

District III

State of New Mexico

Submit 1 copy to

1000 Rio Brazos Rd

Energy, Minerals and Natural Resources Department

Appropriate District

DEPT. NM 87410 CAS INVENTOR

and 1 copy to

Santa Fe Office

OIL CONSERVATION DIVISION

2040 S. PACHECO

Santa Fe, New Mexico 87505

FEB 08 1993

PIT REMEDIATION AND CLOSURE REPORTOperator: Apache CorporationTelephone: 505-325-0318Address: 2855 Southside River Road, Suite A, Farmington, NM 87401Facility or Well Name: APACHE 107Location: Unit or Qtr/Qtr Sec J NW/SE Sec 2 T 24 N R 4W County Rio ArribaPit Type: Separator: _____ Dehydrator _____ Other Tank DrainLand Type: Jicarilla Tribal

Beginning Pit Dimensions: Length 12' Width 21' Depth 2'

Pit Location: Ending Pit Dimensions: Length 25' Width 15' Depth 6'

(Attach diagram)

Reference: Wellhead XXX Other _____

Footage from reference: 140'

Direction from reference: 262 Degrees _____ East _____ North
 _____ West _____ 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) _____

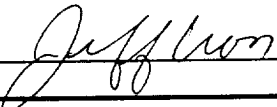
200 feet to 1000 feet (10 points) _____

Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS)

0

Date Remediation Started:		<u>11/16/95</u>	Date Completed:		<u>12/14/95</u>
Remediation Method: (Check all appropriate sections)		Excavation	<u>XXX</u>	Approx. cubic yards	<u>84</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 6', took PID readings. Backfill pit with</u>					
<u>clean soil. Remediated soil to be spread on location. Spread soil on location for remediation.</u>					
<u>Took soil samples</u>					

Groundwater Encountered:		No	<u>XX</u>	Yes	_____
				Depth	_____
Final Pit:	<u>5 point composite sample taken from pit sidewalls and pit</u>				
Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths)	<u>bottom center.</u>				
	Sample location				
	Sample depth	<u>6'</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>		
	Sample Date	<u>12/14/95</u>	Sample Time	<u>2:25 PM</u>	
	Sample results				
	Benzene	(ppm)	<u>ND</u>		
	Total BTEX	(ppm)	<u>ND</u>		
	Field Headspace	(ppm)	<u>15.88</u>		
	TPH		<u>2300</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>

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>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>APACHE # 107</u>			
Location:	Unit or Qtr/Qtr Sec	<u>NW\SE</u>	<u>SEC 2</u>
		<u>T 24 N</u>	<u>R 4 W</u>
		County	<u>Rio Arriba</u>
Pit Type:	Separator: <u> </u>	Dehydrator <u> </u>	Other <u>TANK DRAIN</u>
Land Type: <u>Jicarilla Tribal</u>			
Pit Location: (Attach diagram)	Pit Dimensions:	Length <u>25'</u>	Width <u>15'</u>
		Depth <u>6'</u>	
	Reference:	Wellhead <u>XX</u>	Other <u> </u>
	Footage from reference:	<u>140'</u>	
	Direction from reference:	<u>262</u> Degrees	<u> </u> East
		<u>XX</u> West	North of South <u>X</u>
Depth To Groundwater: (vertical distance from contaminants to seasonal high water elevation of groundwater)		Less than 50 feet	(20 points) <u> </u>
		50 feet to 99 feet	(10 points) <u> </u>
		Greater than 100 feet	(0 points) <u>0</u>
Distance to an Ephemeral Stream: (Downgradient dry wash greater than ten feet in width)		Less than 100 feet	(10 points) <u> </u>
		Greater than 100 feet	(0 points) <u>0</u>
Distance to Nearest Lake, Playa, or Watering Pond: (Downgradient lakes, playas and livestock or wildlife watering ponds)		Less than 100 feet	(10 points) <u> </u>
		Greater than 100 feet	(0 points) <u>0</u>
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)		Yes	(20 points) <u> </u>
		No	(0 points) <u>0</u>
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Less than 100 feet	(20 points) <u> </u>
		100 feet to 1000 feet	(10 points) <u> </u>
		Greater than 1000 feet	(0 points) <u>0</u>
		RANKING SCORE (TOTAL POINTS) <u>0</u>	

Date Remediation Started:		<u>11/16/95</u>		Date Completed:		<u>12/14/95</u>	
Remediation Method: (Check all appropriate sections)		Excavation <u>XXX</u>		Approx. cubic yards		<u>84</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 6', TOOK PID READINGS.</u> <u>BACK FILL PIT WITH CLEAN SOIL. REMEDIATED SOIL TO BE SPREAD ON LOCATION.</u> <u>SPREAD SOIL ON LOCATION FOR REMEDIATION. TOOK SOIL SAMPLES.</u>							
Groundwater Encountered:		No <u>X</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>6'</u>		Sample Date <u>12/14/95</u>		Sample Time <u>2:25 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>15.88</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>2300</u>		Total Xylenes	(ppb)	<u>NA</u>
Groundwater Sample:		Yes _____		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>9/30/98</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. M...</u>		DATE:		<u>11-13-98</u>	

APACHE CORPORATION FARMINGTON DISTRICT
PIT EXCAVATION AND CLOSURE REPORT

LOCATION: APACHE 107
PIT COUNT: 1

JICARILLA APACHE TRIBAL EPO
REVIEW AND APPROVAL

EPO REPRESENTATIVE JCM
DATE OF REVIEW: 12-27-95

EXCAVATION								
DIMENSIONS		START			FINISH			CU.YDS.
	W	L	D		W	L	D	
PIT 1	12'	21	2'	PIT 1	15'	25'	6'	84.0
PIT 2				PIT 2				
PIT 3				PIT 3				
DATE: 11/16/95		PIT1@06'	PIT2@	PIT3@	DATE:	PIT1@	PIT2@	PIT3@
P.	CENTER	212.0			P.	CENTER		
I.	NW CORNER	45.8			I.	NW CORNER		
D.	NE CORNER	308.0			D.	NE CORNER		
	SW CORNER	201.0				SW CORNER		
	SE CORNER	152.0				SE CORNER		

NOTES:

11/16/95 - Hit rock @ 4.5' unable to excavate past 6'. Remove staining from side walls

*Soil sample of 11/16/95 pulled @ 4.5' NOTE high TPH & BTEX levels. To be re-tested @ time of witnessed sampling

SOIL SAMPLING								
DATE: 11/16/95		PIT1@06'	PIT2@	PIT3@	ANALYSIS RESULTS		PER LAB:	ASSAIGAI
P.	CENTER	212.0			PIT	TPH	BETEX	WITNESS
I.	NW CORNER	45.8			NO.			DATE
D.	NE CORNER	308.0			1	16000.0	110.0	IF&S*
	SW CORNER	201.0			2			
	SE CORNER	152.0			3			

RE-SAMPLE OR CELL(S) SAMPLE

DATE: 12/14/95		PIT1@06'	PIT2@	PIT3@	ANALYSIS RESULTS		PER LAB:	ASSAIGAI
P.	CENTER	17.1			PIT	TPH	BETEX	WITNESS
I.	NW CORNER	12.3			NO.			DATE
D.	NE CORNER	21.9			1	2300	ND	JDT
	SW CORNER	15.2			2			
	SE CORNER	12.9			3			

RE-SAMPLE OR CELL(S) SAMPLE

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

[illegible]

Lab ID: 9512195-05A
Sample ID: AP #107

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

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
Toluene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
Ethylbenzene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
P-&m-Xylene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
O-Xylene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097

Lab ID: 9512195-05B
Sample ID: AP #107

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

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	2300	mg/Kg	5.0	250	01/05/96	SLFTD57
HCs DSL XT/CAL DHS 8015M	12/21/95	N/A				

Lab ID: 9512195-06A
Sample ID: AP #104

Collected: 12/14/95 14:40:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
Toluene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097
Ethylbenzene	0.072	mg/Kg	0.0010	50	12/27/95	SBTXME097
P-&m-Xylene	0.18	mg/Kg	0.0010	50	12/27/95	SBTXME097
O-Xylene	ND	mg/Kg	0.0010	50	12/27/95	SBTXME097

Lab ID: 9512195-06B
Sample ID: AP #104

Collected: 12/14/95 14:40:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M						
Diesel	1800	mg/Kg	5.0	100	01/05/96	SLFTD57
HCs DSL XT/CAL DHS 8015M	12/21/95	N/A				

Lab ID: 9512195-07A
Sample ID: AP #154

Collected: 12/14/95 15:05:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	100	12/27/95	SBTXME097
Toluene	ND	mg/Kg	0.0010	100	12/27/95	SBTXME097

Chain of Custody Record



7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 871
(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. Behrend
City/State/Zip Farmington, NM 87401
Project Name / Number Pl Remediation 4507
Contract / Purchase Order / Quote -

Project Manager / Contact John Taylor
Telephone No. (505) 325-0318
Fax No. (505) 325-0325
Samplers: (Signature) _____

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

ALL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp.	Chemical
01A	AP# 143-H	12/14	1:30	Soil	4 oz. Glass		TOC
01B	AP# 143-H		1:20				
02A	AP# 150-H		2:05				
02B	AP# 150-H		2:05				
03A	AP# 143-C		1:10				
03B	AP# 143-C		1:10				
04A	AP# 150-C		1:55				
04B	AP# 150-C		1:55				
05A	AP# 107		2:25				
05B	AP# 107		2:25				
06A	AP# 104		2:40				
06B	AP# 104		2:40				

Inquired by: Signature <u>[Signature]</u> Printed <u>John Taylor</u> Company <u>Apache</u> Reason <u>Testing</u>	Date <u>12/14/95</u> Time <u>10:45 AM</u>	Received by: Signature <u>[Signature]</u> Printed <u>John Taylor</u> Company <u>Apache</u> Reason <u>Testing</u>	Date <u>12/14/95</u> Time <u>12:10</u>	Relinquished by: Signature <u>[Signature]</u> Printed <u>John Taylor</u> Company <u>Apache</u> Reason <u>Testing</u>	Date <u>12/14/95</u> Time <u>12:10</u>	Received by: Signature <u>[Signature]</u> Printed <u>John Taylor</u> Company <u>Apache</u> Reason <u>Testing</u>	Date <u>12/14/95</u> Time <u>12:10</u>
Method of Shipment: _____				After analysis, samples are to be:			
Shipment No. _____				☐ Disposed of (additional fee)			
Special Instructions: _____				☐ Stored (30 days max)			
				☐ Stored over 30 days (additional fee)			
				☐ Returned to customer			

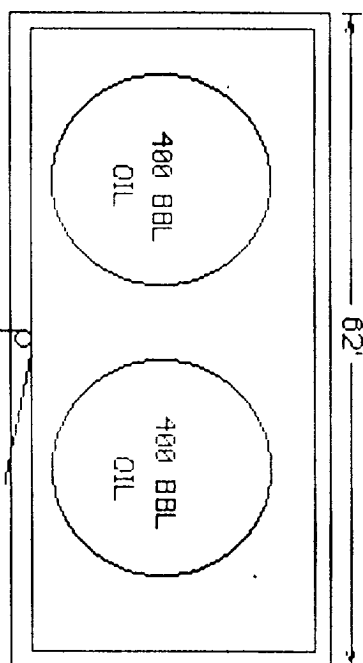
COURIER

NORTH

GENERAL DRAINAGE

APACHE
APACHE NUMBER 107 Lease # JAT 126
NW/4 SE/4 (J)
SECTION 2, TOWNSHIP 24N RANGE 4W
RIO ARriba COUNTY, NM
Revised 6/1/97 MG

PIT
2620532
RECLAIMED
140' FOOT



ERNG LINE DRIP



100' X 40' X 12" Cell

4" X 40' ERNG METER RUN

SEPARATOR



WELL HEAD



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>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>APACHE # 107</u>			
Location: Unit or Qtr/Qtr Sec		NW/SE SEC 2 T 24 N R 4 W County <u>RIO ARRIBA</u>	
Land Type		<u>JIC. TRIBAL</u>	
Date Remediation Started: <u>11/16/95</u>		Date Completed: <u>8/17/98</u>	
Remediation Method: Landfarmed		<u>XXX</u> Approx. cubic yards <u>84</u>	
Composted		<u> </u>	
Other		<u>REMEDIED SOIL TO BE SPREAD ON LOCATION.</u>	
Depth to Groundwater: (pts) <u>0</u>		Final Closure Sampling Sampling Date: <u>8/17/98</u> Time: <u>10:40AM</u> Sample Results: Field Headspace (ppm) <u>0</u> TPH (ppm) <u>1100</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>9/30/98</u>		PRINTED NAME <u>JEFF CROSS</u>	
SIGNATURE <u>Jeff Cross</u>		TITLE <u>PROJECT MANAGER</u>	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.			
APPROVED: YES <u>X</u> NO <u> </u> (REASON) <u> </u>			
SIGNED: <u>Kurt M. M...ll</u>		DATE: <u>11-13-98</u>	

APACHE CORPORATION/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE APACHE # 107

* AMOUNT OF SOIL UNDERGOING REMEDIATION 84 Yds.

CELL No. <u>1</u>	SampDATE 8/17/98	TPH 1100	BTEX ND
DIMENSIONS(LxWxH) <u>100' X 40' X 12"</u>			
CELL LOCATION (dir. from well head) <u>WEST</u>			
* DATE BEGAN: <u>11/16/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>8/17/98</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) _____			
REMEDATION RECORD: (Date, Treatment, Tilling)			
TREAT SOIL WITH 28-4-4 FERTILIZER		5/10/98 TILL SOIL.	
11/20/95 TILL SOIL.		5/27/98 PLOW AND TILL SOIL.	
6/10/97 WATER,PLOW AND TILL SOIL.		6/9/98 TREAT WITH 46-0-0 FERTILIZER,WATER	
6/26/97 TILL SOIL.		PLOW AND TILL SOIL.	
7/9/97 PLOW AND TILL SOIL.		7/7/98 PLOW AND TILL SOIL.	
7/24/97 PLOW AND TILL SOIL.		8/14/98 PLOW AND TILL SOIL.	
8/26/97 TREAT SOIL WITH 22LBS PHOSPHORUS,55LBS 46-0-0 FERTILIZER.			
5/1/98 PLOW SOIL.			

From excavation reports.

WELL NAME:

Apache #107

SAMPLE DATE:

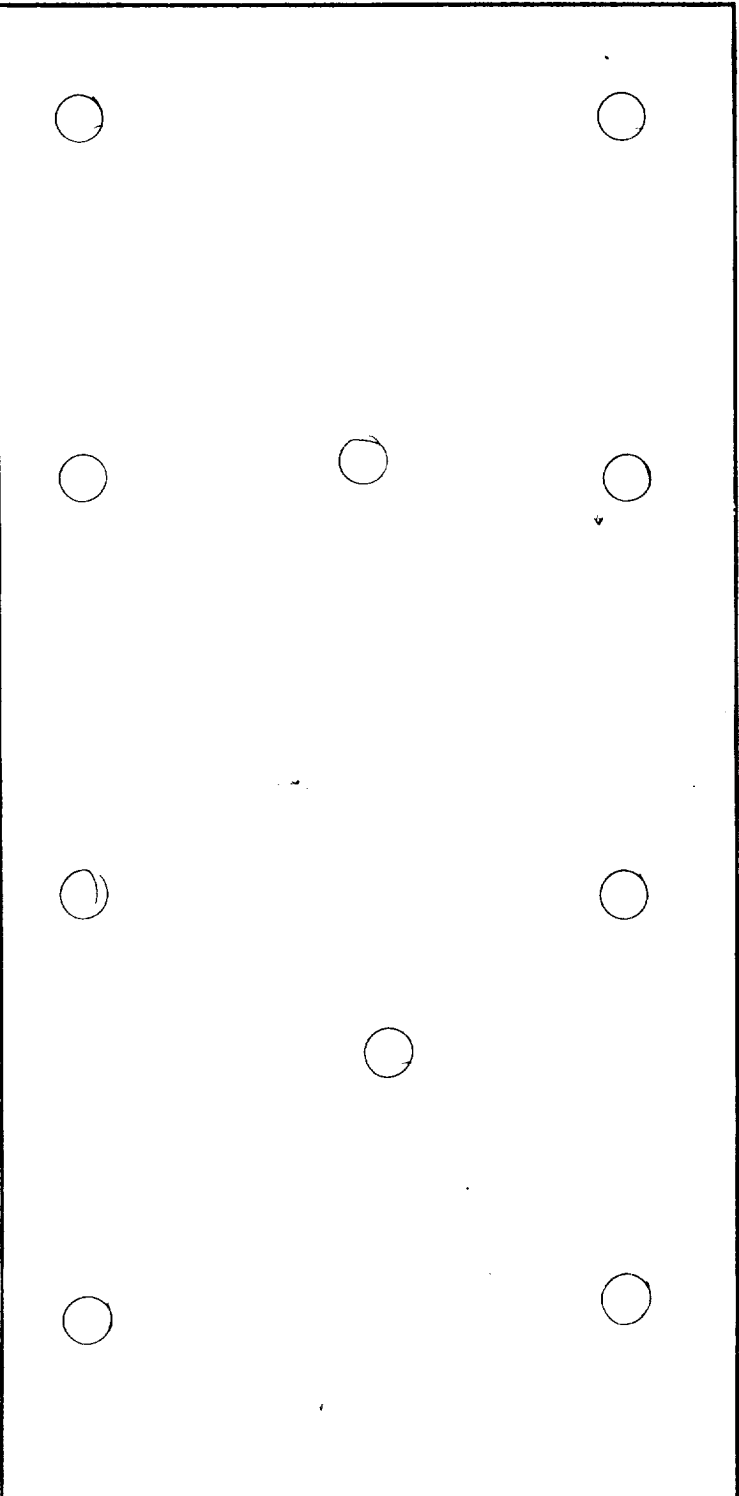
8-17-98

DIMENSIONS:

100' x 40' x 12"



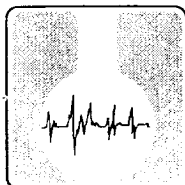
= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

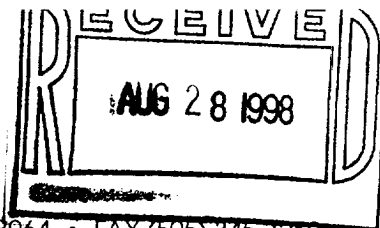
10 point composite sample



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



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: **9808191 JICARILLA PIT CLOSURES**

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

Client	APACHE #107 CELL	Sample	SOIL	Sample	08/17/98
Sample ID		Matrix		Collected	10:40:00

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit *	Sequence	Run Date
Test: SW846 8010B/8020A Purgeable VOCs by GC/PID-ELCD								
9808191-01A	X98390	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG.1998.702-5 08/20/98
	X98390	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.702-5
	X98390	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.702-5
	X98390		P/M-Xylenes	ND	mg / Kg	50	0.01	XG.1998.702-5
	X98390	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.702-5
Test: SW846 8015A Diesel Range Organics by GC/FID								
9808191-01B	X98389		Diesel Range Organics	1100	mg / Kg	25	25	XG.1998.699-22 08/21/98

*** Sample specific analytical Detection Limit is determined by multiplying the sample Dilution Factor by the listed method Detection Limit. ***
*** Results relate only to the items tested. ***



