

District III
1000 Rio Brazos Rd
Santa Fe, NM 87505
DEPUTY OIL & GAS INSPECTOR

State of New Mexico
Energy, Minerals and Natural Resources Department

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

JAN 29 1999

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

PIT REMEDIATION AND CLOSURE REPORT

Approved

(MW PETROLEUM)
Operator: **APACHE CORPORATION** Telephone: **505-325-0318**

Address: **2855 Southside River Road, Suite A, Farmington, NM 87401**

Facility or Well Name: **FRED PHILLIPS C # 3**

Location: Unit or Qtr/Qtr Sec **SE/NE Sec 15 T 25N R 3W** County **Rio Arriba**

Pit Type: Separator: _____ Dehydrator: _____ Other: **SEPARATOR/BLOW PIT**

Land Type: **FEE**

Pit Dimensions
Pit Location: (Attach diagram)
START: Length **15'** Width **15'** Depth **4'**
FINISH: Length **20'** Width **20'** Depth **14'**

Reference: Wellhead **XX** Other _____

Footage from reference: **130'**

Direction from reference: **266** Degrees _____ East _____ North _____
_____ **XX** 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>4/14/97</u>	Date Completed:		<u>6/13/98</u>
Remediation Method: (Check all appropriate sections)	Excavation	<u>XX</u>	Approx. cubic yards	<u>148</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		
<u>REMEDIED SOIL TO BE PUT BACK IN PIT.</u>					
General Description of Remedial Action:					
<u>EXCAVATE PIT TO 14', TOOK PID READINGS. SPREAD SOIL ON LOCATION,</u>					
<u>TREAT SOIL WITH FERTILIZER, WATER AND TILL SOIL. 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>14'</u>			
Sample Date		<u>4/15/97</u>	Sample Time		<u>10:00AM</u>
Sample results					
Benzene		(ppm)	<u>ND</u>		
Total BTEX		(ppm)	<u>ND</u>		
Field Headspace		(ppm)	<u>0.32</u>		
TPH			<u>ND</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>6-Jan-99</u>	PRINTED NAME		<u>Jeff Cross</u>
SIGNATURE		<u>Jeff Cross</u>	AND TITLE		<u>Project Manager</u>

APACHE CORPORATION/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

(MW PETROLEUM)

LOCATION FRED PHILLIPS C #3

PIT COUNT 1

START		4/14/97			FINISH		4/15/97	
DIMENSIONS		L	W	D	L	W	D	CU YDS
Pit 1	15'	15'	4'	Pit 1	20'	20'	14'	148
Pit 2				Pit 2				
Pit 3				Pit 3				
		Pit 1 @ 8'	Pit 1 @ 10'	Pit 1 @ 12'		Pit 1 @ 14'	Pit 2 @	Pit 3 @
P I D	Center	2500+	550	121	P I D	Center	0.7	
	NW Corner	375	270	87		NW Corner	0	
	NE Corner	305	80	42		NE Corner	0	
	SW Corner	500	110	56		SW Corner	0.4	
	SE Corner	900	205	73		SE Corner	0.5	

NOTES:

4/14/97 START EXCAVATION ON PIT , EXCAVATE TO 8' , PID READINGS HIGH , STRONG ODOR ,LIGHT TO MED. ST
4/14/97 CONTINUE EXCAVATING PIT , PID STILL HIGH AT 10' AND 12' LIGHT ODOR AND STAINING.
4/15/97 EXCAVATE PIT TO 14' , PID READINGS GOOD , NO STAINING OR ODOR.
4/15/97 TOOK SOIL SAMPLES AND SENT TO ASSAIGAI LABS.

DATE		4/15/97			SOIL SAMPLING				PER LAB		Assaigai
		Pit 1 @ 14'	Pit 2 @	Pit 3 @	ANALYSIS RESULTS				WITNESS	DATE	
P I D	Center	0.7			PIT NO	TPH	BETEX				
	NW Corner	0				SIDE\BTM	SIDE\BTM				
	NE Corner	0			1	ND	ND		J.C.	4/15/97	
	SW Corner	0.4			2						
	SE Corner	0.5			3						

RE-SAMPLE

DATE:		Pit 1 @	Pit 2 @	Pit 3 @	ANALYSIS RESULTS			PER LAB		
					PIT NO	TPH	BETEX	WITNESS	DATE	
P I D	Center					SIDE\BTM	SIDE\BTM			
	NW Corner									
	NE Corner				1					
	SW Corner				2					
	SE Corner				3					

RE-SAMPLE

DATE:		Pit 1 @	Pit 2 @	Pit 3 @	ANALYSIS RESULTS			PER LAB		
					PIT NO	TPH	BETEX	WITNESS	DATE	
P I D	Center					SIDE\BTM	SIDE\BTM			
	NW Corner									
	NE Corner				1					
	SW Corner				2					
	SE Corner				3					

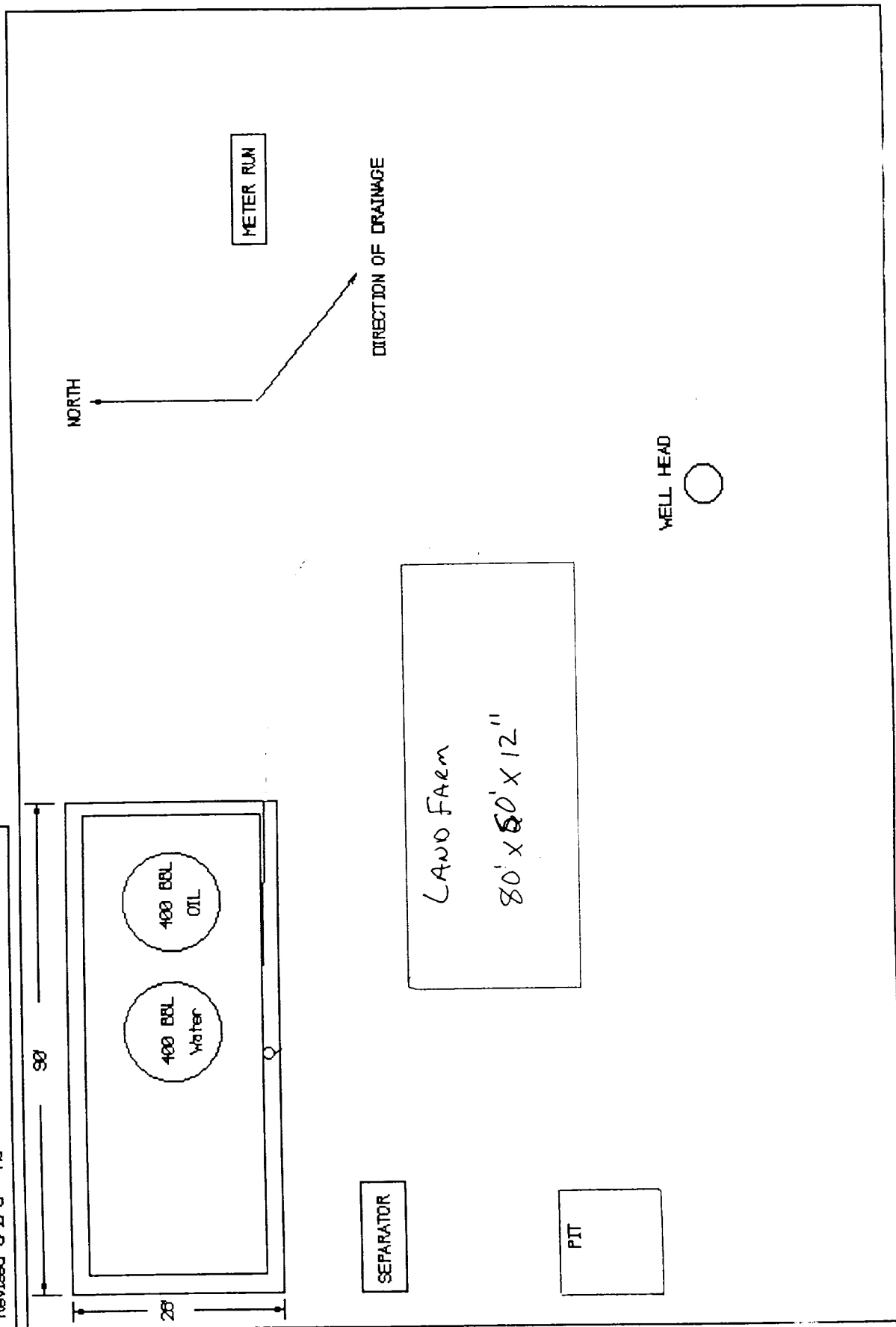
M W PETROLEUM, FRED PHILLIPS C NUMBER 3

Lease # NNM01138

SW/4 NW/4 E1, SECTION 15, TOWNSHIP 25N, RANGE 3W

RIO ARriba COUNTY, NEW MEXICO

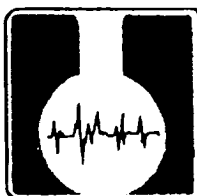
Revised 8/2/97 MG





SAMPLE DATE 4/15/97

[illegible]



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

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3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

APR 25 1997

Report Generated:
April 23, 1997 13:50

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9704175
WORK ID : PIT REMEDIATION
CLIENT CODE : APA01
DATE RECEIVED : 04/17/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9704175-01A
Sample ID: FRED PHILLIPS C-3 PIT

Collected: 04/15/97 10:00:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A						
Benzene	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154
Toluene	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154
Ethylbenzene	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154
P-&m-Xylene	ND	mg/Kg	0.0020	500	04/19/97	SBTXME154
O-Xylene	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154

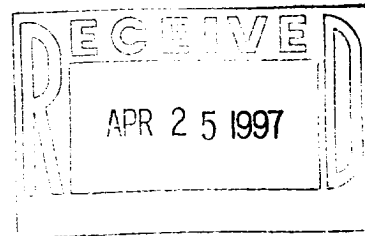
Lab ID: 9704175-01B
Sample ID: FRED PHILLIPS C-3 PIT

Collected: 04/15/97 10:00:00
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	50	25	04/19/97	SDRO22

Fred L. Shore, Ph.D.
VP of Laboratory Operations





WORKORDER COMMENTS

DATE : 04/23/97
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.

*** Analytical results reported pertain only to the samples provided ***
*** for analysis and may not represent actual field conditions. ***

*** This report is not to be reproduced except in full, without the ***
*** written approval of Assaigai Analytical Inc. ***

REPORT COMMENTS



Chain of Custody Record

Lab job no.: 4175 Date 4/12/97
Page 1 of 1

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87111
(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 Apache Corporation
Address 304 W. Behrens
City/State/Zip Farmington N.M. 87401
Project Name / Number Pt Remediation
Contract / Purchase Order / Quote

Project Manager / Contact JEFF CROSS
Telephone No. 505-774-6643
Fax No. 505-774-6624
Samplers: (Signature) Jeff Cross

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation	
						Temp.	Chemical
1	FREDPHILLIPS C-3 pit	4/15/97	10:00	soil	4oz glass	1°C	ICE
2	FREDPHILLIPS C-3 pit	4/15/97	10:00	soil	4oz glass	↓	ICE
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Relinquished by: Signature <u>Jeff Cross</u> Printed <u>Jeff Cross</u> Company <u>Apache Corporation</u> Reason <u></u>	Date 4/17/97 Time 8:27	Received by: Signature <u>Elva S. Garcia</u> Printed <u>Elva S. Garcia</u> Company <u>AME</u> Reason <u></u>	Date 4/17/97 Time 10:25 Company Reason	Relinquished by: Signature Printed Company Reason	Date Time Company Reason
Method of Shipment: <u></u>		After analysis, samples are to be: ☐ Disposed of (additional fee) ☐ Stored (30 days max) ☐ Stored over 30 days (additional fee) ☐ Returned to customer		Comments: <u></u> <u></u> <u></u>	
Shipment No. <u></u>		Special Instructions: <u></u>			

COURIER

M W PETROLEUM/FARMINGTON DISTRICT (APACHE CORPORATION)
SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE FRED PHILLIPS C # 3

* AMOUNT OF SOIL UNDERGOING REMEDIATION 148 Yds.

CELL No. <u>1</u>	SampDATE 6/13/98	TPH 1200	BTEX ND
DIMENSIONS(LxWxH) <u>80' X 50' X 12"</u>			
CELL LOCATION (dir. from well head) <u>NORTH WEST</u>			
* DATE BEGAN: <u>4/14/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>6/13/97</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) _____			
REMEDIATION RECORD: (Date, Treatment, Tilling)			
5/6/97 TREAT SOIL WITH 46-0-0 FERTILIZER, WATER, PLOW AND TILL SOIL.			
5/19/97 PLOW AND TILL SOIL.			
6/11/97 PLOW AND TILL SOIL.		5/12/98 WATER, PLOW AND TILL SOIL.	
6/27/97 WATER, PLOW AND TILL SOIL.		5/16/98 PLOW AND TILL SOIL.	
7/7/97 PLOW AND TILL SOIL.		6/3/98 WATER. PLOW AND TILL SOIL.	
7/24/97 PLOW AND TILL SOIL.		6/10/98 PLOW AND TILL SOIL.	
8/6/97 WATER, PLOW AND TILL SOIL.		6/13/98 SAMPLE SOIL.	
8/26/97 PLOW AND TILL SOIL.			

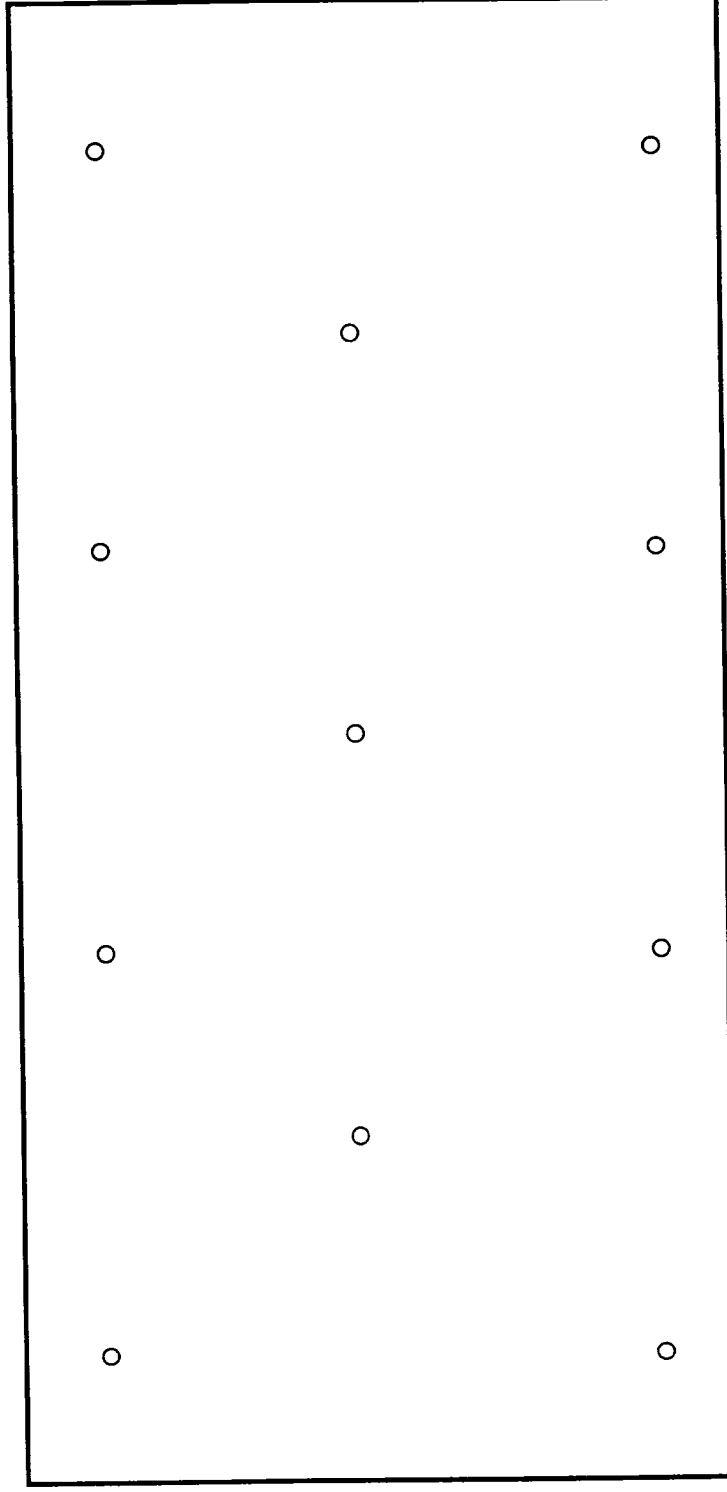
From excavation reports.

WELL NAME: FRED PHILLIPS C # 3

SAMPLE DATE: 6/13/98

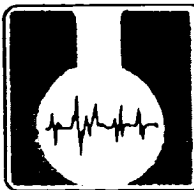
DIMENSIONS: 80' X 50' X 12"

 = SAMPLE AREA



NOTES: ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

11 POINT COMPOSITE SAMPLE



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JUN 26 1998

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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: 9806212 JICARILLA

Karen Galster for
William P. Biava, President of Assaigai Analytical Laboratories, Inc.

Client	M.W.P. FRED PHILLIPS #C3	Sample Matrix	SOIL	Sample Collected	06/13/98 13:00:00
--------	--------------------------	---------------	------	------------------	-------------------

Fraction	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit *	Sequence	Run Date
SW846-8010/8020 Volatiles								
9806212-01A	X98329	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG 1998 550-12 06/17/98
	X98329	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG 1998 550-12
	X98329	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG 1998 550-12
	X98329		P/M-Xylenes	ND	mg / Kg	50	0.01	XG 1998 550-12
	X98329	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG 1998 550-12
SW846-8015 Modified TPH								
9806212-01B	X98332		Diesel Range Organics	1200	mg / Kg	25	25	XG 1998 561-9 06/23/98

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



Chain of Custody Record



ALBUQUERQUE, NEW MEXICO 87109

(505) 345-8964
3332 WEDGEWOOD,
EL PASO, TEXAS 79925
(915) 591-6000

Lab Job No. 6212 Date 6/13/98
Page 1 of 1

Client Apache Corporation Project Manager / Contact Jeff Cross
Address 2855 Southside River Rd, Ste. A Telephone No. (505) 774-6643
City / State / Zip Farmington, NM 87401 Fax No. (505) 774-6624
Project Name / Number WLP #C3 Samplers: (Signature) Danny Butler
Contract / Purchase Order / Quote 2855

Analysis Required		Remarks	
1	TKN		
1	DRO		
1	BTEX		
1	No. of Containers		

Relinquished by:	Received by:	Relinquished by:	Received by:
Signature <u>Jeff Cross</u>	Signature <u>Rich Ardra</u>	Signature <u>Scott Pratt</u>	Signature <u>Rich Ardra</u>
Printed <u>JEFF CROSS</u>	Printed <u>Rich Ardra</u>	Printed <u>SCOTT PRATT</u>	Printed <u>Rich Ardra</u>
Company <u>Apache Corp.</u>	Company <u>Apache</u>	Company <u>AAL</u>	Company <u>Apache</u>
Reason <u></u>	Reason <u>8 AM</u>	Reason <u></u>	Reason <u></u>

Date	Time	Date	Time
<u>16 June 98</u>	<u>10:15</u>	<u>17 June 98</u>	<u>07:30</u>

Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp.	Chemical
<u>WLP #C3</u>	<u>6/13/98</u>	<u>1:00</u>	<u>SOIL</u>	<u>4 oz glass</u>	<u>ICE</u>	<u>1</u>
<u>1A</u>						
<u>1B</u>						

Relinquished by:	Received by:
Signature <u>Jeff Cross</u>	Signature <u>Rich Ardra</u>
Printed <u>JEFF CROSS</u>	Printed <u>Rich Ardra</u>
Company <u>Apache Corp.</u>	Company <u>Apache</u>
Reason <u></u>	Reason <u>8 AM</u>

Date	Time
<u>16 June 98</u>	<u>10:15</u>

Relinquished by:	Received by:
Signature <u>Scott Pratt</u>	Signature <u>Rich Ardra</u>
Printed <u>SCOTT PRATT</u>	Printed <u>Rich Ardra</u>
Company <u>AAL</u>	Company <u>Apache</u>
Reason <u></u>	Reason <u>8 AM</u>

Date	Time
<u>16 June 98</u>	<u>10:15</u>

LABORATORY