

District 11c
1000 Rio Brazos Rd
Aztec, NM 87410
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

JAN 29 1999

PIT REMEDIATION AND CLOSURE REPORT

Operator: (MW PETROLEUM) APACHE CORPORATION		Telephone: 505-325-0318	
Address: 2855 Southside River Road, Suite A, Farmington, NM 87401			
Facility or Well Name: FRED PHILLIPS C # 3A		PIT #1	
Location: Unit or Qtr/Qtr Sec SE/NE Sec 15		T 25N R 3W County Rio Arriba	
Pit Type: Separator: _____ Dehydrator: _____ Other: BLOW PIT			
Land Type: FEE			
Pit Dimensions		START: Length 21' Width 21' Depth 5'	
Pit Location:		FINISH: Length 25' Width 25' Depth 11'	
(Attach diagram)			
Reference: Wellhead XX		Other: _____	
Footage from reference: 115'			
Direction from reference: 156 Degrees		X East North West of South XX	
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	

Date Remediation Started: 4/13/97 Date Completed: 8/18/98

Remediation Method: (Check all appropriate sections)
Excavation XX Approx. cubic yards 139
Landfarmed XX Insitu Bioremediation _____
Other _____

Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)
Onsite XX Offsite _____
REMEDIED SOIL TO BE PUT BACK IN PIT.

General Description of Remedial Action: _____
EXCAVATE PIT TO 11', TOOK PID READINGS. SPREAD SOIL ON LOCATION,
TREAT SOIL WITH FERTILIZER, WATER AND TILL SOIL. TOOK SOIL SAMPLES.
4/15/97 SOIL SAMP. HAD HIGH TPH OF 6200 PPM. EXCAVATE MORE SOIL OFF PIT SIDE
WALLS AND RESAMPLE PIT ON 5/13/97. TEST RESULTS CAME BACK OK.

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 11'
Sample Date 5/13/97 Sample Time 12:15PM
Sample results
Benzene (ppm) ND
Total BTEX (ppm) ND
Field Headspace (ppm) 4.5
TPH ND

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 6-Jan-99 PRINTED NAME Jeff Cross
SIGNATURE Jeff Cross AND TITLE Project Manager

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
Appropriate District
and 1 copy to
Santa Fe Office

PIT REMEDIATION AND CLOSURE REPORT

Operator: (MW PETROLEUM) APACHE CORPORATION		Telephone: 505-325-0318	
Address: 2855 Southside River Road, Suite A, Farmington, NM 87401			
Facility or Well Name:		FRED PHILLIPS C # 3A	PIT # 2
Location: Unit or Qtr/Qtr Sec	SE/NE Sec 15	T 25N	R 3W County Rio Arriba
Pit Type: Separator:	Dehydrator	Other	SEPARATOR AND TANK DRAIN
Land Type: FEE			
Pit Dimensions	START: Length 15'	Width 15'	Depth 3'
Pit Location:	FINISH: Length 17'	Width 17'	Depth 12'
(Attach diagram)			
Reference:	Wellhead XX	Other	
Footage from reference: 90'			
Direction from reference: 258 Degrees XX East 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			

Date Remediation Started: 4/13/97 Date Completed: 8/18/98

Remediation Method: (Check all appropriate sections)
Excavation XX Approx. cubic yards 96
Landfarmed XX Insitu Bioremediation _____
Other _____

Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)
Onsite XX Offsite _____
REMEDIED SOIL TO BE PUT BACK IN PIT.

General Description of Remedial Action: _____

EXCAVATE PIT TO 12', TOOK PID READINGS. SPREAD SOIL ON LOCATION,
TREAT SOIL WITH FERTILIZER, WATER AND TILL SOIL. 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

12'

Sample Date

4/15/97

Sample Time

11:38AM

Sample results

Benzene

(ppm)

ND

Total BTEX

(ppm)

45.8

Field Headspace

(ppm)

42.58

TPH

ND

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.

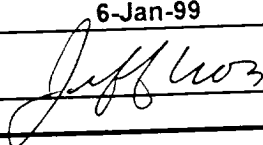
DATE

6-Jan-99

PRINTED NAME

Jeff Cross

SIGNATURE



AND TITLE

Project Manager

APACHE CORPORATION/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

(MW PETROLEUM)

LOCATION FRED PHILLIPS C # 3A

PIT COUNT 2

START		PIT # 1 14/13/97			FINISH PIT# 1 5/13/97		
DIMENSIONS		PIT# 2 4/13/97			PIT# 2 4/15/97		
	L	W	D		L	W	D
Pit 1	21'	21'	5'	Pit 1	25'	25'	11'
Pit 2	15'	15'	3'	Pit 2	17'	17'	12'
Pit 3				Pit 3			
	Pit 1 @ 7'	Pit 2 @ 7'	Pit 3 @		Pit 1 @ 9'	Pit 2 @ 12'	Pit 1 @ 11'
P	Center	2500+	2500+	P	Center	3.9	74.3
I	NW Corner	2500+	2500+	I	NW Corner	28.3	58.7
D	NE Corner	2500+	2500+	D	NE Corner	5.8	44.9
	SW Corner	2500+	2500+		SW Corner	1.1	20.3
	SE Corner	2500+	2500+		SE Corner	16.3	14.7

NOTES:

4/13/97 START EXCAVATION ON PIT # 1 ,EXCAVATE TO 7' ,PID READINGS HIGH ,STRONG ODOR AND LIGHT STAIN

4/13/97 CONTINUE EXCAVATION ON PIT # 1 TO 9' ,PID READINGS GOOD , NO STAINING OR ODOR

4/14/97 EXCAVATE PIT # 1 SIDE WALLS,.

4/13/97 START EXCAVATION ON PIT # 2 , EXCAVATE PIT TO 7' , PID READINGS HIGH.

4/14/97 CONTINUE EXCAVATION ON PIT # 2 TO 12' , PID READINGS GOOD, NO STAINING OR ODOR.

4/15/97 SOIL SAMPLE PITS # 1 & # 2, SENT TO ASSAIGAI LABS.

PIT # 1 TEST RESULTS FAILED WITH A HIGH TPH OF 6200 PPM.

5/13/97 CONTINUE EXCAVATION ON PIT # 1 TO A DEPTH OF 11' , PID READINGS GOOD.

5/13/97 RESAMPLE PIT # 1 AND SENT TO ASSAIGAI LABS.

DATE		4/15/97	4/15/97	SOIL SAMPLING	ANALYSIS RESULTS		PER LAB		Assaigai
		Pit 1 @ 9'	Pit 2 @ 12'	Pit 3 @	PIT NO	TPH	BETEX	WITNESS	DATE
P	Center	3.9	74.3						
I	NW Corner	28.3	58.7		1	6200	ND	J.C.	4/15/97
D	NE Corner	5.8	44.9		2	ND	45.8	J.C.	4/15/97
	SW Corner	1.1	20.3		3				
	SE Corner	16.3	14.7						

RE-SAMPLE

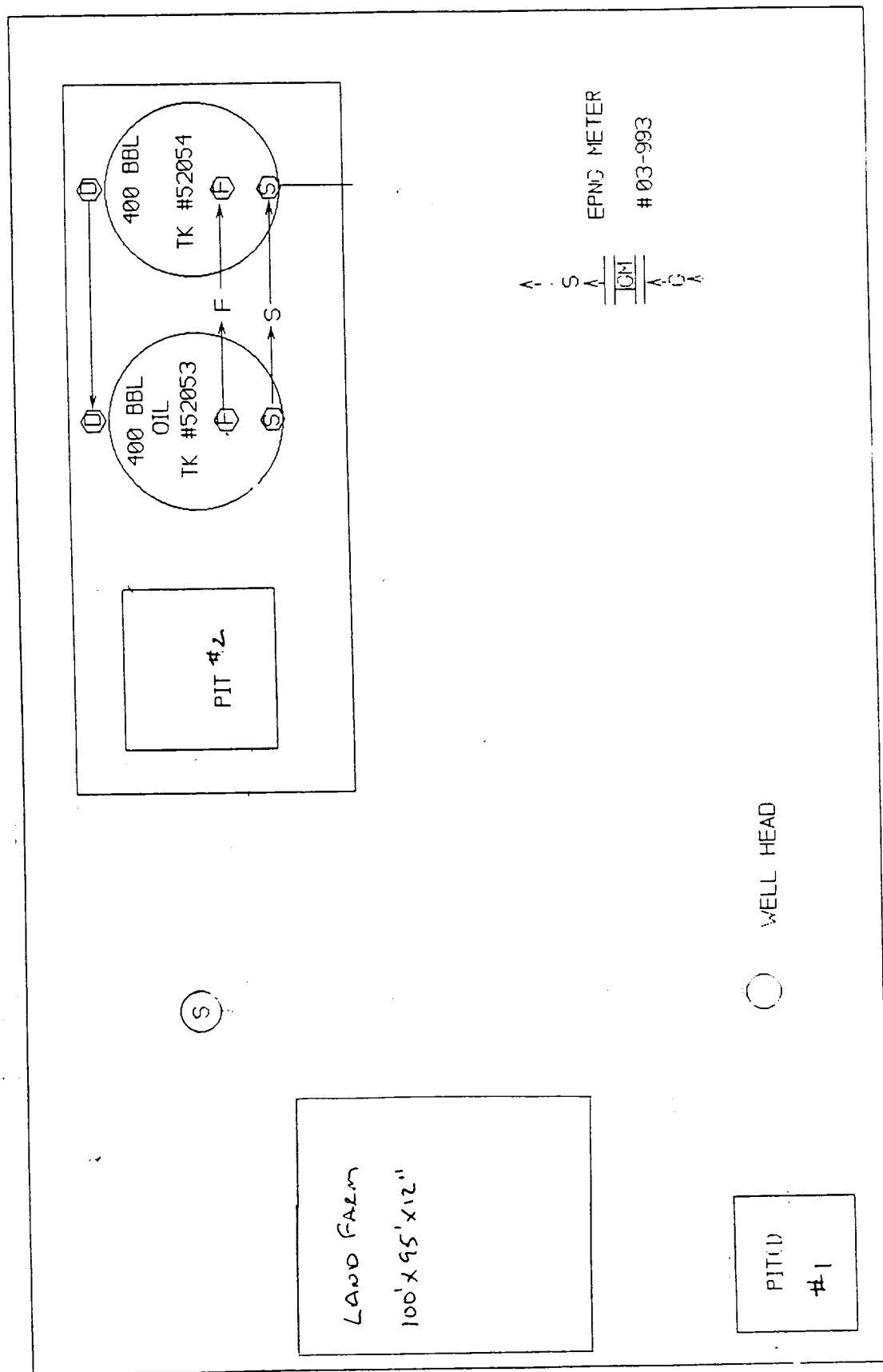
DATE:		5/13/97	Pit 1 @ 11'	Pit 2 @	Pit 3 @	ANALYSIS RESULTS		PER LAB	
						PIT NO	TPH	BETEX	WITNESS
P	Center		0.5						
I	NW Corner		12.2			1	ND	ND	J.C.
D	NE Corner		5			2			
	SW Corner		0			3			
	SE Corner		4.8						

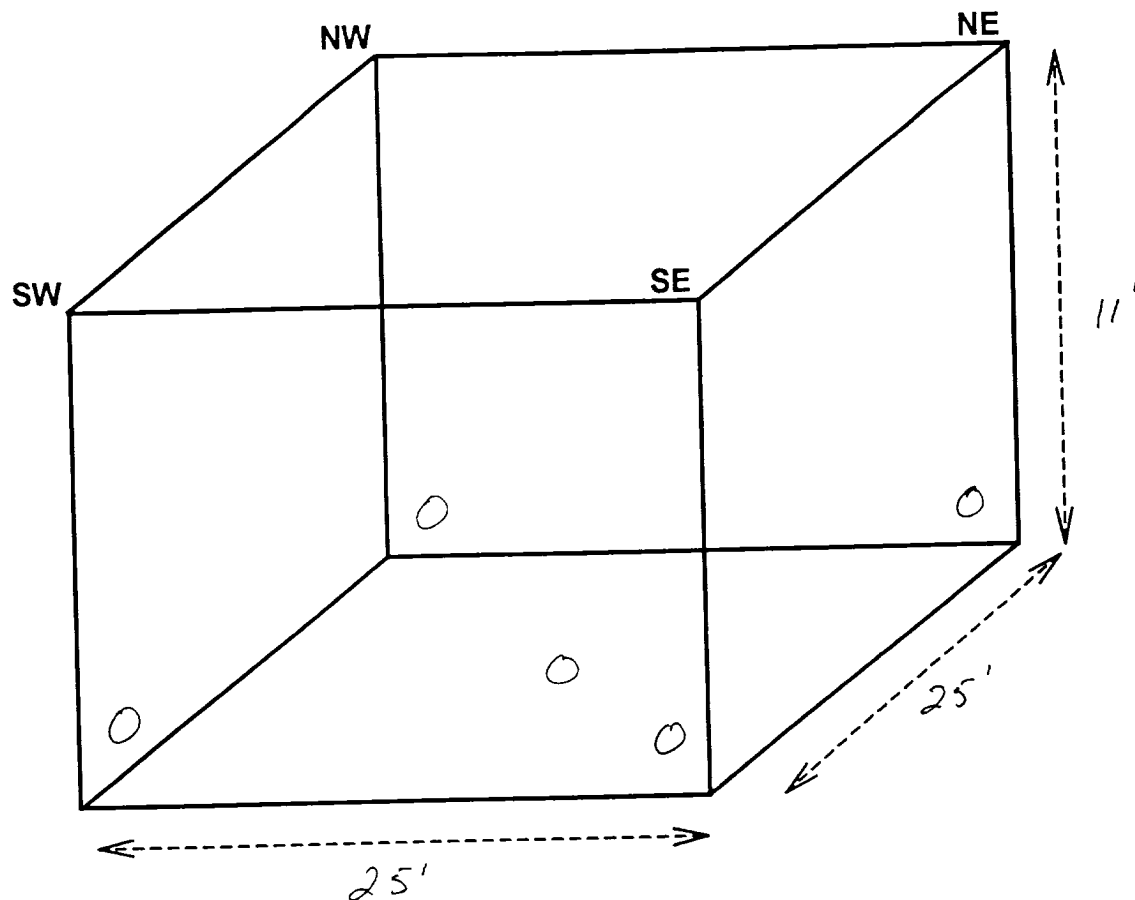
RE-SAMPLE

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

SECTION 15, TOWNSHIP 25N, RANGE 3W
RIO ARriba COUNTY, NM

GENERAL DRAINAGE
NORTH





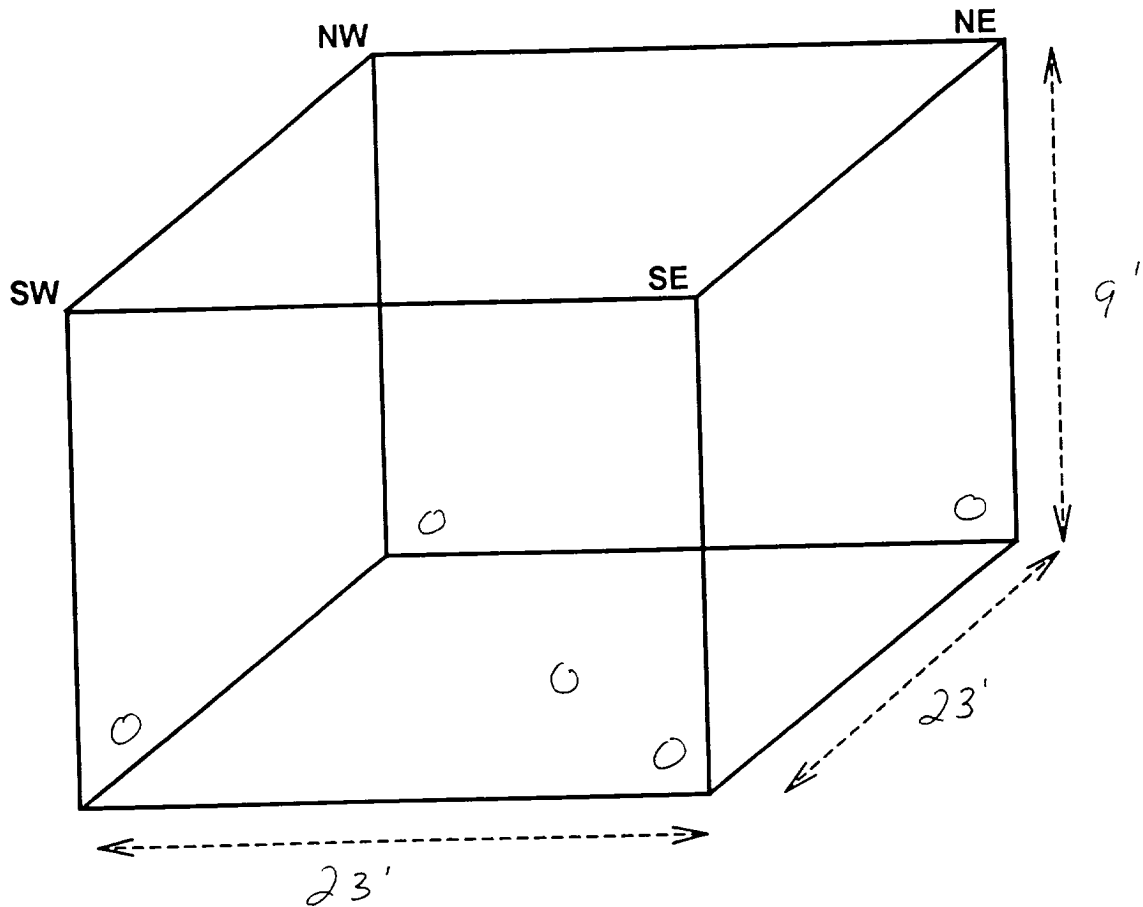
○ = SAMPLE AREA

WELL NAME FRED PHILLIPS C # 3A PIT # 1

SAMPLE DATE 5/13/97 (RESAMPLE)

NOTES 5 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT
SIDEWALL, AND PIT BOTTOM CENTER.

(PIT SAMPLING ON 4/15/97 FAILED, EXCAVATE MORE SOIL FROM
PIT AND RESAMPLED)



○ = SAMPLE AREA

WELL NAME FRED PHILLIPS C # 3A PIT # 1

SAMPLE DATE 4/15/97

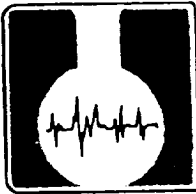
NOTES 5 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT
SIDEWALL, AND PIT BOTTOM CENTER.

(PIT SAMPLING FAILED, REEXCAVTE PIT AND RESAMPLED PIT
ON 5-13-97)



NOTES

5 POINT COMPOSITE SAMPLE TAKEN 8" TO 10" INTO PIT
SIDEWALL, AND PIT BOTTOM CENTER.



**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
304 N. BEHREND
FARMINGTON, NM 87401

Attn: JEFF CROSS
Invoice Number:

Order #: 97-04-173

Date: 04/23/97 16:53

Work ID: PIT REMEDIATION

Date Received: 04/17/97

Date Completed: 04/23/97

Client Code: APA01

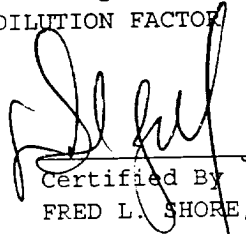
APR 25 1997

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	FRED PHILLIPS C-3A PIT 1

Sample Number	Sample Description
02	FRED PHILLIPS C-3A PIT 2

ND = None Detected D_F = Dilution Factor NT = Not Tested
B = Analyte was present in the blank
E = Estimated Value or Result exceeds calibration range
MULTIPLY THE LIMIT(= AAL'S DETECTION LIMIT) BY DILUTION FACTOR


Certified By
FRED L. SHORE, Ph.D.

Reexcavate and sample pit #1 on 5-13-97



Received: 04/17/97

Results by Sample

SAMPLE ID FRED PHILLIPS C-3A PIT 1 FRACTION 01A TEST CODE SBTEX NAME BTEX/SW846 8020A
Date & Time Collected 04/15/97 11:00:00 Category SOIL

PARAMETER	RESULT	LIMIT	D_F	DATE_ANAL
Benzene	ND	0.0010	500	04/18/97
Toluene	ND	0.0010	500	04/18/97
Ethylbenzene	ND	0.0010	500	04/18/97
P-4m-Xylene	ND	0.0020	500	04/18/97
O-Xylene	ND	0.0010	500	04/18/97

APR 25 1997

Notes and Definitions for this Report:

EXTRACTED _____
ANALYST JM
FILE ID 4VL0460.D
UNITS mg/Kg
BATCH_ID SBTXME154
FRONT_MOIST _____

Received: 04/17/97

Results by Sample

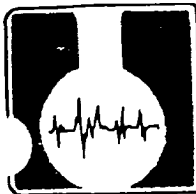
SAMPLE ID FRED PHILLIPS C-3A PIT 1 FRACTION 01B TEST CODE SDRO NAME Diesel Range OG Soil/M8015
Date & Time Collected 04/15/97 11:00:00 Category SOIL

PARAMETER	RESULT	LIMIT	D_F	DATE_ANAL
Diesel Range OG in Soil	<u>6200</u>	<u>50</u>	<u>50</u>	<u>04/21/97</u>

Notes and Definitions for this Report:

EXTRACTED _____
ANALYST JM
FILE ID _____
UNITS mg/Kg
BATCH_ID SDR0022
PRCNT_MOIST _____

Reexcavate and sample pit #1 on 5-13-97



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgwood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

MAY 27 1997

Report Generated:
May 21, 1997 15:02

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9705138
WORK ID : JICARILLA PIT CLOSURES
CLIENT CODE : APA01
DATE RECEIVED : 05/14/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9705138-01A

Sample ID: ~~████████████████████~~

Collected: 05/13/97 12:15:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A		mg/Kg	0.0010	500	05/15/97	SBTXME162
Benzene		mg/Kg	0.0010	500	05/15/97	SBTXME162
Toluene		mg/Kg	0.0010	500	05/15/97	SBTXME162
Ethylbenzene		mg/Kg	0.0020	500	05/15/97	SBTXME162
P-&m-Xylene		mg/Kg	0.0010	500	05/15/97	SBTXME162
O-Xylene						

Lab ID: 9705138-01B

Sample ID: FRED PHILLIPS C-3A PIT

Collected: 05/13/97 12:15:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015		mg/Kg	50	25	05/16/97	SDRO26
Diesel Range OG in Soil						

William P. Biava
President



MAY 27 1997

Page: 2

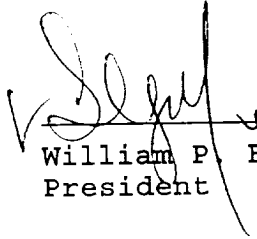
L ID: 9705139-02B

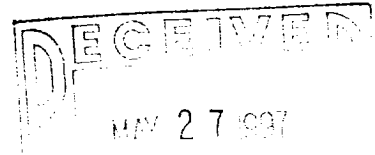
Sample ID: JAT 396 #4 PIT 1 BOTTOM

Collected: 05/12/97 15:50:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
Diesel Range OG Soil/M8015 Diesel Range OG in Soil	1100	mg/Kg	50	2.0	05/16/97	SDRO26


William P. Biava
President



WORKORDER COMMENTS

DATE : 05/21/97
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



Lab job no: 5/38 Date: 5/11/97

Lab job no.: 2125 Date: 5/11/91

7-10

~~Project Manager / Contact - Jeff Cross~~

Telephone No. (505) 774-6643

Fax No. (505) 774-5624

Samplers: (Signature) _____

Client Apache Corporation

..... 304 N. Behrend

U.S. State / Z-Farmington. NM 87401

Subject Name / Number JICARILLA PIT CLOSURES

Contract / Purchase Order / Quote

~~Project Manager / Contact - Jeff Cross~~

Telephone No. (505) 774-6643

Fax No. (505) 774-5624

Samplers: (Signature)

Contract / Purchase Order / Quote

[illegible]

Inquired by: signature <u>Jeff Cross</u> Printed <u>JEFF CROSS</u> Company <u>APACIFIC CORP.</u>	Date <u>5/14/17</u>	Received by: Signature <u>[Signature]</u> Printed <u>Eric S. Chase</u> Company <u>AAAI</u> Reason _____	Relinquished by: Signature _____ Printed _____ Company _____ Reason _____
---	------------------------	---	---

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

LABORATORY

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

3332 WEDGEWOOD
EL PASO, TEXAS 79825
(915) 593-6000

1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 575-1116

MAY 27 1997

MELQUIADES ALANIS
8411 LOCAL UNO

CITY OF CHIHUAHUA, CHIHUAHUA MEXICO 32320

Analytical Reagents

EX (mod. 8015)

Remarks:

Received by: _____
Signature _____
Printed _____
Company _____
Reason _____

Date _____ Time _____

After analysis, samples are to be:

☐ **Disposed of (additional fee)**

☐ **Stored (30 days max)**

☐ **Stored over 30 days (additional fee)**

☐ **Returned to customer**

Received: 04/17/97

Results by Sample

SAMPLE ID FRED PHILLIPS C-3A PIT 2 FRACTION 02A TEST CODE SBTEX NAME BTEX/SW846 8020A
Date & Time Collected 04/15/97 11:38:00 Category SOIL

PARAMETER	RESULT	LIMIT	D_F	DATE_ANAL
Benzene	<u>ND</u>	<u>0.0010</u>	<u>1250</u>	<u>04/19/97</u>
Toluene	<u>ND</u>	<u>0.0010</u>	<u>1250</u>	<u>04/19/97</u>
Ethylbenzene	<u>4.9</u>	<u>0.0010</u>	<u>1250</u>	<u>04/19/97</u>
P-&m-Xylene	<u>36</u>	<u>0.0020</u>	<u>1250</u>	<u>04/19/97</u>
O-Xylene	<u>4.9</u>	<u>0.0010</u>	<u>1250</u>	<u>04/19/97</u>

10771
APR 25 1997

Notes and Definitions for this Report:

EXTRACTED _____
ANALYST JM
FILE ID 4VL0476.D
UNITS mg/Kg
BATCH_ID SBTXME154
PRCNT_MOIST _____

Received: 04/17/97

Results by Sample

SAMPLE ID FRED PHILLIPS C-3A PIT 2 FRACTION 02B TEST CODE SDRO NAME Diesel Range OG Soil/M8015
Date & Time Collected 04/15/97 11:38:00 Category SOIL

PARAMETER	RESULT	LIMIT	D_F	DATE_ANAL
Diesel Range OG in Soil	<u>ND</u>	<u>50</u>	<u>25</u>	<u>04/19/97</u>

Notes and Definitions for this Report:

EXTRACTED _____
ANALYST JM
FILE ID _____
UNITS mg/Kg
BATCH_ID SDR0022
PRCNT_MOIST _____

5 1997



Chain of Custody Record

Lab job no.: 4173 Date 4/12/97
Page 1 of 1

Client Apache Corporation Project Manager / Contact Jeff Cross
Address 304 N. Behrend Telephone No. 505-774-6643
City / State / Zip Farmington N.M. 87401 Fax No. 505-774-6624
Project Name / Number Pit Remediation Samplers: (Signature) Jeff Cross
Contract / Purchase Order / Quote _____

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 8
(505) 345-8964
3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000
1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 570-1116
MELOQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

ALL FRACTION NUMBER	Field Sample Number	Location	Date	Time	Sample Type	Type / Use of Container	Preservation Temp.	Chemical
	GeoPhyllips C-3Apt2		4/15/97	11:00	Soil	402 Glass	4°C Ice	✓
	GeoPhyllips C-3Apt4		4/15/97	11:00				✓
	GeoPhyllips C-3Apt2		4/15/97	11:38				
	GeoPhyllips C-3Apt2		4/15/97	11:38				



Relinquished by: Signature <u>Jeff Cross</u> Printed <u>Jeff Cross</u> Company <u>Apache Corporation</u> Reason _____	Received by: Signature <u>Jeff Cross</u> Printed <u>Jeff Cross</u> Company <u>Apache</u> Reason _____
Date <u>4/17/97</u> Time <u>8:26</u>	Date <u>4/17/97</u> Time <u>10:25</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: _____

Method of Shipment: _____

Shipment No. _____

Special Instructions: _____

COURIER

M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

(APACHE COPORATION)

REMEDIATION SITE FRED PHILLIPS C # 3A

* AMOUNT OF SOIL UNDERGOING REMEDIATION 235 Yds.

CELL No. <u>1</u>	SampDATE	TPH	BTEX
	6/13/98	5900	ND
	8/18/98	1700	ND
DIMENSIONS(LxWxH) <u>100' X 95' X 12"</u>			
CELL LOCATION (dir. from well head) <u>WEST</u>			
* DATE BEGAN: <u>4/13/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>8/18/98</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) _____			
REMEDICATION 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. 7/23/98 WATER, PLOW, TILL			
6/27/97 WATER, PLOW AND TILL SOIL. 5/16/98 PLOW AND TILL SOIL. 8/7/98 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. 8/15/98 WATER, PLOW, TILL.			
8/6/97 WATER, PLOW AND TILL SOIL. 6/13/98 SAMPLE SOIL.			
8/26/97 PLOW AND TILL SOIL. 7/11/98 PLOW AND TILL SOIL. 8/18/98 SAMPLE SOIL.			

From excavation reports.

WELL NAME:

FRED PHILLIPS C # 3A

SAMPLE DATE:

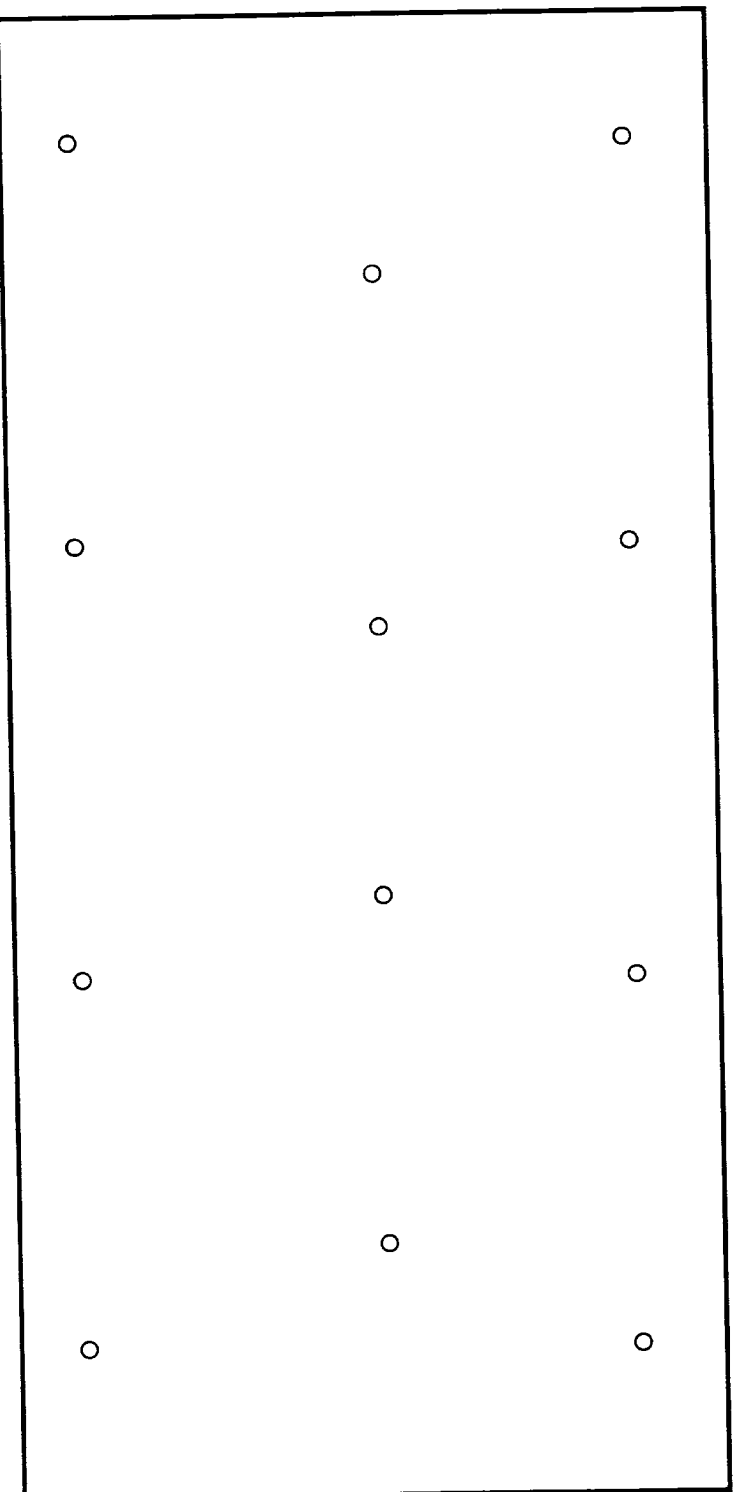
8/18/98

DIMENSIONS:

100' X 95' X 12"



= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

12 POINT COMPOSITE SAMPLE

WELL NAME:

FRED PHILLIPS C # 3A

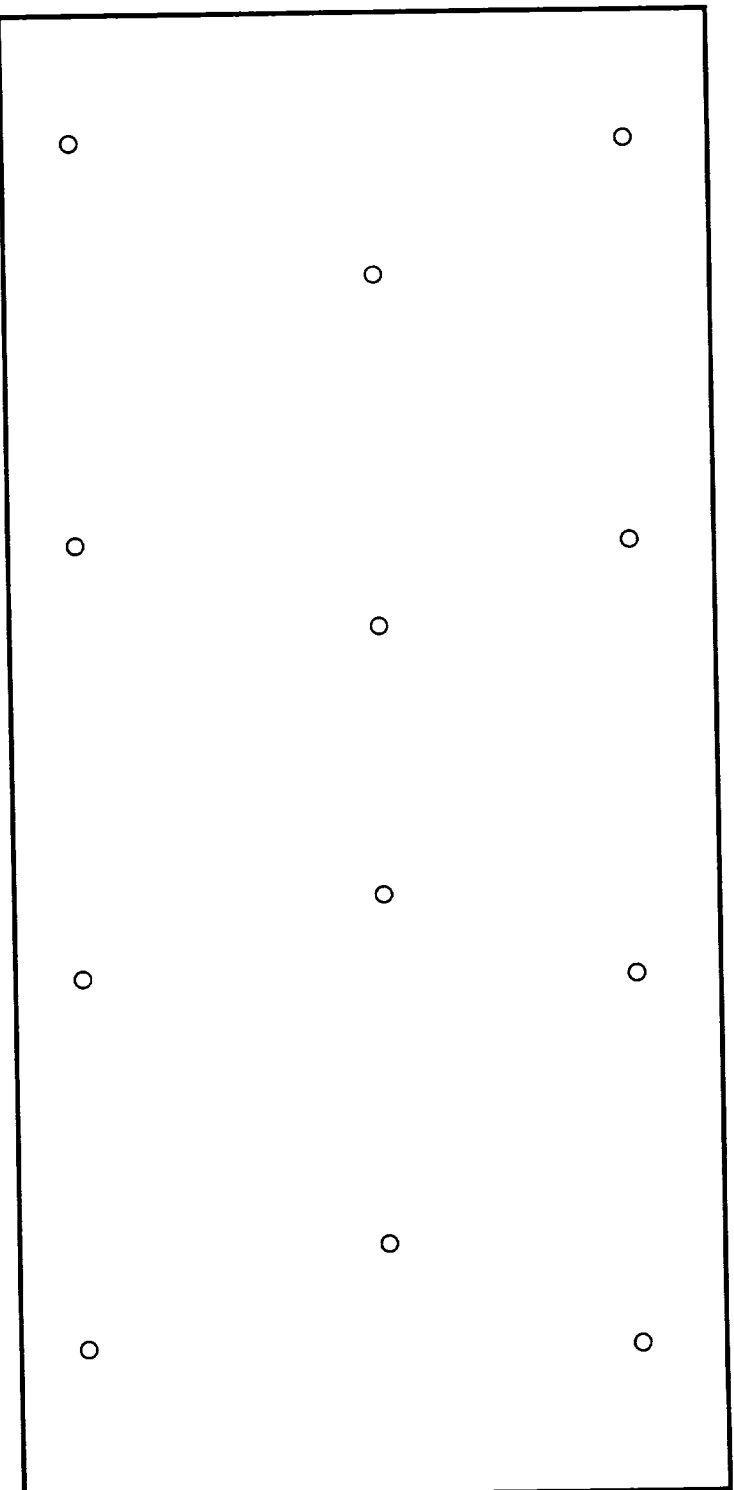
SAMPLE DATE:

6/13/98

DIMENSIONS:

100' X 95' X 12"

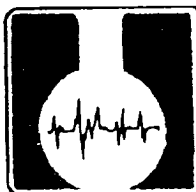
 = SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL.

12 POINT COMPOSITE SAMPLE



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

JUN 26 1998

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: **9806216 JICARILLA**

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

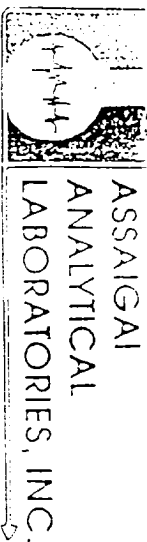
Client Sample ID: **M.W.P. FRED PHILLIPS C3A** Sample Matrix: **SOIL** Sample Collected: **6/13/98 13:50:00**

Location	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit *	Sequence	Run Date
SW846-8010/8020 Volatiles								
9806216-01A	X98329	71-43-2	ND	mg / Kg	50	0.005	XG.1998.550-18	06/17/98
	X98329	100-41-4	ND	mg / Kg	50	0.005	XG.1998.550-18	
	X98329	95-47-6	ND	mg / Kg	50	0.005	XG.1998.550-18	
	X98329		ND	mg / Kg	50	0.01	XG.1998.550-18	
	X98329	108-88-3	ND	mg / Kg	50	0.005	XG.1998.550-18	
SW846-8015 Modified TPH								
9806216-01B	X98332		5900	mg / Kg	25	25	XG.1998.561-6	06/23/98
			Diesel Range Organics					

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

*Continue working soil
Resample 8-18-98*





Chain of Custody Record

Lab job no: 6216 Date: _____

Page 1 of 1

ALBUQUERQUE, NEW MEXICO 87109
(505) 345-896
3332 WEDGEW. AVE.
EL PASO, TEXAS 79925
(915) 593-6000

Client Apache Corporation

Project Manager / Contact Jeff Cross

Address 2855 Southside River Rd. Ste. A Telephone No. (505) 774-6643

City / State / Zip Farlington, NM 87401-7941 Fax No. (505) 774-6624

Project Name / Number _____

Samplers: (Signature) Janey Butler

Contract / Purchase Order / Quote _____

Analysis Required

BTEX
DRO
TKN

Remarks

ACTIVITY IN NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp Chemical	No. of Containers	Analysis Required	Remarks
1A	W. W. P. Field Phillips C34	6/10/98	1:50	SOIL	4 oz glass 4 oz glass	ICE	1 X		
1B	1	6/15/98	1:50				1 X		
JUN 26 1998									

Relinquished by _____

Date 16 June 98

Received by: _____

Signature _____

Printed _____

Company _____

Reason _____

Time 10:15

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Printed _____

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Reason _____

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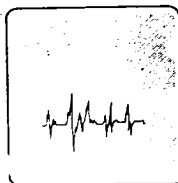
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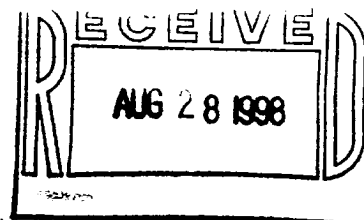
Printed _____



ASSAIGAI ANALYTICAL LABORATORIES, INC.

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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: 9808177 JICARILLA PIT CLOSURES

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

Client Sample ID: **FRED PHILLIPS C-3A CELL** Sample Matrix: **SOIL** Sample Collected: **08/18/98 11:55:00**

Location	QC Group	CAS #	Result	Units	Dilution Factor	Detection Limit	Sequence	Run Date
Test: SW846 8015A/8020A GRO / Purgeable Aromatics								
9808177-01A	X98392	71-43-2	Benzene	ND	mg / Kg	50	0.005	XG 1998 704-8 08/21/98
	X98392	100-41-4	Ethylbenzene	ND	mg / Kg	50	0.005	XG 1998 704-8
	X98392	95-47-6	o-Xylene	ND	mg / Kg	50	0.005	XG 1998 704-8
	X98392		p/m Xylenes	ND	mg / Kg	50	0.01	XG 1998 704-8
	X98392	108-88-3	Toluene	ND	mg / Kg	50	0.005	XG 1998 704-8
Test: SW846 8015A Diesel Range Organics by GC/FID								
9808177-01B	X98389		Diesel Range Organics	1700	mg / Kg	25	25	XG 1998 699-4 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. ***



Chambliss, Lusk y Record

Date _____

Page 1 of 1

Contract / Purchase Order / Quote

MELQUIADES ALANIS
6411 LOCAL UNO -
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

LABORATORY