

Dennis L. Fort
District III
DEPUTY OIL & GAS INSPECTOR
Energy, Minerals and Natural Resources Department
Aztec, NM 87410
APR 10 1998

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

Approved **PIT REMEDIATION AND CLOSURE REPORT**

Operator: Apache Corporation		Telephone: 505-325-0318	
Address: 2855 Southside River Road, Suite A, Farmington, NM 87401			
Facility or Well Name: JAT 124 #4			
Location: Unit or Qtr/Qtr Sec		J Sec 23 T 25 N R 4W County Rio Arriba	
Pit Type: Separator: _____ Dehydrator: _____ Other: Blow Pit			
Land Type: Jicarilla Tribal			
BEGIN Dimensions			
Pit Location: END Pit Dimensions:		Length 35' Width 24' Depth 7'	
(Attach diagram)			
Reference: Wellhead X Other: _____			
Footage from reference: 100'			
Direction from reference: 100 Degrees XX East of North		West of South X	
Depth To Groundwater: (vertical distance from contaminants to seasonal high water elevation of groundwater)		Less than 50 feet (20 points) _____ 50 feet to 99 feet (10 points) _____ Greater than 100 feet (0 points) 0	
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)		Yes (20 points) _____ No (0 points) 0	
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Less than 200 feet (20 points) _____ 200 feet to 1000 feet (10 points) _____ Greater than 1000 feet (0 points) 0	
		RANKING SCORE (TOTAL POINTS) 0	

RECEIVED
DEC 10 1997
OIL CON. DIV.
DIST. 3

Date Remediation Started: 9/28/95 Date Completed: 6/26/97

Remediation Method: (Check all appropriate sections)
Excavatio XXX Approx. cubic yards 140
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 7', took PID readings.

Spread soil on location for remediation. Took soil samples.

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location 5 point composite taken from pit sidewalls and pit bottom center

Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 8 to 10" into pit sidewalls 10" into pit bottom

Sample Date 12/15/95 Sample Time 9:30 A.M.
Sample results

Benzene (ppm) ND

Total BTEX (ppm) ND

Field Headspace (ppm) 0.6

TPH 580

Groundwater Sample: Yes _____ No X (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 November 5, 1997 PRINTED NAME Jeff Cross

SIGNATURE Jeff Cross AND TITLE Project Manager

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

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

PIT REMEDIATION AND CLOSURE REPORT

Operator:	<u>M W PETROLEUM</u>		Telephone	<u>505-325-0318</u>	
Address:	<u>304 N. BEHREND, FARMINGTON, N.M. 84701</u>				
Facility or Well Name:	<u>JAT 124 - # 4</u>				
Location:	Unit or Qtr/Qtr	Sec	<u>J</u>	SEC 23	T 25N R 4W County <u>RIO ARRIBA</u>
Pit Type:	Separator:	Dehydrator	Other <u>BLOW PIT</u>		
Land Type:	<u>JIC. TRIBAL</u>				
Pit Location: (Attach diagram)	Pit Dimensions:	Length	<u>35'</u>	Width	<u>24'</u> Depth <u>7'</u>
	Reference:	Wellhead	<u>XXX</u>	Other	
	Footage from reference:	<u>100</u>			
	Direction from reference:	<u>100</u>	Degrees	<u>XX</u>	East North West 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>		
Distance to an Ephemeral Stream: (Downgradient dry wash greater than ten feet in width)	Less than 100 feet	(10 points)			
	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)			
	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 100 feet	(20 points)			
	100 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>9/28/95</u>		Date Completed:		<u>6/26/97</u>	
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>		Approx. cubic yards		<u>140</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 7', 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>5 point composite taken from pit sidewalls and pit bottom center.</u>					
Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)		Sample depth <u>8" to 10" into pit side walls, 10" into pit bottom.</u>					
Sample Date		<u>12/15/95</u>		Sample Time		<u>9:30AM</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>0.6</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>580</u>		Total Xylenes	(ppb)	<u>NA</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>8-22-97</u>		PRINTED NAME		<u>JEFF CROSS</u>	
SIGNATURE		<u>Jeff Cross</u>		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:		<u>Ken C Mammell</u>		DATE:		<u>9-2-97</u>	

/// = Spread Area

NORTH

GENERAL DRAINAGE

100' 100° ESE

M W PETROLEUM

JICARILLA CONTRACT 124 NUMBER 4

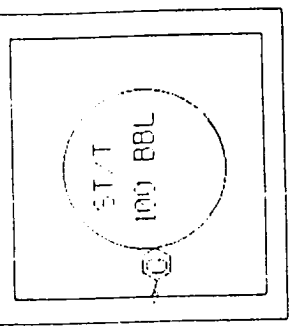
NW/4 SE/4 (J)

SECTION 23, TOWNSHIP 25N, RANGE 4W

RIO ARRIBA COUNTY, NM

Dirt Cell

WELL HEAD



PIT

APACHE CORPORATION FARMINGTON DISTRICT
PIT EXCAVATION AND CLOSURE REPORT

JICARILLA APACHE TRIBAL EPO
REVIEW AND APPROVAL

LOCATION: J.A.T. 124 #4

EPO REPRESENTATIVE *HCm*
DATE OF REVIEW: 12-27-95

PIT COUNT: 1

EXCAVATION								
DIMENSIONS			START			FINISH		
	W	L	D		W	L	D	CU.YDS.
PIT 1	24	35'	2.5		PIT 1	24'	35'	7'
PIT 2					PIT 2			
PIT 3					PIT 3			
DATE: 09/28/95			PIT1@07'	PIT2@	PIT3@	DATE:		PIT1@
P. I. D.	CENTER	40.8				P. I. D.	CENTER	
	NW CORNER	58.1					NW CORNER	
	NE CORNER	2.7					NE CORNER	
	SW CORNER	78.4					SW CORNER	
	SE CORNER	1.0					SE CORNER	

NOTES:

09/28/95 Staining to 3.5'. No ocor.

SOIL SAMPLING

DATE: 09/28/95			PIT1@07'	PIT2 @	PIT3@	ANALYSIS RESULTS			PER LAB: ASSAIGAI
P. I. D.	CENTER	40.8				PIT	TPH	BETEX	WITNESS
	NW CORNER	58.1				NO.			DATE
	NE CORNER	2.7				1	ND	ND	IF&S
	SW CORNER	78.4				2			09/28/95
	SE CORNER	1.0				3			

RE-SAMPLE OR CELL(S) SAMPLE

DATE: 12/15/95			PIT1@07'	PIT2 @	PIT3@	ANALYSIS RESULTS			PER LAB: ASSAIGAI
P. I. D.	CENTER	0.6				PIT	TPH	BETEX	WITNESS
	NW CORNER	1.6				NO.			DATE
	NE CORNER	0.6				1	580	ND	JDT
	SW CORNER	0.0				2			12/15/95
	SE CORNER	0.2				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
	NW CORNER					NO.			DATE
	NE CORNER					1			
	SW CORNER					2			
	SE CORNER					3			

Lab ID: 9512196-09A
Sample ID: JIC. A-118#16-H

Collected: 12/15/95 11:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A O-Xylene	ND	mg/Kg	0.0010	100	12/28/95	SBTXME098

Lab ID: 9512196-09B
Sample ID: JIC. A-118#16-H

Collected: 12/15/95 11:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCS DIESEL/CAL DHS 8015M Diesel	820*	mg/Kg	5.0	250	01/03/96	SLFTD058
HCS DSL XT/CAL DHS 8015M	2/22/95	N/A				

Lab ID: 9512196-10A
Sample ID: J.A.T. 124#4

Collected: 12/15/95 09:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
X/SW846 8020A	ND	mg/Kg	0.0010	100	12/28/95	SBTXME098
Benzene	ND	mg/Kg	0.0010	100	12/28/95	SBTXME098
Toluene	ND	mg/Kg	0.0010	100	12/28/95	SBTXME098
Ethylbenzene	ND	mg/Kg	0.0010	100	12/28/95	SBTXME098
P-&m-Xylene	ND	mg/Kg	0.0010	100	12/28/95	SBTXME098
O-Xylene	ND	mg/Kg	0.0010	100	12/28/95	SBTXME098

Lab ID: 9512196-10B
Sample ID: J.A.T. 124#4

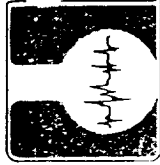
Collected: 12/15/95 09:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCS DIESEL/CAL DHS 8015M Diesel	580	mg/Kg	5.0	50	01/03/96	SLFTD058
HCS DSL XT/CAL DHS 8015M	12/22/95	N/A				

Lab ID: 9512196-11A
Sample ID: AP #155-C

Collected: 12/14/95 16:25:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A	ND	mg/Kg	0.0010	50	12/28/95	SBTXME098
Benzene	ND	mg/Kg	0.0010	50	12/28/95	SBTXME098
Toluene	ND	mg/Kg	0.0010	50	12/28/95	SBTXME098
Ethylbenzene	0.13	mg/Kg	0.0010	50	12/28/95	SBTXME098
P-&m-Xylene	0.28	mg/Kg	0.0010	50	12/28/95	SBTXME098
O-Xylene	ND	mg/Kg	0.0010	50	12/28/95	SBTXME098



Chain of Custody Record

SSAIGAL
ANALYTICAL
LABORATORIES

Lab job no.:

2196 Date 12/18/95

Page 2 of 3

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87105
(505) 345-8964

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

MELQUIADES ALANIS

6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Project Manager / Contact John Taylor

Telephone No. (505) 325-0318

Fax No. (505) 325-0328

Samplers: (Signature)

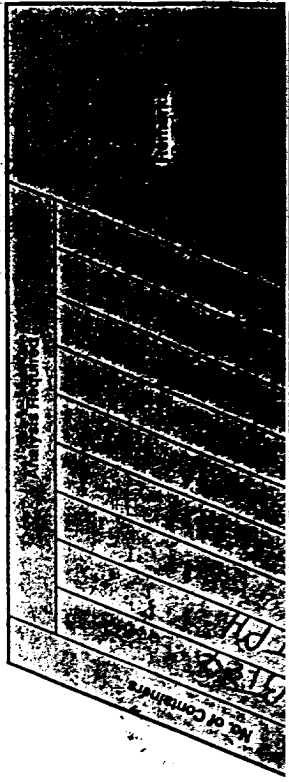
Client Apache Corporation

Address 304 N. Bebbend

City / State / Zip Farmington, NM 87401

Project Name / Number P-1 Remediation

Contract / Purchase Order / Quote



FRACTION NUMBER	Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation	
						Temp.	Chemical
07A	J.C.A-118 #19-H	12/15	11:00	Soil	402 Glass		ICE
B	J.C.A-118 #19-H		11:00				
08A	J.C.A-118 #19-C		11:10				
B	J.C.A-118 #19-C		11:10				
09A	J.C.A-118 #16-H		11:30				
B	J.C.A-118 #16-H		11:30				
10A	J.A.T. 124 #4		9:30				
B	J.A.T. 124 #4		9:30				

Relinquished by: Signature Scott Duckworth Printed Scott Duckworth Company IFS Reason Testing	Received by: Signature Edwin J. Chavez Printed Edwin J. Chavez Company APL Reason Testing	Date 12/18/95 Time 12:10 PM	Relinquished by: Signature John Taylor Printed John Taylor Company APL Reason Testing	Date 12/18/95 Time 12:10 PM	Received by: Signature Laura M. Campbell Printed Laura M. Campbell Company APL Reason Testing
Method of Shipment:			After analysis, samples are to be:		
Shipment No.:			<input type="checkbox"/> Disposed of (additional fee)		
Special Instructions:			<input type="checkbox"/> Stored (30 days max)		
			<input type="checkbox"/> Stored over 30 days (additional fee)		
			<input type="checkbox"/> Returned to customer		

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 PETROLEUM</u>		Telephone <u>505-325-0318</u>	
Address: <u>304 N. BEHREND, FARMINGTON, N.M. 87401</u>			
Facility or Well Name: <u>JAT 124 - # 4</u>			
Location: Unit or Qtr/Qtr Sec <u>J</u> Sec <u>23</u> T <u>25N</u> R <u>4W</u> County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>9/28/95</u>		Date Completed: <u>6/26/97</u>	
Remediation Method: Landfarmed <u>XXX</u>		Approx. cubic yards <u>140</u>	
Composted <u> </u>			
Other <u> </u>			
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>6/26/97</u> Time: <u>4:30PM</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>8-22-97</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>Kate C. Mamm</u>		DATE: <u>9-2-97</u>	

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE JAT 124-#4

* AMOUNT OF SOIL UNDERGOING REMEDIATION 140 Yds.

CELL No. <u>1</u>	SampDATE 6/26/97	TPH ND	BTEX ND
DIMENSIONS(LxWxH) <u>100' L X 25' W X 18" H</u>			
CELL LOCATION (dir. from well head) <u>NORTH</u>			
* DATE BEGAN: <u>9/28/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/26/97</u>			
CELL No. <u>2</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>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)			
5/10/97 TREAT WITH 46-0-0 FERTILIZER , WATER AND TILL CELL.			
5/30/97 TILL CELL.			
6/24/97 WATER AND TILL CELL.			

From excavation reports.

WELL NAME:

JAT 124 #4

SAMPLE DATE:

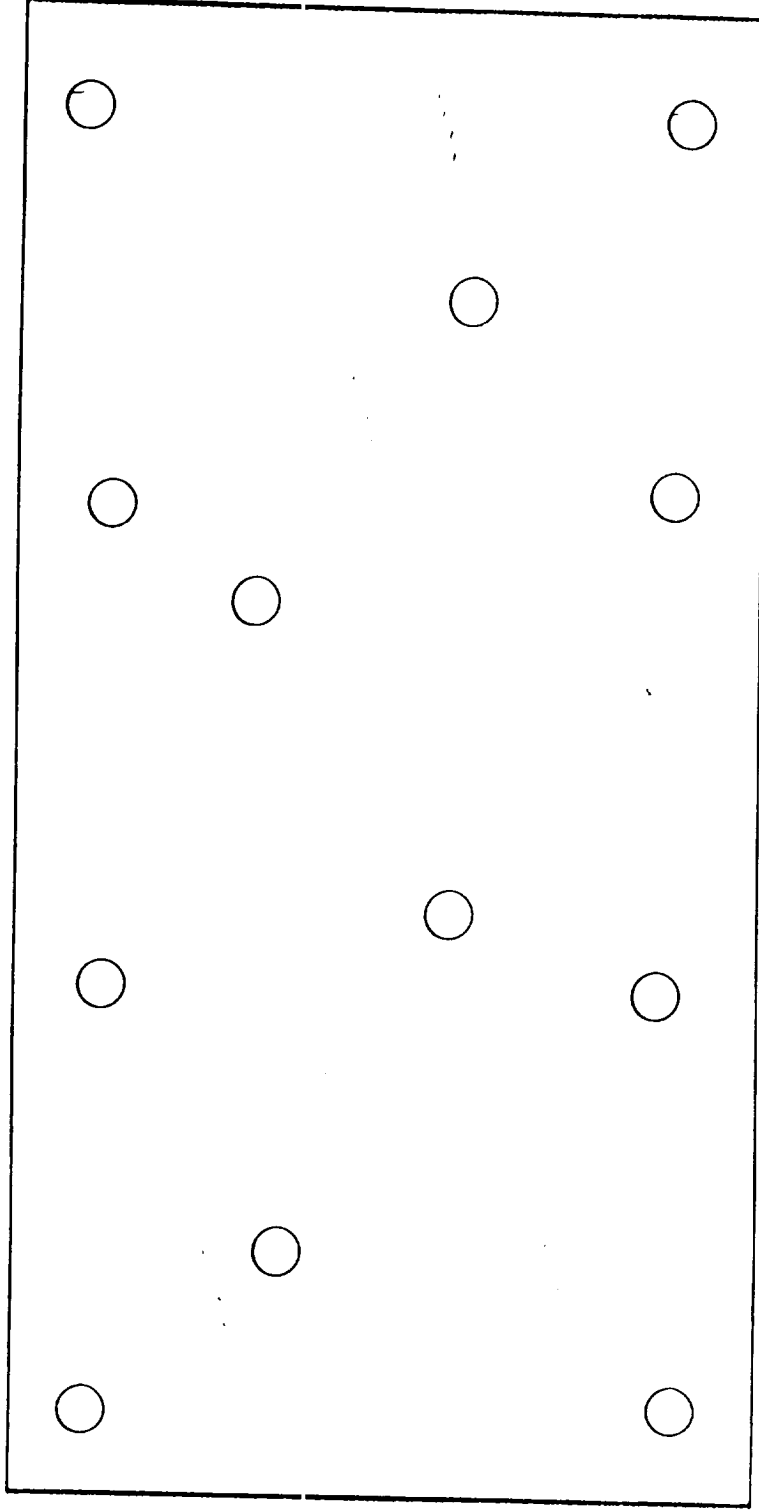
6-26-97

DIMENSIONS:

100' L x 25' W x 18" H



= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

12 point composite sample

P10 composite Reading. 0.0 ppm.



**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

JUL 21 1997

Report Generated:
July 7, 1997 16:25

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9706289
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 06/27/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9706289-01A
Sample ID: 124 #4 CELL

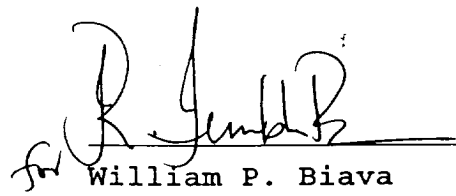
Collected: 06/26/97 16:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	06/30/97	SBTXME173
Toluene	ND	mg/kg	0.0050	100	06/30/97	SBTXME173
Ethylbenzene	ND	mg/kg	0.0050	100	06/30/97	SBTXME173
P-&m-Xylene	ND	mg/kg	0.010	100	06/30/97	SBTXME173
O-Xylene	ND	mg/kg	0.0050	100	06/30/97	SBTXME173

Lab ID: 9706289-01B
Sample ID: 124 #4 CELL

Collected: 06/26/97 16:30:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	ND	mg/Kg	50	25	07/01/97	SDRO39


William P. Biava
President



WORKORDER COMMENTS

DATE : 07/07/97
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

ALBUQUERQUE, NEW MEXICO 87109
(505) 745-8054

(505) 345-8964

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

910 N. BIG SPRING
DALLAS, TEXAS 75205
(915) 570-1116

Client Apache Corporation

Address 304 N. Behrend

City / State / Zip Farmington, NM 87401

Telephone No. (505) 774-6643
Fax No. (505) 774-6624

Fax No. (505) 774-6624

Project Name / Number JICARILLA PIT CLOSURES

Samplers: (Signature) Arden M. Miller

Contract / Purchase Order / Quote

[illegible]