>27</sup> TD	<sup>28</sup> PBTD	<sup>29</sup> Perforations
<sup>30</sup> Hole Size	<sup>31</sup> Casing & Tubing Size	<sup>32</sup> Depth Set	<sup>33</sup> Sacks Cement	

VI Well Test Data

<sup>34</sup> Date New Oil	<sup>35</sup> Gas Delivery Date	<sup>36</sup> Test Date	<sup>37</sup> Test Length	<sup>38</sup> Tbg. Pressure	<sup>39</sup> Csg. Pressure
<sup>40</sup> Choke Size	<sup>41</sup> Oil	<sup>42</sup> Water	<sup>43</sup> Gas	<sup>44</sup> AOF	<sup>45</sup> Test Method

<sup>46</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Pamela M. Leighton*

Printed Name:  
Pamela M. Leighton

Title:  
Sr Operations Clerk

Date: 7/10/98  
Phone: 713-296-7120

OIL CONSERVATION DIVISION

Approved by: *[Signature]*  
Title: SUPERVISOR DISTRICT #3

Approval Date: JUL 28 1998

<sup>47</sup> If this is a change of operator fill in the OGRID number and name of the previous operator  
OGRID #015422 M W Petroleum Corporation

Previous Operator Signature: *Pamela M. Leighton* Printed Name: Pamela M. Leighton Title: Sr Operations Clerk Date: 7/10/98