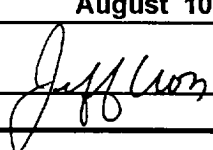


Date Remediation Started:		<u>5/9/97</u>	Date Completed:		<u>5/12/97</u>
Remediation Method: (Check all appropriate sections)		Excavation	<u>XXX</u>	Approx. cubic yards	<u>214</u>
		Landfarmed	<u>XX</u>	In situ Bioremediation	
		Other			
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)		Onsite	<u>XX</u>	Offsite	
General Description of Remedial Action:		<u>Excavate pit to 4' below pit bottom, 6' off pit sides.</u>			
		<u>Lay soil out on location in four dirt farm cells.</u>			
Groundwater Encountered:		No	<u>XX</u>	Yes	Depth <u> </u>
Final Pit:		<u>Sample location 4 point composite sample taken 8 to 10" into pit sidewalls,</u>			
Closure Sampling: (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>6'</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>		
	Sample Date	<u>5/12/97</u>	Sample Time	<u>3:20 PM</u>	
	Sample results				
	Benzene	(ppm)	<u>ND</u>		
	Total BTEX	(ppm)	<u>ND</u>		
	Field Headspace	(ppm)	<u>18.48</u>		
	TPH		<u>ND\Sides</u>		
			<u>1100\BTM</u>		
Groundwater Sample:		Yes	<u> </u>	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>

→ 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

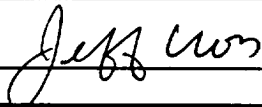
**Submit 1 copy to
Appropriate District
and 1 copy to
Santa Fe Office**

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 #4 Pit #2</u>	
Location: Unit or Qtr/Qtr Sec	<u>A</u>	<u>Sec 17</u>	T <u>23 N</u> R <u>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>10'</u> Width <u>10'</u> Depth <u>2'</u>			
Pit Location: Ending Pit Dimensions: Length <u>15'</u> Width <u>15'</u> Depth <u>12'</u>	(Attach diagram)		
Reference: Wellhead <u>XX</u>	Other _____		
Footage from reference: <u>100'</u>			
Direction from reference: <u>260</u> Degrees	_____ East	North	_____
	<u>XX</u> West	of South	<u>X</u>
Depth To Groundwater: (vertical distance from contaminants to seasonal high water elevation of groundwater)		Less than 50 feet (20 points)	_____
		50 feet to 99 feet (10 points)	_____
		Greater than 100 feet (0 points)	<u>0</u>
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)		Yes (20 points)	_____
		No (0 points)	<u>0</u>
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Less than 200 feet (20 points)	_____
		200 feet to 1000 feet (10 points)	_____
		Greater than 1000 feet (0 points)	<u>0</u>
		RANKING SCORE (TOTAL POINTS)	<u>0</u>

Date Remediation Started:	<u>5/12/97</u>	Date Completed:	<u>5/16/97</u>
Remediation Method: (Check all appropriate sections)	Excavation	<u>XXX</u>	Approx. cubic yards <u>93</u>
	Landfarmed	<u>XX</u>	In situ Bioremediation
	Other		
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)	Onsite	<u>XX</u>	Offsite
General Description of Remedial Action: <u>Excavate pit to 10' below pit bottom, 5' off pit sides.</u>			
<u>Lay soil out on location in four dirt farm cells.</u>			
Groundwater Encountered:	No	<u>XX</u>	Yes <u> </u> Depth <u> </u>

Final Pit:	Sample location	<u>4 point composite sample taken 8 to 10" into pit sidewalls,</u>	
Closure Sampling: (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>12'</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>
	Sample Date	<u>5/16/97</u>	Sample Time <u>11:30 AM</u>
	Sample results		
	Benzene	(ppm)	<u>ND</u>
	Total BTEX	(ppm)	<u>ND</u>
	Field Headspace	(ppm)	<u>60.2</u>
	TPH		<u>3400\Sides</u> <u>1000\BTM</u>
Groundwater Sample:	Yes	<u> </u>	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>

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

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# 4 PIT # 1</u>			
Location:	Unit or Qtr/Qtr	Sec <u>A</u>	SEC <u>17</u> T <u>23N</u> R <u>3W</u> 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: Pit Dimensions: Length <u>35'</u> Width <u>36'</u> Depth <u>6'</u>			
(Attach diagram)			
Reference: Wellhead <u>XXX</u> Other <u> </u>			
Footage from reference: <u>150'</u>			
Direction from reference: <u>190</u> Degrees <u> </u> East North <u> </u>			
<u>X</u> West of South <u>XX</u>			
Depth To Groundwater:		Less than 50 feet	(20 points) <u> </u>
(vertical distance from		50 feet to 99 feet	(10 points) <u> </u>
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) <u> </u>
(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) <u> </u>
(Downgradient lakes, playas and		Greater than 100 feet	(0 points) <u>0</u>
livestock or wildlife watering ponds)			
Wellhead Protection Area:		Yes	(20 points) <u> </u>
(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) <u> </u>
(Horizontal distance to perennial		100 feet to 1000 feet	(10 points) <u> </u>
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: 5/9/97 Date Completed: 5/12/97

Remediation Method: Excavation XXX Approx. cubic yards 214
 (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, 6' off pit sides.
Lay soil out on location in ^{four} ~~five~~ dirt farm cells.

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

Sample Date 5/12/97 Sample Time 3:20pm

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>18.48</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>ND\SIDE</u>		Total Xylenes	(ppb)	<u>NA</u>
			<u>1100\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. Mammitt DATE: 7-30-97

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

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# 4 PIT # 2</u>			
Location:	Unit or Qtr/Qtr	Sec <u>A</u>	SEC 17 T 23N R 3W 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>15'</u>	Width <u>15'</u>	Depth <u>12'</u>
Reference:	Wellhead <u>XXX</u>	Other <u> </u>	
Footage from reference:	<u>100'</u>		
Direction from reference:	<u>260</u> Degrees	<u> </u> East	North <u> </u>
		<u>XX</u> West	of South <u>X</u>
Depth To Groundwater: (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>
Distance to an Ephemeral Stream: (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>
Distance to Nearest Lake, Playa, or Watering Pond: (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>
Wellhead Protection Area: (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>
Distance To Surface Water: (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: 5/12/97 Date Completed: 5/16/97

Remediation Method: Excavation XXX Approx. cubic yards 93
(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 10' below pit bottom, 5' off pit sides.

Lay soil out on location in ^{four} five dirt farm cells.

Groundwater Encountered: No XXX Yes _____ Depth _____

Final Pit: Sample location 4 POINT COMPOSITE SAMPLE TAKEN 10" INTO PIT SIDEWALL

Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths) GRAB SAMPLE TAKEN 10" INTO PIT BOTTOM CENTER.

Sample depth 12' 8" to 10" into pit side walls, 10" into pit bottom.

Sample Date 5/16/97 Sample Time 11:30AM

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>60.2</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>3400\SIDE</u> <u>1000\BTM</u>		Total Xylenes	(ppb)	<u>NA</u>

Groundwater Sample: Yes _____ No XXX (If yes attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE 7/9/97 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

M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

LOCATION JIC TRIBAL 396 #4

PIT COUNT 2

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

Excavation								
DIMENSIONS			START: PIT #1 5/9/97 PIT #2 5/12/97			FINISH: PIT# 1 5/10/97 PIT #2 5/14/97		
	W	L	D		W	L	D	CU YDS
Pit 1	30'	30'	2'	Pit 1	35'	36'	6'	214
Pit 2	10'	10'	2'	Pit 2	15'	15'	12'	93
Pit 3				Pit 3				
		Pit 1 @ 6'	Pit 2 @ 6'	Pit 2 @ 10'		Pit 1 @ 6'	Pit 2 @ 12'	Pit 3 @
P I D	Center	105	400	250	P I D	Center	105	92
	NW Corner	85	650	200		NW Corner	85	86
	NE Corner	18.5	750	220		NE Corner	18.5	85
	SW Corner	16.5	1100	200		SW Corner	16.5	91
	SE Corner	95	980	195		SE Corner	95	74

NOTES:

5/9/97 START EXCAVATION ON PIT #1, STAINED LIGHT GRAY TO APPROX 3' STAINING CLEARED UP @ 6'
NO ODOR DETECTED. PIT WAS EXCAVATED TO 4' BELOW PIT BOTTOM. PID READINGS AT 6' (GOOD)

5/12/97 START EXCAVATION ON PIT #2. HEAVY STAINING ON SURFACE WITH LIGHT ODOR. EXCAVATE TO 6',
LIGHT GRAY STAINING AND LIGHT ODOR. PID READING HIGH @ 6' CONTINUE EXCAVATING.

5/13/96 EXCAVATE PIT #2 DOWN TO 8' LIGHT GRAY STAINING AND SLIGHT ODOR. PID READINGS HIGH.
CONTINUE EXCAVATING TO 10' VERY LIGHT STAINING WITH NO ODOR. PID READINGS STILL A LITTLE HIGH.

5/14/97 CONTINUE EXCAVATING PIT #2 TO 12' HIT BED ROCK @ 12' NO STAINING, NO ODOR,
PID READINGS GOOD @ 12'.

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

5/12/97, 5/16/97 SOIL SAMPLES WERE TAKEN AND SENT TO ASSAIGAI LABS.

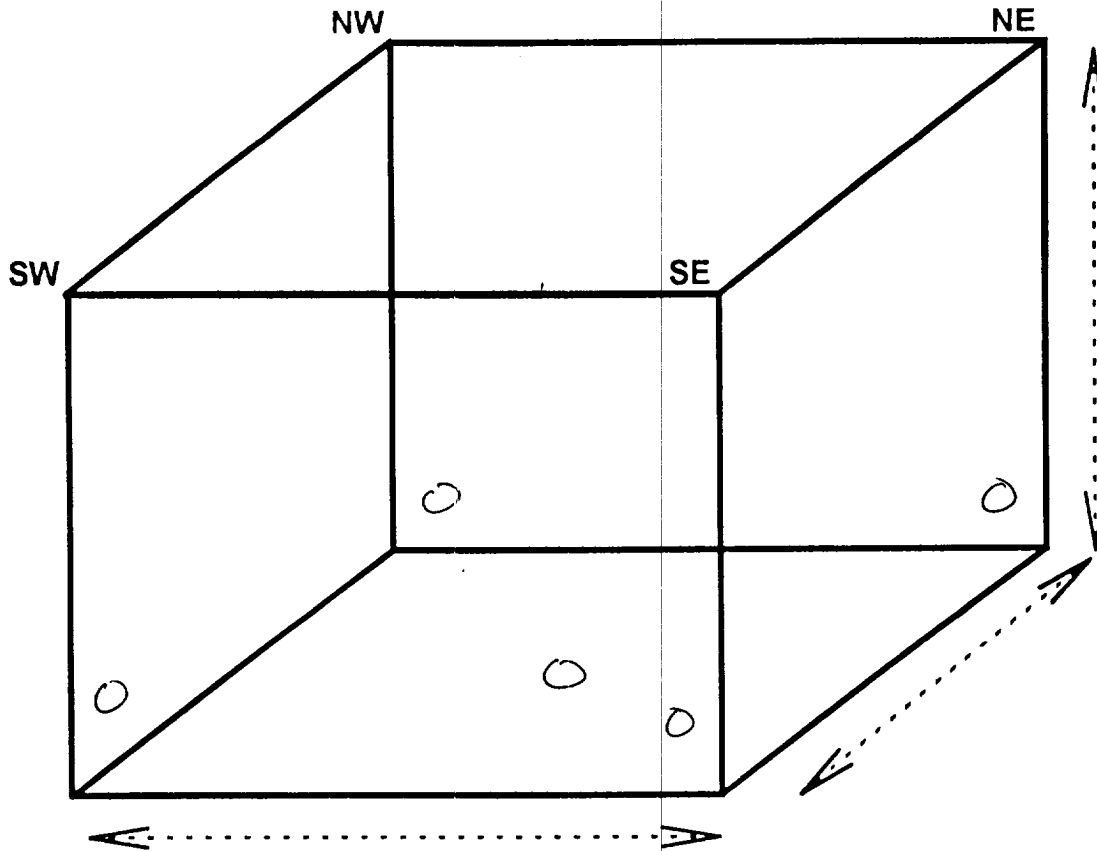
DATE:		5/12/97	5/16/97	SOIL SAMPLING					
		Pit 1 @ 6'	Pit 2 @ 12'	Pit 3 @	ANALYSIS RESULTS			PER LAB	ASSAIGAI
P I D	Center	84.3	35		PIT	TPH	BETEX	WITNESS	DATE
	NW Corner	1.2	8		NO	SIDE/BTM	SIDE/BTM		
	NE Corner	2.1	80		1	ND/1100	ND	JEFF C.	5/16/97
	SW Corner	1.7	78		2	3400/1000	ND	JEFF C.	5/20/97
	SE Corner	3.1	100		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	SIDE/BTM	SIDE/BTM		
	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	
P I D	Center				PIT	TPH	BETEX	WITNESS	DATE
	NW Corner				NO	SIDE/BTM	SIDE/BTM		
	NE Corner				1				
	SW Corner				2				
	SE Corner				3				



○ = SAMPLE AREA

WELL NAME SAT 396#4 pit #1

SAMPLE DATE 5-12-97

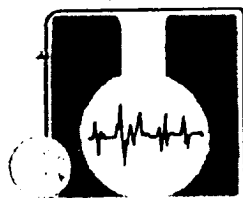
NOTES 4 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT

SIDEWALL

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



NOTES	4 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT
	SIDEWALL
	"
	1 POINT GRAB SAMPLE TAKEN 10" TO 12" INTO BOTTOM CENTER



**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 15:03

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9705139
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 05/14/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9705139-01A
Sample ID: JAT 396 #4 PIT 1 SIDES

Collected: 05/12/97 15:20:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	1250	05/16/97	SBTXME162
Toluene	ND	mg/Kg	0.0010	1250	05/16/97	SBTXME162
Ethylbenzene	ND	mg/Kg	0.0010	1250	05/16/97	SBTXME162
P-&m-Xylene	ND	mg/Kg	0.0020	1250	05/16/97	SBTXME162
O-Xylene	ND	mg/Kg	0.0010	1250	05/16/97	SBTXME162

Lab ID: 9705139-01B
Sample ID: JAT 396 #4 PIT 1 SIDES

Collected: 05/12/97 15:20:00
Matrix: SOIL

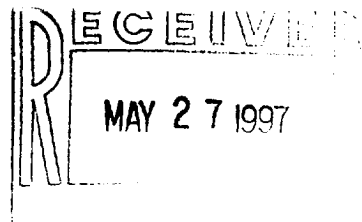
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	ND	mg/Kg	50	1.0	05/15/97	SDRO26

Lab ID: 9705139-02A
Sample ID: JAT 396 #4 PIT 1 BOTTOM

Collected: 05/12/97 15:50:00
Matrix: SOIL

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





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



Chain of Custody / Record

Lab Job No.: 5139 Date: 5/14/97
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: _____

ANALYST	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp.	Chemical
01A	SAT 394 #4 pit 1 side	5-12-97	15:20	Soil	402 g/ass	ICE	
01B	" " " " side		15:20				
02A	SAT 394 #4 Bottom		15:50				
02B	" " " " Bottom		15:50				

Received by: Jeff Gross Date: 5/14/97
Signature: Jeff Gross Printed: Jeff Gross
Company: Apache Corp. Reason: _____

Relinquished by: Elvin S. Chavez
Signature: Elvin S. Chavez Printed: Elvin S. Chavez
Company: ANL Reason: _____

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

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

Comments: _____

After analysis, samples are to be:
☐ Disposed of (additional fee)
☐ Stored (30 days min)
☐ Stored over 30 days (additional fee)
☐ Returned to customer

LABORATORY

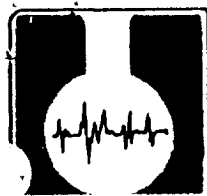
No. of Containers	Analysis Required	Remarks
1		
1		
1		
1		

RECEIVED
APACHE CORP.
MAY 27 1997
1910 N. BIG SPRING
MIDLAND, TEXAS 79701
(915) 570-1118

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

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

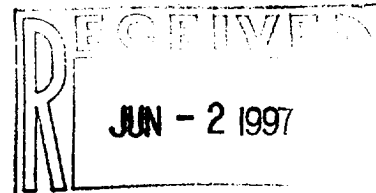
7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87106
(505) 345-8964



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

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

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Report Generated:
May 27, 1997 17:41

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9705182
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 05/20/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9705182-01A
Sample ID: JAT 396 #4 PIT 2 SIDES

Collected: 05/16/97 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	05/20/97	SBTXME164
Toluene	ND	mg/Kg	0.0010	500	05/20/97	SBTXME164
Ethylbenzene	ND	mg/Kg	0.0010	500	05/20/97	SBTXME164
P-&m-Xylene	ND	mg/Kg	0.0020	500	05/20/97	SBTXME164
O-Xylene	ND	mg/Kg	0.0010	500	05/20/97	SBTXME164

Lab ID: 9705182-01B
Sample ID: JAT 396 #4 PIT 2 SIDES

Collected: 05/16/97 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	3400	mg/Kg	50	5.0	05/22/97	SDRO27

Lab ID: 9705182-02A
Sample ID: JAT 396 #4 PIT 2 BOTTOM

Collected: 05/16/97 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	05/20/97	SBTXME164
Toluene	ND	mg/Kg	0.0010	500	05/20/97	SBTXME164
Ethylbenzene	ND	mg/Kg	0.0010	500	05/20/97	SBTXME164
P-&m-Xylene	ND	mg/Kg	0.0020	500	05/20/97	SBTXME164
O-Xylene	ND	mg/Kg	0.0010	500	05/20/97	SBTXME164



RECEIVED
JUN - 2 1997
Page: 2

I.D: 9705182-02B
Sample ID: JAT 396 #4 PIT 2 BOTTOM

Collected: 05/16/97 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	1000	mg/Kg	50	1.0	05/21/97	SDRO27

Wm. P. Biava
William P. Biava
President

JUN - 2 1997

WORKORDER COMMENTS

DATE : 05/27/97
WORKORDER:

DEFINITIONS/DATA QUALIFIERS

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

- ND = Analyte "not detected" in analysis at the sample specific detection limit.
- D_F = Sample "dilution factor"
- NT = Analyte "not tested" per client request.
- B = Analyte was also detected in laboratory method QC blank.
- E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.
- LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

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

REPORT COMMENTS



Chain of Custody Record

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

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

1910 N. B. RING
MIDLAND, TEXAS 79705
(915) 570-1116

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Client Apache Corporation Project Manager / Contact Jeff Cross

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) [Signature]

Contract / Purchase Order / Quote _____

AAL FIELD NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation	
						Temp.	Chemical
01A	JAT 396 #4 pt 3 5.00	5-16-97	11:30	spil	462 g / 450	4°C ICE	
01B	" " "	"	11:36	"	"	"	"
02A	JAT 396 #4 pt 3 Bottom	"	11:45	"	"	"	"
02B	" " "	"	11:45	"	"	"	"

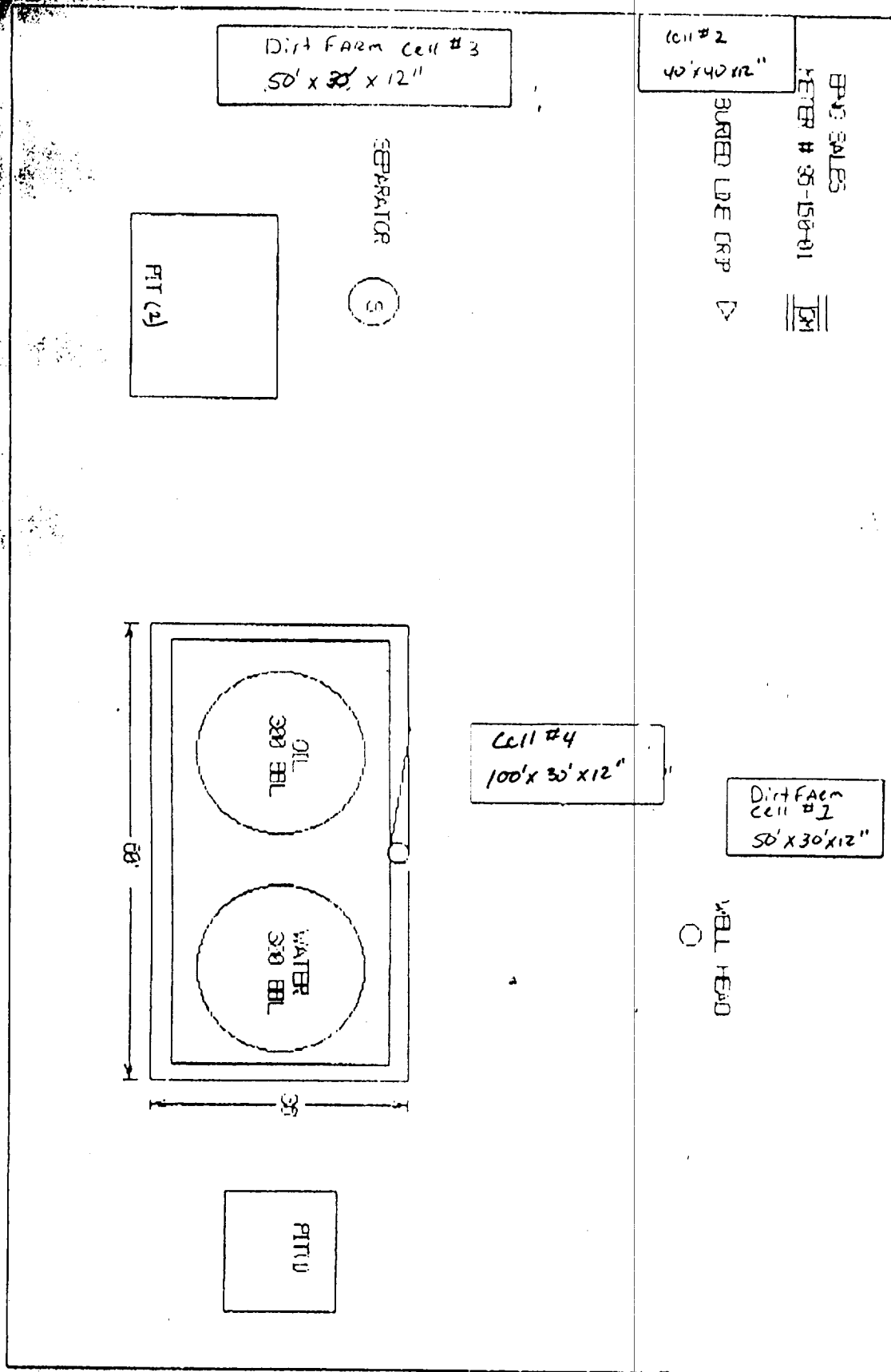
[Signature] 5/14/97

No. of Containers	Analysis Required	Remarks
BTX (md 805)		
DRG		

Relinquished by: Signature <u>[Signature]</u> Printed <u>ELVIN S. CHAVEZ</u> Company <u>AACT</u> Reason _____	Received by: Signature <u>[Signature]</u> Printed <u>ELVIN S. CHAVEZ</u> Company <u>AACT</u> Reason _____	Date <u>5/14/97</u> Time <u>2:32</u>	Relinquished by: Signature <u>[Signature]</u> Printed <u>MICKEL APPEAS</u> Company <u>APACHE CORP.</u> Reason _____	Received by: Signature <u>[Signature]</u> Printed <u>ELVIN S. CHAVEZ</u> Company <u>AACT</u> Reason _____	Date <u>5/20/97</u> Time <u>8:12 AM</u>
---	---	---	---	---	--

Method of Shipment: _____	After analysis, samples are to be: ☐ Disposed of (additional fee) ☐ Stored (30 days max) ☐ Stored over 30 days (additional fee) ☐ Returned to customer
Shipment No. _____	
Special Instructions: _____	
Comments: _____	

LABORATORY



NORTH

GENERAL CRUISE

NAV PETROLEUM

ACRILLA TRIBAL 395 NUMBER 4

NE/4 NE/4 Lease # 241 396

SECTION 17, TOWNSHIP 23N RANGE 3W

RIO ARriba COUNTY, NM

Revised 8/2/97 HB

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 # 4 CELL # 1</u>			
Location: Unit or Qtr/Qtr Sec <u>A</u> Sec <u>17</u> T <u>23</u> N R <u>3</u> W County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>5/9/97</u>		Date Completed: <u>6/13/98</u>	
Remediation Method: Landfarmed <u>XXX</u>		Approx. cubic yards <u>68</u>	
Composted <u> </u>			
Other <u> </u>		<u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>6/13/98</u> Time: <u>9:20AM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>3800</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>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>Jeff Cross</u>		DATE: <u>7-29-98</u>	

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

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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 # 4 CELL # 2</u>			
Location: Unit or Qtr/Qtr Sec <u>A</u> Sec <u>17</u> T <u>23</u> N R <u>3</u> W County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>5/9/97</u>		Date Completed: <u>6/13/98</u>	
Remediation Method: Landfarmed <u>XXX</u>		Approx. cubic yards <u>59</u>	
Composted <u> </u>			
Other <u> </u>		<u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>6/13/98</u> Time: <u>9:30AM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>3900</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>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>Kent C Mamm</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 # 4 CELL # 3</u>	
Location: Unit or Qtr/Qtr Sec <u>A</u> Sec <u>17</u> T <u>23</u> N <u>R 3 W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>5/9/97</u> Date Completed: <u>6/13/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>68</u>	
Composted _____	
Other <u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling Sampling Date: <u>6/13/98</u> Time: <u>9:40AM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>2200</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>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
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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 # 4 CELL # 4</u>	
Location: Unit or Qtr/Qtr Sec <u>A</u> Sec <u>17</u> T <u>23 N</u> R <u>3 W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>5/12/97</u> Date Completed: <u>6/10/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>111</u>	
Composted _____	
Other <u>SOIL TO BE PUT BACK IN PIT # 2</u>	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling Sampling Date: <u>6/10/98</u> Time: <u>1:10PM</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>	
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>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) <u>use as Backfill</u>	
SIGNED: <u>Kent C Mamm</u>	DATE: <u>7-29-98</u>

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE JAT 396 # 4

* AMOUNT OF SOIL UNDERGOING REMEDIATION 307 Yds.

CELL No. <u>1</u>	SampDATE 6/13/98	TPH 3800	BTEX ND
DIMENSIONS(LxWxH) <u>50' X 30' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTH</u>			
* DATE BEGAN: <u>5/9/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/13/98</u>			
CELL No. <u>2</u>	SampDATE 6/13/98	TPH 3900	BTEX ND
DIMENSIONS(LxWxH) <u>40' X40' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTHWEST</u>			
* DATE BEGAN: <u>5/9/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/13/98</u>			
CELL No. <u>3</u>	SampDATE 6/13/98	TPH 2200	BTEX ND
DIMENSIONS(LxWx) <u>50' X 30' X 12"</u>			
CELL LOCATION (dir. from well head) <u>WEST</u>			
* DATE BEGAN: <u>5/9/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/13/98</u>			
REMEDICATION RECORD: (Date, Treatment, Tilling)			
5/20/97 TREAT ALL CELLS WITH 46-0-0 FERTILIZER, WATER, PLOW AND TILL SOIL.			
5/30/97 PLOW AND TILL ALL CELLS.			
7/11/97 TILL ALL CELLS.			
8/7/97 TREAT CELL # 1 WITH 23LBS PHOSPHORUS, 42LBS LIME.			
8/7/97 TREAT CELL # 4 WITH 35LBS PHOSPHORUS, 88LBS LIME.			
8/14/97 WATER, PLOW AND TILL ALL CELLS.			
4/28/98 PLOW ALL CELLS, 4/29/98 TILL ALL CELLS.			
6/2/98 PLOW ALL CELLS, 6/3/98 TILL ALL CELLS.			

From excavation reports.

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE JAT 396 # 4

* AMOUNT OF SOIL UNDERGOING REMEDIATION 307 Yds.

CELL No. <u>4</u>	SampDATE 6/10/98	TPH ND	BTEX ND
DIMENSIONS(LxWxH) <u>100' X 30' X 12"</u>			
CELL LOCATION (dir. from well head) <u>WEST</u>			
* DATE BEGAN: <u>5/12/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/10/98</u>			
CELL No. <u>5</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>6</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)			

From excavation reports.

WELL NAME:

JAT 396 #4 CELL #1

SAMPLE DATE:

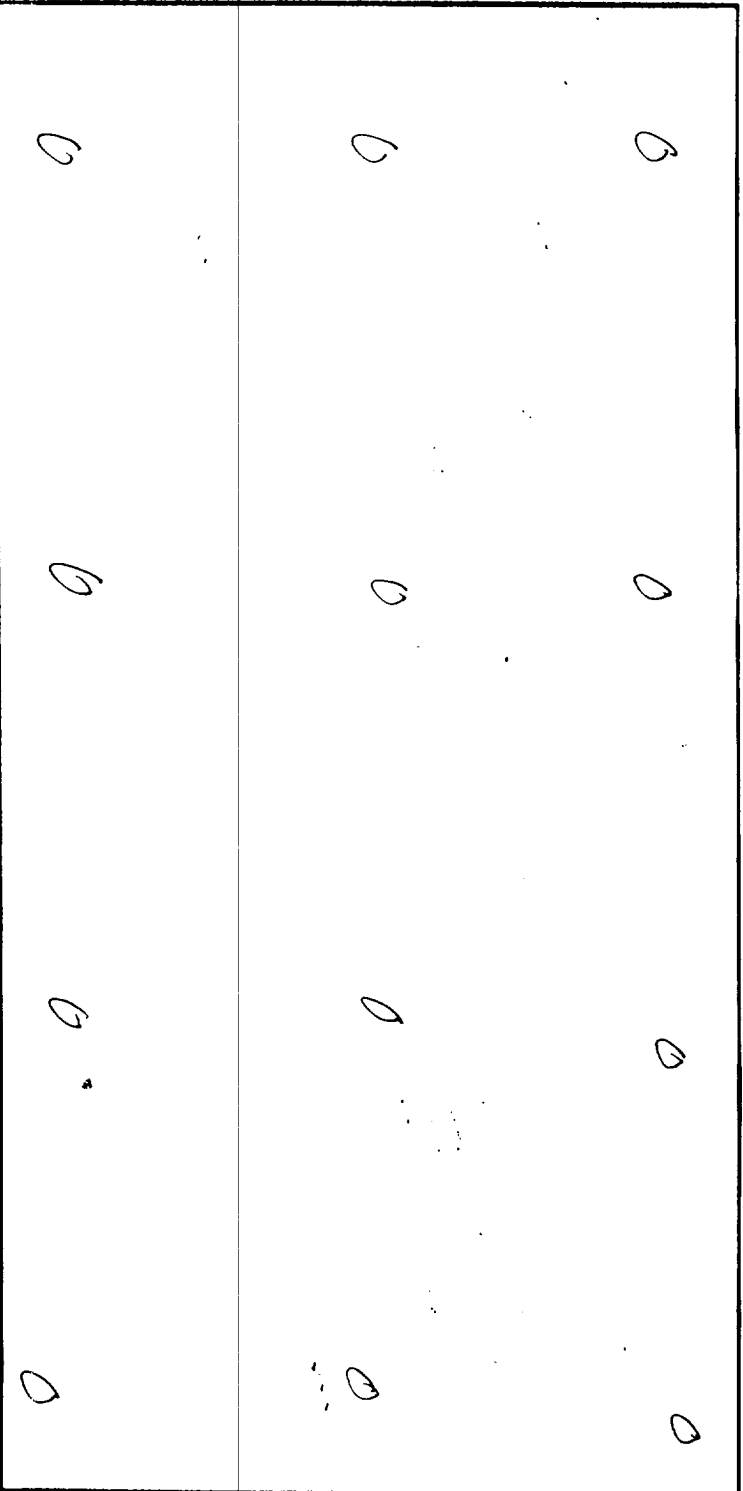
6/13/98

DIMENSIONS:

50' x 30' x 12'



= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL

18 POINT COMPOSITE SAMPLE

WELL NAME:

JAT 396 #4 CELL #2

SAMPLE DATE:

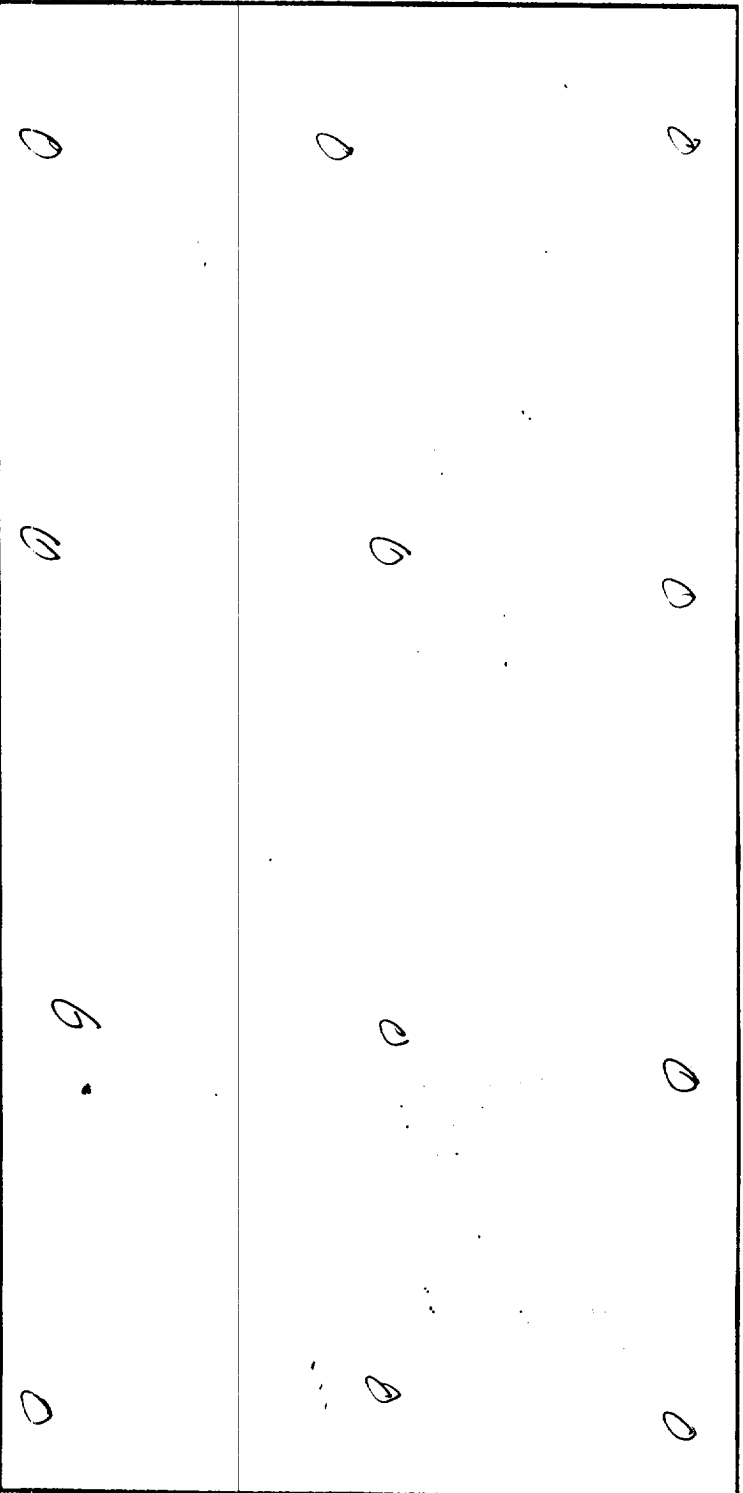
6/13/98

DIMENSIONS:

40' x 40' x 12"



= SAMPLE AREA



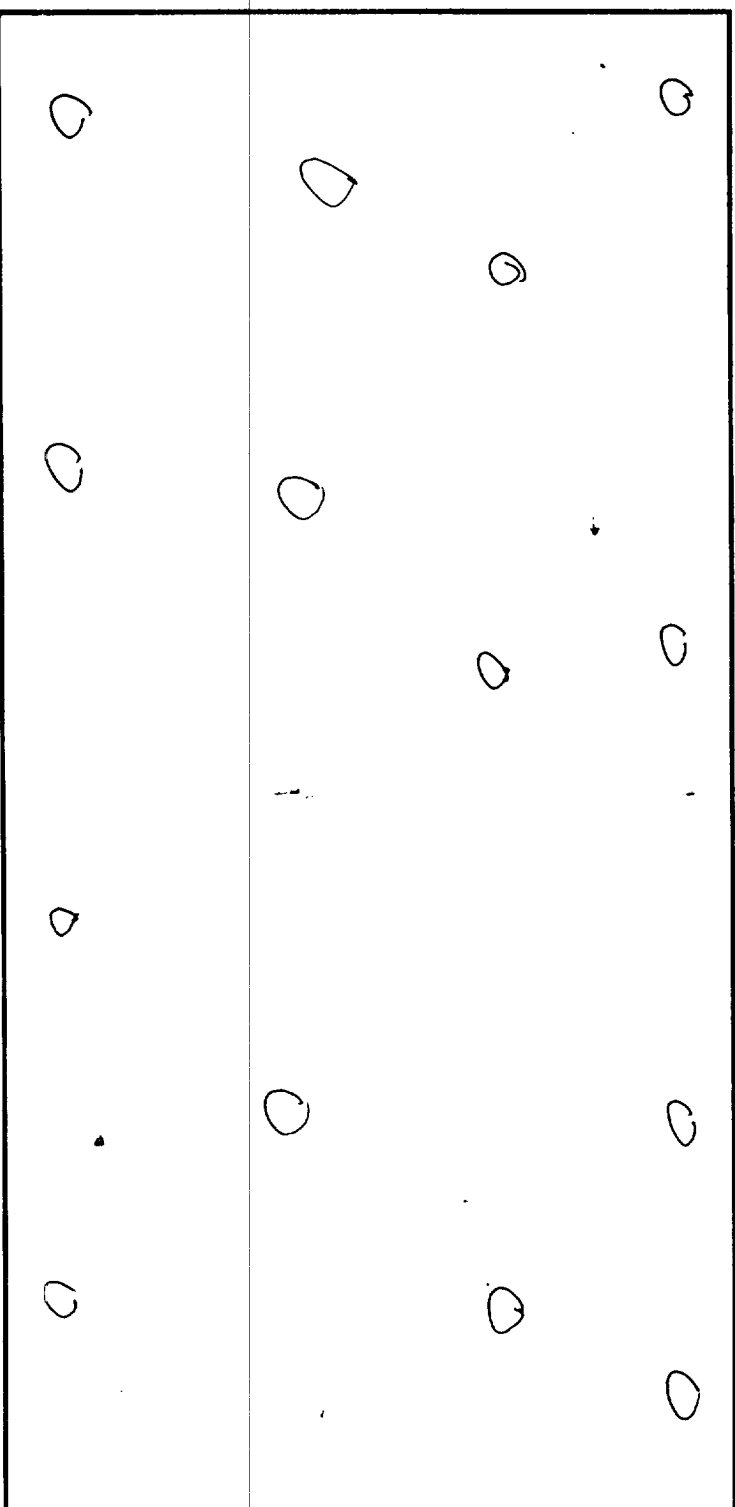
NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL

12 FOOT COMPOSITE SAMPLE

WELL NAME: SAT 396#4 Cell #4
SAMPLE DATE: 6-10-98
DIMENSIONS: 100' x 30' x 12"

○ = SAMPLE AREA



NOTES: ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

14 point composite sample

WELL NAME:

JAT 396 #4 CELL #3

SAMPLE DATE:

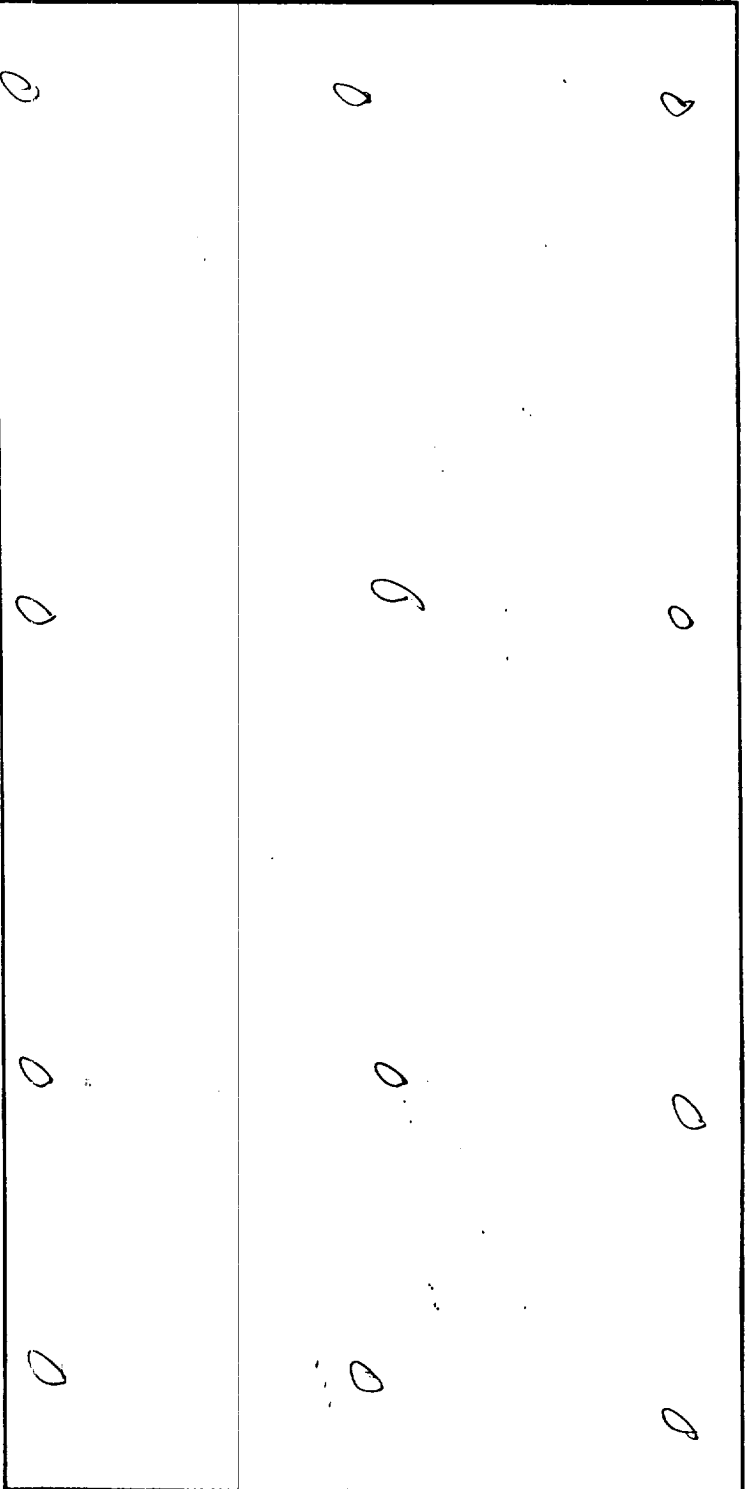
6/13/98

DIMENSIONS:

50' x 30' x 12"



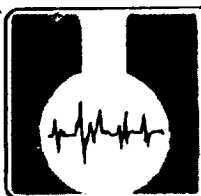
= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL

12 POINT COMPOSITE SAMPLE



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

JUN 26 1998

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: **9806215 JICARILLA**

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

Client Sample ID **JIC 396 #4 CELL #1**

Sample Matrix **SOIL**

Sample Collected **06/13/98
09:20:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	*	Sequence	Run Date
SW846-8010/8020 Volatiles									
9806215-01A	X98329	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.550-15	06/17/98
	X98329	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.550-15	
	X98329	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.550-15	
	X98329		P/M-Xylenes	ND	mg / Kg	50	0.01	XG.1998.550-15	
	X98329	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.550-15	
SW846-8015 Modified TPH									
9806215-01B	X98332		Diesel Range Organics	3800	mg / Kg	25	25	XG.1998.561-12	06/23/98

Client Sample ID **JIC 396 #4 CELL #2**

Sample Matrix **SOIL**

Sample Collected **06/13/98
09:30:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	*	Sequence	Run Date
SW846-8010/8020 Volatiles									
9806215-02A	X98329	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.550-17	06/17/98
	X98329	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.550-17	
	X98329	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.550-17	
	X98329		P/M-Xylenes	ND	mg / Kg	50	0.01	XG.1998.550-17	
	X98329	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.550-17	
SW846-8015 Modified TPH									
9806215-02B	X98332		Diesel Range Organics	3900	mg / Kg	25	25	XG.1998.561-13	06/23/98



Assaigai Analytical Laboratories, Inc.
Certificate of Analysis

Client: **APACHE CORPORATION**
Project: **9806215 JICARILLA**

JUN 26 1998

Client Sample ID **JIC 396 #4 CELL #3**

Sample Matrix **SOIL**

Sample Collected **06/13/98 09:40:00**

<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>
SW846-8010/8020 Volatiles									
9806215-03A	X98329	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.550-16	06/17/98
	X98329	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.550-16	
	X98329	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.550-16	
	X98329		P/M-Xylenes	ND	mg / Kg	50	0.01	XG.1998.550-16	
	X98329	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.550-16	
SW846-8015 Modified TPH									
9806215-03B	X98332		Diesel Range Organics	2200	mg / Kg	25	25	XG.1998.561-14	06/23/98

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

Quality Control Summary

JUN 26 1998

Client: APACHE CORPORATION

Project: 9806215 JICARILLA

* explanation of codes

D	Not applicable due to sample dilution
L	Not applicable due to MDL proximity

QC Type LCS: Lab Control Spike

QC Matrix SOLID

QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-001	Benzene	110	% Recovery		XG.1998.550 - 1	06/17/98
	X98329-001	Ethylbenzene	110	% Recovery		XG.1998.550 - 1	
	X98329-001	o-Xylene	107	% Recovery		XG.1998.550 - 1	
	X98329-001	P/M-Xylenes	110	% Recovery		XG.1998.550 - 1	
	X98329-001	Toluene	108	% Recovery		XG.1998.550 - 1	
SW846-8015 Modified TPH							
X98332	X98332-002	Diesel Range Organics	115	% Recovery		XG.1998.561 - 1	06/23/98

QC Type LCSD: Lab Control Spike Duplicate Accuracy

QC Matrix SOLID

QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-002	Benzene	109	% Recovery		XG.1998.550 - 2	06/17/98
	X98329-002	Ethylbenzene	106	% Recovery		XG.1998.550 - 2	
	X98329-002	o-Xylene	103	% Recovery		XG.1998.550 - 2	
	X98329-002	P/M-Xylenes	106	% Recovery		XG.1998.550 - 2	
	X98329-002	Toluene	105	% Recovery		XG.1998.550 - 2	
SW846-8015 Modified TPH							
X98332	X98332-003	Diesel Range Organics	126	% Recovery		XG.1998.561 - 2	06/23/98

QC Type LCSD: Lab Control Spike Duplicate Precision

QC Matrix SOLID

QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-002	Benzene	2	RPD		XG.1998.550 - 2	06/17/98
	X98329-002	Ethylbenzene	3	RPD		XG.1998.550 - 2	
	X98329-002	o-Xylene	4	RPD		XG.1998.550 - 2	
	X98329-002	P/M-Xylenes	4	RPD		XG.1998.550 - 2	
	X98329-002	Toluene	3	RPD		XG.1998.550 - 2	
SW846-8015 Modified TPH							
X98332	X98332-003	Diesel Range Organics	9	RPD		XG.1998.561 - 2	06/23/98

Quality Control Summary

Client: **APACHE CORPORATION**
 Project: **9806215 JICARILLA**

JUN 26 1998

* explanation of codes

D	Not applicable due to sample dilution
L	Not applicable due to MDL proximity

QC Type		MB: Method Blank		QC Matrix		SOLID		
QC Group	Run ID			Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles								
X98329	X98329-003	Benzene		< 0.005	mg / Kg		XG.1998.550 - 3	06/17/98
	X98329-003	Ethylbenzene		< 0.005	mg / Kg		XG.1998.550 - 3	
	X98329-003	o-Xylene		< 0.005	mg / Kg		XG.1998.550 - 3	
	X98329-003	P/M-Xylenes		< 0.010	mg / Kg		XG.1998.550 - 3	
	X98329-003	Toluene		< 0.005	mg / Kg		XG.1998.550 - 3	
SW846-8015 Modified TPH								
X98332	X98332-001	Diesel Range Organics		< 25	mg / Kg		XG.1998.561 - 15	06/23/98

QC Type		MS: Matrix Spike		QC Matrix		SOLID	
QC Group	Run ID	Result		Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-005	Benzene	102	% Recovery		XG.1998.550 - 5	06/17/98
	X98329-005	Ethylbenzene	108	% Recovery		XG.1998.550 - 5	
	X98329-005	o-Xylene	105	% Recovery		XG.1998.550 - 5	
	X98329-005	P/M-Xylenes	108	% Recovery		XG.1998.550 - 5	
	X98329-005	Toluene	105	% Recovery		XG.1998.550 - 5	
SW846-8015 Modified TPH							
X98332	X98332-005	Diesel Range Organics	130	% Recovery		XG.1998.561 - 3	06/23/98

QC Type		MSD: Matrix Spike Duplicate Accuracy		QC Matrix		SOLID	
QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-006	Benzene	103	% Recovery		XG.1998.550 - 6	06/17/98
	X98329-006	Ethylbenzene	111	% Recovery		XG.1998.550 - 6	
	X98329-006	o-Xylene	108	% Recovery		XG.1998.550 - 6	
	X98329-006	P/M-Xylenes	110	% Recovery		XG.1998.550 - 6	
	X98329-006	Toluene	108	% Recovery		XG.1998.550 - 6	
SW846-8015 Modified TPH							
X98332	X98332-006	Diesel Range Organics	121	% Recovery		XG.1998.561 - 4	06/23/98

Quality Control Summary

Client: **APACHE CORPORATION**
 Project: **9806215 JICARILLA**

JUN 26 1998

* explanation of codes

D	Not applicable due to sample dilution
L	Not applicable due to MDL proximity

QC Type **MSD: Matrix Spike Duplicate Precision**

QC Matrix **SOLID**

QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-006	Benzene	1	RPD		XG.1998.550 - 6	06/17/98
	X98329-006	Ethylbenzene	2	RPD		XG.1998.550 - 6	
	X98329-006	o-Xylene	2	RPD		XG.1998.550 - 6	
	X98329-006	P/M-Xylenes	2	RPD		XG.1998.550 - 6	
	X98329-006	Toluene	2	RPD		XG.1998.550 - 6	
SW846-8015 Modified TPH							
X98332	X98332-006	Diesel Range Organics	7	RPD		XG.1998.561 - 4	06/23/98

Surrogate Summary: Fraction

Client: **APACHE CORPORATION**Project: **9806215 JICARILLA****JUN 26 1998**

* explanation of codes

D

Not applicable due to sample dilution

Client Sample ID **JIC 396 #4 CELL #1** Sample Matrix **SOIL**

Fraction	QC Group	Run ID	Surrogate	% Recovery	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
9806215-01A	X98329	X98329-015	4-Bromofluorobenzene	103		XG.1998.550 - 15	06/17/98
		X98329-015	aaa-Trifluorotoluene	106		XG.1998.550 - 15	
		X98329-015	Bromochloromethane	95		XG.1998.550 - 15	
		X98329-015	Bromochloropropane	93		XG.1998.550 - 15	
		X98329-015	Dichlorobutane	82		XG.1998.550 - 15	
SW846-8015 Modified TPH							
9806215-01B	X98332	X98332-011	O-terphenyl	101		XG.1998.561 - 12	06/23/98

Client Sample ID **JIC 396 #4 CELL #2** Sample Matrix **SOIL**

Fraction	QC Group	Run ID	Surrogate	% Recovery	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
9806215-02A	X98329	X98329-017	4-Bromofluorobenzene	102		XG.1998.550 - 17	06/17/98
		X98329-017	aaa-Trifluorotoluene	106		XG.1998.550 - 17	
		X98329-017	Bromochloromethane	93		XG.1998.550 - 17	
		X98329-017	Bromochloropropane	93		XG.1998.550 - 17	
		X98329-017	Dichlorobutane	81		XG.1998.550 - 17	
SW846-8015 Modified TPH							
9806215-02B	X98332	X98332-012	O-terphenyl	116		XG.1998.561 - 13	06/23/98

Client Sample ID **JIC 396 #4 CELL #3** Sample Matrix **SOIL**

Fraction	QC Group	Run ID	Surrogate	% Recovery	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
9806215-03A	X98329	X98329-016	4-Bromofluorobenzene	102		XG.1998.550 - 16	06/17/98
		X98329-016	aaa-Trifluorotoluene	107		XG.1998.550 - 16	
		X98329-016	Bromochloromethane	92		XG.1998.550 - 16	
		X98329-016	Bromochloropropane	93		XG.1998.550 - 16	
		X98329-016	Dichlorobutane	81		XG.1998.550 - 16	
SW846-8015 Modified TPH							
9806215-03B	X98332	X98332-013	O-terphenyl	97		XG.1998.561 - 14	06/23/98

Assaigal Analytical Laboratories, Inc.
Surrogate Summary: QC

Client: **APACHE CORPORATION**
 Project: **9806215 JICARILLA**

* explanation of codes	
D	Not applicable due to sample dilution

JUN 26 1998

QC Type	LCS: Lab Control Spike	QC Matrix	SOLID
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QC Group	Run ID	Surrogate	% Recovery	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles						
X98329	X98329-001	4-Bromofluorobenzene	99		XG.1998.550 - 1	06/17/98
	X98329-001	aaa-Trifluorotoluene	102		XG.1998.550 - 1	
	X98329-001	Bromochloromethane	92		XG.1998.550 - 1	
	X98329-001	Bromochloropropane	93		XG.1998.550 - 1	
	X98329-001	Dichlorobutane	90		XG.1998.550 - 1	
SW846-8015 Modified TPH						
X98332	X98332-002	O-terphenyl	100		XG.1998.561 - 1	06/23/98

QC Type	LCSD: Lab Control Spike Duplicate Precision	QC Matrix	SOLID
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QC Group	Run ID	Surrogate	% Recovery	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles						
X98329	X98329-002	4-Bromofluorobenzene	99		XG.1998.550 - 2	06/17/98
	X98329-002	aaa-Trifluorotoluene	104		XG.1998.550 - 2	
	X98329-002	Bromochloromethane	94		XG.1998.550 - 2	
	X98329-002	Bromochloropropane	95		XG.1998.550 - 2	
	X98329-002	Dichlorobutane	91		XG.1998.550 - 2	
SW846-8015 Modified TPH						
X98332	X98332-003	O-terphenyl	113		XG.1998.561 - 2	06/23/98

QC Type	MB: Method Blank	QC Matrix	SOLID
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QC Group	Run ID	Surrogate	% Recovery	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles						
X98329	X98329-003	4-Bromofluorobenzene	102		XG.1998.550 - 3	06/17/98
	X98329-003	aaa-Trifluorotoluene	104		XG.1998.550 - 3	
	X98329-003	Bromochloromethane	93		XG.1998.550 - 3	
	X98329-003	Bromochloropropane	94		XG.1998.550 - 3	
	X98329-003	Dichlorobutane	91		XG.1998.550 - 3	
SW846-8015 Modified TPH						
X98332	X98332-001	O-terphenyl	88		XG.1998.561 - 15	06/23/98

Assaigai Analytical Laboratories, Inc.
Surrogate Summary: QC

Client: **APACHE CORPORATION**
Project: **9806215 JICARILLA**

*** explanation of codes**

D Not applicable due to sample dilution

JUN 26 1998

QC Type		MS: Matrix Spike		QC Matrix		SOLID	
QC Group	Run ID	Surrogate	% Recovery	*	Run Group - #	Run Date	
SW846-8010/8020 Volatiles							
X98329	X98329-005	4-Bromofluorobenzene	103		XG.1998.550 - 5	06/17/98	
	X98329-005	aaa-Trifluorotoluene	98		XG.1998.550 - 5		
	X98329-005	Bromochloromethane	84		XG.1998.550 - 5		
	X98329-005	Bromochloropropane	91		XG.1998.550 - 5		
	X98329-005	Dichlorobutane	90		XG.1998.550 - 5		
SW846-8015 Modified TPH							
X98332	X98332-005	O-terphenyl	125		XG.1998.561 - 3	06/23/98	

QC Type	MSD: Matrix Spike Duplicate Precision				QC Matrix	SOLID
QC Group	Run ID	Surrogate	% Recovery	*	Run Group - #	Run Date
		SW846-8010/8020 Volatiles				
X98329	X98329-006	4-Bromofluorobenzene	102		XG.1998.550 - 6	06/17/98
	X98329-006	aaa-Trifluorotoluene	99		XG.1998.550 - 6	
	X98329-006	Bromochloromethane	83		XG.1998.550 - 6	
	X98329-006	Bromochloropropane	91		XG.1998.550 - 6	
	X98329-006	Dichlorobutane	91		XG.1998.550 - 6	
		SW846-8015 Modified TPH				
X98332	X98332-006	O-terphenyl	118		XG.1998.561 - 4	06/23/98

Quality Control Summary

Client: APACHE CORPORATION

Project: 9806216 JICARILLA

JUN 26 1998

* explanation of codes

D	Not applicable due to sample dilution
L	Not applicable due to MDL proximity

QC Type LCS: Lab Control Spike

QC Matrix SOLID

QC Group	Run ID	Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles						
X98329	X98329-001	Benzene	110	% Recovery	XG.1998.550 - 1	06/17/98
	X98329-001	Ethylbenzene	110	% Recovery	XG.1998.550 - 1	
	X98329-001	o-Xylene	107	% Recovery	XG.1998.550 - 1	
	X98329-001	P/M-Xylenes	110	% Recovery	XG.1998.550 - 1	
	X98329-001	Toluene	108	% Recovery	XG.1998.550 - 1	
SW846-8015 Modified TPH						
X98332	X98332-002	Diesel Range Organics	115	% Recovery	XG.1998.561 - 1	06/23/98

QC Type LCSD: Lab Control Spike Duplicate Accuracy

QC Matrix SOLID

QC Group	Run ID	Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles						
X98329	X98329-002	Benzene	109	% Recovery	XG.1998.550 - 2	06/17/98
	X98329-002	Ethylbenzene	106	% Recovery	XG.1998.550 - 2	
	X98329-002	o-Xylene	103	% Recovery	XG.1998.550 - 2	
	X98329-002	P/M-Xylenes	106	% Recovery	XG.1998.550 - 2	
	X98329-002	Toluene	105	% Recovery	XG.1998.550 - 2	
SW846-8015 Modified TPH						
X98332	X98332-003	Diesel Range Organics	126	% Recovery	XG.1998.561 - 2	06/23/98

QC Type LCSD: Lab Control Spike Duplicate Precision

QC Matrix SOLID

QC Group	Run ID	Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles						
X98329	X98329-002	Benzene	2	RPD	XG.1998.550 - 2	06/17/98
	X98329-002	Ethylbenzene	3	RPD	XG.1998.550 - 2	
	X98329-002	o-Xylene	4	RPD	XG.1998.550 - 2	
	X98329-002	P/M-Xylenes	4	RPD	XG.1998.550 - 2	
	X98329-002	Toluene	3	RPD	XG.1998.550 - 2	
SW846-8015 Modified TPH						
X98332	X98332-003	Diesel Range Organics	9	RPD	XG.1998.561 - 2	06/23/98

Quality Control Summary

Client: **APACHE CORPORATION**
 Project: **9806216 JICARILLA**

JUN 26 1998

* explanation of codes

D	Not applicable due to sample dilution
L	Not applicable due to MDL proximity

QC
Type

MB: Method Blank

QC
Matrix

SOLID

QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-003	Benzene	< 0.005	mg / Kg		XG.1998.550 - 3	06/17/98
	X98329-003	Ethylbenzene	< 0.005	mg / Kg		XG.1998.550 - 3	
	X98329-003	o-Xylene	< 0.005	mg / Kg		XG.1998.550 - 3	
	X98329-003	P/M-Xylenes	< 0.010	mg / Kg		XG.1998.550 - 3	
	X98329-003	Toluene	< 0.005	mg / Kg		XG.1998.550 - 3	
SW846-8015 Modified TPH							
X98332	X98332-001	Diesel Range Organics	< 25	mg / Kg		XG.1998.561 - 15	06/23/98

QC
Type

MS: Matrix Spike

QC
Matrix

SOLID

QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-005	Benzene	102	% Recovery		XG.1998.550 - 5	06/17/98
	X98329-005	Ethylbenzene	108	% Recovery		XG.1998.550 - 5	
	X98329-005	o-Xylene	105	% Recovery		XG.1998.550 - 5	
	X98329-005	P/M-Xylenes	108	% Recovery		XG.1998.550 - 5	
	X98329-005	Toluene	105	% Recovery		XG.1998.550 - 5	
SW846-8015 Modified TPH							
X98332	X98332-005	Diesel Range Organics	130	% Recovery		XG.1998.561 - 3	06/23/98

QC
Type

MSD: Matrix Spike Duplicate Accuracy

QC
Matrix

SOLID

QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-006	Benzene	103	% Recovery		XG.1998.550 - 6	06/17/98
	X98329-006	Ethylbenzene	111	% Recovery		XG.1998.550 - 6	
	X98329-006	o-Xylene	108	% Recovery		XG.1998.550 - 6	
	X98329-006	P/M-Xylenes	110	% Recovery		XG.1998.550 - 6	
	X98329-006	Toluene	108	% Recovery		XG.1998.550 - 6	
SW846-8015 Modified TPH							
X98332	X98332-006	Diesel Range Organics	121	% Recovery		XG.1998.561 - 4	06/23/98

Quality Control Summary

Client: **APACHE CORPORATION**
 Project: **9806216 JICARILLA**

JUN 26 1998

* explanation of codes

D	Not applicable due to sample dilution
L	Not applicable due to MDL proximity

QC Type **MSD: Matrix Spike Duplicate Precision**

QC Matrix **SOLID**

QC Group	Run ID		Result	Units	*	Run Group - #	Run Date
SW846-8010/8020 Volatiles							
X98329	X98329-006	Benzene	1	RPD		XG.1998.550 - 6	06/17/98
	X98329-006	Ethylbenzene	2	RPD		XG.1998.550 - 6	
	X98329-006	o-Xylene	2	RPD		XG.1998.550 - 6	
	X98329-006	P/M-Xylenes	2	RPD		XG.1998.550 - 6	
	X98329-006	Toluene	2	RPD		XG.1998.550 - 6	
SW846-8015 Modified TPH							
X98332	X98332-006	Diesel Range Organics	7	RPD		XG.1998.561 - 4	06/23/98

Chain of Custody Record

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

Lab Job No. 6215 Date _____

Page 1 of 1

ASSAIGAI
ANALYTICAL
LABORATORIES, INC.

Client Apache Corporation Project Manager / Contact Jeff Cross

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

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

Project Name / Number _____ Samplers: (Signature) Danny Butler

Contract / Purchase Order / Quote _____

Anal. Fraction Number	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation		No. of Containers	Analysis Required	Remarks
						Temp	Chemical			
1A	JIC 196 #4 CELL #1	6/13/98	9:20	SOIL	4 oz glass		ICE	1		
1B	JIC 196 #4				4 oz glass			1		
2A	JIC 196 #4 CELL #2		9:10					1		
2B	JIC 196 #4							1		
3A	JIC 196 #4 CELL #3		9:40					1		
3B	JIC 196 #4							1		

Relinquished by:		Received by:		Relinquished by:		Received by:	
Signature	Printed	Signature	Printed	Signature	Printed	Signature	Printed
<u>Jeff Cross</u>	<u>JEFF CROSS</u>	<u>Scott Pratt</u>	<u>SCOTT PRATT</u>	<u>Scott Pratt</u>	<u>SCOTT PRATT</u>	<u>Scott Pratt</u>	<u>SCOTT PRATT</u>
Company <u>Apache Corp</u>	Reason _____	Company <u>AAC</u>	Reason _____	Company <u>AAC</u>	Reason _____	Company <u>AAC</u>	Reason _____
Date <u>16 June 98</u>	Time <u>10:15</u>	Date <u>17 June 98</u>	Time <u>07:30</u>	Date <u>17 June 98</u>	Time <u>07:30</u>	Date <u>17 June 98</u>	Time <u>07:30</u>

After analysis, samples are to be:

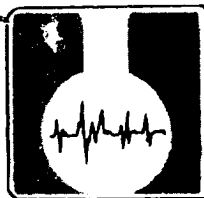
☐ Disposed of (additional)

☐ Stored (30 days max)

☐ Stored over 30 days (ad. 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

JUN 26 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: **9806166 JICARILLA**


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

Client Sample ID **JAT 396 #4 CELL #4**

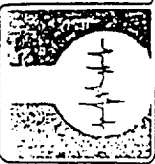
Sample Matrix **SOIL**

Sample Collected **06/10/98
13:10:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	Sequence	Run Date
SW846-8020 Volatiles								
9806166-01A	X98325	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.536-6 06/15/98
	X98325	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.536-6
	X98325	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.536-6
	X98325		p/m Xylenes	ND	mg / Kg	50	0.01	XG.1998.536-6
	X98325	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.536-6
SW846-8015 Modified TPH								
9806166-01B	X98321		Diesel Range Organics	ND	mg / Kg	25	25	XG.1998.562-2 06/15/98

*** 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. 6166 Date 6/12/98
Page 1 of 2

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 2855 Samplers: (Signature) Jeff Cross

Contract / Purchase Order / Quote 2855

ALBUQUERQUE, NEW MEXICO 87109
(505) 345-9964

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

Analysis Required				Remarks			
ALL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp.	Chemical
1A	SAT 396 #4 coll #4	6-10-98	11:10	SOIL	4 oz glass	ice	1 X
1B					4 oz glass		1 X
<u>6/12/98</u>							
<u>BTX D80 TKN</u>							
<u>No. of Containers</u>							
<u>BTX D80 TKN</u>							
<u>Remarks</u>							
Relinquished by: Signature <u>Jeff Cross</u> Printed <u>Jeff Cross</u> Company <u>Apache Corp.</u> Reason _____				Received by: Signature <u>Jeff Cross</u> Printed <u>Jeff Cross</u> Company _____ Reason _____			
Date <u>6/12/98</u> Time <u>8:30</u>				Date <u>6/12/98</u> Time <u>17:00</u>			
Method of Shipment: _____				After analysis, samples are to be:			
Shipment No. _____				☐ Disposed of (additional: _____)			
Special Instructions: _____				☐ Stored (30 days max)			
				☐ Stored over 30 days (add: _____)			
				☐ Returned to customer			

LABORATORY