

District III

1000 Rio Arriba Rd.

Aztec, NM 87410

DEPUTY OIL & GAS INSPECTOR

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. PACHECO

Santa Fe, New Mexico 87505

JAN 27 1999

Submit 1 copy to

Appropriate District

and 1 copy to

Santa Fe Office

PIT REMEDIATION AND CLOSURE REPORT

RECEIVED
AUG 24 1998OIL CON. DIV.
DIST. 3Operator: **Apache Corporation/MW Petroleum**

Telephone:

505-325-0316

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

Facility or Well Name:

JAT # 124 #3

Location: Unit or Qtr/Qtr Sec

NWSE Sec 13

T 25 N

R 4W

County

Rio Arriba

Pit Type: Separator:

Dehydrator

Other

Blow Pit

Land Type:

Jicarilla Tribal

Beginning Pit Dimensions:

Length

55'

Width

55'

Depth

4'

Pit Location:

Ending Pit Dimensions:

Length

62'

Width

60'

Depth

8'

(Attach diagram)

Reference:

Wellhead

XXX

Other

Footage from reference:

240'

Direction from reference:

204

Degrees

East

North

of

X

West

South

XX

Depth To Groundwater:

(vertical distance from
contaminants to seasonal
high water elevation of
groundwater)

Less than 50 feet

(20 points)

50 feet to 99 feet

(10 points)

Greater than 100 feet

(0 points)

0

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources)

Yes

(20 points)

No

(0 points)

0

Distance To Surface Water:

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

Less than 200 feet

(20 points)

200 feet to 1000 feet

(10 points)

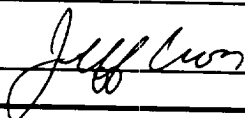
Greater than 1000 feet

(0 points)

0

RANKING SCORE (TOTAL POINTS)

0

Date Remediation Started:		<u>6/30/97</u>	Date Completed:		<u>7/2/97</u>
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>	Approx. cubic yards	<u>550</u>	
		Landfarmed <u>XX</u>	Insitu Bioremediation		
		Other _____			
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)		Onsite <u>XX</u>	Offsite		
General Description of Remedial Action:		<u>Excavate pit to 8', took PID readings.</u>			
		<u>Spread soil on location for remediation. Took soil samples.</u>			
Groundwater Encountered:		No <u>XX</u>	Yes _____	Depth _____	
Final Pit:	Sample location	<u>4 point composite taken from pit sidewalls, 1 point</u>			
Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)		<u>grab sample from pit bottom center.</u>			
	Sample depth	<u>8"</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>		
	Sample Date	<u>7/2/97</u>	Sample Time	<u>10:00 AM</u>	
	Sample results				
	Benzene	(ppm)	<u>ND</u>		
	Total BTEX	(ppm)	<u>ND</u>		
	Field Headspace	(ppm)	<u>10.26</u>		
	TPH		<u>ND\Sides</u>		
			<u>2300\BTM</u>		
Groundwater Sample:	Yes _____	No <u>XX</u>	(If yes attach sample results)		
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.					
DATE	<u>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

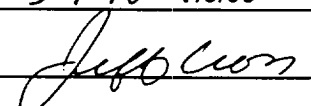
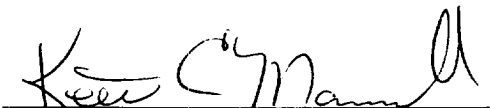
Submit 1 copy to
Natural Resource Dept.
and Oil & Gas Administration

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>M W PETROLEUM</u>		Telephone <u>505-325-0318</u>	
Address: <u>2855 SOUTHSIDE RIVER ROAD / SUITE A / FARMINGTON N.M. 87401-7947</u>			
Facility or Well Name: <u>JAT 124# 3</u>			
Location:	Unit or Qtr/Qtr Sec	<u>NWSE SEC 13</u>	T <u>25N</u> R <u>4W</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: (Attach diagram)	Pit Dimensions:	Length <u>62'</u>	Width <u>60'</u>	Depth <u>8'</u>
	Reference:	Wellhead <u>XXX</u>	Other <u> </u>	
	Footage from reference:	<u>240'</u>		
	Direction from reference:	<u>204</u> Degrees	<u> </u> East <u>X</u> West	North of South <u>XX</u>

Depth To Groundwater: (vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	(20 points)	<u> </u>
	50 feet to 99 feet	(10 points)	<u> </u>
	Greater than 100 feet	(0 points)	<u>0</u>
Distance to an Ephemeral Stream: (Downgradient dry wash greater than ten feet in width)	Less than 100 feet	(10 points)	<u> </u>
	Greater than 100 feet	(0 points)	<u>0</u>
Distance to Nearest Lake, Playa, or Watering Pond: (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet	(10 points)	<u> </u>
	Greater than 100 feet	(0 points)	<u>0</u>
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)	Yes	(20 points)	<u> </u>
	No	(0 points)	<u>0</u>
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet	(20 points)	<u> </u>
	100 feet to 1000 feet	(10 points)	<u> </u>
	Greater than 1000 feet	(0 points)	<u>0</u>
RANKING SCORE (TOTAL POINTS)			<u>0</u>

Date Remediation Started:		<u>6/30/97</u>		Date Completed:		<u>7/2/97</u>	
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>		Approx. cubic yards		<u>550</u>	
		Landfarmed <u>XX</u>		Insitu Bioremediation			
		Other _____					
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)		Onsite <u>XX</u>		Offsite _____			
General Description of Remedial Action: <u>Excavate pit to 8', took PID readings. spread soil on</u>							
<u>location for remediation. Took soil samples.</u>							
Groundwater Encountered:		No <u>XXX</u>		Yes _____		Depth _____	
Final Pit:		Sample location <u>4 point composite taken from pit sidewalls.</u>					
Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)		<u>1 POINT GRAB SAMPLE FROM PIT BOTTOM CENTER.</u>					
		Sample depth <u>8"</u>		<u>8" to 10" into pit side walls, 10" into pit bottom.</u>			
		Sample Date <u>7/2/97</u>		Sample Time		<u>10:00AM</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>10.26</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>ND\SIDES</u>		Total Xylenes	(ppb)	<u>NA</u>
			<u>2300\BTM.</u>				
Groundwater Sample:		Yes _____		No <u>XXX</u>		(If yes attach sample results)	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.							
DATE		<u>5-7-98</u> 7-8-98		PRINTED NAME		<u>JEFF CROSS</u>	
SIGNATURE				AND TITLE		<u>PROJECT MANAGER</u>	
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.							
APPROVED:		YES <u>X</u>		NO _____		(REASON) _____	
SIGNED:				DATE:		<u>5-7-98</u>	

M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

LOCATION JAT 124 # 3

PIT COUNT 1

Jicarilla Apache Tribal EPO/OCD/BLM

Review and Approval

OCD-BLM

EPO Representative

Date of Review

START: 6/30/97

FINISH: 7/2/97

DIMENSIONS								
	W	L	D		W	L	D	CU YDS
Pit 1	55'	55'	4'	Pit 1	60'	62'	8'	550
Pit 2				Pit 2				
Pit 3				Pit 3				
		Pit 1 @ 6'	Pit 2 @	Pit 3 @		Pit 1 @ 8'	Pit 2 @	Pit 3 @
P	Center	150			P	Center	50.5	
I	NW Corner	80			I	NW Corner	0.1	
D	NE Corner	75.4			D	NE Corner	0.2	
	SW Corner	81.2				SW Corner	0.2	
	SE Corner	90.5				SE Corner	0.3	

NOTES:

6/30/97 START EXCAVATION ON PIT, DARK STAINING ON TOP, LIGHT ODOR.

7/1/97 CONTINUE EXCAVATION ON PIT, PID READING HIGH ON PIT BOTTOM CENTER AT SIX FEET.

7/2/97 FINISH EXCAVATING PIT TO 8 FEET, PID READINGS GOOD, NO STAINING OR ODOR.

7/2/97 TOOK SOIL SAMPLES AND SENT TO ASSAIGAI LABS.

SAMP DATE 7/2/97

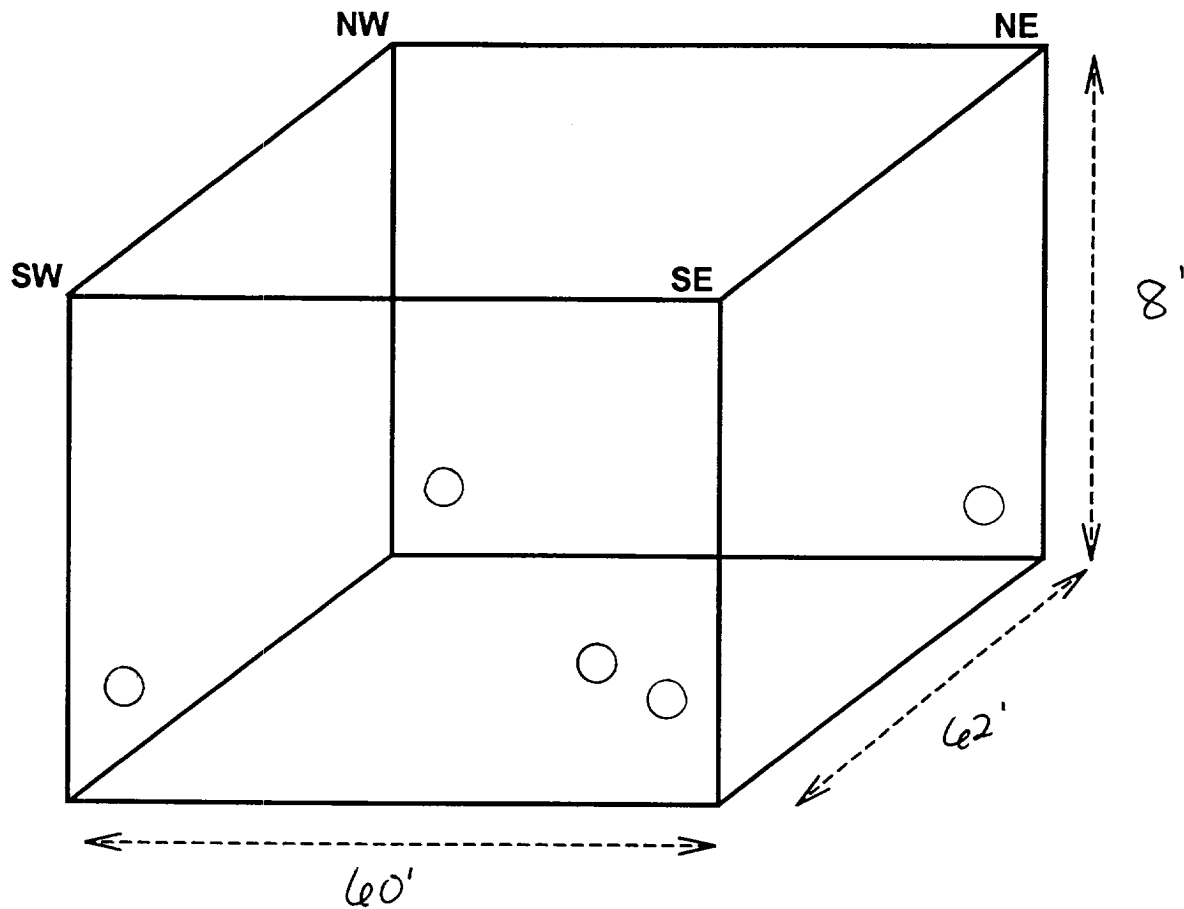
		Pit 1 @ 8'	Pit 2 @	Pit 3 @	ANALYSIS RESULTS			PER LAB	Assaigai
P	Center	50.5			PIT NO	TPH	BETEX	WITNESS	DATE
I	NW Corner	0.1			1	2300ND	NDND	J.C.	7/7/97
D	NE Corner	0.2			2				
	SW Corner	0.2			3				
	SE Corner	0.3							

RE-SAMPLE OR CELL(S) SAMPLE

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

RE-SAMPLE OR CELL(S) SAMPLE

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



○ = SAMPLE AREA

WELL NAME JAT 124 #3

SAMPLE DATE 7/2/97

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.**

AUG 4 1997

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:
July 11, 1997 14:47

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9707037
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 07/04/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9707037-01A
Sample ID: JAT 124 #3 SIDES

Collected: 07/02/97 10:00:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	07/07/97	SBTXME175
Toluene	ND	mg/kg	0.0050	100	07/07/97	SBTXME175
Ethylbenzene	ND	mg/kg	0.0050	100	07/07/97	SBTXME175
P-&m-Xylene	ND	mg/kg	0.010	100	07/07/97	SBTXME175
O-Xylene	ND	mg/kg	0.0050	100	07/07/97	SBTXME175

Lab ID: 9707037-01B
Sample ID: JAT 124 #3 SIDES

Collected: 07/02/97 10:00:00
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	07/09/97	SDRO040

Lab ID: 9707037-02A
Sample ID: JAT 124 #3 BOTTOM

Collected: 07/02/97 10:15:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	07/08/97	SBTXME175
Toluene	ND	mg/kg	0.0050	100	07/08/97	SBTXME175
Ethylbenzene	ND	mg/kg	0.0050	100	07/08/97	SBTXME175
P-&m-Xylene	ND	mg/kg	0.010	100	07/08/97	SBTXME175
O-Xylene	ND	mg/kg	0.0050	100	07/08/97	SBTXME175



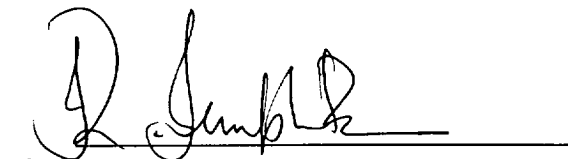
Lab ID: 9707037-02B

Sample ID: JAT 124 #3 BOTTOM

Collected: 07/02/97 10:15:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	2300	mg/Kg	50	25	07/09/97	SDRO040


for William P. Biava
President

WORKORDER COMMENTS

DATE : 07/11/97
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

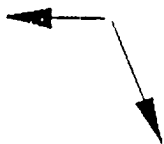
MASSAIGAI
ANALYTICAL
LABORATORIES

CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

ALL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation	
						Temp.	Chemical
1A	JAT 124 #3 Sides	7-2-97	10:00	Soil	402 glass		Ice
1B	1	7-2-97	10:00	Soil	402 glass		Ice
2A	JAT 124 #3 Bottom	7-2-97	10:15	Soil	402 glass		Ice
2B	1	7-2-97	10:15	Soil	402 glass		Ice
3A							
3B							
4A							
4B							
5A							
5B							
6A							
6B							
7A							
7B							
8A							
8B							
9A							
9B							
10A							
10B							

LABORATORY

NORTH



DRAINAGE

JICARILLA APACHE 124 WELL #3

NW/4 SE/4

SECTION 13, T25N-R4W.

RIO ARriba COUNTY, NM

LAND FARM
Cell #3

100'x60'x12"

LAND FARM
Cell #2

40'x30'x12"

LAND FARM Cell #4

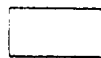
60'x52'x12"

LAND FARM
Cell #5

60'x50'x12"

PIT

LIME HEATER



WELL HEAD

LAND FARM Cell #1
60'x20'x12"



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

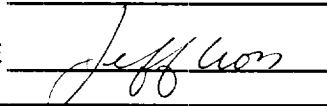
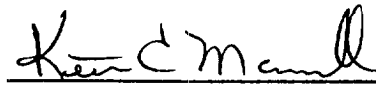
ON-SITE SOIL REMEDIATION REPORT

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 124 # 3 CELL # 1</u>			
Location: Unit or Qtr/Qtr Sec <u>NEISE</u> Sec <u>13</u> T <u>25 N</u> R <u>4 W</u> County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>6/30/97</u>		Date Completed: <u>4/28/98</u>	
Remediation Method: Landfarmed		<u>XXX</u> Approx. cubic yards <u>67</u>	
Composted			
Other		<u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>4/28/98</u> Time: <u>2:25PM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>2000</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>7/16/98</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>Ken 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 124 # 3 CELL # 2</u>	
Location: Unit or Qtr/Qtr Sec <u>NEISE</u> Sec <u>13</u> T <u>25 N</u> R <u>4 W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>6/30/97</u> Date Completed: <u>4/28/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>44</u>	
Composted _____	
Other <u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling
Distance to an Ephemeral Stream: (pts) <u>0</u>	Sampling Date: <u>4/28/98</u> Time: <u>2:35PM</u>
Distance to Nearest Lake, Playa, or Watering Pond: (pts) <u>0</u>	Sample Results:
Wellhead Protection Area: (pts) <u>0</u>	Field Headspace (ppm) <u>0</u>
Distance To Surface Water: (pts) <u>0</u>	TPH (ppm) <u>2600</u> Method <u>M8015</u>
RANKING SCORE (TOTAL POINTS) <u>0</u>	Other <u>BTEX \ SW846 , 8020A (ND)</u>
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE: <u>7/16/98</u> PRINTED NAME <u>JEFF CROSS</u>	
SIGNATURE <u></u> TITLE <u>PROJECT MANAGER</u>	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.	
APPROVED: YES <u>X</u> NO _____ (REASON) _____	
SIGNED: <u></u> DATE: <u>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 124 # 3 CELL # 3</u>			
Location: Unit or Qtr/Qtr Sec <u>NEISE</u> Sec <u>13</u> T <u>25 N</u> R <u>4 W</u> County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>6/30/97</u>		Date Completed: <u>4/28/98</u>	
Remediation Method: Landfarmed <u>XXX</u>		Approx. cubic yards <u>222</u>	
Composted <u> </u>			
Other <u> </u>		SOIL TO BE SPREAD ON LOCATION.	
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>4/28/98</u> Time: <u>2:45PM</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>7/16/98</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>	

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 124 # 3 CELL # 4</u>	
Location: Unit or Qtr/Qtr Sec <u>NEISE</u> Sec <u>13</u> T <u>25 N</u> R <u>4 W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>6/30/97</u> Date Completed: <u>6/10/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>112</u>	
Composted _____	
Other <u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling Sampling Date: <u>6/10/98</u> Time: <u>9:00AM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>4600</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>7/16/98</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>Kate 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 124 # 3 CELL # 5</u>	
Location: Unit or Qtr/Qtr Sec <u>NEISE Sec 13 T 25 N R 4 W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>6/30/97</u> Date Completed: <u>6/10/98</u>	
Remediation Method: Landfamed <u>XXX</u> Approx. cubic yards <u>105</u>	
Composted _____	
Other <u>SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling Sampling Date: <u>6/10/98</u> Time: <u>9:10AM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>3300</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>7/16/98</u>	PRINTED NAME <u>JEFF CROSS</u>
SIGNATURE <u><i>Jeff Cross</i></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><i>Kurt M. M...</i></u> DATE: <u>7-29-98</u>	

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDATION SITE JAT 124 # 3

* AMOUNT OF SOIL UNDERGOING REMEDIATION 550 Yds.

CELL No. <u>1</u>	SampDATE 4/28/98	TPH 2000	BTEX ND
DIMENSIONS(LxWxH) <u>60' X 20' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTHEAST</u>			
* DATE BEGAN: <u>6/30/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>4/28/98</u>			
CELL No. <u>2</u>	SampDATE 4/28/98	TPH 2600	BTEX ND
DIMENSIONS(LxWxH) <u>40' X 30' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTH</u>			
* DATE BEGAN: <u>6/30/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>4/28/98</u>			
CELL No. <u>3</u>	SampDATE 4/28/98	TPH 3800	BTEX ND
DIMENSIONS(LxWxH) <u>100' X 60' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTHWEST</u>			
* DATE BEGAN: <u>6/30/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>4/28/98</u>			
REMEDATION RECORD: (Date, Treatment, Tilling)			
7/2/97 TREAT ALL CELLS WITH 46-0-0 FERTILIZER, WATER, PLOW AND TILL SOIL.			
7/18/97 PLOW AND TILL ALL CELLS.			
7/24/97 TILL ALL CELLS.			
8/5/97 PLOW AND TILL ALL CELLS.			
8/14/97 TILL ALL CELLS.			
8/18/97 PLOW AND TILL ALL CELLS.			
4/20/98, 4/21/98 WATER, PLOW AND TILL ALL CELLS.			
6/7/98 WATER, PLOW AND TILL CELLS # 1 AND # 2.			

From excavation reports.

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE JAT 124 # 3

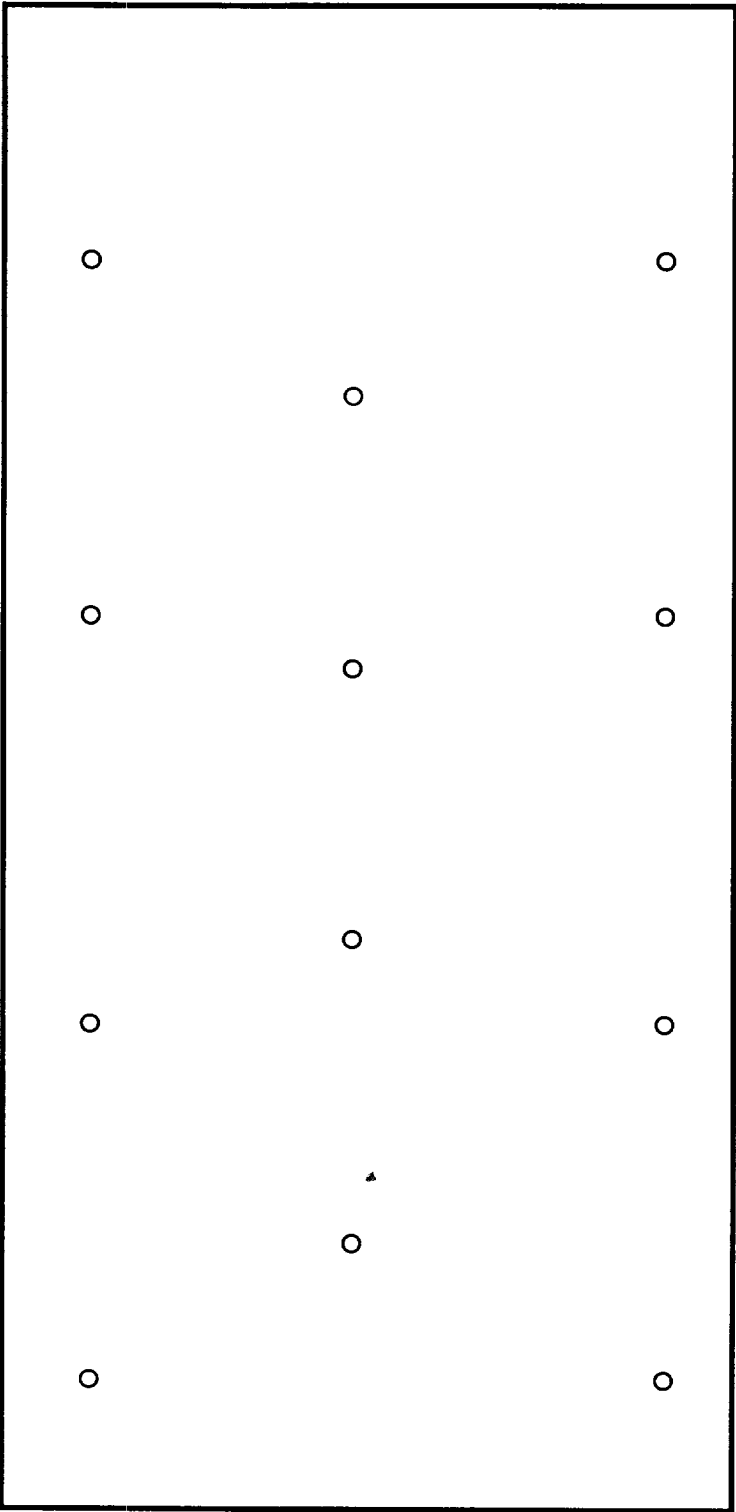
* AMOUNT OF SOIL UNDERGOING REMEDIATION 550 Yds.

CELL No. <u>4</u>	SampDATE 6/10/98	TPH 4600	BTEX ND
DIMENSIONS(LxWxH) <u>60' X 52' X 12"</u>			
CELL LOCATION (dir. from well head) <u>SOUTHWEST</u>			
* DATE BEGAN: <u>6/30/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/10/98</u>			
CELL No. <u>5</u>	SampDATE 6/10/98	TPH 3300	BTEX ND
DIMENSIONS(LxWxH) <u>60' X 50' X 12"</u>			
CELL LOCATION (dir. from well head) <u>SOUTH</u>			
* DATE BEGAN: <u>6/30/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/10/98</u>			
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) _____			
REMEDIATION RECORD: (Date, Treatment, Tilling)			

From excavation reports.

WELL NAME: JAT 124 # 3 CELL # 1
SAMPLE DATE: 4/28/98
DIMENSIONS: 60' X 20' X 12"

○ = SAMPLE AREA



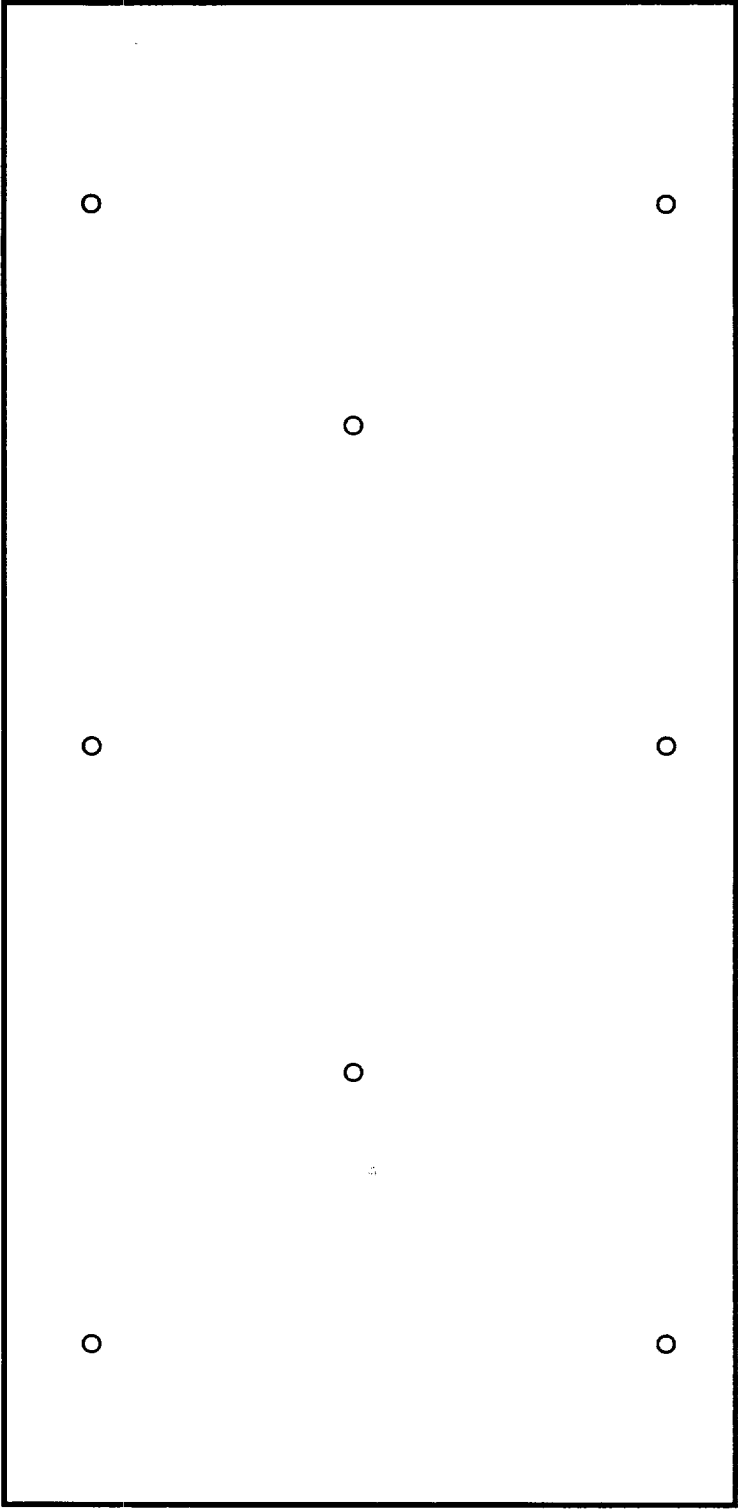
NOTES: ALL SAMPLES TAKEN 10" TO 12" INTO CELL.
12 POINT COMPOSITE SAMPLE

WELL NAME: JAT 124 # 3 CELL # 2

SAMPLE DATE: 4/28/98

DIMENSIONS: 40' X 30' X 12"

○ = SAMPLE AREA

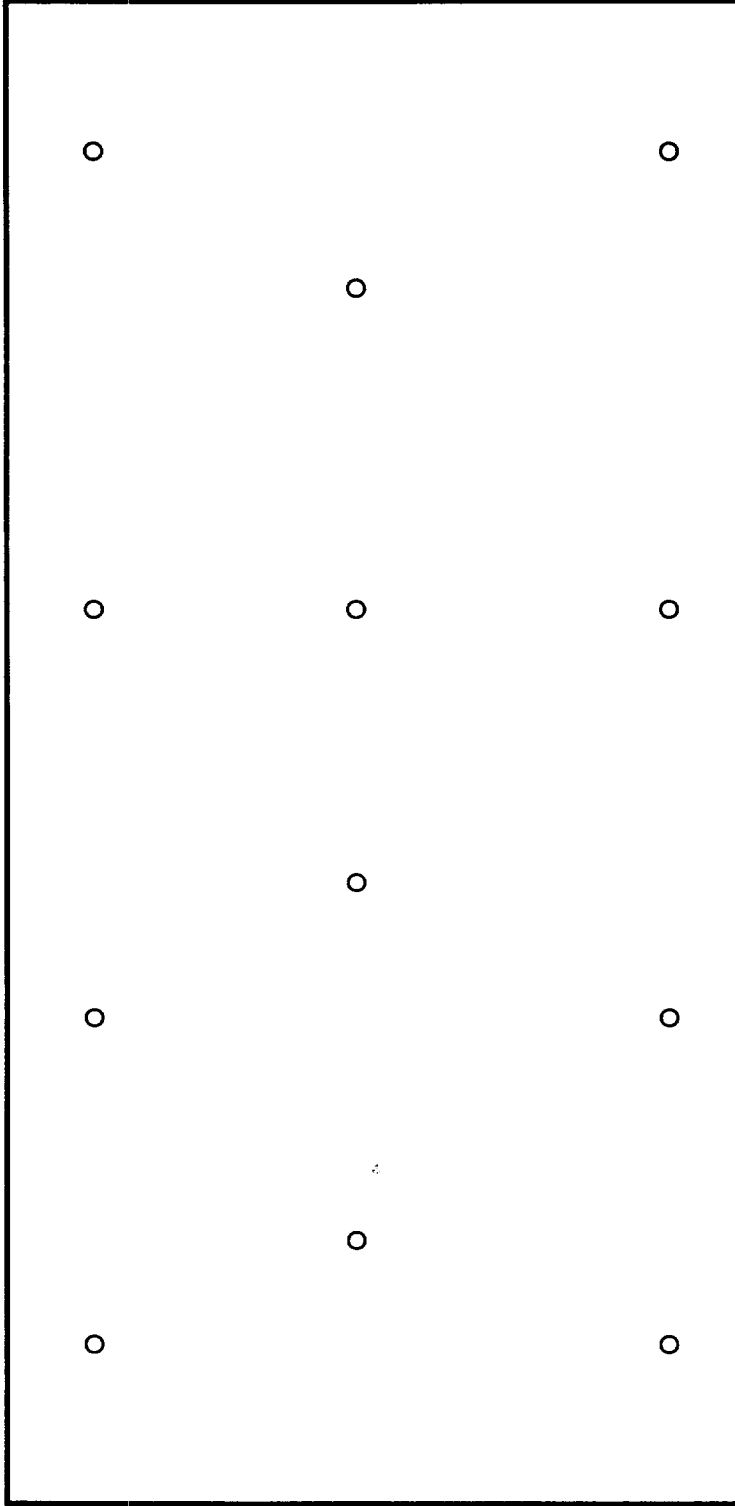


NOTES: ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

8 POINT COMPOSITE SAMPLE

WELL NAME: JAT 124 # 3 CELL # 3
SAMPLE DATE: 4/28/98
DIMENSIONS: 100' X 60' X 12"

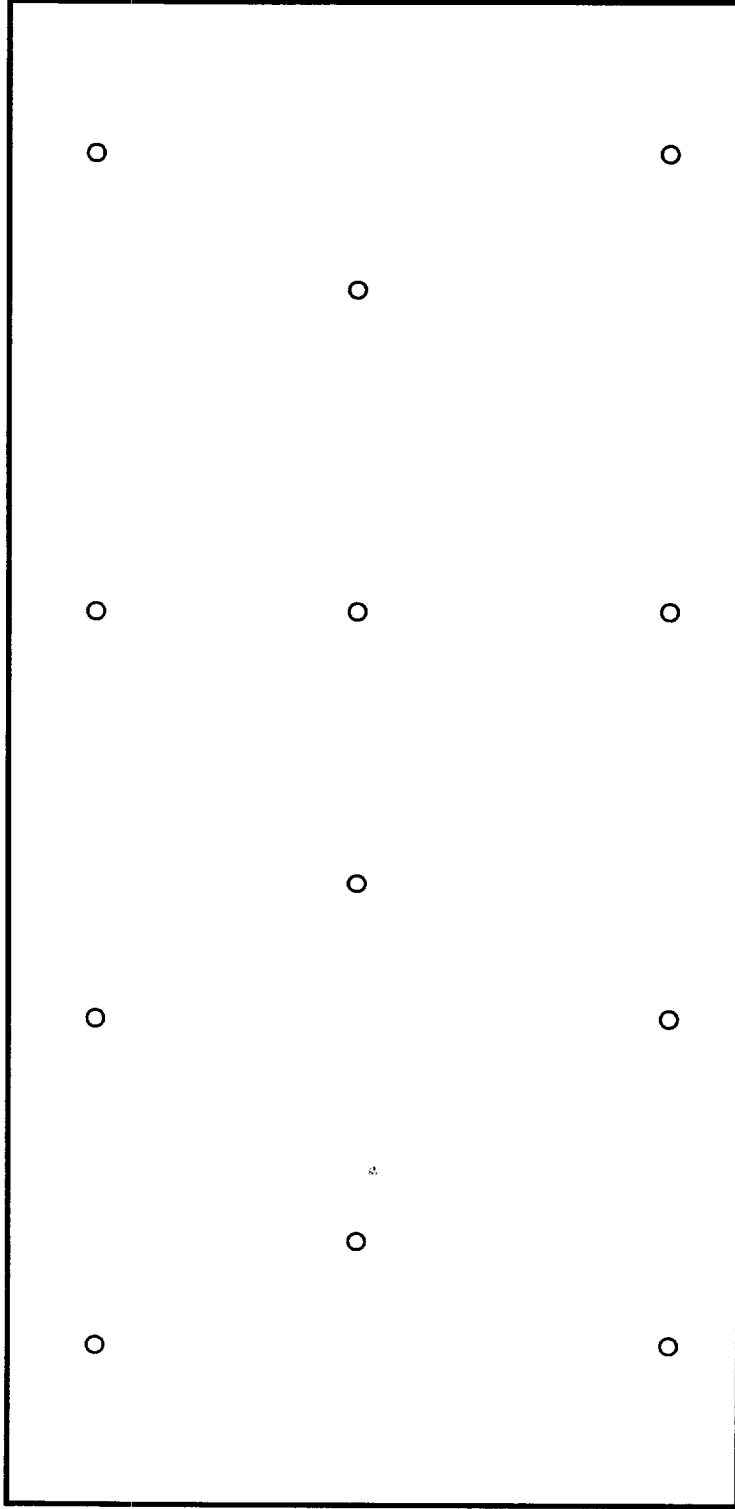
○ = SAMPLE AREA



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

WELL NAME: JAT 124 # 3 CELL # 4
SAMPLE DATE: 6/10/98
DIMENSIONS: 60' X 52' X 12"

○ = SAMPLE AREA



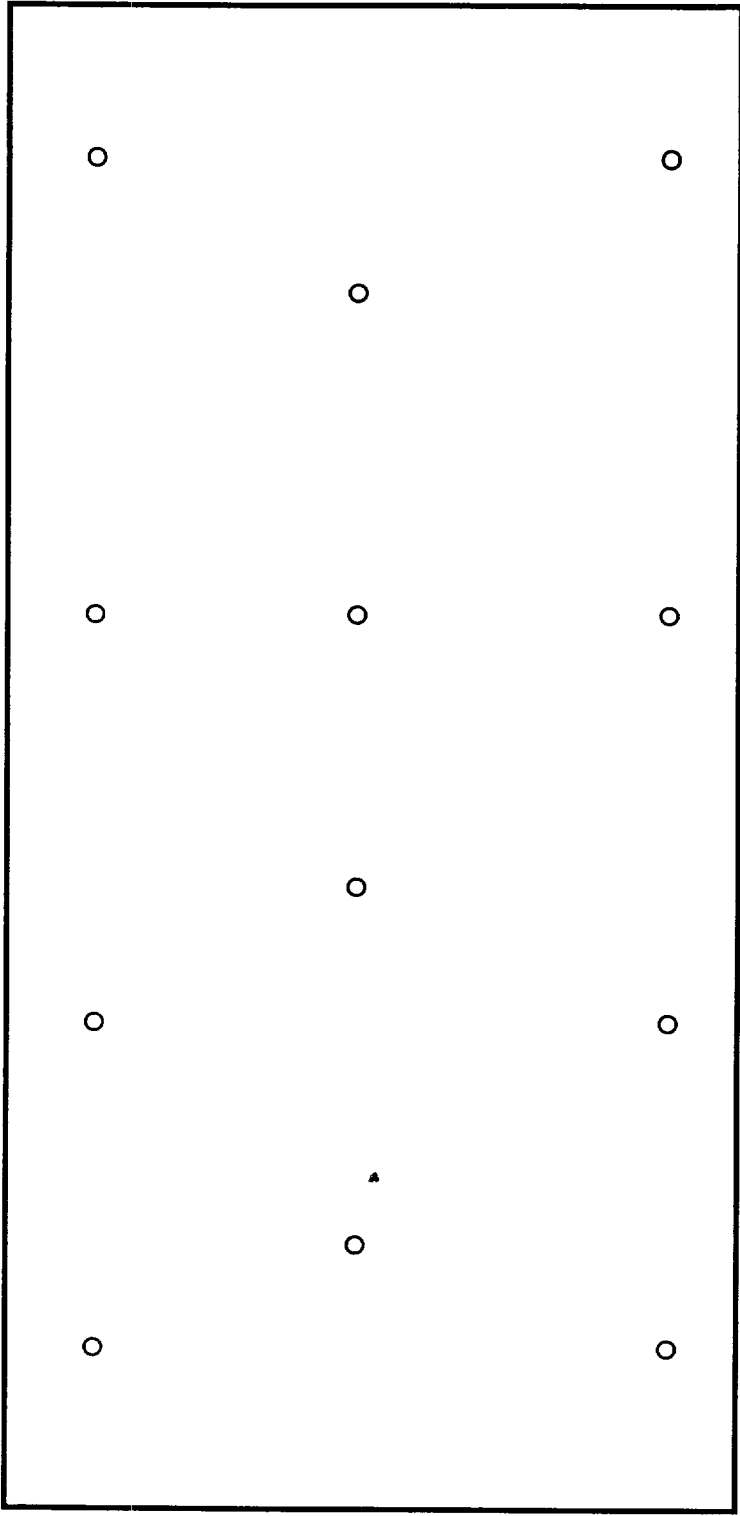
NOTES: ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

12 POINT COMPOSITE SAMPLE

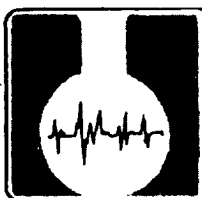
Blank lines for additional notes or data entry.

WELL NAME: JAT 124 # 3 CELL # 5
SAMPLE DATE: 6/10/98
DIMENSIONS: 60' X 50' X 12"

○ = SAMPLE AREA



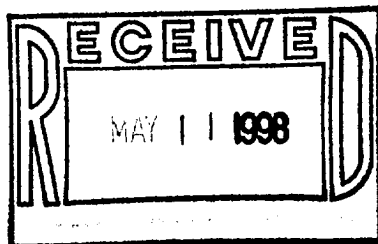
NOTES: ALL SAMPLES TAKEN 10" TO 12" INTO CELL.
12 POINT COMPOSITE SAMPLE



ASSAIGAI ANALYTICAL LABORATORIES, INC.

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

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



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

* explanation of codes

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

Assaigai Analytical Laboratories, Inc.
Certificate of Analysis

Client: APACHE CORPORATION
Project: 9804264 JICARILLA PIT CLOSURES

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

Client Sample ID: JAT 124 #3 CELL #1 Sample Matrix: SOIL Sample Collected: 04/28/98 14:25:00

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	*	Sequence	Run Date
SW846-8015 Modified TPH									
9804264-01A	X98240	Diesel Range Organics	2000	mg / Kg	25	25		XG. 1998.441-19	05/06/98
SW846-8020 Volatiles									
9804264-01A	X98243	71-43-2 Benzene	ND	mg / Kg	50	0.005		XG. 1998.428-21	05/05/98
	X98243	100-41-4 Ethylbenzene	ND	mg / Kg	50	0.005		XG. 1998.428-21	
	X98243	95-47-6 o-Xylene	ND	mg / Kg	50	0.005		XG. 1998.428-21	
	X98243	p/m Xylenes	ND	mg / Kg	50	0.01		XG. 1998.428-21	
	X98243	108-88-3 Toluene	ND	mg / Kg	50	0.005		XG. 1998.428-21	

Client Sample ID: JAT 124 #3 CELL #2 Sample Matrix: SOIL Sample Collected: 04/28/98 14:35:00

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	*	Sequence	Run Date
SW846-8015 Modified TPH									
9804264-02A	X98240	Diesel Range Organics	2600	mg / Kg	25	25		XG. 1998.441-20	05/06/98
SW846-8020 Volatiles									
9804264-02A	X98243	71-43-2 Benzene	ND	mg / Kg	50	0.005		XG. 1998.428-22	05/05/98
	X98243	100-41-4 Ethylbenzene	ND	mg / Kg	50	0.005		XG. 1998.428-22	
	X98243	95-47-6 o-Xylene	ND	mg / Kg	50	0.005		XG. 1998.428-22	
	X98243	p/m Xylenes	ND	mg / Kg	50	0.01		XG. 1998.428-22	
	X98243	108-88-3 Toluene	ND	mg / Kg	50	0.005		XG. 1998.428-22	



Assaigai Analytical Laboratories, Inc.
Certificate of Analysis

Client: **APACHE CORPORATION**
 Project: **9804264 JICARILLA PIT CLOSURES**

Client Sample ID	JAT 124 #3 CELL #3	Sample Matrix	SOIL	Sample Collected	04/28/98 14:45:00
------------------	---------------------------	---------------	-------------	------------------	------------------------------

<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>Sequence</u>	<u>Run Date</u>
SW846-8015 Modified TPH									
9804264-03A	X98240		Diesel Range Organics	3800	mg / Kg	25	25	XG.1998.441-21	05/06/98
SW846-8020 Volatiles									
9804264-03A	X98243	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.428-23	05/05/98
	X98243	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.428-23	
	X98243	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.428-23	
	X98243		p/m Xylenes	ND	mg / Kg	50	0.01	XG.1998.428-23	
	X98243	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.428-23	

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



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

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

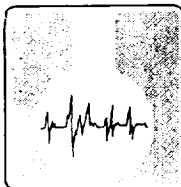
2

P.T.

Q.R.

O.S.

LABORATORY

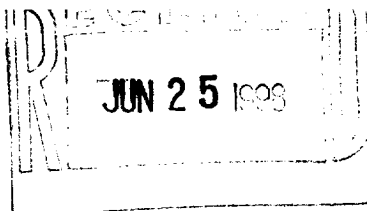


ASSAIGAI ANALYTICAL LABORATORIES, INC.

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



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: **9806183 JICARILLA**

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

Client Sample ID: **JAT 124 #3 CELL #4** Sample Matrix: **SOIL** Sample Collected: **06/10/98 09:00:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	*	Sequence	Run Date
SW846-8010/8020 Volatiles									
9806183-01A	X98326	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.535-20	06/15/98
	X98326	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.535-20	
	X98326	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.535-20	
	X98326		P/M-Xylenes	ND	mg / Kg	50	0.01	XG.1998.535-20	
	X98326	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.535-20	
SW846-8015 Modified TPH									
9806183-01B	X98328		Diesel Range Organics	4600	mg / Kg	25	25	XG.1998.556-21	06/21/98

Client Sample ID: **JAT 124 #3 CELL #5** Sample Matrix: **SOIL** Sample Collected: **06/10/98 09:10:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	*	Sequence	Run Date
SW846-8010/8020 Volatiles									
9806183-02A	X98326	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.535-21	06/15/98
	X98326	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.535-21	
	X98326	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.535-21	
	X98326		P/M-Xylenes	ND	mg / Kg	50	0.01	XG.1998.535-21	
	X98326	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.535-21	
SW846-8015 Modified TPH									
9806183-02B	X98328		Diesel Range Organics	3300	mg / Kg	25	25	XG.1998.556-22	06/21/98



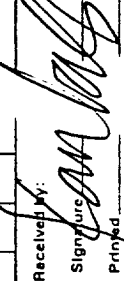


ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

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

LABORATORY

Analysis Required				Remarks
No. of Containers	BTEX	DRO	TKN	
1	X			
1		X		
1	X			
1		X		

	Date	6/12/57	Received by:	
	Time	17:00	Signature	
			Printed	
			Company	
			Reason	

After analysis, samples are to be:

☐ Disposed of (additional .
☐ Stored (30 days max)
☐ Stored over 30 days (ad.
☐ Returned to customer

tee)