

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  
Natural Resource Dept.  
and Oil & Gas Administration

OK  
note  
Sample  
Handwritten

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: Apache Corporation Telephone 505-325-0318

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

Facility or Well Name: JAT 358 #3

Location: Unit or Qtr/Qtr Sec SW/NW Sec 6 T 22N R 2W County SANDOVAL

Pit Type: Separator:            Dehydrator            Other BLOW PIT

Land Type: JIC. TRIBAL

Beginning Pit Dimensions: Length 50' Width 35' Depth 5'  
Pit Location: Ending Pit Dimensions: Length 50' Width 35' Depth 5'  
(Attach diagram)

Reference: Wellhead XXX Other                                   

Footage from reference: 150'

Direction from reference: 260 Degrees            East of North             
X West South           

<b>Depth To Groundwater:</b> (vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) <u>          </u> (10 points) <u>          </u> (0 points) <u>0</u>
<b>Distance to an Ephemeral Stream:</b> (Downgradient dry wash greater than ten feet in width)	Less than 100 feet Greater than 100 feet	(10 points) <u>          </u> (0 points) <u>0</u>
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet Greater than 100 feet	(10 points) <u>          </u> (0 points) <u>0</u>
<b>Wellhead Protection Area:</b> (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)	Yes No	(20 points) <u>          </u> (0 points) <u>0</u>
<b>Distance To Surface Water:</b> (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) <u>          </u> (10 points) <u>          </u> (0 points) <u>0</u>
<b>RANKING SCORE (TOTAL POINTS)</b>		<u>0</u>

Date Remediation Started: 11/18/1999 Date Completed: 09/20/2000

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

Other Core sample 4' below pit bottom center, composite core sample  
4' below pit bottom corners

Remediation Location: Onsite XX Offsite  
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: NONE REQUIRED, CONTAMINATION CLOSURE LIMIT

9/20/00 BACKFILLED AND RESEEDDED

Groundwater Encountered: No XXX Yes Depth

Final Pit: Sample location Core sample 4' below pit bottom center, 4 points composite sample of pit corner

Closure Sampling: (in multiple samples, attach sample results and diagram of sample locations and depths) Sample depth CORE SAMPLE 4' BELOW PIT BOTTOM.

Sample Date 11/18/1999 Sample Time 4:00PM, 4:30PM  
Sample results corner/center

Soil:	Benzene	(ppm)	ND/ND	Water:	Benzene	(ppb)	NA
	Total BTEX	(ppm)	ND/0.006		Toluene	(ppb)	NA
	Field Headspace	(ppm)	ND/78		Ethylbenzene	(ppb)	NA
	TPH	(ppm)	180/ND		Total Xylenes	(ppb)	NA

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 11-22-00 PRINTED NAME Jeff Cross

SIGNATURE Jeff Cross AND TITLE Project Manager

**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 SOUTH SIDE RIVER ROAD FARMINGTON N.M. 87401</u>			
Facility or Well Name: <u>JAT 358 # 3</u>			
Location:	Unit or Qtr/Qtr Sec	<u>SWNW SEC 6</u>	T <u>22N</u> R <u>2W</u> County <u>SANDOVAL</u>
Pit Type:	Separator: <u>          </u>	Dehydrator <u>          </u>	Other <u>BLOW PIT</u>
Land Type: <u>JIC. TRIBAL</u>			
Pit Location: (Attach diagram)			
Pit Dimensions:	Length <u>50'</u>	Width <u>35'</u>	Depth <u>5'</u>
Reference:	Wellhead <u>XXX</u>	Other <u>          </u>	
Footage from reference:	<u>150'</u>		
Direction from reference:	<u>260°</u> Degrees	<u>          </u> East	North <u>          </u>
		<u>X</u> West	of South <u>          </u>
<b>Depth To Groundwater:</b> (vertical distance from contaminants to seasonal high water elevation of groundwater)		Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) <u>          </u> (10 points) <u>          </u> ( 0 points) <u>0</u>
<b>Distance to an Ephemeral Stream:</b> (Downgradient dry wash greater than ten feet in width)		Less than 100 feet Greater than 100 feet	(10 points) <u>          </u> ( 0 points) <u>0</u>
<b>Distance to Nearest Lake, Playa, or Watering Pond:</b> (Downgradient lakes, playas and livestock or wildlife watering ponds)		Less than 100 feet Greater than 100 feet	(10 points) <u>          </u> ( 0 points) <u>0</u>
<b>Wellhead Protection Area:</b> (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)		Yes No	(20 points) <u>          </u> ( 0 points) <u>0</u>
<b>Distance To Surface Water:</b> (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)		Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) <u>          </u> (10 points) <u>          </u> ( 0 points) <u>0</u>
<b>RANKING SCORE (TOTAL POINTS)</b>			<u>0</u>

Date Remediation Started: 11/18/99 Date Completed: 9-20-00

Remediation Method: Excavation \_\_\_\_\_ Approx. cubic yards \_\_\_\_\_  
(Check all appropriate sections) Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_  
Other Core sample 4' below pit bottom center, composite core sample 4' below pit bottom corners.

Remediation Location: Onsite XX Offsite \_\_\_\_\_  
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: . NONE Required, P.T TO Be Back Filled and Resealed - contamination Below closure Limits - 9-20-00 Backfill P.T AND Reseal.

Groundwater Encountered: No XXX Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit: Sample location core sample 4' below pit bottom center, 4 point composite sample of pit bottom corners.

**Closure Sampling:**

(in multiple samples, attach sample results

and diagram of sample locations and depths)

Sample depth

CORE SAMPLE 4' BELOW PIT BOTTOM.

Sample Date

11/18/99

Sample Time;

4:00pm, 4:30pm

Sample results

Soil:	Benzene	(ppm)	<u>ND/ND</u>	Water:	Benzene	(ppb)	<u>NA</u>
	Total BTEX	(ppm)	<u>ND/0.006</u>		Toluene	(ppb)	<u>NA</u>
	Field Headspace	(ppm)	<u>ND/78</u>		Ethylbenzene	(ppb)	<u>NA</u>
	TPH	(ppm)	<u>180/ND</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 9-20-2000 <sup>Je.</sup> 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: Lee C. M... DATE: 11-9-00

# Pit Impact Rating Sheet

Well Name: JAT 358 # 3  
 Well Location: SW/NW SEC 6 T 22 N R 2 W  
 Number of Pits at Location: 1  
 Pit Number and Usage: BLOW PIT  
 Estimated Elevation: 7300'  
 Estimated Groundwater Elevation: \_\_\_\_\_  
 Vulnerable Area: YES NO XX  
 Fluid in Pits: YES NO XX  
 % Water: 0  
 % Oil: 0  
 Visual Soil Contamination:  
 Highly Contamination/Saturated Soils: NONE  
 Unsaturated Contamination (Odor or PID Reading): ND  
 Suspected Groundwater Contamination: NO XX YES \_\_\_\_\_  
 Reason for Suspicion: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## RATING:

Depth to Groundwater:		Wellhead Protection Area:	
< 50'	20	< 1000' from water source, or	
50' - 99'	10	<200' from a domestic source?	
> 100'	0	Yes	20
Rating	0	No	0
		Rating	0

Distance to Surface Water:		Distance to Ephemeral stream > 10 feet width	
< 200' horizontal feet	20	< 100' horizontal feet	Yes 10
200' - 1000' horizontal feet	10	> 100' horizontal feet	No 0
> 1000' horizontal feet	0	Rating	0
Rating	0		

	Distance to Lake, Playa or Watering Pond	
	< 100' horizontal feet	Yes 10
	> 100' horizontal feet	No 0
	Rating	0

## FINAL SOIL REMEDIATION STANDARDS:

Total Rating 0

TPH: 5000 ppm  
 Benzene: 10 ppm  
 BTEX: 50 ppm

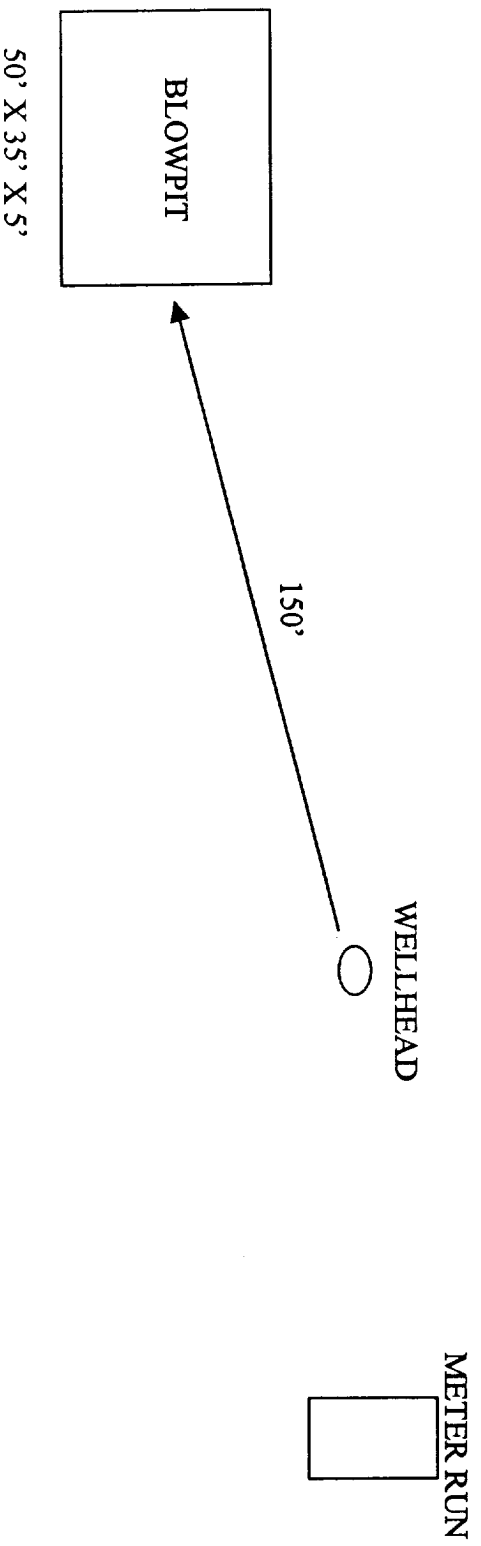
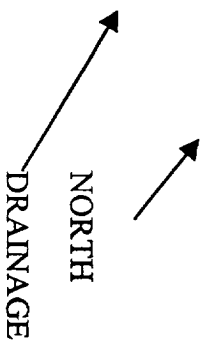
## KNOWN ANALYSIS:

Soil:	TPH: <u>180</u> ppm	Benzene: <u>ND</u> ppm	BTEX: <u>0.006</u> ppm
Groundwater:	TPH: <u>NA</u> ppm	Benzene: <u>NA</u> ppm	BTEX: <u>NA</u> ppm

## PROBABLE SOIL REMEDIATION TECHNIQUE:

Bioremediation: On-Site \_\_\_\_\_  
 Composting: \_\_\_\_\_  
 Disposal: Facility Name \_\_\_\_\_  
 Thermal Desorption: \_\_\_\_\_  
 Soil Venting: \_\_\_\_\_  
 Other: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

JAT 358 # 3  
SW/NW (E) SEC 6 T22N R2W  
SANDOVAL, COUNTY N.M.

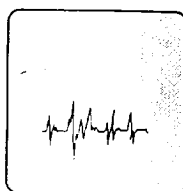


# APACHE CORPORATION/FARMINGTON DISTRICT PIT EXCAVATION AND CLOSURE REPORT

LOCATION JAT 358 # 3

PIT COUNT 1

START					FINISH				
DIMENSIONS									
	L	W	D		L	W	D	CU YDS	
Pit 1	50'	35'	5'	Pit 1					
Pit 2				Pit 2					
Pit 3				Pit 3					
DATE:	11/18/99	Pit 1 @ 9'	Pit 2 @	Pit 3 @	Date:	Pit 1 @	Pit 2 @	Pit 3 @	
P I D	Center	78			P I D	Center			
	NW Corner	ND				NW Corner			
	NE Corner	ND				NE Corner			
	SW Corner	ND				SW Corner			
	SE Corner	ND				SE Corner			
NOTE PIT SHOWS SOME VISIABLE STAINING , OVERGROWN WITH SAGEBRUSH.									
11/18/99 TOOK ONE CORE SAMPLE 4' BELOW PIT BOTTOM CENTER, PID READINGS 78PPM.									
SOME VISIABLE STAINING AND ODOR. CONFINED TO APPOX. A 12' X 24' AREA IN PIT BOTTOM CENTER.									
11/18/99 TOOK 4 POINT COMPOSITE CORE SAMPLE 4' BELOW PIT BOTTOM CORNERS.									
PID READINGS ON CORNERS ND. WITH NO VISIABLE STAINING OR ODOR.									
HIT SANDSTONE (BEDROCK AT 3.5' TO 4' BELOW PIT BOTTOM)									
DATE 11/18/99 SOIL SAMPLING									
	Pit 1 @ 9"	Pit 2 @	Pit 3 @	ANALYSIS RESULTS			PER LAB	Assaigai	
P I D	Center	78		PIT	TPH	BETEX	WITNESS	DATE	
	NW Corner	ND		NO	SIDE\BTM	SIDE\BTM			
	NE Corner	ND		1	180 / ND	ND / 0.006	J.C.	11/18/99	
	SW Corner	ND		2					
	SE Corner	ND		3					
RE-SAMPLE									
DATE:	Pit 1 @	Pit 2 @	Pit 3 @	ANALYSIS RESULTS			PER LAB		
P I D	Center			PIT	TPH	BETEX	WITNESS	DATE	
	NW Corner			NO	SIDE\BTM	SIDE\BTM			
	NE Corner			1					
	SW Corner			2					
	SE Corner			3					
RE-SAMPLE									
DATE:	Pit 1 @	Pit 2 @	Pit 3 @	ANALYSIS RESULTS			PER LAB		
P I D	Center			PIT	TPH	BETEX	WITNESS	DATE	
	NW Corner			NO	SIDE\BTM	SIDE\BTM			
	NE Corner			1					
	SW Corner			2					
	SE Corner			3					



# ASSAIGAI ANALYTICAL LABORATORIES, INC.

7300 Jefferson, NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259

3332 Wedgewood Dr., Suite N • 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: **9911222 JIC. PIT REMEDIATION**

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

Client Sample ID		JAT358#3 PIT SIDES		Sample Matrix		SOIL		Sample Collected		11/18/99 16:00:00	
QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date		
9911222-01A		SW846 5030A/8021B Purgeable VOCs by GC/PID									
X99355	XG.1999.993-4	71-43-2	Benzene	ND	mg / Kg	1	0.005	1	11/23/99		
X99355	XG.1999.993-4	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	1	11/23/99		
X99355	XG.1999.993-4	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	1	11/23/99		
X99355	XG.1999.993-4		p/m-Xylenes	ND	mg / Kg	1	0.01	1	11/23/99		
X99355	XG.1999.993-4	108-88-3	Toluene	ND	mg / Kg	1	0.005	1	11/23/99		
9911222-01A		SW846 ME/8015A Diesel Range Organics by GC/FID									
X99385	XG.1999.1002-10		Diesel Range Organics	180	mg / Kg	1	25		11/30/99		

Client Sample ID		JAT358#3 PIT CENTER			Sample Matrix	SOIL		Sample Collected	11/18/99 16:30:00	
QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Run Date	
9911222-02A		SW846 5030A/8021B Purgeable VOCs by GC/PID								
X99355	XG.1999.993-5	71-43-2	Benzene	ND	mg / Kg	1	0.005	1	11/23/99	
X99355	XG.1999.993-5	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005	1	11/23/99	
X99355	XG.1999.993-5	95-47-6	o-Xylene	ND	mg / Kg	1	0.005	1	11/23/99	
X99355	XG.1999.993-5		p/m-Xylenes	ND	mg / Kg	1	0.01	1	11/23/99	
X99355	XG.1999.993-5	108-88-3	Toluene	0.006	mg / Kg	1	0.005	1	11/23/99	





Assaigai Analytical Laboratories, Inc.  
**Certificate of Analysis**

Client: **APACHE CORPORATION**  
Project: **9911222 JIC. PIT REMEDIATION**

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9911222-02A SW846 ME/8015A Diesel Range Organics by GC/FID  
X99385 XG.1999.1002-11 Diesel Range Organics ND mg / Kg 1 25 11/30/99

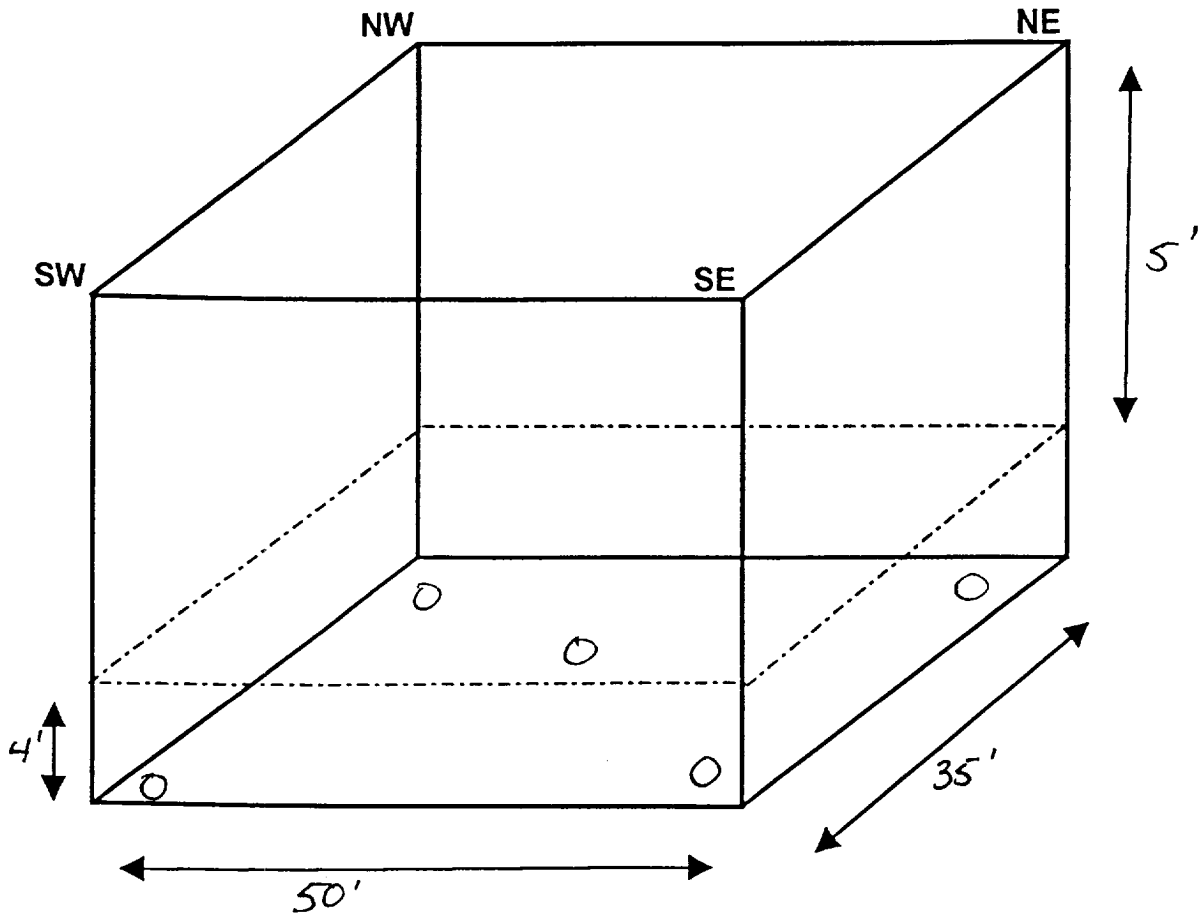
\*\*\* Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. \*\*\*

\*\*\* ND = Not detected: less than the sample specific Detection Limit. Results relate only to the items tested. \*\*\*

footnote 1 Sample was received with headspace.

memo Please note that the cooler was received at a temperature greater than 4 degrees C.





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= PIT BOTTOM



= SAMPLE AREA

WELL NAME

JAT 358 #3

SAMPLE DATE

11-18-99

NOTES

4 POINT COMPOSITE SAMPLE TAKEN 4' BELOW PIT

BOTTOM CORNERS.

1 POINT GRAB SAMPLE TAKEN 4' BELOW PIT BOTTOM CENTER

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