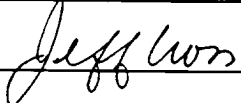




<b>Date Remediation Started:</b>		<u>10/18/95</u>	<b>Date Completed:</b>		<u>11/29/95</u>
<b>Remediation Method:</b> (Check all appropriate sections)		Excavation <u>XXX</u>	Approx. cubic yards		<u>661</u>
		Landfarmed <u>XX</u>	Insitu Bioremediation		
		Other _____			
<b>Remediation Location:</b> (i.e. landfarmed onsite, name and location of offsite facility)		Onsite <u>XX</u>	Offsite _____		
<b>General Description of Remedial Action:</b>		<u>Excavate pit to 10', took PID readings.</u>			
		<u>Spread soil on location for remediation. Took soil samples. Pit back filled w/ fill dirt</u>			
		_____			
		_____			
		_____			
<b>Groundwater Encountered:</b>		No <u>XX</u>	Yes _____		Depth _____
<b>Final Pit:</b>	Sample location	<u>5 point composite taken from pit sidewalls and pit bottom center</u>			
<b>Closure Sampling:</b> (in multiple samples, attach sample results and diagram of sample locations and depths)	Sample depth <u>10'</u>	<u>8 to 10" into pit sidewalls 10" into pit bottom</u>			
	Sample Date	<u>11/29/95</u>	Sample Time	<u>2:18 P.M.</u>	
	Sample results				
	Benzene	(ppm)	<u>ND</u>		
	Total BTEX	(ppm)	<u>6.8</u>		
	Field Headspace	(ppm)	<u>6.1</u>		
	TPH		<u>4200</u>		
<b>Groundwater Sample:</b>		Yes _____	No <u>XX</u> (If yes attach sample results)		
<b>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.</b>					
<b>DATE</b>		<u>June 8, 1998</u>	<b>PRINTED NAME</b>		<u>Jeff Cross</u>
<b>SIGNATURE</b>		<u></u>	<b>AND TITLE</b>		<u>Project Manager</u>

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

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 # 114</u>			
Location:	Unit or Qtr/Qtr	Sec <u>I</u>	SEC 24 T 24N R 4W County <u>RIO ARRIBA</u>
Pit Type:	Separator: <u></u>	Dehydrator: <u></u>	Other <u>TANK DRAIN \ BLOW PIT</u>
Land Type: <u>JIC. TRIBAL</u>			
Pit Location: (Attach diagram)	Pit Dimensions:	Length <u>56'</u>	Width <u>56'</u> Depth <u>10'</u>
	Reference:	Wellhead <u>XXX</u>	Other <u></u>
	Footage from reference:	<u>145</u>	
	Direction from reference:	<u>300</u> Degrees	East North <u>X</u> West South <u></u>
<b>Depth To Groundwater:</b>		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)			
<b>Distance to an Ephemeral Stream:</b>		Less than 100 feet	(10 points) <u></u>
(Downgradient dry wash greater than		Greater than 100 feet	( 0 points) <u>0</u>
ten feet in width			
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b>		Less than 100 feet	(10 points) <u></u>
(Downgradient lakes, playas and		Greater than 100 feet	( 0 points) <u>0</u>
livestock or wildlife watering ponds)			
<b>Wellhead Protection Area:</b>		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)			
<b>Distance To Surface Water:</b>		Less than 100 feet	(20 points) <u></u>
(Horizontal distance to perennial		100 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: 10/18/95 Date Completed: 11/29/95

Remediation Method: Excavation XXX Approx. cubic yards 661

(Check all appropriate sections)

Landfarmed XX Insitu Bioremediation \_\_\_\_\_

Other \_\_\_\_\_

Remediation Location: Onsite XX Offsite \_\_\_\_\_

(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavate pit to 10', took PID readings. spread soil on

location for remediation. Took soil samples. Pit Back Filled w/ Fill Dirt

Groundwater Encountered: No XXX 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 10' 8" to 10" into pit side walls, 10" into pit bottom.

Sample Date 11/29/95 Sample Time 2:18PM

Sample results

Soil:	Benzene	(ppm)	<u>ND</u>	Water:	Benzene	(ppb)	<u>NA</u>
	Total BTEX	(ppm)	<u>6.8</u>		Toluene	(ppb)	<u>NA</u>
	Field Headspace	(ppm)	<u>6.1</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>4200</u>		Total Xylenes	(ppb)	<u>NA</u>

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

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

DATE 5/26/98 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:

Kevin Mamm

DATE:

6-2-98

# APACHE CORPORATION FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

JICARILLA APACHE TRIBAL EPO  
REVIEW AND APPROVAL

LOCATION: APACHE 114

PIT COUNT: 1

EPO REPRESENTATIVE K.C.  
DATE OF REVIEW: 11/29/95

		EXCAVATION							
DIMENSIONS		START		FINISH					
	W'	L'	D'		W'	L'	D'	CU.YDS.	
PIT 1	52'	52'	5'	PIT 1	56'	56'	10'	661.0	
PIT 2				PIT 2					
PIT 3				PIT 3					
DATE: 10/18/95		PIT 1@ 10'	PIT 2@	PIT 3@	DATE: 11/29/95		PIT 1@ 10'	PIT 2@	PIT 3@
P. I. D.	CENTER	239.0			P. I. D.	CENTER	3.9		
	NW CORNER	4.9				NW CORNER	1.1		
	NE CORNER	92.8				NE CORNER	9.8		
	SW CORNER	7.0				SW CORNER	3.1		
	SE CORNER	148.0				SE CORNER	12.6		

## NOTES:

10/18/95 Excavate to 10'. Staining to 7.5', odor to 10'.

## SOIL SAMPLING

DATE: 10/18/95		PIT 1@ 10'	PIT 2@	PIT 3@	ANALYSIS RESULTS		PER LAB: ASSAIGAI	
P. I. D.	CENTER	239.0			PIT NO.	TPH	BTEX	WITNESS DATE
	NW CORNER	4.9			1	ND	ND	IF&S 10/18/95
	NE CORNER	92.8						
	SW CORNER	7.0						
	SE CORNER	148.0						

## RE-SAMPLE OR CELL(S) SAMPLE

DATE: 11/29/95		PIT 1@ 10'	PIT 2@	PIT 3@	ANALYSIS RESULTS		PER LAB: ASSAIGAI	
P. I. D.	CENTER	3.9			PIT NO.	TPH	BTEX	WITNESS DATE
	NW CORNER	1.1			1	4200.0	6.8	JDT 11/29/95
	NE CORNER	9.8						
	SW CORNER	3.1						
	SE CORNER	12.6						

## RE-SAMPLE OR CELL(S) SAMPLE

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

11-29-95 XCM

Proj. Number: 95017

Date Finished: 10/18/95

1	Type:	H	x	C		Dimensions Pit 1 Start:	52' x 52' x 5'		Dimensions Pit 1 Finished:	56' x 56' x 10'
2	Type:	H		C		Dimensions Pit 2 Start:			Dimensions Pit 2 Finished:	
3	Type:	H		C		Dimensions Pit 3 Start:			Dimensions Pit 3 Finished:	
Total Cu. Yards Removed:							661		Total Liquids Removed:	20 bbls.

[illegible]

[illegible]

[illegible]



Lab ID: 9512029-11B  
Sample ID: AP #146-C

Collected: 11/29/95 13:32:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M	37	mg/Kg	5.0	5.0	12/07/95	SLFTD053
Diesel	12/05/95	N/A				
HCs DSL XT/CAL DHS 8015M						

Lab ID: 9512029-12A  
Sample ID: AP #146-H

Collected: 11/29/95 13:48:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093
Toluene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093
Ethylbenzene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093
P-&m-Xylene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093
O-Xylene	ND	mg/Kg	0.0010	500	12/06/95	SBTXME093

Lab ID: 9512029-12B  
Sample ID: AP #146-H

Collected: 11/29/95 13:48:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M	2600	mg/Kg	5.0	250	12/07/95	SLFTD053
Diesel	12/05/95	N/A				
HCs DSL XT/CAL DHS 8015M						

Lab ID: 9512029-13A  
Sample ID: AP #146-H

Collected: 11/29/95 14:18:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
Toluene	ND	mg/Kg	0.0010	500	12/05/95	SBTXME092
Ethylbenzene	0.81	mg/Kg	0.0010	500	12/05/95	SBTXME092
P-&m-Xylene	0.7	mg/Kg	0.0010	500	12/05/95	SBTXME092
O-Xylene	2.3	mg/Kg	0.0010	500	12/05/95	SBTXME092

Lab ID: 9512029-13B  
Sample ID: AP #146-H

Collected: 11/29/95 14:18:00  
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
HCs DIESEL/CAL DHS 8015M	2200	mg/Kg	5.0	500	12/07/95	SLFTD053
Diesel	12/05/95	N/A				
HCs DSL XT/CAL DHS 8015M						



ASSAIGAL  
ANALYTICAL  
LABORATORIES

# Chain of Custody Record

Lab job no. 12021 Date 12/11/15

Page 2 of 3

7300 JEFFERSON, N.E.  
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

Client \_\_\_\_\_

Project Manager / Contact \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

City / State / Zip \_\_\_\_\_

Fax No. \_\_\_\_\_

Project Name / Number \_\_\_\_\_

Samplers: (Signature) \_\_\_\_\_

Contract / Purchase Order / Quote \_\_\_\_\_

AAL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation		No. of Containers	Analysis Required	Remarks
						Temp.	Chemical			

11A-B	11A-B	11/29	2:18	Soil	4.2 glass	↓	↓	2	1 Sample jar for B.T.F.x	
11A-B	11A-B	11/29	3:01	↓	↓	↓	↓	2	1 Sample jar for T.P.H	
11A-B	11A-B	11/30	12:50	Soil	4.2 glass	↓	↓	2	1 Sample jar for P.E.P. Reagent	
11A-B	11A-B	11/30	1:05	↓	↓	↓	↓	2		
11A-B	11A-B	11/30	1:35	↓	↓	↓	↓	2		
11A-B	11A-B	11/30	2:05	↓	↓	↓	↓	2		
11A-B	11A-B	11/30	2:12	↓	↓	↓	↓	2		
11A-B	11A-B	11/30	2:35	↓	↓	↓	↓	2		
11A-B	11A-B	11/30	2:45	↓	↓	↓	↓	2		
11A-B	11A-B	11/30	3:40	↓	↓	↓	↓	2		

Relinquished by:	Date	Received by:	Date
Signature _____	12/11/15	Signature _____	12/11/15
Printed _____		Printed _____	
Company _____		Company _____	
Reason _____		Reason _____	

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

GENERAL DRAINAGE NORTH



APACHE

APACHE NUMBER 114 Lease # JAT 129

NE 1/4 SE 1/4 (1)

SECTION 24, TOWNSHIP 24N RANGE 4W  
RIO ARriba COUNTY, NM

Revised 6/1/97 MC

WELL HEAD



4" 30' EPUB METEOR RUN



LAND FARM.

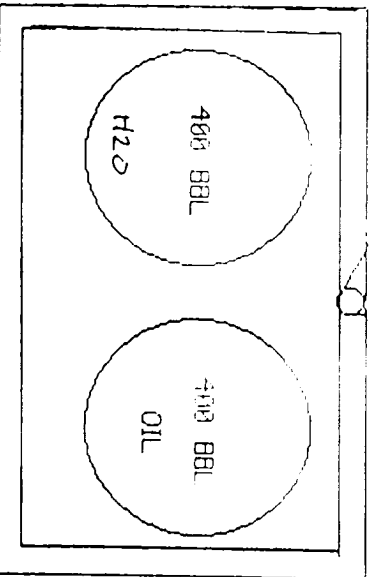
110' x 45' x 18"



EPUB  
LINE  
DEEP

PIT

145' FWH  
RECLAIMED  
300' WSW



5

SEPARATOR

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 # 114</u>			
Location: Unit or Qtr/Qtr Sec <u>I</u> Sec <u>24</u> T <u>24N</u> R <u>4W</u> County <u>RIO ARRIBA</u>			
Land Type <u>JIC. TRIBAL</u>			
Date Remediation Started: <u>10/18/95</u>		Date Completed: <u>5/14/98</u>	
Remediation Method: Landfarmed <u>XXX</u>		Approx. cubic yards <u>661</u>	
Composted <u>                    </u>			
Other <u>                    </u>			
Depth to Groundwater: (pts) <u>0</u>		<b>Final Closure Sampling</b> Sampling Date: <u>5/14/98</u> Time: <u>3:15PM</u> Sample Results: Field Headspace (ppm) <u>ND</u> TPH (ppm) <u>ND</u> Method <u>M8015</u> Other BTEX \ SW846 , 8020A ( ND )	
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>5/26/98</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>Kevin C. Mammell</u>		DATE: <u>6-2-98</u>	

# APACHE CORPORATION/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE APACHE # 114

\* AMOUNT OF SOIL UNDERGOING REMEDIATION 661 Yds.

CELL No. <u>1</u>	SampDATE <b>5/14/98</b>	TPH <b>ND</b>	BTEX <b>ND</b>
DIMENSIONS(LxWxH) <u>210' X 45' X 18"</u>			
CELL LOCATION (dir. from well head) <u>WEST</u>			
* DATE BEGAN: <u>10/18/95</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>5/14/98</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) _____			
REMEDIATION RECORD: (Date, Treatment, Tilling)			
10/20/95 TREAT SOIL WITH 28-4-4 FERTILIZER.			
6/17/98 TREAT SOIL WITH 46-0-0 FERTILIZER, WATER , PLOW AND TILL SOIL.			
5/5/98 PLOW SOIL.			
5/11/98 TILL SOIL.			

From excavation reports.

WELL NAME:


Apache #114

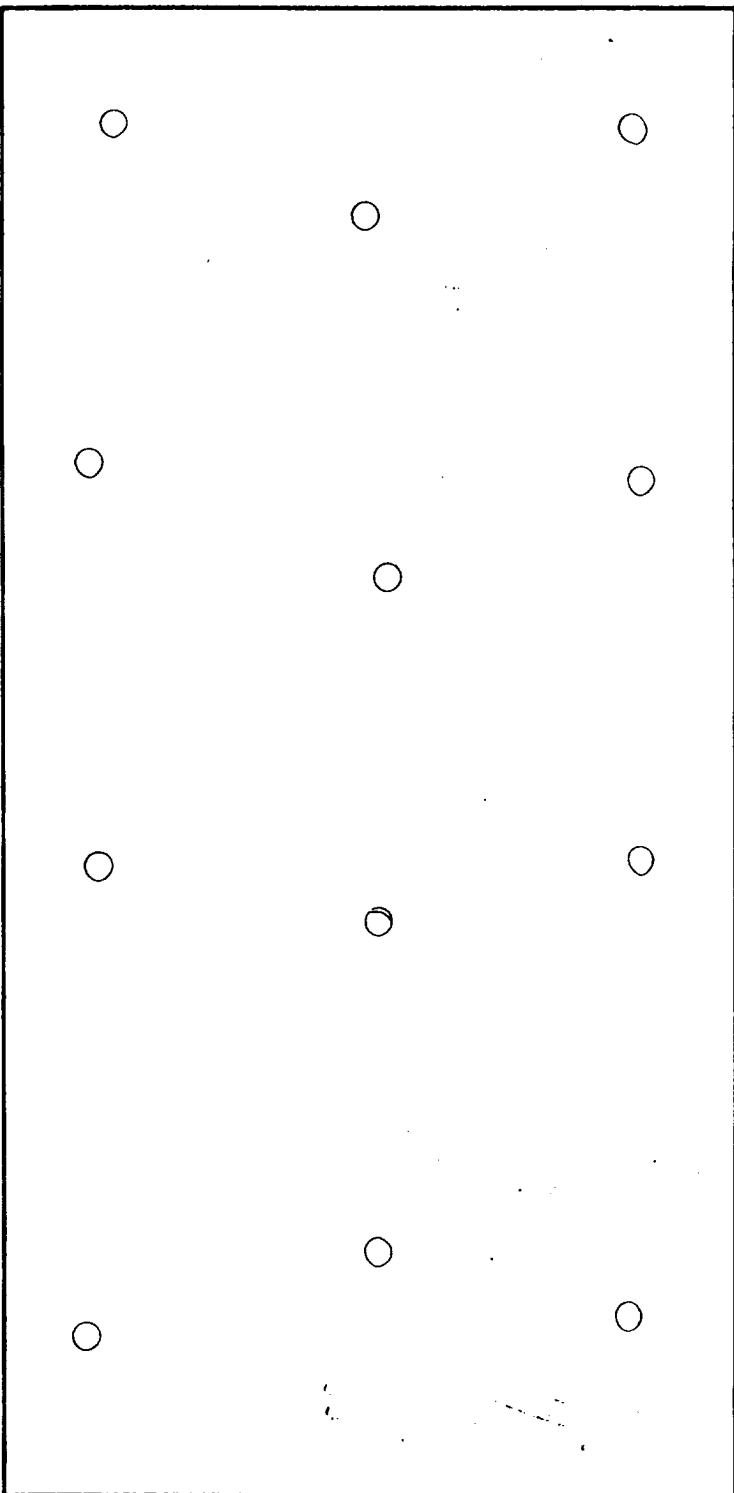
SAMPLE DATE:

5-14-98

DIMENSIONS:

210' x 45' x 18'

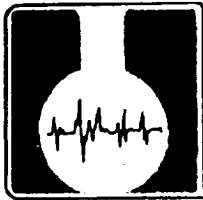
 = SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

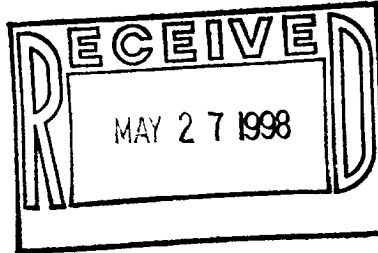
12 point composite Sample



**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

**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: **9805129 JICARILLA PIT CLOSURE**

*William F. Biava*  
William F. Biava, President of Assaigai Analytical Laboratories, Inc.

Client Sample ID **APACHE #114 CELL** Sample Matrix **SOIL** Sample Collected **05/14/98 15:15:00**

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	Sequence	Run Date
<b>SW846-8020 Volatiles</b>								
9805129-01A	X98267	71-43-2	Benzene	ND	mg / Kg	50	0.005	05/14/98
	X98267	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG.1998.464-21
	X98267	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG.1998.464-21
	X98267		p/m Xylenes	ND	mg / Kg	50	0.01	XG.1998.464-21
	X98267	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG.1998.464-21
<b>SW846-8015 Modified TPH</b>								
9805129-01B	X98268		Diesel Range Organics	ND	mg / Kg	25	25	05/15/98

\*\*\* Sample specific analytical Detection Limit is determined by multiplying the sample Dilution Factor by the listed method Detection Limit. \*\*\*



