

District III

1000 R. R. Road

Albuquerque, NM 87102

State of New Mexico

Energy, Minerals and Natural Resources Department

Submit 1 copy to

Appropriate District

and 1 copy to

Santa Fe Office

DEPUTY OIL & GAS INSPECTOR

OIL CONSERVATION DIVISION

2040 S. PACHECO

Santa Fe, New Mexico 87505

APR 10 1997

PIT REMEDIATION AND CLOSURE REPORT

Approved

Operator: **M W PETROLEUM** Telephone: **505-325-0318**

Address: **2855 Southside River Road, Suite A, Farmington, NM 87401-7947**

Facility or Well Name: **TAPACITOS COM B # 4** **PIT # 2**

Location: Unit or Qtr/Qtr Sec **O** **Sec 36** **T 26N** **R 2W** County **Rio Arriba**

Pit Type: Separator: _____ Dehydrator: _____ Other: **TANK DRAIN**

Land Type: **FEE**

PIT DIMENSION START	Length	Width	Depth
25'	20'	3'	
PIT DIMENSION FINISH	Length	Width	Depth
27'	22'	7'	

(Attach diagram)

Reference: Wellhead **X** Other _____

Footage from reference: **95'**

Direction from reference: **90** Degrees **XX** East North
West 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: 4/16/97 Date Completed: 10/17/97

Remediation Method: Excavation XX Approx. cubic yards 84

(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 7', 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 8 to 10" into pit sidewalls 10" into pit bottom

Sample Date 4/16/97 Sample Time 12:00PM

Sample results

Benzene (ppm) ND

Total BTEX (ppm) 2.4

Field Headspace (ppm) 22.18

TPH ND

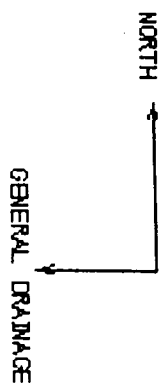
Groundwater Sample: Yes No X (If yes attach sample results)

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

DATE 11-11-97 PRINTED NAME Jeff Cross

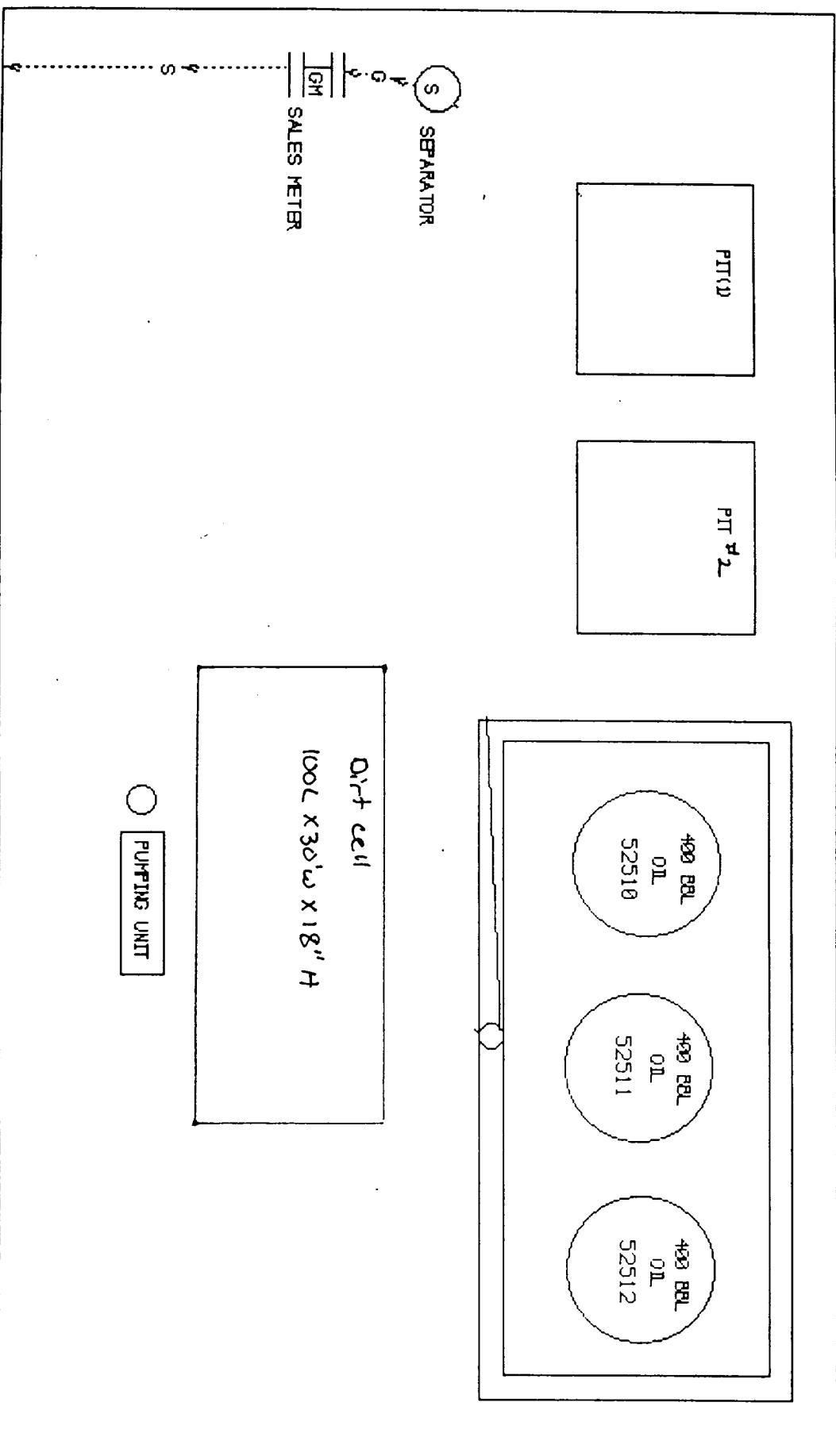
SIGNATURE Jeff Cross AND TITLE Project Manager

Soil to be put back in pit



MW PETROLEUM
TAPACITOS COM B NUMBER 4
SW/4 SE/4 (D) Lease #NMMN76744
SECTION 36, TOWNSHIP 28N, RANGE 2W
RIO ARriba COUNTY, NM

Revised 8/3/97 HIG



M W PETROLEUM/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

LOCATION TAPACITOS COM B # 4

PIT COUNT 2

Jicarilla Apache Tribal EPO/OCD/BLM

Review and Approval

OCD-BLM

EPO Representative

Date of Review

Excavation								
DIMENSIONS			START: PIT #1 4/15/97, PIT # 2 4/16/97			FINISH: PIT # 1 4/16/97, PIT # 2 4/16/97		
	W	L	D		W	L	D	CU YDS
Pit 1	20'	25'	3'	Pit 1	22'	27'	7'	84
Pit 2	20'	25'	3'	Pit 2	22'	27'	7'	84
Pit 3				Pit 3				
	Pit 1 @	Pit 2 @	Pit 3 @		Pit 1 @ 7'	Pit 2 @ 7'	Pit 3 @	
P	Center			P	Center	25.6	30.4	
I	NW Corner			I	NW Corner	21.6	22.6	
D	NE Corner			D	NE Corner	22.4	16.7	
	SW Corner				SW Corner	15.6	18.3	
	SE Corner				SE Corner	20.8	22.9	

NOTES:

4/15/97 START EXCAVATION ON PIT # 1 NO STAINING OR ODOR.

4/16/97 FINISH EXCAVATION ON PIT # 1, TOOK PID READINGS AND SOIL SAMPLES.

4/16/97 START AND FINISH EXCAVATION ON PIT # 2, NO STAINING OR ODOR.

TOOK PID READINGS AND SOIL SAMPLES.

DATE: 4/16/97 4/16/97 SOIL SAMPLING

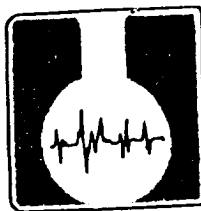
		Pit 1 @	Pit 2 @	Pit 3 @	ANALYSIS RESULTS			PER LAB	ASSAIGAI
					PIT NO	TPH	BETEX	WITNESS	DATE
P	Center	25.6	30.4						
I	NW Corner	21.6	22.6		1	ND	ND	JEFF C.	4/19/97
D	NE Corner	22.4	16.7		2	ND	2.4	JEFF C.	4/19/97
	SW Corner	15.6	18.3		3				
	SE Corner	20.8	22.9						

RE-SAMPLE OR CELL(S) SAMPLE

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

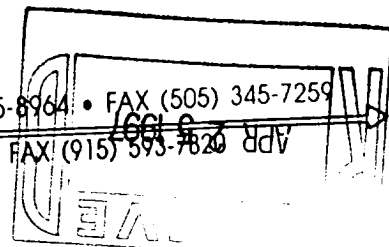
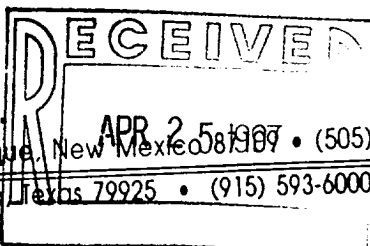
RE-SAMPLE OR CELL(S) SAMPLE

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



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

7300 Jefferson, N.E. • Albuquerque, New Mexico 87107 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820



Report Generated:
April 23, 1997 13:39

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

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

WORKORDER # : 9704180
WORK ID : PIT REMEDIATION
CLIENT CODE : APA01
DATE RECEIVED : 04/17/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9704180-01A
Sample ID: TAPACITOS #4 PIT 1

Collected: 04/16/97 11:40:00
Matrix: SOIL

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

Lab ID: 9704180-01B
Sample ID: TAPACITOS #4 PIT 1

Collected: 04/16/97 11:40:00
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	04/20/97	SDRO22

Lab ID: 9704180-02A
Sample ID: TAPACITOS #4 PIT 2

Collected: 04/16/97 12:00:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
BTEX/SW846 8020A	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154
Benzene	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154
Toluene	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154
Ethylbenzene	2.4	mg/Kg	0.0020	500	04/19/97	SBTXME154
P-&m-Xylene	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154
O-Xylene	ND	mg/Kg	0.0010	500	04/19/97	SBTXME154



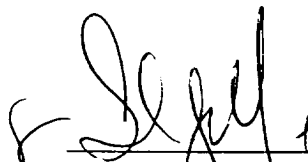
Lab ID: 9704180-02B

Sample ID: TAPACITOS #4 PIT 2

Collected: 04/16/97 12:00:00

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	04/20/97	SDRO22



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

WORKORDER COMMENTS

DATE : 04/23/97
WORKORDER:

DEFINITIONS/DATA QUALIFIERS

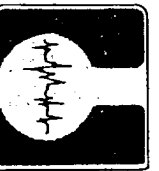
The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

- 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



ASSAIGAL
ANALYTICAL
LABORATORIES

Chain of Custody Record

Lab Job no: 4180 Date 4/17/97

Page 1 of 1

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8904

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 583-6000

MELOUDES ALANS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32200

Client Apache Corporation Project Manager / Contact JEFFERSON

Address 304 N. Belknap Telephone No. 505-774-6643

City / State / Zip FAIRMONT N.M. 87401 Fax No. 505-774-6624

Project Name / Number P.T. Remediation Samplers: (Signature) Jefferson

Contract / Purchase Order / Quote _____

ANALYST LABORATORY	Field Sample Number	Location	DATE	Time	Sample Type	Type / Size of Container	Preservation Temp.	Chemical
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No. of Containers	ANALYST	LABORATORY
156	JEFFERSON	ASSAIGAL
01	MELOUDES	ASSAIGAL

654	TAPACITOS #4, P1 + 2	4/16/97	11:46	Soil	402 glass	PC ICE	1	✓
655	TAPACITOS #4, P1 + 2	4/16/97	11:46	Soil	402 glass	ICE	1	✓
656	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
657	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
658	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
659	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
660	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
661	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
662	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
663	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
664	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
665	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
666	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
667	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
668	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
669	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
670	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
671	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
672	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
673	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
674	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
675	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
676	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
677	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
678	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
679	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
680	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
681	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
682	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
683	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
684	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
685	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
686	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
687	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
688	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
689	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
690	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
691	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
692	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
693	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
694	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
695	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
696	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
697	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
698	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
699	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓
700	TAPACITOS #4, P1 + 2	4/16/97	12:06	Soil	402 glass	ICE	1	✓

Relinquished by: Signature <u>Jefferson</u> Printed <u>JEFFERSON</u> Company <u>Apache Corporation</u> Reason _____	Date <u>4-17-97</u> Time <u>8:24</u>	Received by: Signature <u>Jefferson</u> Printed <u>JEFFERSON</u> Company <u>Apache Corporation</u> Reason _____	Relinquished by: Signature _____ Printed _____ Company _____ Reason _____	Date <u>4-17-97</u> Time <u>10:25</u>	Received by: Signature <u>Jefferson</u> Printed <u>JEFFERSON</u> Company <u>Apache Corporation</u> Reason _____
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Method of Shipment: _____	Comments: _____
Shipment No. _____	_____
Special Instructions: _____	_____

After analysis, samples are to be:	_____
☐ Disposed of (additional fee)	_____
☐ Stored (30 days max)	_____
☐ Stored over 30 days (additional fee)	_____
☐ Returned to customer	_____

COURIER

[illegible]

[illegible]

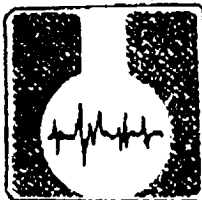
M W PETROLEUM/FARMINGTON DISTRICT SOIL REMEDIATIONS STATUS REPORT

REMEDIATION SITE TAPACITOS COM B # 4

* AMOUNT OF SOIL UNDERGOING REMEDIATION 168 Yds.

CELL No. <u>1</u>	SampDATE 10/17/97	TPH ND	BTEX ND
DIMENSIONS(LxWxH) <u>100' X 30' X 18"</u>			
CELL LOCATION (dir. from well head) <u>EAST</u>			
* DATE BEGAN: <u>4/15/97</u>			
DATE TERMINATED (TPH <5,000 ppm/BTEX< 50 ppm/Benzene < 10 ppm) <u>10/17/97</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)			
5/3/97 TREAT WITH 42-0-0 FERTILIZER, WATER AND TILL SOIL.			
7/5/97 TILL AND WATER SOIL.			
8/11/97 TILL SOIL.			
9/15/97 TILL AND WATER SOIL.			
10/17/97 TOOK SOIL SAMPLES.			

From excavation reports.



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

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Report Generated:

October 28, 1997 12:54

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

SENT APACHE CORPORATION

TO: 2855 SOUTHSIDE RIVER RD STE
FARMINGTON, NM 87401-7947

WORKORDER # : 9710214

AWORK ID : JICARILLA PIT CLOSURES

CLIENT CODE : APA01

DATE RECEIVED : 10/22/97

ATTN: JEFF CROSS

Page: 1

Lab ID: 9710214-01A

Sample ID: TAPACITOS B-4 CELL

Collected: 10/17/97 08:45:00

Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
3TEX/SW846 8020A						
Benzene	ND	mg/kg	0.0050	100	10/23/97	SBTXME191
Toluene	ND	mg/kg	0.0050	100	10/23/97	SBTXME191
Ethylbenzene	ND	mg/kg	0.0050	100	10/23/97	SBTXME191
P-&m-Xylene	ND	mg/kg	0.010	100	10/23/97	SBTXME191
O-Xylene	ND	mg/kg	0.0050	100	10/23/97	SBTXME191

Lab ID: 9710214-01B

Sample ID: TAPACITOS B-4 CELL

Collected: 10/17/97 08:45:00

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	25	25	10/24/97	X97336

William P. Biava
William P. Biava
President



WORKORDER COMMENTS

DATE : 10/28/97
WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

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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

1505) 245-8964

332 WEDGEWOOD 1910 N. BIG SPRING
EL PASO, TEXAS 79925 MIDLAND, TEXAS 79705

Page 121

Apache Corporation

304 N. Behrend

Project Manager / Contact - JOE F. GRIFFIN

Telephone No. (505) 774-6693

rate / Zip 60310, NH 03240

Fax No. (505) 774-6624.

Name / Number JICARILLA PIT CLOSURES

Samplers: (Signature)

Purchase Order / Quote

Field Sample Number/Location	Date	Time	Sample Type	Type / Size of Container	Preservation	
					Temp	Chemical
A 700-200-24	10/11/12	5:00	Soil	4 oz. glass	100	1 X
B 11	11	1	1	1	1	1 X
<i>[Signature]</i>						
Received by: <i>[Signature]</i> Signature: <i>[Signature]</i> Printed: <i>[Signature]</i> Company: <i>[Signature]</i> Reason: Received by: <i>[Signature]</i> Signature: <i>[Signature]</i> Printed: <i>[Signature]</i> Company: <i>[Signature]</i> Reason:						
Date: 23 OCT 07 Time: 08:30 Received by: <i>[Signature]</i> Signature: <i>[Signature]</i> Printed: <i>[Signature]</i> Company: <i>[Signature]</i> Reason: After analysis, samples are to be: ☐ Disposed of (additional fee) ☐ Stored (30 days max) ☐ Stored over 30 days (additional fee) ☐ Returned to customer						

LABORATORY

WELL NAME:

Tad B-4

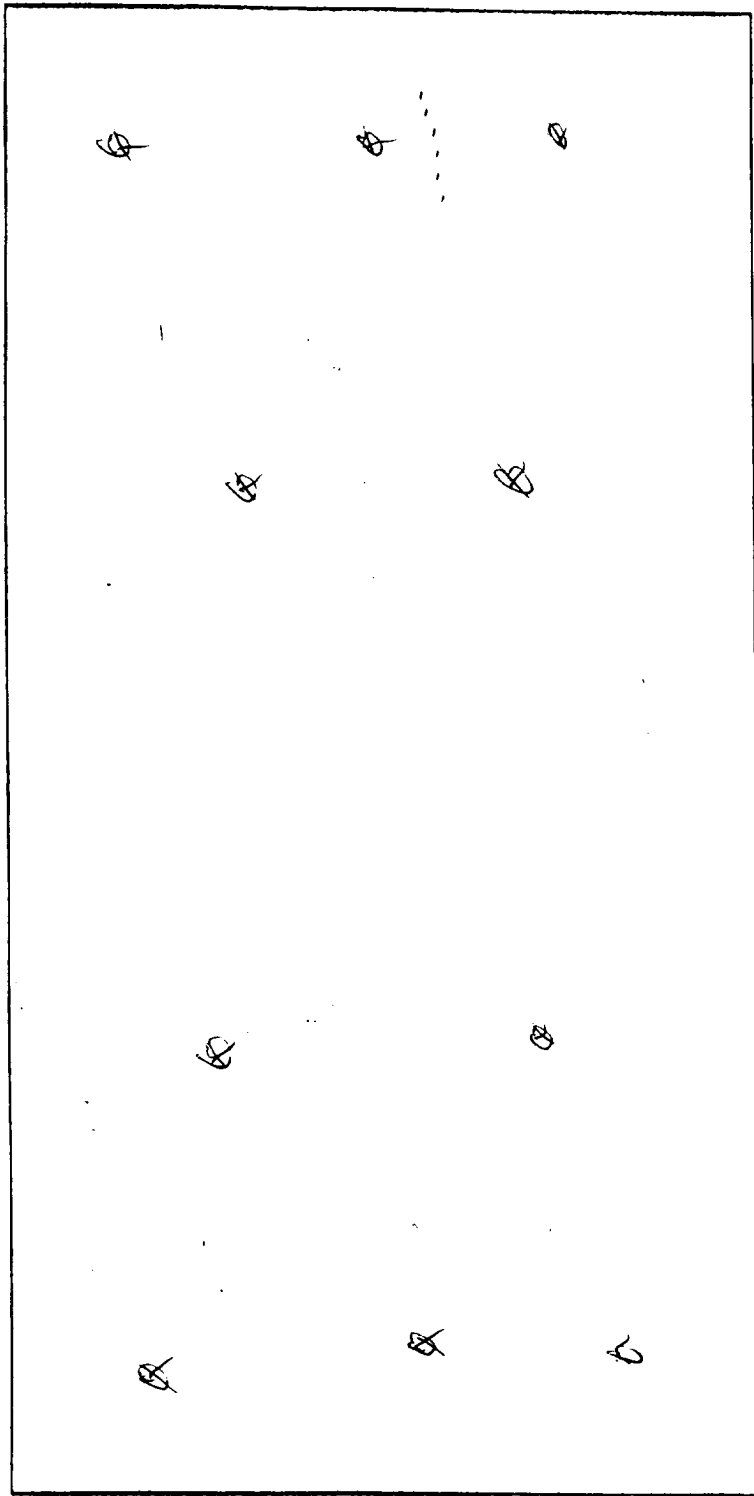
SAMPLE DATE:

10/12/87

DIMENSIONS:



= SAMPLE AREA



NOTES:

ALL SAMPLES TAKEN 10" TO 12" INTO CELL

Team o.l.o Point comp To Sample