

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

FEB 01 1998

RECEIVED
DEC - 3 1998
OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Approved

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 A118 #13 Pit #1

Location: Unit or Qtr/Qtr Sec F Sec 35 T 26 N R 3W County Rio Arriba

Pit Type: Separator: _____ Dehydrator _____ Other Blow Pit

Land Type: Jicarilla Tribal

Beginning Pit Dimensions: Length 10' Width 10' Depth 4'
Ending Pit Dimensions: Length 18' Width 18' Depth 8'
Reference: Wellhead XX Other _____
Footage from reference: 90'
Direction from reference: 20 Degrees X East North XX
of West South _____

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>

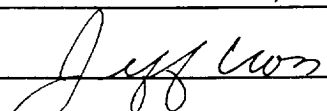
Wellhead Protection Area:
(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources)

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) 0

Date Remediation Started:	<u>9/8/97</u>	Date Completed:	<u>9/9/97</u>
Remediation Method: (Check all appropriate sections)	Excavation <u>XXX</u>	Approx. cubic yards	<u>88</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 8' , took PID readings. Spread soil on location for remediation. Took soil samples. Hit Bedrock, spray with 46-0-0 fertilizer.</u>		
Groundwater Encountered:	No <u>XX</u>	Yes _____	Depth _____
Final Pit:	Sample location	<u>4 point composite sample taken from pit sidewalls. Grab sample</u>	
Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)	Sample depth	<u>8' 8 to 10" into pit sidewalls 10" into pit bottom</u>	
	Sample Date	<u>9/9/97</u>	Sample Time <u>9:00 AM</u>
	Sample results		
	Benzene	(ppm)	<u>ND</u>
	Total BTEX	(ppm)	<u>ND</u>
	Field Headspace	(ppm)	<u>50.5</u>
	TPH		<u>side/3200</u> <u>Btm/3000</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>December 1, 1998</u>	PRINTED NAME	<u>Jeff Cross</u>
SIGNATURE		AND TITLE	<u>Project Manager</u>

Date Remediation Started: 9/9/97 Date Completed: 9/9/97

Remediation Method: Excavation XXX Approx. cubic yards 28
(Check all appropriate sections) Landfarmed XX Insitu Bioremediation _____
Other _____

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

General Description of Remedial Action: Excavate pit to 6' , took PID readings. Spread soil on location for remediation. Took soil samples. Hit Bedrock, spray with 46-0-0 fertilizer.

Groundwater Encountered: No XX Yes _____ Depth _____

Final Pit: Sample location 4 point composite sample taken from pit sidewalls. Grab sample

Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths) taken from pit bottom center.

Sample depth 6' 8 to 10" into pit sidewalls 10" into pit bottom

Sample Date 9/9/97 Sample Time 3:00 PM

Sample results

Benzene (ppm) ND

Total BTEX (ppm) ND

Field Headspace (ppm) 46.26

TPH side/2200
Btm/3000

Groundwater Sample: Yes _____ No XX (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 December 1, 1998 PRINTED NAME Jeff Cross

SIGNATURE  AND TITLE Project Manager

Date Remediation Started: 9/8/97 **Date Completed:** 9/9/97

Remediation Method: (Check all appropriate sections)
 Excavation XXX Approx. cubic yards 88
 Landfarmed XX Insitu Bioremediation _____
 Other _____

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

General Description of Remedial Action: Excavate pit to 8', took PID readings. spread soil on location for remediation. Took soil samples. HIT BEDROCK, SPRAY WITH 46-0-0 FERT.

Groundwater Encountered: No XXX Yes _____ Depth _____

Final Pit: Sample location 4 point composite taken from pit sidewalls, Grab sample from pit bottom center.

Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)
 Sample depth 8'
 Sample Date 9/9/97 Sample Time 9:00AM

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>50.5</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>SIDE\3200 BTM\3000</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 9-22-98 PRINTED NAME JEFF CROSS

SIGNATURE Jeff Cross AND TITLE PROJECT MANAGER

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) _____

SIGNED: Ken C Marshall DATE: 11-13-98

Date Remediation Started: 9/9/97 **Date Completed:** 9/9/97

Remediation Method: (Check all appropriate sections)
 Excavation XXX Approx. cubic yards 28
 Landfarmed XX Insitu Bioremediation _____
 Other _____

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

General Description of Remedial Action: Excavate pit to 6',took PID readings. spread soil on location for remediation. Took soil samples. HIT BEDROCK,SPRAY WITH 46-0-0 FERT.

Groundwater Encountered: No XXX Yes _____ Depth _____

Final Pit: Sample location 4 point composite taken from pit sidewalls, Grab sample from pit bottom center. 8" to 10" into pit side walls ,10" into pit bottom.

Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)
 Sample depth 6'
 Sample Date 9/9/97 Sample Time 3:00PM

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>46.26</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>SIDE\2200 BTM\3000</u>		Total Xylenes	(ppb)	<u>NA</u>

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

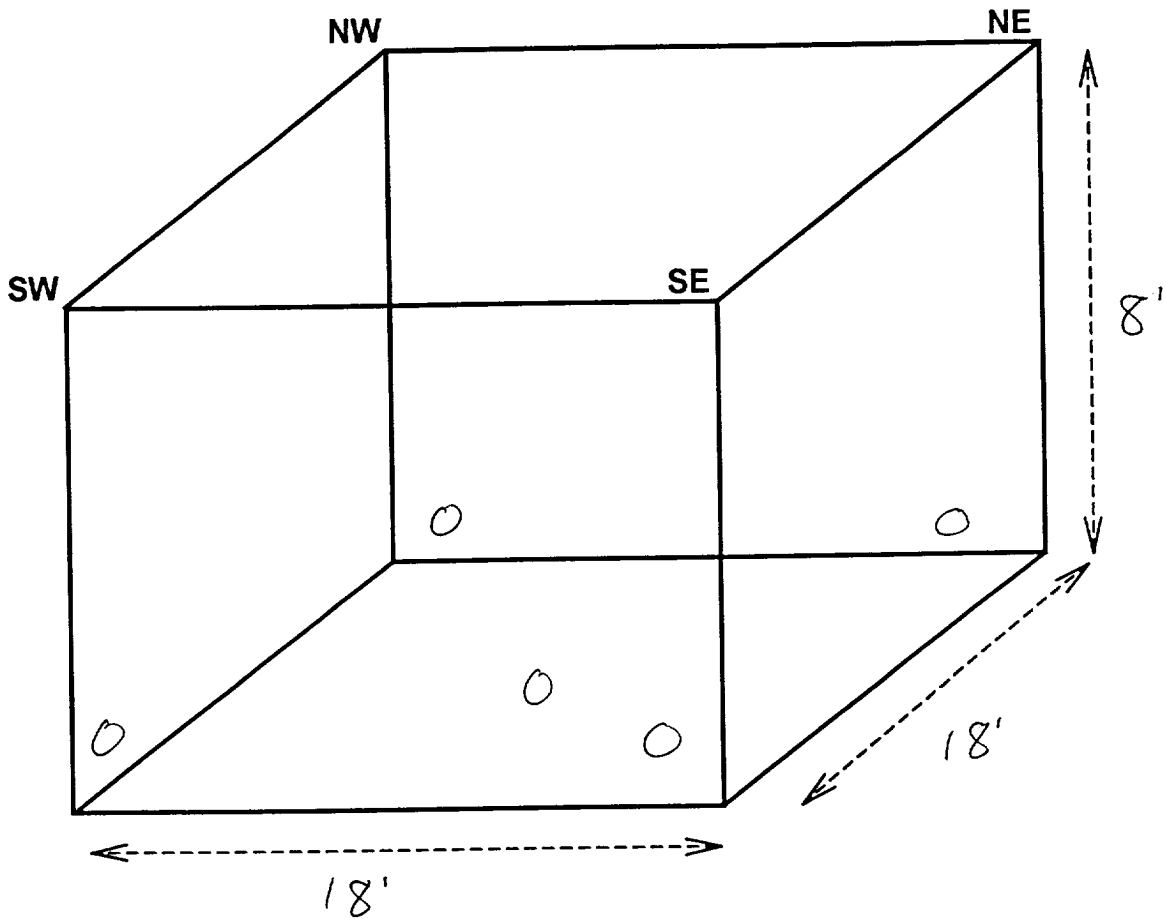
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE 9-22-98 PRINTED NAME JEFF CROSS
 SIGNATURE Jeff Cross AND TITLE PROJECT MANAGER

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) _____

SIGNED: Kurt M... [Signature] DATE: 11-13-98



○ = SAMPLE AREA

WELL NAME JAT A 118 # 13 PIT # 1

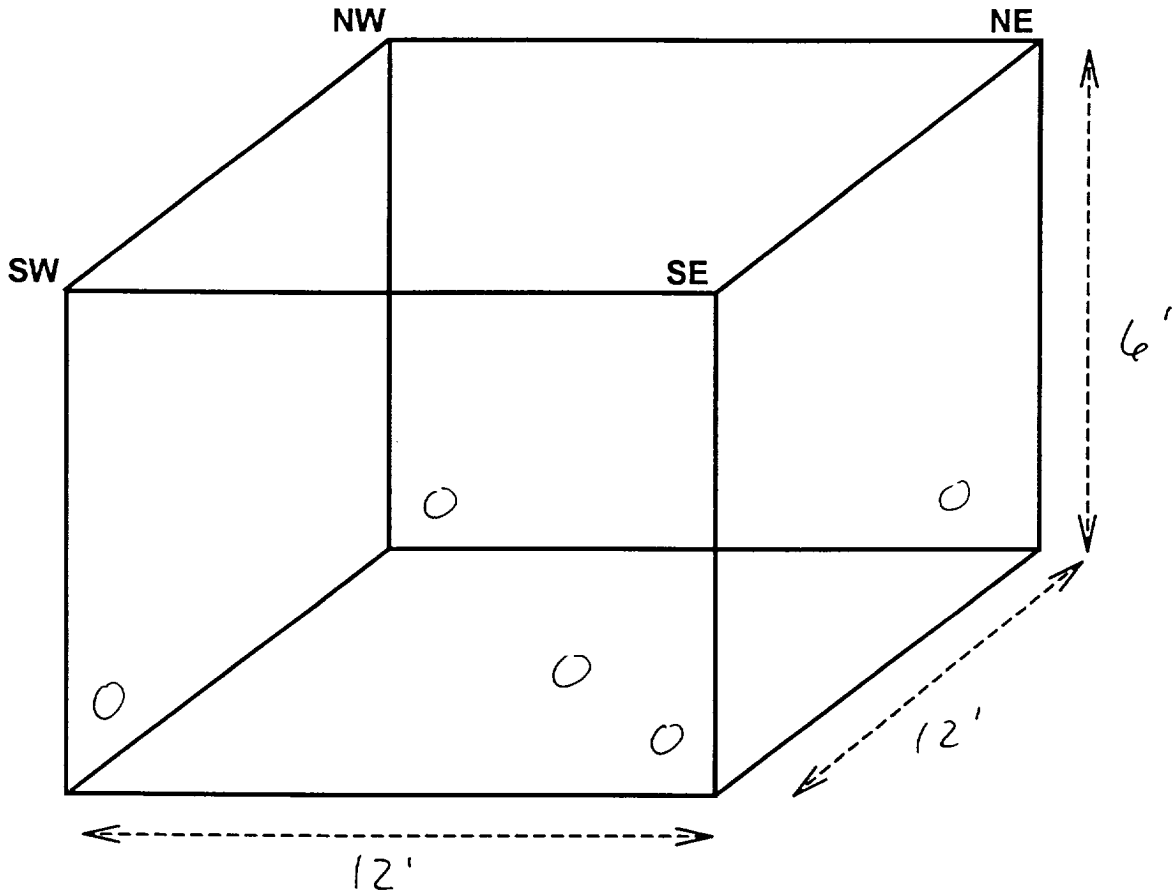
SAMPLE DATE 9/9/97

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

SIDEWALL

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

HIT BED ROCK @ 8'

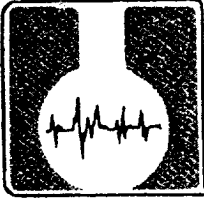


○ = SAMPLE AREA

WELL NAME JAT A 118 # 13 PIT # 2

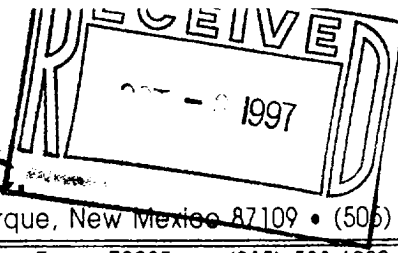
SAMPLE DATE 9/9/97

NOTES 4 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT
SIDEWALL
1 POINT GRAB SAMPLE TAKEN 10" TO 12" INTO BOTTOM CENTER
HIT BED ROCK @ 6'



**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:

September 23, 1997 11:07

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

SENT APACHE CORPORATION

TO: 2855 SOUTHSIDE RIVER RD STE
FARMINGTON, NM 87401-7947

WORKORDER # : 9709121
AWORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 09/12/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9709121-01A

Sample ID: A118 #13 PIT 1 SIDES

Collected: 09/09/97 09:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	09/15/97	X97265
Toluene	ND	mg/kg	0.0050	100	09/15/97	X97265
Ethylbenzene	ND	mg/kg	0.0050	100	09/15/97	X97265
P-&m-Xylene	ND	mg/kg	0.010	100	09/15/97	X97265
O-Xylene	ND	mg/kg	0.0050	100	09/15/97	X97265

Lab ID: 9709121-01B

Sample ID: A118 #13 PIT 1 SIDES

Collected: 09/09/97 09:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	3200	mg/Kg	25	25	09/18/97	SDRO053

Lab ID: 9709121-02A

Sample ID: A118 #13 PIT 1 BOTTOM

Collected: 09/09/97 09:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	250	09/15/97	X97265
Toluene	ND	mg/kg	0.0050	250	09/15/97	X97265
Ethylbenzene	ND	mg/kg	0.0050	250	09/15/97	X97265
P-&m-Xylene	ND	mg/kg	0.010	250	09/15/97	X97265
O-Xylene	ND	mg/kg	0.0050	250	09/15/97	X97265



Lab ID: 9709121-02B
 Sample ID: A118 #13 PIT 1 BOTTOM

Collected: 09/09/97 09:30:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	3000	mg/Kg	25	25	09/18/97	SDRO053

Lab ID: 9709121-03A
 Sample ID: A118 #13 PIT 2 SIDES

Collected: 09/09/97 15:00:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	250	09/15/97	X97265
Toluene	ND	mg/kg	0.0050	250	09/15/97	X97265
Ethylbenzene	ND	mg/kg	0.0050	250	09/15/97	X97265
P-&m-Xylene	ND	mg/kg	0.010	250	09/15/97	X97265
O-Xylene	ND	mg/kg	0.0050	250	09/15/97	X97265

Lab ID: 9709121-03B
 Sample ID: A118 #13 PIT 2 SIDES

Collected: 09/09/97 15:00:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	2200	mg/Kg	25	25	09/18/97	SDRO053

Lab ID: 9709121-04A
 Sample ID: A118 #13 PIT 2 BOTTOM

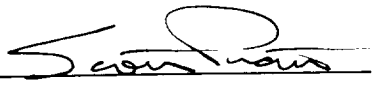
Collected: 09/09/97 15:30:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	250	09/15/97	X97265
Toluene	ND	mg/kg	0.0050	250	09/15/97	X97265
Ethylbenzene	ND	mg/kg	0.0050	250	09/15/97	X97265
P-&m-Xylene	ND	mg/kg	0.010	250	09/15/97	X97265
O-Xylene	ND	mg/kg	0.0050	250	09/15/97	X97265

Lab ID: 9709121-04B
 Sample ID: A118 #13 PIT 2 BOTTOM

Collected: 09/09/97 15:30:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	3000	mg/Kg	25	25	09/18/97	SDRO053



for
William P. Biava
President

WORKORDER COMMENTS

DATE : 09/23/97
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



City of Mustang Nevada

ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

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

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

MELOJUADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Lab job no. 912 Date: _____ of _____

Page _____ of _____

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) John Melaris

Contract / Purchase Order / Quote _____

No. of Containers	Analysis Required	Remarks
1		
1		
1		
1		
1		
1		
1		

LAB FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp.	Chemical
01A	A118#3 Pit #1 Sides	9-9-97	9:00	Soil	102 Glass	ICE	
01B	" "						
02A	A118#3 Pit #1 Bottom		9:30				
02B	" "						
03A	A118#3 Pit #2 Sides		3:00				
03B	" "						
04A	A118#3 Pit #2 Bottom		3:30				
04B	" "						

Retinquished by: Signature <u>John Melaris</u> Printed <u>John Melaris</u> Company <u>Apache Corp.</u> Reason _____	Date _____	Received by: Signature <u>Scott Pratt</u> Printed <u>SCOTT PRATT</u> Company <u>AAL</u> Reason _____	Date <u>12 Sept-97</u>	Received by: Signature <u>Scott Pratt</u> Printed <u>SCOTT PRATT</u> Company <u>AAL</u> Reason _____	Date <u>12 Sept-97</u>
			Time <u>10:30</u>		

After analysis, samples are to be:

Disposed of (additional fee)

Stored (30 days max)

Stored over 30 days (additional fee)

Returned to customer

Method of Shipment: _____

Shipment No. _____

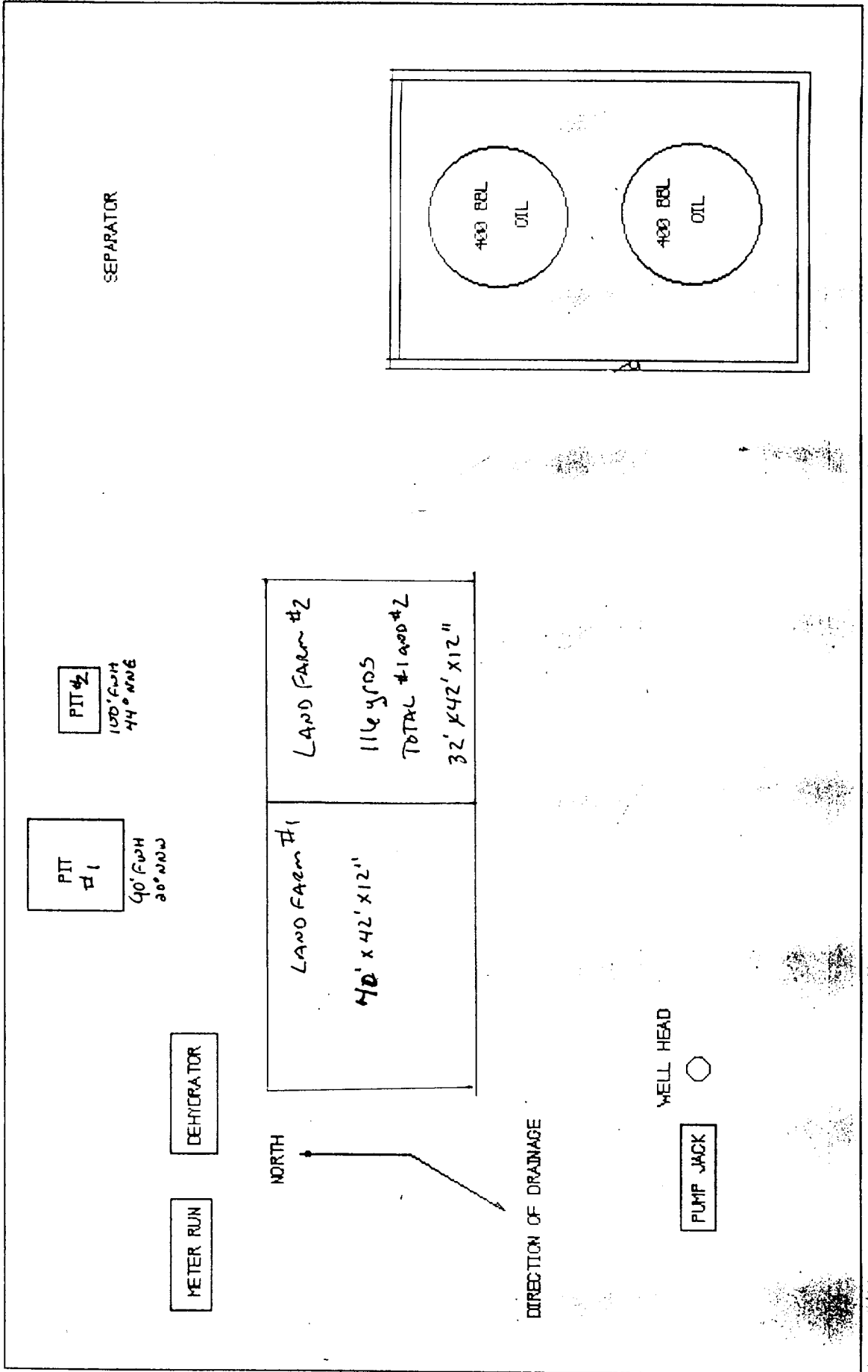
Special Instructions: _____

LABORATORY

M W PETROLEUM JUCARILLA APACHE 118 NUMBER 13
Lease # JAT A118
SE/4 NW/4 (P), SECTION 35, TOWNSHIP 28N, RANGE 31W

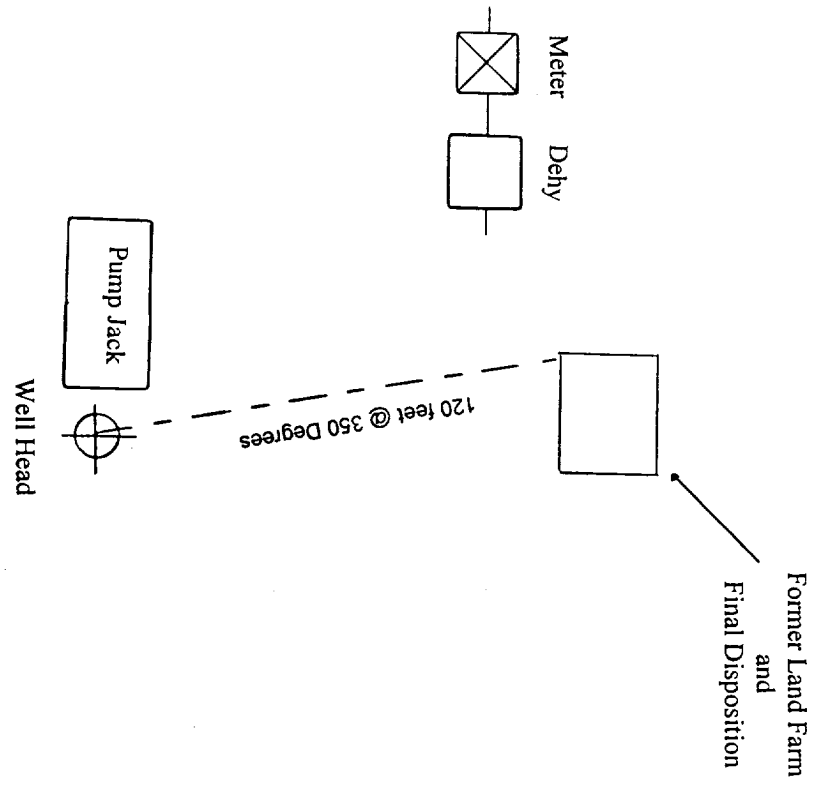
RIO ARriba COUNTY, NEW MEXICO

Revised: 8/10/97 MG





Scale
1 Inch Equals 50 Feet



WILLIAMS FIELD SERVICES
LANDFARM LOCATION MAP
Jicarilla Apache 118 Unit 13
Unit E Sec 35 Twn 26N Rng 3W
August 20, 1997

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 A118 # 13 CELL # 1</u>	
Location: Unit or Qtr/Qtr Sec <u>F SEC 35 T 26 N R 3 W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>9/8/97</u> Date Completed: <u>6/14/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>65</u>	
Composted _____	
Other <u>REMEDIATED SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</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>	Final Closure Sampling Sampling Date: <u>6/14/98</u> Time: <u>12:50PM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>2900</u> Method <u>M8015</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>9/22/98</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>Kent M... [unclear]</i></u> DATE: <u>11-13-98</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 A118 # 13 CELL # 2</u>	
Location: Unit or Qtr/Qtr Sec <u>F SEC 35 T 26 N R 3 W</u> County <u>RIO ARRIBA</u>	
Land Type <u>JIC. TRIBAL</u>	
Date Remediation Started: <u>9/8/97</u> Date Completed: <u>6/14/98</u>	
Remediation Method: Landfarmed <u>XXX</u> Approx. cubic yards <u>51</u>	
Composted _____	
Other <u>REMEDIATED SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling Sampling Date: <u>6/14/98</u> Time: <u>1:00PM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>3500</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>9/22/98</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>Kent M...ll</i></u> DATE: <u>11-13-98</u>	

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE JAT A118 # 13

* AMOUNT OF SOIL UNDERGOING REMEDIATION 116 Yds.

CELL No. <u>1</u>	SampDATE 6/14/98	TPH 2900	BTEX ND
DIMENSIONS(LxWxH) <u>40' X 42' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTH</u>			
* DATE BEGAN: <u>9/9/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/14/98</u>			
CELL No. <u>2</u>	SampDATE 6/14/98	TPH 3500	BTEX ND
DIMENSIONS(LxWxH) <u>32' X 42' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTH EAST</u>			
* DATE BEGAN: <u>9/9/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/14/98</u>			
CELL No. <u>3</u>	SampDATE	TPH	BTEX
DIMENSIONS(LxWxH)			
CELL LOCATION (dir. from well head)			
* DATE BEGAN:			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm)			
REMEDIATION RECORD: (Date, Treatment, Tilling)			
9/12/97 TREAT BOTH CELLS WITH 46-0-0 FERTILIZER, WATER, PLOW AND TILL.			
9/23/97 PLOW AND TILL CELLS.			
4/23/98 PLOW AND TILL CELLS.			
5/5/98 WATER, PLOW AND TILL CELLS.			
5/21/98 PLOW AND TILL CELLS.			
5/29/98 PLOW AND TILL CELLS.			
6/3/98 WATER, PLOW AND TILL CELLS.			
6/12/98 PLOW AND TILL CELLS.			

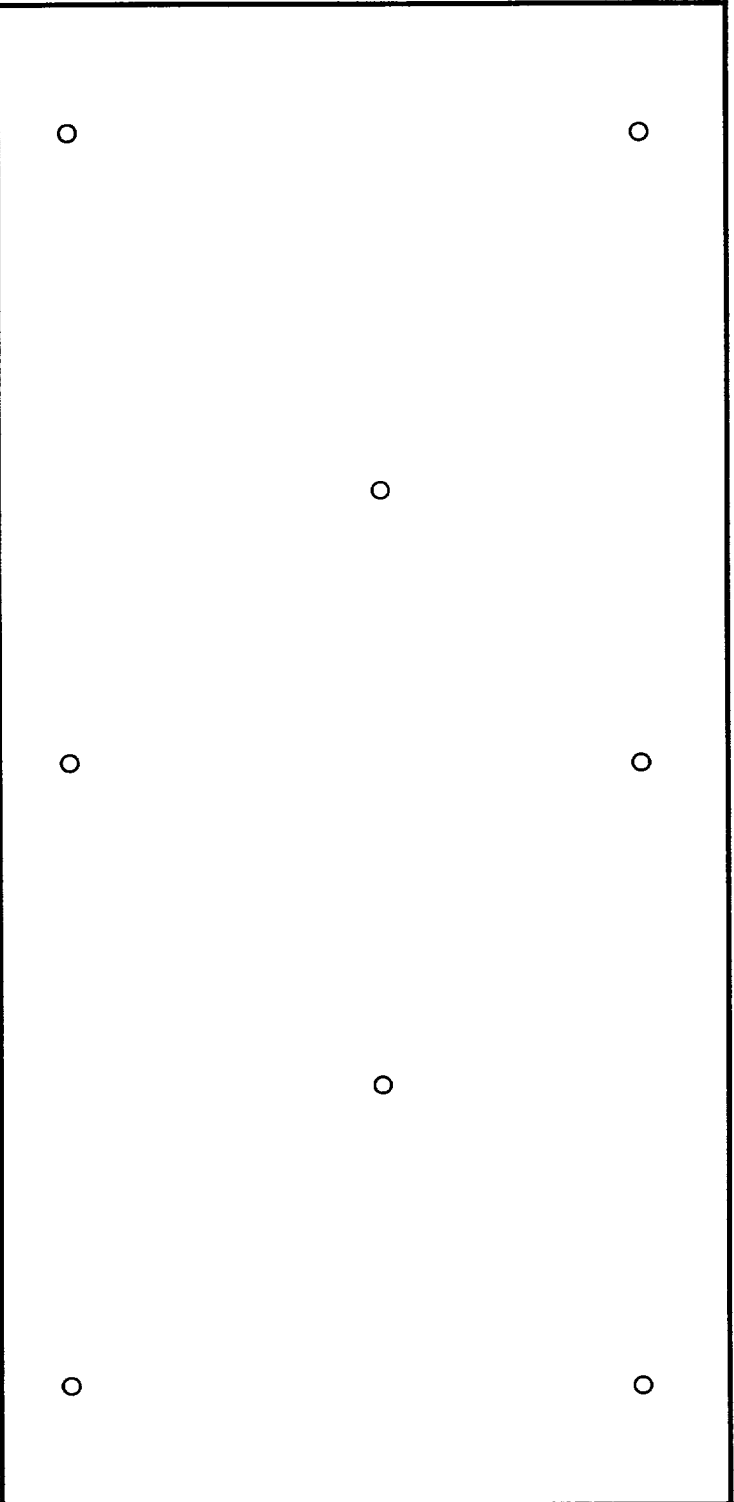
From excavation reports.

WELL NAME: JAT A118 # 13 CELL # 1

SAMPLE DATE: 6/14/98

DIMENSIONS: 40' X 42' X 12"

○ = SAMPLE AREA



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

8 POINT COMPOSITE SAMPLE

WELL NAME:

JAT A118 # 13 CELL # 2

SAMPLE DATE:

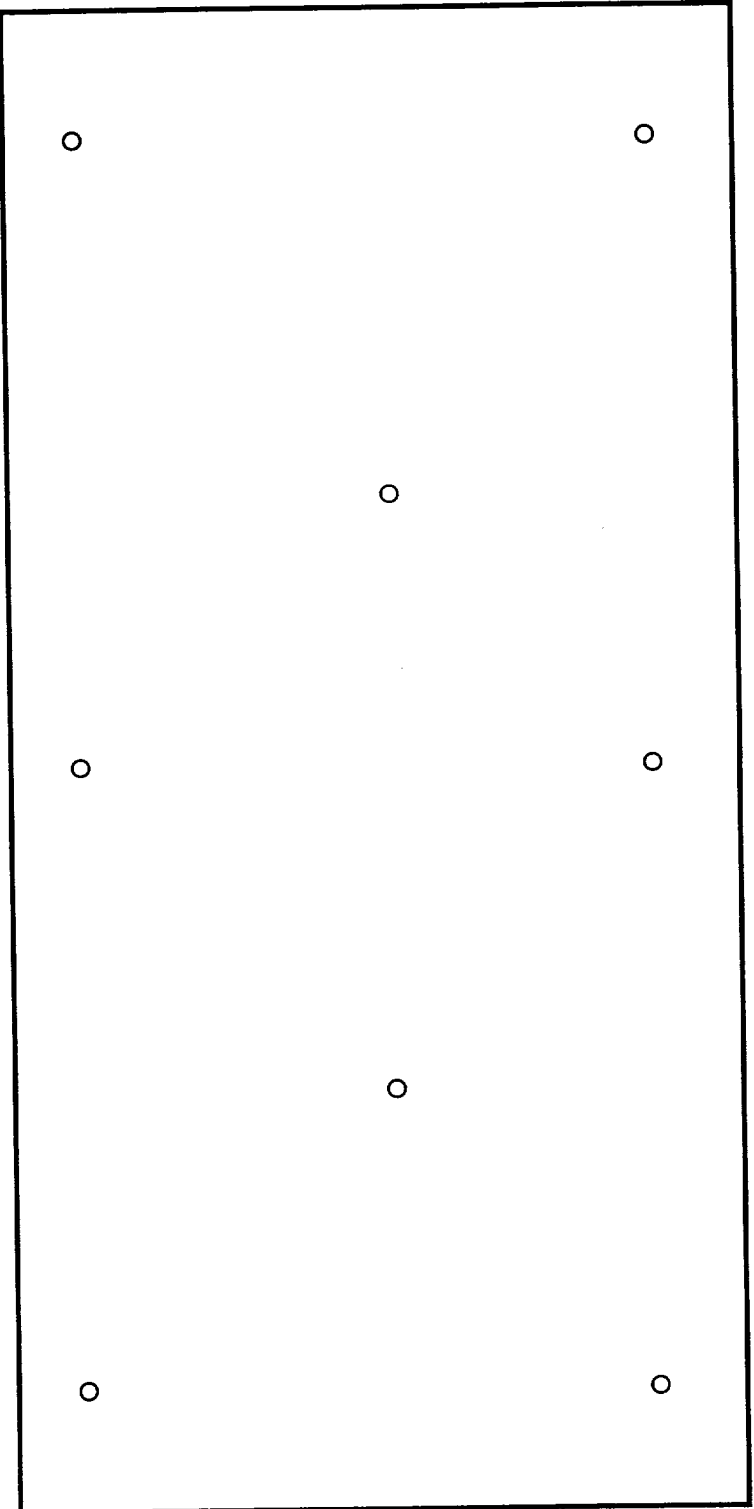
6/14/98

DIMENSIONS:

32' X 42' X 12"



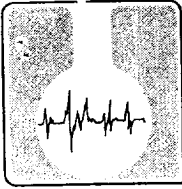
= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

8 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

* 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

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

Assaigai Analytical Laboratories, Inc.
Certificate of Analysis

Client: **APACHE CORPORATION**
Project: **9806208 JICARILLA**

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

Client Sample ID: **JAT A118 #13 CELL 1** Sample Matrix: **SOIL** Sample Collected: **06/14/98 12:50:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit *	Sequence	Run Date
SW846-8020 Volatiles								
9806208-01A	X98330	71-43-2	ND	mg / Kg	50	0.005	XG.1998.551-22	06/18/98
	X98330	100-41-4	ND	mg / Kg	50	0.005	XG.1998.551-22	
	X98330	95-47-6	ND	mg / Kg	50	0.005	XG.1998.551-22	
	X98330		ND	mg / Kg	50	0.01	XG.1998.551-22	
	X98330	108-88-3	ND	mg / Kg	50	0.005	XG.1998.551-22	
SW846-8015 Modified TPH								
9806208-01B	X98331		2900	mg / Kg	25	25	XG.1998.557-19	06/21/98

Client Sample ID: **JAT A118 #13 CELL 2** Sample Matrix: **SOIL** Sample Collected: **06/14/98 13:00:00**

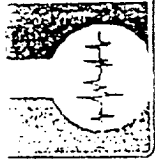
Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit *	Sequence	Run Date
SW846-8020 Volatiles								
9806208-02A	X98330	71-43-2	ND	mg / Kg	50	0.005	XG.1998.551-23	06/18/98
	X98330	100-41-4	ND	mg / Kg	50	0.005	XG.1998.551-23	
	X98330	95-47-6	ND	mg / Kg	50	0.005	XG.1998.551-23	
	X98330		ND	mg / Kg	50	0.01	XG.1998.551-23	
	X98330	108-88-3	ND	mg / Kg	50	0.005	XG.1998.551-23	
SW846-8015 Modified TPH								
9806208-02B	X98331		3500	mg / Kg	25	25	XG.1998.557-20	06/21/98



Assagai Analytical Laboratories, Inc.
Certificate of Analysis

Client: **APACHE CORPORATION**
Project: **9806208 JICARILLA**

*** 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

(505) 345-8964
3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

LAB Job no.: 6222 Date: _____
Page: 1 of 1
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) [Signature]

Client: Apache Corporation
Address: 2855 Southside River Rd, Ste. A
City / State / Zip: Farmington, NM 87401-7947
Project Name / Number: _____
Samplers: (Signature) [Signature]

Contract / Purchase Order / Quote _____

ANAL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp	Chemical	No. of Containers	Remarks
1A	JAT A118 #13 CELL 1	6/14/98	12:50	SOIL	4 oz glass	ICE		1	
1B	" " " "		"	"	4 oz glass			1	
2A	JAT A118 #13 CELL 2		1:00	"				1	
2B	" " " "		"	"				1	

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

After analysis, samples are to be:

Disposed of (additional fee)

Stored (30 days max)

Stored over 30 days (add. fee)

Returned to customer

Method of Shipment: _____

Shipment No. _____

Special Instructions: _____

LABORATORY