

District III

1600 Rio Brazos Rd

DEPT. NM 87110 GAS INSPECTOR

JAN 29 1999

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

RECEIVED
JAN 25 1999OIL CON. DIV.
DIST. 3**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 A118 #2 Pit #1</u>			
Location: Unit or Qtr/Qtr Sec	<u>P</u>	<u>Sec 25</u>	<u>T 26 N R 3W</u> County <u>Rio Arriba</u>
Pit Type: Separator: _____	Dehydrator: _____	Other: <u>Blow Pit</u>	
Land Type: <u>Jicarilla Tribal</u>			
Beginning Pit Dimensions:		Length <u>35'</u>	Width <u>30'</u> Depth <u>4'</u>
Ending Pit Dimensions:		Length <u>45'</u>	Width <u>35'</u> Depth <u>10'</u>
Reference: Wellhead <u>XX</u>		Other _____	
Footage from reference:		<u>100'</u>	
Direction from reference:		<u>84</u> Degrees <u>XX</u> East	North <u>X</u>
		West	South
Depth To Groundwater:		Less than 50 feet (20 points) _____	
(vertical distance from		50 feet to 99 feet (10 points) _____	
contaminants to seasonal		Greater than 100 feet (0 points) <u>0</u>	
high water elevation of			
groundwater)			
Wellhead Protection Area:		Yes (20 points) _____	
(Less than 200 feet from a private		No (0 points) <u>0</u>	
domestic water source, or; less than			
1000 feet from all other water sources)			
Distance To Surface Water:		Less than 200 feet (20 points) _____	
(Horizontal distance to perennial		200 feet to 1000 feet (10 points) _____	
lakes, ponds, rivers, streams, creeks,		Greater than 1000 feet (0 points) <u>0</u>	
irrigation canals and ditches)			
		RANKING SCORE (TOTAL POINTS) <u>0</u>	

Date Remediation Started:

7/16/97

Date Completed:

7/17/97

Remediation Method:

(Check all appropriate sections)

Excavation

XXX

Approx. cubic yards

350

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 10' , took PID readings. Spread soil onlocation for remediation. Took soil samples.

Groundwater Encountered:

No

XX

Yes

Depth

Final Pit:

Sample location

4 point composite sample taken from pit sidewalls.

Closure Sampling:

(in multiple samples, attach sample results and diagram of sample locations and depths)

Sample depth

10'1 Grab sample taken from pit bottom center8 to 10" into pit sidewalls 10" into pit bottom

Sample Date

7/17/97

Sample Time

11:30 AM

Sample results

Benzene

(ppm)

ND

Total BTEX

(ppm)

ND

Field Headspace

(ppm)

2.64

TPH

Side/ND
BTM/1400

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

January 8, 1999

PRINTED NAME

Jeff Cross

SIGNATURE

AND TITLE

Project Manager

District III
1000 Rio Brazos Rd
Aztec, NM 87410

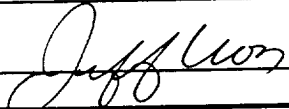
State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
2040 S. PACHECO
Santa Fe, New Mexico 87505

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>Apache Corporation \ MW Petroleum</u>		Telephone: <u>505-325-0318</u>	
Address: <u>2855 Southside River Road, Suite A, Farmington, NM 87401</u>			
Facility or Well Name:		<u>Jic Apache Tribal A118 #2 Pit #2</u>	
Location: Unit or Qtr/Qtr Sec	<u>P</u>	<u>Sec 25</u>	<u>T 26 N R 3W</u> County <u>Rio Arriba</u>
Pit Type: Separator:	<u>XX</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: (Attach diagram)	Ending Pit Dimensions:	Length <u>15'</u>	Width <u>15'</u> Depth <u>5'</u>
Reference:	Wellhead	<u>XX</u>	Other
Footage from reference:		<u>100'</u>	
Direction from reference:		<u>166</u> Degrees	<u>X</u> East 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>
 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 200 feet	(20 points) <u> </u>
		200 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>8/12/97</u>		Date Completed:		<u>8/12/97</u>	
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>		Approx. cubic yards		<u>25</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 5' , took PID readings. Spread soil on</u>					
		<u>location for remediation. Took soil samples.</u>					
Groundwater Encountered:		No <u>XX</u>		Yes _____		Depth _____	
Final Pit:		<u>4 point composite sample taken from pit sidewalls.</u>					
Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)		<u>1 Grab sample taken from pit botton center</u>					
		Sample location					
		Sample depth		<u>5' 8 to 10" into pit sidewalls 10" into pit bottom</u>			
		Sample Date		<u>8/12/97</u>		Sample Time <u>1:00 PM</u>	
		Sample results					
		Benzene		(ppm)		<u>ND</u>	
		Total BTEX		(ppm)		<u>ND</u>	
		Field Headspace		(ppm)		<u>0.12</u>	
		TPH				<u>Side/ND</u> <u>BTM/ND</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>January 8, 1999</u>		PRINTED NAME		<u>Jeff Cross</u>	
SIGNATURE		<u></u>		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 A 118 # 2</u>		<u>PIT # 1</u>		
Location:	Unit or Qtr/Qtr	Sec	<u>P</u>	<u>SEC 25</u>	<u>T 26 N R 3 W</u> County <u>RIO ARRIBA</u>
Pit Type:	Separator:	<u>Dehydrator</u>	Other	<u>BLOW PIT</u>	
Land Type:	<u>JIC. TRIBAL</u>				
Pit Location: (Attach diagram)	Pit Dimensions:	Length	<u>45'</u>	Width	<u>35'</u> Depth <u>10'</u>
	Reference:	Wellhead	<u>XXX</u>	Other	<u></u>
	Footage from reference:	<u>100'</u>			
	Direction from reference:	<u>84</u>	Degrees	<u>XX</u>	East of North <u>X</u> West of South <u></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: 7/16/97 Date Completed: 7/17/97

Remediation Method:

(Check all appropriate sections)

Excavation XXX Approx. cubic yards 350

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 10', took PID readings. spread soil on

location for remediation. Took soil samples.

Groundwater Encountered: No XXX Yes _____ Depth _____

Final Pit:

Sample location 4 point composite taken from pit sidewalls.
1 GRAB SAMPLE TAKEN FROM PIT BOTTOM CENTER.

Closure Sampling:

(in multiple samples, attach sample results and diagram of sample locations and depths)

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

Sample Date 7/17/97 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>2.64</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>SIDE/ND</u>		Total Xylenes	(ppb)	<u>NA</u>
			<u>BTM/1400</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 11-25-98 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. M...

DATE:

12-28-98

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

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: <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 A 118 # 2</u>		PIT # <u>2</u>	
Location:	Unit or Qtr/Qtr Sec <u>P</u>	<u>SEC 25</u>	<u>T 26 N</u> <u>R 3 W</u> County <u>RIO ARRIBA</u>
Pit Type:	Separator: <u>XX</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>5'</u>
	Reference:	Wellhead <u>XXX</u>	Other <u> </u>
	Footage from reference:	<u>100'</u>	
	Direction from reference:	<u>166</u> Degrees <u>X</u> East	North <u> </u>
		<u> </u> West	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: 8/12/97 Date Completed: 8-12-97

Remediation Method: (Check all appropriate sections)
Excavation XXX Approx. cubic yards 25
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 5', took PID readings. spread soil on location for remediation. Took soil samples.

Groundwater Encountered: No XXX Yes _____ Depth _____

Final Pit: Sample location 4 point composite taken from pit sidewalls.
Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths) 1 GRAB SAMPLE TAKEN FROM PIT BOTTOM CENTER.

Sample depth 5' 8" to 10" into pit side walls, 10" into pit bottom.

Sample Date 8/12/97 Sample Time 1:00PM
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>0.12</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>SIDE/ND</u>		Total Xylenes	(ppb)	<u>NA</u>
			<u>BTM/ND</u>				

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

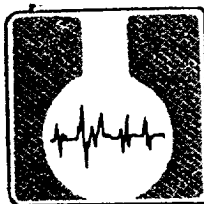
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE 11-25-98 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 Mammall DATE: 12-28-98



**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 22, 1997 11:13

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9707175
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 07/18/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9707175-01A *Pit #1*
Sample ID: JAT A 118 #2 PIT SIDES

Collected: 07/17/97 11:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
Toluene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
Ethylbenzene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
P-&m-Xylene	ND	mg/kg	0.010	100	07/21/97	SBTXME179
O-Xylene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179

Lab ID: 9707175-01B *Pit #1*
Sample ID: JAT A 118 #2 PIT SIDES

Collected: 07/17/97 11:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	ND	mg/Kg	25	25	07/21/97	SDRO43

Lab ID: 9707175-02A *Pit #1*
Sample ID: JAT A 118 #2 PIT BOTTOM

Collected: 07/17/97 11:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
Toluene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
Ethylbenzene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179
P-&m-Xylene	ND	mg/kg	0.010	100	07/21/97	SBTXME179
O-Xylene	ND	mg/kg	0.0050	100	07/21/97	SBTXME179



b ID: 9707175-02B

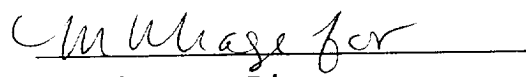
Pit #1

Collected: 07/17/97 11:30:00

Sample ID: JAT A 118 #2 PIT BOTTOM

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	1400	mg/Kg	25	25	07/21/97	SDRO43


William P. Biava
President

WORKORDER COMMENTS

DATE : 07/22/97
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



7300 JEFFERSON, N.F.
ALBUQUERQUE, NEW MEXI
(505) 345-8964

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

MEI QUIADES ALANIS

CIUDAD JUAREZ. CHIHUAHUA MEXICO 32320

Telephone No. (505) 774-6643

Fax No. (505) 774-6624

Samplers: (Signature) [Signature]

Contract / Purchase Order / Quote

[illegible]

Date 7-18-97	Received by: <u>Carla Rubio</u>
	Signature _____
	Printed _____
	Company <u>ACL</u>
	Reason _____
Time 16:00	

After analysis, samples are to be:

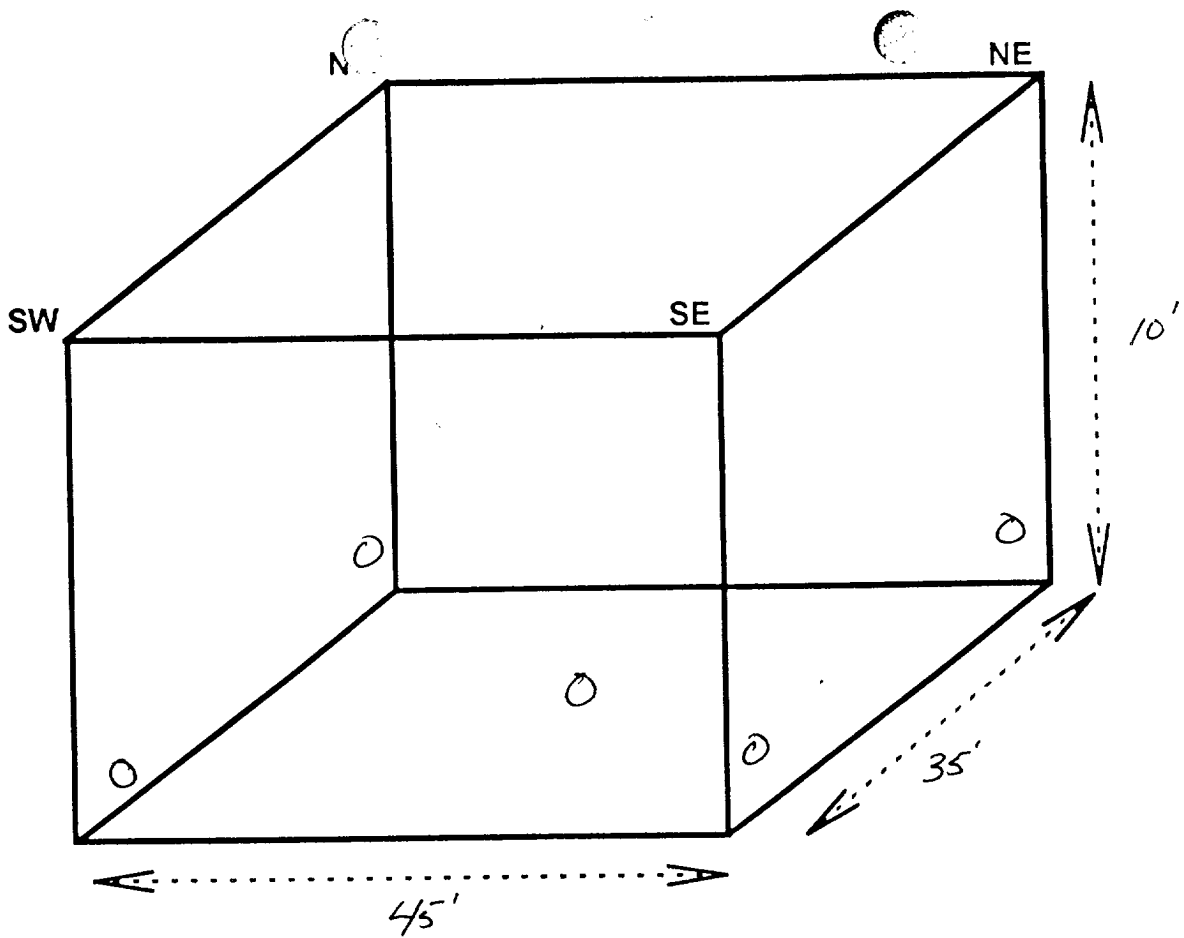
☐ Disposed of (additional fee)

☐ Stored (30 days max)

☐ Stored over 30 days (additional fee)

☐ Returned to customer

U.S. N. LABORATORY



○ = SAMPLE AREA

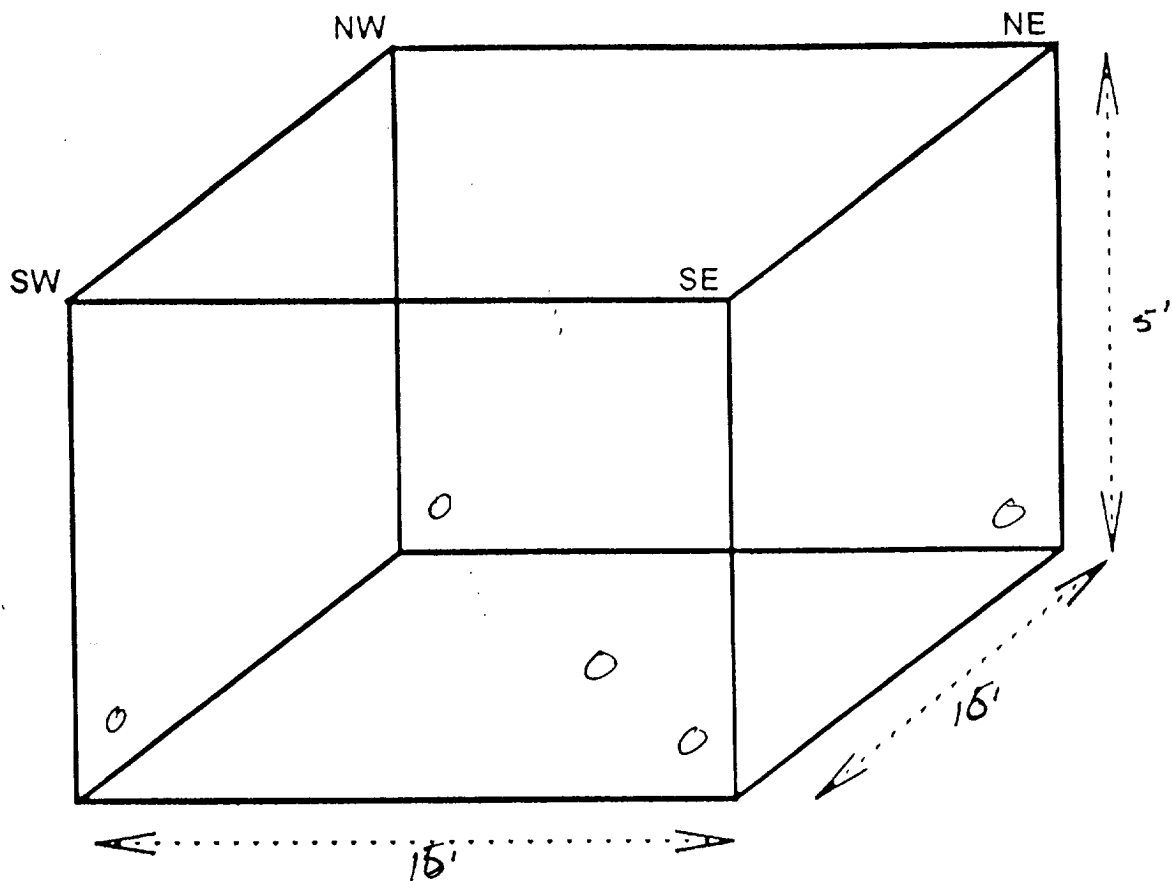
WELL NAME JAT A118 #2 Pit #1

SAMPLE DATE 7-17-97

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

SIDEWALL

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



○ = SAMPLE AREA

WELL NAME A118 #2 Pit #2

SAMPLE DATE 8-12-97

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

M W PETROLEUM/FARMINGTON DISTRICT
PIT EXCAVATION AND CLOSURE REPORT

LOCATION JAT A118 # 2

PIT COUNT 2

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

START:		PIT #1			7/16/97		FINISH: PIT #1		7/17/97				
DIMENSIONS		PIT #2			12-Aug-97			PIT #2			12-Aug-97		
	W	L	D				W	L	D			CU YDS	
Pit 1	30'	35'	4'		Pit 1		35'	45'	10'			350	
Pit 2	10'	10'	2'		Pit 2		15'	15'	5'			25	
Pit 3					Pit 3								
		Pit 1 @ 8'		Pit 2 @ 5'		Pit 3 @				Pit 1 @ 10'		Pit 2 @ 5'	Pit 3 @
P I D	Center	195	0.3			P I D	Center	12.1	0.3				
	NW Corner	115	0.1				NW Corner	0.4	0.1				
	NE Corner	157	0				NE Corner	0.4	0				
	SW Corner	138	0.2				SW Corner	0.1	0.2				
	SE Corner	185	0				SE Corner	0.2	0				

NOTES:

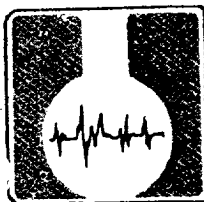
7/16/97 START EXCAVATION ON PIT # 1, EXCAVATE PIT TO 8' PID READINGS HIGH.

7/17/97 EXCAVATE PIT # 1 TO 10' NO STAINING OR ODOR , PID READINGS GOOD.

8/12/97 EXCAVATE PIT # 2 ,TO 5' , NO STAINING AND NO ODOR.

8/12/97 PIT # 2 IS CLEAN , PID READINGS GOOD.NO MORE EXCAVATION NEEDED.

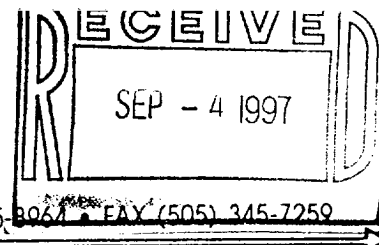
SAMP DATE		7/17/97	8/12/97						
		Pit 1 @ 10'	Pit 2 @ 5'	Pit 3 @	ANALYSIS RESULTS		PER LAB	Assaigai	
P I D	Center	12.1	0.3		PIT NO	TPH	BETEX	WITNESS	DATE
	NW Corner	0.4	0.1						
	NE Corner	0.4	0		1	1400	ND	J.C.	7/21/97
	SW Corner	0.1	0.2		2	ND	ND	J.C.	8/20/97
	SE Corner	0.2	0		3				
RE-SAMPLE OR CELL(S) SAMPLE									
DATE:		Pit 1 @	Pit 2 @	Pit 3 @	ANALYSIS RESULTS		PER LAB		
P I D	Center				PIT NO	TPH	BETEX	WITNESS	DATE
	NW Corner								
	NE Corner				1				
	SW Corner				2				
	SE Corner				3				
RE-SAMPLE OR CELL(S) SAMPLE									
DATE:		Pit 1 @	Pit 2 @	Pit 3 @	ANALYSIS RESULTS		PER LAB		
P I D	Center				PIT NO	TPH	BETEX	WITNESS	DATE
	NW Corner								
	NE Corner				1				
	SW Corner				2				
	SE Corner				3				



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8064 • FAX (505) 345-7259

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Report Generated:
August 22, 1997 14:38

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9708166
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 08/15/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9708166-01A

Sample ID: ~~XXXXXXXXXX~~

Collected: ~~08/12/97~~ 13:00:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
Toluene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
Ethylbenzene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
P-&m-Xylene	ND	mg/kg	0.010	100	08/20/97	SBTXME185
O-Xylene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185

Lab ID: 9708166-01B

Sample ID: ~~A118 #2 PIT #2 SIDES~~

Collected: ~~08/12/97~~ 13:00:00

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	25	25	08/19/97	SDRO47

Lab ID: 9708166-02A

Sample ID: ~~A118 #2 PIT #2 BOTTOM~~

Collected: 08/12/97 13:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
Toluene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
Ethylbenzene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185
P-&m-Xylene	ND	mg/kg	0.010	100	08/20/97	SBTXME185
O-Xylene	ND	mg/kg	0.0050	100	08/20/97	SBTXME185



ID: 9708166-02B

Sample ID: [REDACTED] BOTTOM

Collected: 08/12/97 13:30:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	[REDACTED]	mg/Kg	25	25	08/19/97	SDRO47

William P. Biava
William P. Biava
President

WORKORDER COMMENTS

DATE : 08/22/97
WORKORDER:

DEFINITIONS/DATA QUALIFIERS

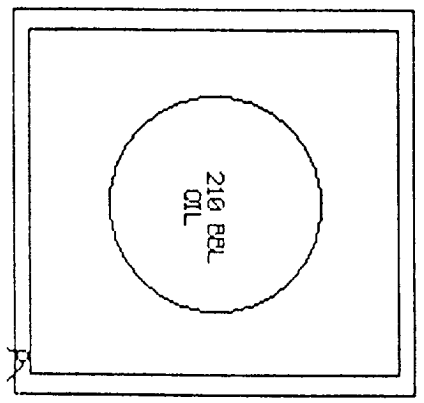
The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

- 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

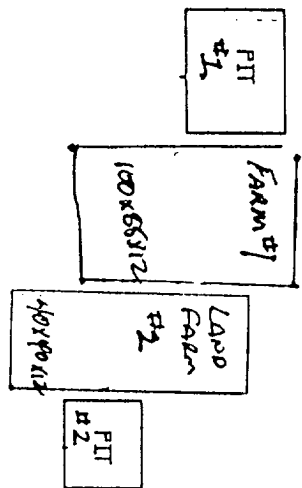
M V PETROLEUM, JICARILLA APACHE 118 NUMBER 2
SE/4 SE/4 P1, SECTION 25, TOWNSHIP 28N, RANGE 3N
RUD ARRIBA COUNTY, NEW MEXICO



WELL HEAD

SEPARATOR

METER RUN



NORTH

DIRECTION OF DRAINAGE

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>MW PETROLEUM</u> <u>APACHE CORPORATION</u>		Telephone <u>505-325-0318</u>	
Address: <u>2855 SOUTHSIDE RIVER ROAD/SUITE A/ FARMINGTON N.M. 87401-7947</u>			
Facility or Well Name: <u>JAT A 118 # 2 CELL # 1</u>			
Location: Unit or Qtr/Qtr Sec <u>P</u> SEC 25 T 26 N R 3 W County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>7/16/97</u>		Date Completed: <u>11/11/98</u>	
Remediation Method: Landfarmed <u>XXX</u>		Approx. cubic yards <u>315</u>	
Composted <u> </u>			
Other <u> </u>		<u>SOIL TO BE PUT BACK IN PIT</u>	
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>11/11/98</u> Time: <u>12:45PM</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>11/25/98</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>we are Backfill</u>			
SIGNED: <u>Ken C Mamm</u>		DATE: <u>12-28-98</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>MW PETROLEUM</u> <u>APACHE CORPORATION</u>		Telephone <u>505-325-0318</u>	
Address: <u>2855 SOUTHSIDE RIVER ROAD/SUITE A/ FARMINGTON N.M. 87401-7947</u>			
Facility or Well Name: <u>JAT A 118 # 2 CELL # 2</u>			
Location: Unit or Qtr/Qtr Sec <u>P</u> <u>SEC 25</u> <u>T 26 N</u> <u>R 3 W</u> County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>7/16/97</u>		Date Completed: <u>11/11/98</u>	
Remediation Method: Landfarmed <u>XXX</u>		Approx. cubic yards <u>59</u>	
Composted _____			
Other <u>SOIL TO BE PUT BACK IN PIT</u>			
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>11/11/98</u> Time: <u>12:55PM</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>11/25/98</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>Kate C. Mendez</u>		DATE: <u>12-28-98</u>	

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE JAT A118 #2

* AMOUNT OF SOIL UNDERGOING REMEDIATION 375 Yds.

CELL No. <u>1</u>	SampDATE	TPH	BTEX
	6/10/98	5700	ND
	11/11/98	ND	ND
DIMENSIONS(LxWxH) <u>100' X 85' X 12"</u>			
CELL LOCATION (dir. from well head) <u>EAST</u>			
* DATE BEGAN: <u>7/16/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) _____			
CELL No. <u>2</u>	SampDATE	TPH	BTEX
	6/10/98	2700	ND
	11/11/98	ND	ND
DIMENSIONS(LxWxH) <u>40' X 40' X 12"</u>			
CELL LOCATION (dir. from well head) <u>SOUTH</u>			
* DATE BEGAN: <u>7/16/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) _____			
CELL No. <u>3</u>	SampDATE	TPH	BTEX
DIMENSIONS(LxWxH) _____			
CELL LOCATION (dir. from well head) _____			
* DATE BEGAN: _____			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) _____			
REMEDICATION RECORD: (Date, Treatment, Tilling)			
7/21/97 TREAT CELLS WITH 46-0-0 FERTILIZER, WATER,PLOW AND TILL SOIL.			
7/30/97 PLOW AND TILL CELLS. 6/3/98 WATER,PLOW AND TILL SOIL CELLS.			
8/4/97 PLOW AND TILL SOIL. 6/9/98 PLOW AND TILL SOIL CELLS.			
8/21/97 PLOW AND TILL SOIL. 7/13/98 WATER PLOW AND TILL SOIL CELLS			
8/29/97 WATERPLOW AND TILL SOIL CELLS. 7/28/98 PLOW AND TILL SOIL CELLS.			
9/23/97 PLOW AND TILL SOIL CELLS. 8/12/98 PLOW AND TILL SOIL CELLS.			
4/22/98 PLOW AND TILL SOIL CELLS. 9/4/98 WATER,PLOW AND TILL SOIL CELLS.			
5/19/97 PLOW AND TILL SOIL CELLS 9/24/98 PLOW AND TILL SOIL CELLS.			

From excavation reports.

JAT A118#2 CELL#2

11/11/98

40' X 40' X 12"

= SAMPLE AREA

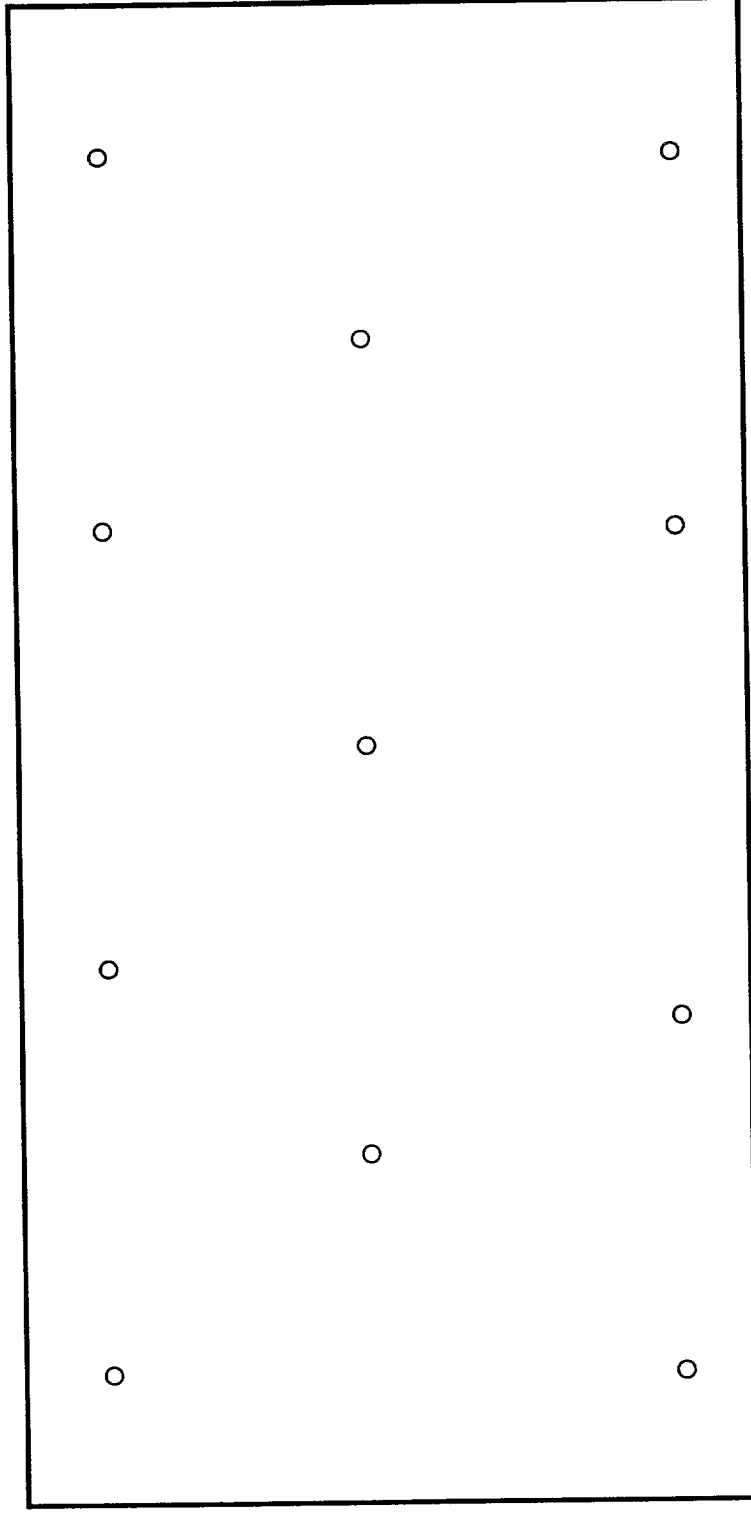
ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

8 POINT COMPOSITE SAMPLE

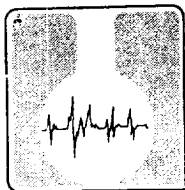
[illegible]

WELL NAME: JAT A118 # 2 CELL # 1
SAMPLE DATE: 11/11/98
DIMENSIONS: 100' X 85' X 12"

○ = SAMPLE AREA



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



ASSAIGAI ANALYTICAL LABORATORIES, INC.

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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: **9811106 JICARILLA PIT CLOSURES**

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

Client Sample ID **A118#2 CELL 1** Sample Matrix **SOIL** Sample Collected **11/11/98 12:45:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	* Sequence	Run Date
Test: SW846 8010B/8020A Purgeable VOCs by GC/PID-ELCD								
9811106-01A	X98513	71-43-2	Benzene	ND	mg / Kg	250	0.005	XG.1998.996-6 11/12/98
	X98513	100-41-4	Ethylbenzene	ND	mg / Kg	250	0.005	XG.1998.996-6
	X98513	95-47-6	o-Xylene	ND	mg / Kg	250	0.005	XG.1998.996-6
	X98513		P/M-Xylenes	ND	mg / Kg	250	0.01	XG.1998.996-6
	X98513	108-88-3	Toluene	ND	mg / Kg	250	0.005	XG.1998.996-6
Test: SW846 8015A Diesel Range Organics by GC/FID								
9811106-01B	X98501		Diesel Range Organics	ND	mg / Kg	25	25	XG.1998.1006-7 11/13/98

Client Sample ID **A118#2 CELL 2** Sample Matrix **SOIL** Sample Collected **11/11/98 12:55:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	* Sequence	Run Date
Test: SW846 8010B/8020A Purgeable VOCs by GC/PID-ELCD								
9811106-02A	X98513	71-43-2	Benzene	ND	mg / Kg	250	0.005	XG.1998.996-7 11/12/98
	X98513	100-41-4	Ethylbenzene	ND	mg / Kg	250	0.005	XG.1998.996-7
	X98513	95-47-6	o-Xylene	ND	mg / Kg	250	0.005	XG.1998.996-7
	X98513		P/M-Xylenes	ND	mg / Kg	250	0.01	XG.1998.996-7
	X98513	108-88-3	Toluene	ND	mg / Kg	250	0.005	XG.1998.996-7
Test: SW846 8015A Diesel Range Organics by GC/FID								
9811106-02B	X98501		Diesel Range Organics	ND	mg / Kg	25	25	XG.1998.1006-8 11/13/98



