

State of New Mexico
Energy, Minerals and Natural Resources Department
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

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

APR 10 1998

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 A118 #19 PIT #1

Location: Unit or Qtr/Qtr Sec P Sec 36 T 26 N R 3W County Rio Arriba

Pit Type: Separator: _____ Dehydrator: _____ Other: TANK DRAIN (BLOW PIT)

Land Type: Jicarilla Tribal

Pit Location: END Pit Dimensions 18' 18' 2.3
(Attach diagram) Length 21' Width 21' Depth 10'

Reference: Wellhead XX Other: _____

Footage from reference: 110'

Direction from reference: 5 Degrees X East North XX
West of South

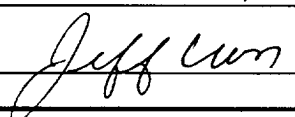
Depth To Groundwater: Less than 50 feet (20 points) _____
(vertical distance from 50 feet to 99 feet (10 points) _____
contaminants to seasonal Greater than 100 feet (0 points) 0
high water elevation of groundwater)

Wellhead Protection Area: Yes (20 points) _____
(Less than 200 feet from a private No (0 points) 0
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) 0
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS) 0

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

Date Remediation Started:		<u>9/19/95</u>	Date Completed:		<u>8/18/97</u>
Remediation Method: (Check all appropriate sections)		Excavatio	<u>XXX</u>	Approx. cubic yards	<u>133</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 10', took PID readings.</u>					
<u>Spread soil on location for remediation. Took soil samples.</u>					
Groundwater Encountered:		No	<u>X</u>	Yes	Depth <u> </u>
Final Pit:	<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)	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>				
Sample Date	<u>12/15/95</u>	Sample Time	<u>11:00 A.M.</u>		
Sample results					
Benzene	(ppm)	<u>ND</u>			
Total BTEX	(ppm)	<u>ND</u>			
Field Headspace	(ppm)	<u>0.3</u>			
TPH		<u>41</u>			
Groundwater Sample:	Yes	<u> </u>	No	<u>X</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>November 5, 1997</u>	PRINTED NAME	<u>Jeff Cross</u>		
SIGNATURE	<u></u>	AND TITLE	<u>Project Manager</u>		

District III
1000 Rio Brazos Rd
Aztec, NM 87410

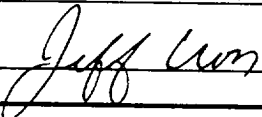
State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit 1 copy to
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and 1 copy to
Santa Fe Office

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>Apache Corporation</u>		Telephone: <u>505-325-0318</u>	
Address: <u>2855 Southside River Road, Suite A, Farmington, NM 87401</u>			
Facility or Well Name:		<u>JAT A118 #19</u>	<u>PIT #2</u>
Location: Unit or Qtr/Qtr Sec	<u>P</u>	<u>Sec 36</u>	<u>T 26 N R 3W</u> County <u>Rio Arriba</u>
Pit Type: Separator:	<u> </u>	Dehydrator <u> </u>	Other <u>COMPRESSOR</u>
Land Type:	<u>Jicarilla Tribal</u>		
<i>Reg. Pit Dimensions</i>			
Pit Location: <u>EWD</u>	Pit Dimensions:	Length <u>18'</u> <u>21'</u>	Width <u>18'</u> <u>21'</u> Depth <u>4'</u> <u>10'</u>
(Attach diagram)			
Reference:	Wellhead <u>XX</u>	Other <u> </u>	
Footage from reference:	<u>100'</u>		
Direction from reference:	<u>95</u> Degrees	<u>XX</u> East	North of South <u>X</u>
Depth To Groundwater:		Less than 50 feet	(20 points) <u> </u>
(vertical distance from		50 feet to 99 feet	(10 points) <u> </u>
contaminants to seasonal		Greater than 100 feet	(0 points) <u>0</u>
high water elevation of			
groundwater)			
Wellhead Protection Area:		Yes	(20 points) <u> </u>
(Less than 200 feet from a private		No	(0 points) <u>0</u>
domestic water source, or; less than			
1000 feet from all other water sources)			
Distance To Surface Water:		Less than 200 feet	(20 points) <u> </u>
(Horizontal distance to perennial		200 feet to 1000 feet	(10 points) <u> </u>
lakes, ponds, rivers, streams, creeks,		Greater than 1000 feet	(0 points) <u>0</u>
irrigation canals and ditches)			
		RANKING SCORE (TOTAL POINTS)	<u>0</u>

Date Remediation Started:		<u>9/19/95</u>		Date Completed:		<u>8/18/97</u>	
Remediation Method: (Check all appropriate sections)		Excavatio	<u>XXX</u>	Approx. cubic yards	<u>115</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 10', took PID readings.</u>					
		<u>Spread soil on location for remediation. Took soil samples.</u>					
Groundwater Encountered:		No	<u>X</u>	Yes	Depth <u> </u>		
Final Pit:		<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)		<u>8 to 10" into pit sidewalls 10" into pit bottom</u>					
Sample Date		<u>12/15/95</u>		Sample Time		<u>11:10 A.M.</u>	
Sample results							
Benzene		(ppm)	<u>ND</u>				
Total BTEX		(ppm)	<u>ND</u>				
Field Headspace		(ppm)	<u>10.2</u>				
TPH			<u>690</u>				
Groundwater Sample:		Yes	<u> </u>	No	<u>X</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>November 5, 1997</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

Submittal Form
Natural Resource Dept.
and Oil & Gas Administration

PIT REMEDIATION AND CLOSURE REPORT

Operator: M W PETROLEUM Telephone 505-325-0318
Address: 304 N. BEHREND, FARMINGTON, N.M. 84701
Facility or Well Name: JAT A118 # 19 PIT # 1
Location: Unit or Qtr/Qtr Sec P SEC 36 T 26N R 3W County RIO ARRIBA
Pit Type: Separator: _____ Dehydrator: _____ Other: TANK DRAIN (BLOW PIT)
Land Type: JIC. TRIBAL

Pit Location: (Attach diagram) Pit Dimensions: Length 21' Width 21' Depth 10'
Reference: Wellhead XXX Other: _____
Footage from reference: 110'
Direction from reference: 5 Degrees X East of North XX
West of South

Depth To Groundwater:

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

Less than 50 feet
50 feet to 99 feet
Greater than 100 feet

(20 points) _____
(10 points) _____
(0 points) 0

Distance to an Ephemeral Stream:
(Downgradient dry wash greater than
ten feet in width)

Less than 100 feet
Greater than 100 feet

(10 points) _____
(0 points) 0

Distance to Nearest Lake, Playa, or Watering Pond:
(Downgradient lakes, playas and
livestock or wildlife watering ponds)

Less than 100 feet
Greater than 100 feet

(10 points) _____
(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
No

(20 points) _____
(0 points) 0

Distance To Surface Water:

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

Less than 100 feet
100 feet to 1000 feet
Greater than 1000 feet

(20 points) _____
(10 points) _____
(0 points) 0

RANKING SCORE (TOTAL POINTS) 0

Date Remediation Started:		<u>9/19/95</u>		Date Completed:		<u>8-18-97</u>	
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>		Approx. cubic yards		<u>133</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 10', took PID readings. spread soil on 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>11:00 AM</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>0.3</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>41</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>8-26-97</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>[Signature]</u>		DATE:		<u>9-2-97</u>	

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

Submit 1 copy to
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and Oil & Gas Administration

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 A118 # 19</u>		PIT # <u>2</u>	
Location:	Unit or Qtr/Qtr Sec <u>P</u>	SEC <u>36</u>	T <u>26N</u> R <u>3W</u> County <u>RIO ARRIBA</u>
Pit Type:	Separator: <u> </u>	Dehydrator: <u> </u>	Other <u>COMPRESSOR</u>
Land Type: <u>JIC. TRIBAL</u>			

Pit Location: (Attach diagram)	Pit Dimensions:	Length <u>21'</u>	Width <u>21'</u>	Depth <u>10'</u>
	Reference:	Wellhead <u>XXX</u>	Other <u> </u>	
	Footage from reference:	<u>100</u>		
	Direction from reference:	<u>95</u> Degrees	<u>XX</u> East	North <u> </u>
			<u> </u> 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>

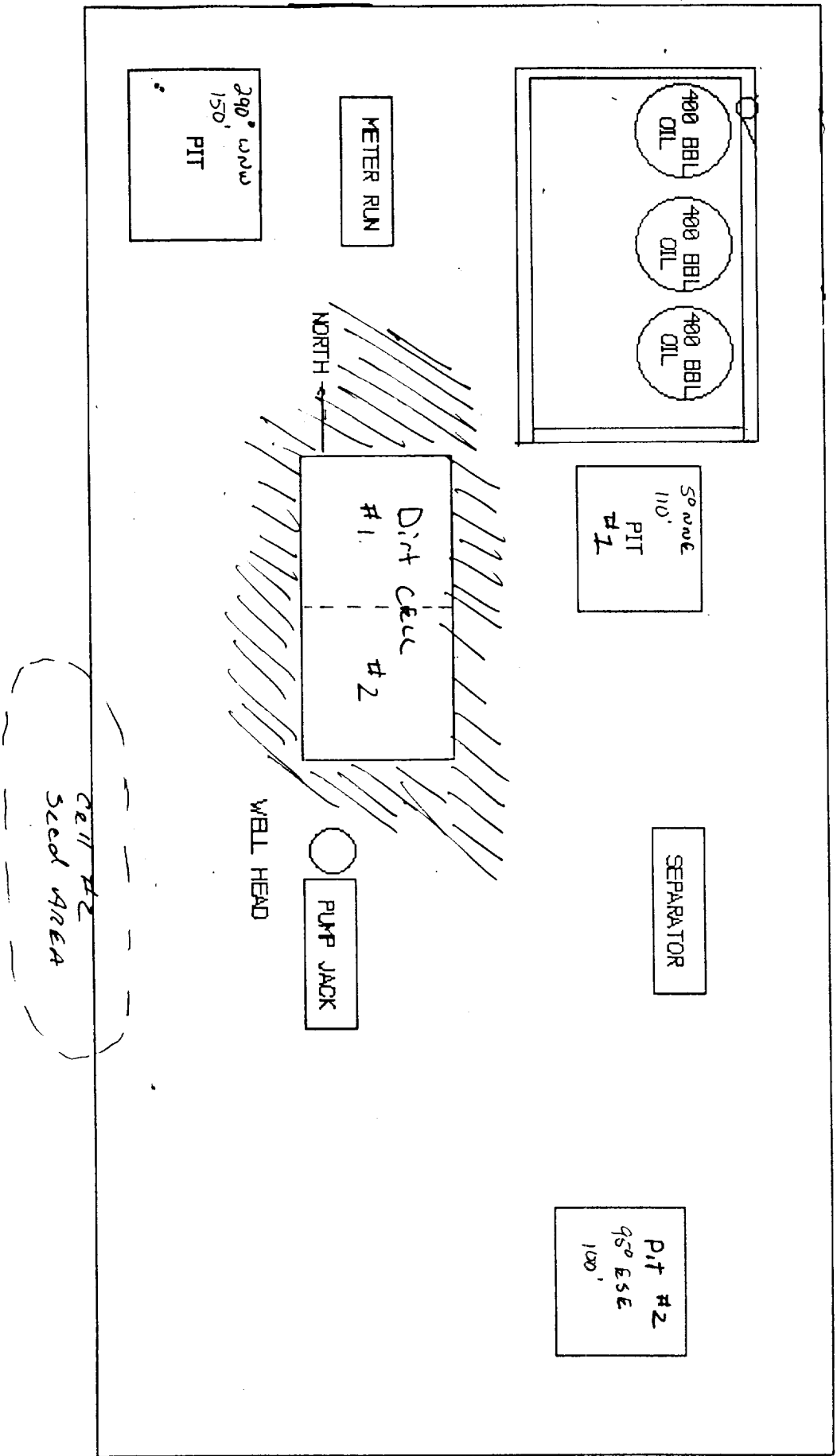
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DEC 10 1997
OIL CON. DIV.
DIST. 8

Date Remediation Started:		<u>9/19/95</u>		Date Completed:		<u>8-18-97</u>	
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>		Approx. cubic yards		<u>115</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 10', took PID readings. spread soil on 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>11:10 Am</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>10.2</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>690</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>8-26-97</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>Jeff Cross</u>		DATE: <u>9-2-97</u>			

○ = SEED AREA

//// = Spread AREA

M W PETROLEUM
JICARILLA APACHE A-118-19
SE/4 SE/4 (P) Lease # JAT A118
SECTION 36, TOWNSHIP 26N RANGE 3W
RIO ARriba COUNTY, NM 8/2/97 MG



APACHE CORPORATION FARMINGTON DISTRICT
PIT EXCAVATION AND CLOSURE REPORT

JICARILLA APACHE TRIBAL EPO
REVIEW AND APPROVAL

LOCATION: JIC. A-118#19

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

PIT COUNT: 2

				EXCAVATION					
DIMENSIONS		START		FINISH					
	W	L	D		W	L	D	CU.YDS.	
PIT 1	18	18'	2.5	PIT 1	21'	21'	10'	133.0	
PIT 2	18	18'	4'	PIT 2	21'	21'	10'	115.0	
PIT 3				PIT 3					
DATE: 09/19/95		PIT1@07'	PIT2@08'	PIT3@_ _ _ '	DATE: 12/15/95		PIT1@10'	PIT2@10'	PIT3@_ _ _ '
P. I. D.	CENTER	178.0	1302.0		P. I. D.	CENTER	1.2	33.8	
	NW CORNER	53.0	237.0			NW CORNER	0.2	14.0	
	NE CORNER	368.0	201.0			NE CORNER	0.0	0.5	
	SW CORNER	1.2	145.0			SW CORNER	0.1	2.1	
	SE CORNER	155.0	238.0			SE CORNER	0.0	0.6	

NOTES:

09/19/95 PIT 1 - Strong odor and staining to 7'. Remove staining from side walls.

PIT 2 - Strong odor and staining to 8'. Remove staining from side walls.

Pit 2 - high TPH level from sampling 9/19/95 @ 8' level.

SOIL SAMPLING									
DATE: 09/19/95		PIT1@07'	PIT2@08'	PIT3@_ _ _ '	ANALYSIS RESULTS			PER LAB:	ASSAIGAI
P.	CENTER	178.0	1302.0		PIT	TPH	BETEX	WITNESS	DATE
	NW CORNER	53.0	237.0		NO.				
I.	NE CORNER	368.0	201.0		1	1000.0	18.9	IF&S	
D.	SW CORNER	1.2	145.0		2	6700.0	4.1	IF&S	
	SE CORNER	155.0	238.0		3				

RE-SAMPLE OR CELL(S) SAMPLE

DATE: 12/15/95		PIT1@10'	PIT2@10'	PIT3@	ANALYSIS RESULTS		PER LAB:	ASSAIGAI	
P. I. D.	CENTER	1.2	33.8		PIT	TPH	BETEX	WITNESS	DATE
	NW CORNER	0.2	14.0		NO.				
	NE CORNER	0.0	0.5		1	41	ND	JDT	12/15/95
	SW CORNER	0.1	2.1		2	690	ND	JDT	12/15/95
	SE CORNER	0.0	0.6		3				

RE-SAMPLE OR CELL(S) SAMPLE

DATE:		PIT 1	PIT 2	PIT 3	ANALYSIS RESULTS			PER LAB:	
P. I. D.	CENTER				PIT	TPH	BETEX	WITNESS	DATE
	NW CORNER				NO.				
	NE CORNER				1				
	SW CORNER				2				
	SE CORNER				3				

Lab ID: 9512196-05A
 Sample ID: J.A.T. 124/125 CTB-C

Collected: 12/15/95 11:55:00
 Matrix: SOIL

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

Lab ID: 9512196-05B
 Sample ID: J.A.T. 124/125 CTB-C

Collected: 12/15/95 11:55:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	1100	mg/Kg	5.0	50	01/02/96	SLFTD058
HCs DSL XT/CAL DHS 8015M	12/22/95	N/A				

Lab ID: 9512196-06A
 Sample ID: J.A.T. 124/125 CTB-PC

Collected: 12/15/95 11:20:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
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: 9512196-06B
 Sample ID: J.A.T. 124/125 CTB-PC

Collected: 12/15/95 11:20:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	1700	mg/Kg	5.0	250	01/03/96	SLFTD058
HCs DSL XT/CAL DHS 8015M	12/22/95	N/A				

Lab ID: 9512196-07A
 Sample ID: JIC. A-118#19-H Pit #1

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

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

Lab ID: 9512196-07A
 Sample ID: JiC. A-118#19-H *pit #1*

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

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
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: 9512196-07B
 Sample ID: JiC. A-118#19-H *pit #1*

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

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	41	mg/Kg	5.0	5.0	01/03/96	SLFTD058
HCs DSL XT/CAL DHS 8015M	12/22/95	N/A				

Lab ID: 9512196-08A
 Sample ID: JiC. A-118#19-C *pit #2*

Collected: 12/15/95 11:10:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
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: 9512196-08B
 Sample ID: JiC. A-118#19-C *pit #2*

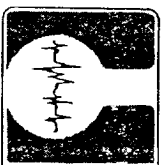
Collected: 12/15/95 11:10:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	690	mg/Kg	5.0	50	01/02/96	SLFTD058
HCs DSL XT/CAL DHS 8015M	12/22/95	N/A				

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						
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



SSAIGAL
ANALYTICAL
LABORATORIES

Chain of Custody Record

Lab Job no.:

12196

Date 12/18/85

Page 2 of 3

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87
(505) 345-8964

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

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

Client Apache Corporation

Address 304 N. 13th Street

City / State / Zip Farmington, NM 87401

Project Name / Number El Remedillo

Contract / Purchase Order / Quote -

Project Manager / Contact John Taylor

Telephone No. (505) 325-0318

Fax No. (505) 325-0328

Samplers: (Signature) -

MELOJADES ALANIS

6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32330

AN FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation		No. of Containers
						Temp.	Chemical	
07A	J.C. A-118 #19-H	12/15	11:00	Soil	402 (3/4) 55		JCC	1
B	J.C. A-118 #19-H		11:00					1
08A	J.C. A-118 #19-C		11:10					1
B	J.C. A-118 #19-C		11:10					1
09A	J.C. A-118 #16-H		11:30					1
B	J.C. A-118 #16-H		11:30					1
10A	J.A.T. 124 #4		9:30					1
B	J.A.T. 124 #4		9:30					1

Relinquished by: Scott D. Miller
Signature
Printed Scott D. Miller
Company IES
Reason Testing
Date 12/18/85
Time PM 5:00

Received by: John Taylor
Signature
Printed John Taylor
Company APL
Reason Testing

Relinquished by: John Taylor
Signature
Printed John Taylor
Company APL
Reason Testing

Received by: Laura M. Campbell
Signature
Printed Laura M. Campbell
Company APL
Reason Testing
Date 12/18/85
Time 12:00 PM

Method of Shipment:

Shipment No.:

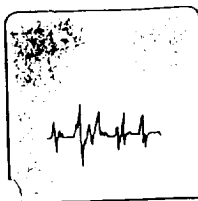
Special Instructions:

Comments:

After analysis, samples are to be:

- ☐ Disposed of (additional fee)
- ☐ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

COURIER



ASSAIGAI ANALYTICAL LABORATORIES

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:
October 6, 1995 13:18

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

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

WORKORDER # : 9509186
WORK ID : PIT REMEDIATION 95017
CLIENT CODE : APA01
DATE RECEIVED : 09/22/95

ATTN: JOHN TAYLOR

Page: 1

Lab ID: 9509186-01A
Sample ID: J.A. 118 #16

Collected: 09/19/95 10:10:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	25000	09/27/95	SBTXME078
Toluene	30	mg/Kg	0.0010	25000	09/27/95	SBTXME078
Ethylbenzene	ND	mg/Kg	0.0010	25000	09/27/95	SBTXME078
P-&m-Xylene	88	mg/Kg	0.0010	25000	09/27/95	SBTXME078
O-Xylene	ND	mg/Kg	0.0010	25000	09/27/95	SBTXME078

Lab ID: 9509186-01B
Sample ID: J.A. 118 #16

Collected: 09/19/95 10:10:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	2800	mg/Kg	5.0	100	10/03/95	SLFTD47
HCs DSL XT/CAL DHS 8015M	10/02/95	N/A				

Lab ID: 9509186-02A
Sample ID: J.A. 118 #19-H

Collected: 09/19/95 15:56:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	1000	09/26/95	SBTXME078
Toluene	ND	mg/Kg	0.0010	1000	09/26/95	SBTXME078
Ethylbenzene	2.3	mg/Kg	0.0010	1000	09/26/95	SBTXME078
P-&m-Xylene	14	mg/Kg	0.0010	1000	09/26/95	SBTXME078
O-Xylene	2.6	mg/Kg	0.0010	1000	09/26/95	SBTXME078



Lab ID: 9509186-02B
 Sample ID: J.A. 118 #19-H

Collected: 09/19/95 15:56:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	1000	mg/Kg	5.0	100	10/03/95	SLFTD47
HCs DSL XT/CAL DHS 8015M	10/02/95	N/A				

Lab ID: 9509186-03A
 Sample ID: J.A. 118 #19-C

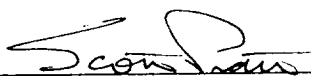
Collected: 09/20/95 13:00:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	10000	09/26/95	SBTXME078
Toluene	ND	mg/Kg	0.0010	10000	09/26/95	SBTXME078
Ethylbenzene	ND	mg/Kg	0.0010	10000	09/26/95	SBTXME078
P-&m-Xylene	41	mg/Kg	0.0010	10000	09/26/95	SBTXME078
O-Xylene	ND	mg/Kg	0.0010	10000	09/26/95	SBTXME078

Lab ID: 9509186-03B
 Sample ID: J.A. 118 #19-C

Collected: 09/20/95 13:00:00
 Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	6700E	mg/Kg	5.0	100	10/03/95	SLFTD47
HCs DSL XT/CAL DHS 8015M	10/02/95	N/A				


 For James A. Seely
 Operations Manager



7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 8
(505) 345-8964

7300 JEFFERSON, N.E.

Lab job no 714 Date 9/20/77

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

MELQUIADES ALANIS

Project Manager/Contact: Anthony M. ...

Telephone No. (505) 325-0316

Fax No. MM 87461 (005) 325-0325

PA Remediation 95017

 Samplers: (Signature) *W. H. H. H.*

Contract / Purchase Order / Quote _____

[illegible]

Relinquished by: <i>David A. Boring</i>	Received by: <i>David A. Boring</i>	Date <i>5/21/55</i>	Relinquished by: <i>David A. Boring</i>	Received by: <i>David A. Boring</i>	Date <i>5/21/55</i>
Signature <i>David A. Boring</i>	Signature <i>David A. Boring</i>		Signature <i>David A. Boring</i>	Signature <i>David A. Boring</i>	
Printed <i>David A. Boring</i>	Printed <i>David A. Boring</i>		Printed <i>David A. Boring</i>	Printed <i>David A. Boring</i>	
Company <i>ASSAULT</i>	Company <i>ASSAULT</i>		Company <i>ASSAULT</i>	Company <i>ASSAULT</i>	
Reason <i>Test</i>	Reason <i>Test</i>		Reason <i>Test</i>	Reason <i>Test</i>	

Received by: <u>Don Q. Davis</u>	Relinquished by: <u>Don Q. Davis</u>
Signature <u>Don Q. Davis</u>	Signature <u>Don Q. Davis</u>
Printed <u>ASSASSIN LABS</u>	Printed <u>ASSASSIN LABS</u>
Company <u>ASSASSIN LABS</u>	Company <u>ASSASSIN LABS</u>
Reason <u>DELIVERY</u>	Reason <u>TESTING</u>

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

☐ Disposed of (additional fee)

☐ Stored (30 days max)

☐ Stored over 30 days (additional fee)

☐ Returned to customer

ASSAIGAI PROJECT FILE

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 A118 # 19</u>		CELL # <u>1</u>	
Location:	Unit or Qtr/Qtr Sec <u>P</u>	Sec <u>36</u>	T <u>26N</u> R <u>3W</u> County <u>RIO ARRIBA</u>
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>9/19/95</u>		Date Completed: <u>8-14-97</u>	
Remediation Method:	Landfarmed <u>XXX</u>	Approx. cubic yards	<u>124</u>
	Composted <u> </u>		
	Other <u> </u>		
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>8/14/97</u> Time: <u>4:00Pm</u> Sample Results: Field Headspace (ppm) <u>0.5</u> TPH (ppm) <u>1800</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>8-26-97</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>Keith C. Marshall</u>		DATE: <u>9-2-97</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 PETROLEUM</u>		Telephone <u>505-325-0318</u>	
Address: <u>304 N. BEHREND, FARMINGTON, N.M. 87401</u>			
Facility or Well Name: <u>JAT A118 # 19</u>		CELL # <u>2</u>	
Location: Unit or Qtr/Qtr	Sec <u>P</u>	Sec <u>36</u>	T <u>26N</u> R <u>3W</u> County <u>RIO ARRIBA</u>
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>9/19/95</u>		Date Completed: <u>8-18-97</u>	
Remediation Method: Landfarmed		<u>XXX</u>	Approx. cubic yards <u>124</u>
Composted			
Other			
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>8/18/97</u> Time: <u>1:27PM</u> Sample Results: Field Headspace (ppm) <u>12.1</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>8-26-97</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 _____ (REASON) _____			
SIGNED: <u>Kevin M. M...</u>		DATE: <u>9-2-97</u>	

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE JAT A118 # 19

* AMOUNT OF SOIL UNDERGOING REMEDIATION 248 Yds.

CELL No. <u>1</u>	SampDATE <u>8/14/97</u>	TPH <u>1800</u>	BTEX <u>ND</u>
DIMENSIONS(LxWxH) <u>45' L X 50' W X 18" H</u>			
CELL LOCATION (dir. from well head) <u>NORTH</u>			
* DATE BEGAN: <u>9/19/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>8-14-97</u>			
CELL No. <u>2</u>	SampDATE <u>8/18/97</u>	TPH <u>3300</u>	BTEX <u>ND</u>
DIMENSIONS(LxWxH) <u>45' L X 50' W X 18" H</u>			
CELL LOCATION (dir. from well head) <u>NORTH</u>			
* DATE BEGAN: <u>9/19/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>8-18-97</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)			
7/28/97 WATER AND TILL CELLS.			
8/5/97 TILL CELLS.			
8/11/97 TREAT CELL # 2 WITH 6 LBS PHOSPHORUS,16 LBS 46-0-0 FERT.			
8/11/97 TREAT CELL # 2 WITH LIME SOLUTION.			

From excavation reports.

WELL NAME:

JAT A118 #19 CELL #1

SAMPLE DATE:

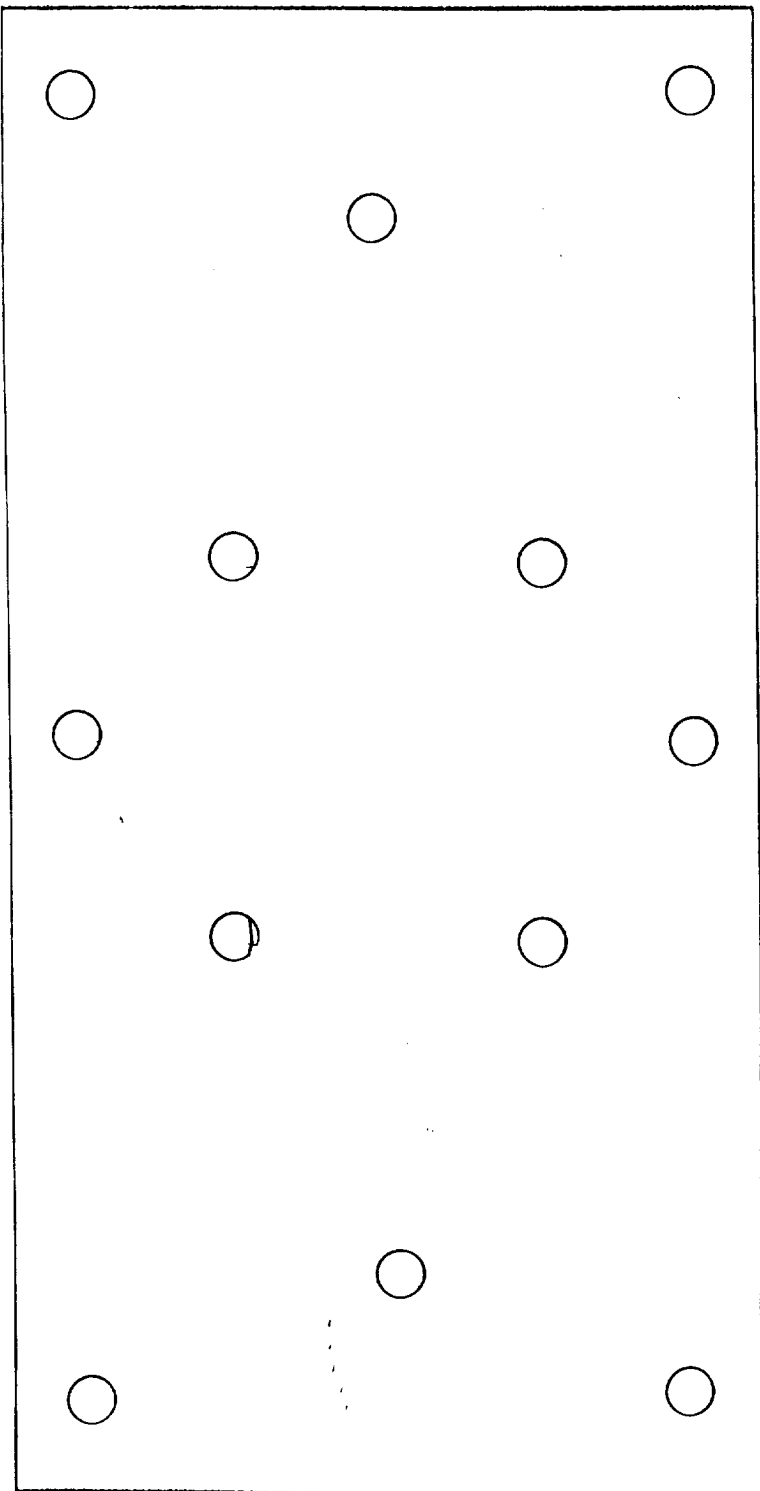
8-14-97

DIMENSIONS:

45' x 50' x 18" H



= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL

12 Point Composite

PID Composite Reading 0.5 ppm.

WELL NAME:

JAT A118 #19 CELL #2

SAMPLE DATE:

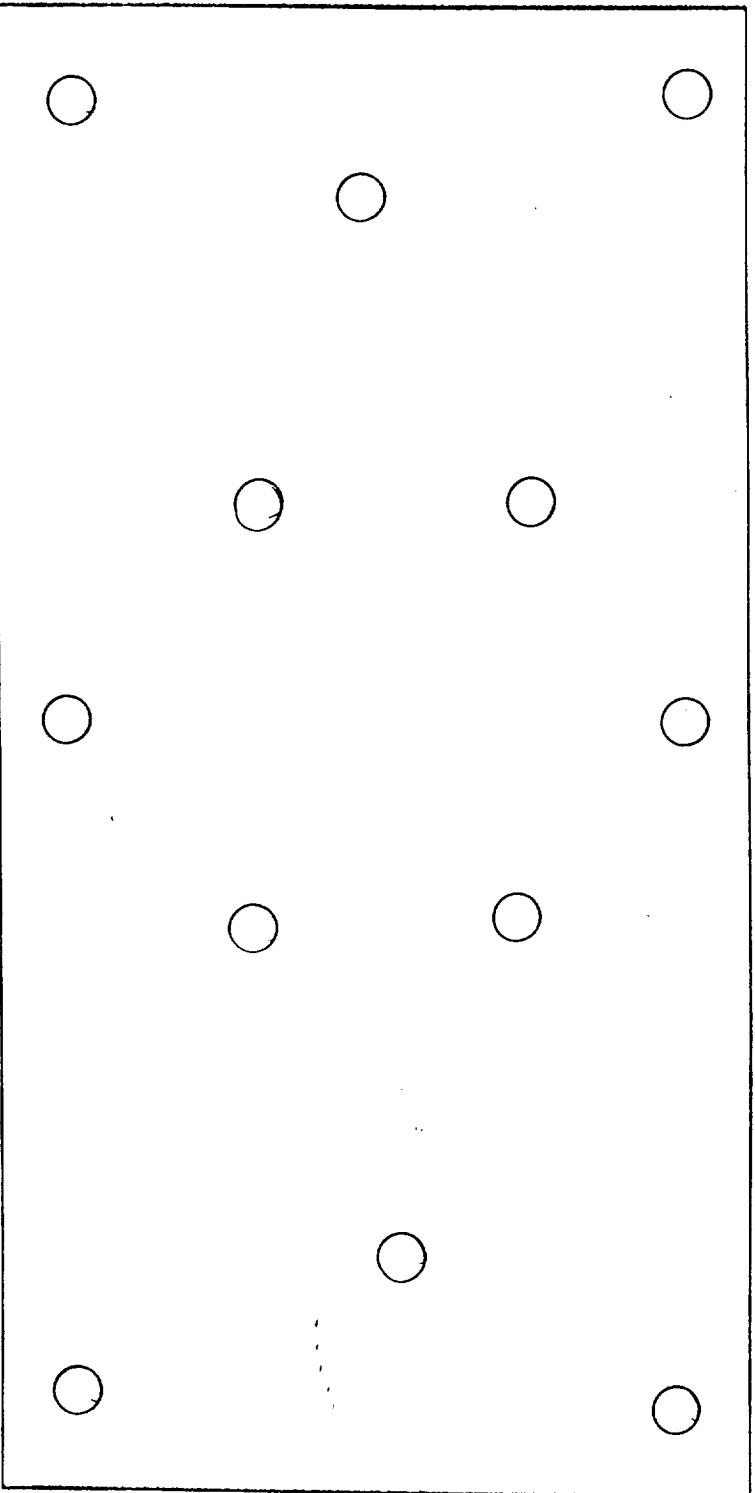
8-18-97

DIMENSIONS:

45' L X 50' W X 18" H



= SAMPLE AREA

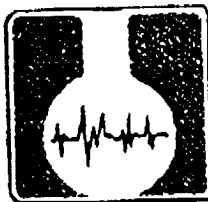


NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL

12 point Composite Sample

PID Composite Reading 12.1 PPM.



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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:
August 22, 1997 14:53

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9708170
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 08/15/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9708170-01A
Sample ID: A118 #19 CELL #1

Collected: 08/14/97 16:00:00
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: 9708170-01B
Sample ID: A118 #19 CELL #1

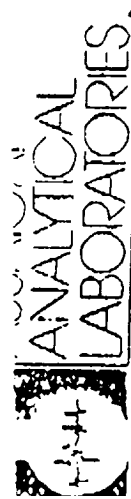
Collected: 08/14/97 16:00:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015						
Diesel Range OG in Soil	1800	mg/Kg	25	25	08/22/97	SDRO047

William P. Biava

William P. Biava
President





CHAIN OF CUSTODY RECORD

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

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Project Manager / Contact Jeff Grogg
Telephone No. (505) 774-6643
Fax No. (505) 774-6624
Project Name / Number JICARILLA PIT CLOSURES Samplers: (Signature) John Muline
Contract / Purchase Order / Quote _____

Analysis Requested

Remarks

No. of Containers

BTEX (incl. BAs)

Lab. Action	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation	
						Temp.	Chemical
1A	A118 th Cell #1	8-14-97	4:00	Soil	402 Glass	7°C	ICE
1B	" "	"	"	"	"	"	"

Received by: John Muline Signature John Muline Printed John Muline Company Apache Corp. Reason _____

Date 8/15/97 Time 7:50 AM

After analysis, samples are to be:

☐ Disposed of (additional fee)

☐ Stored (30 days max)

☐ Stored over 30 days (additional fee)

☐ Returned to customer

LABORATORY

WORKORDER COMMENTS

DATE : 08/22/97

WORKORDER:

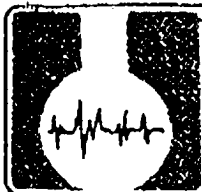
DEFINITIONS/DATA QUALIFIERS

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



**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:
August 25, 1997 12:16

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9708187
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 08/20/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9708187-01A
Sample ID: JAT A118 19 CELL #2

Collected: 08/18/97 13:27:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	08/22/97	SBTXME186
Toluene	ND	mg/kg	0.0050	100	08/22/97	SBTXME186
Ethylbenzene	ND	mg/kg	0.0050	100	08/22/97	SBTXME186
P-&m-Xylene	ND	mg/kg	0.010	100	08/22/97	SBTXME186
O-Xylene	ND	mg/kg	0.0050	100	08/22/97	SBTXME186

Lab ID: 9708187-01B
Sample ID: JAT A118 19 CELL #2

Collected: 08/18/97 13:27:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M3015 Diesel Range OG in Soil	3300	mg/Kg	25	25	08/21/97	SDR0049


William P. Biava
President



ALBUQUERQUE, NEW MEXICO 87105
 (505) 345-8964