# JICARILLA APACHE TRIBE ENVIRONMENTAL PROTECTION OFFICE P.O. BOX 507 **DULCE, NEW MEXICO 87528**

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

# PIT REMEDIATION AND CLOSURE REPOR

OIL COM, DIV. Operator: AMOCO PRODUCTION COMPANY Telephone: (505)326-9200 Address: 200 Amoco Court, Farmington, NM 87401 Unit or Qtr/Qtr Sec P Sec 31 T260 R 5w County RIO ARRIGH Location: Separator\_\_\_\_ Other\_ 800 Pit Type: Land Type: RANGE length\_\_\_\_\_\_, width\_\_\_\_\_\_\_, depth\_\_\_\_\_3' Pit dimensions: Pit Location: Reference: wellhead X , other\_\_\_\_ (Attach diagram) Footage from reference: 145' North X Direction from reference: 49 Degrees X East South \_\_\_\_ West (20 points) Less than 50 feet Depth To Groundwater: (10 points) 50 feet to 99 feet (Vertical distance from ( 0 points) Greater than 100 feet contaminants to seasonal high water elevation of groundwater) (10 points) Less than 100 feet Distance to an Ephemeral Stream ( 0 points) Greater than 100 feet (Downgradient dry wash greater than ten feet in width) (10 points) Less than 100 feet Distance to Nearest Lake, Playa, or Watering Pond (0 points) Greater than 100 feet (Downgradient lakes, playas and livestock or wildlife watering ponds) (20 points) Yes 0 Wellhead Protection Area: (0 points) No (Less than 200 feet from a private domestic water source, or: less than 1000 feet from all other water sources) (20 points) Less than 100 feet Distance To SurfaceWater: (10 points) 100 feet to 1000 feet (Horizontal distance to perennial (0 points) **⊘** :: Greater than 1000 feet lakes, ponds, rivers, streams, creeks, -igation canals and ditches)

RANKING SCORE (TOTAL POINTS):

BUN	PIT	_	817	18

	4/7/99
Date Remediation Started:	
Remediation Method: Excavation	
(Check all appropriate sections)  Landfarmed	Insitu Bioremediation
Other	
(i.e. landfarmed onsite, name and location of offsite facility)	
General Description of Remedial Action: Excavation	1. EXCAUATION CONSISTED OF MOSTLY
BEDROCK, THEREFORE NO THAT ANDLYSIS	was consucred. RISK ASSESSED.
Groundwater Encountered: No Yes	
Final Pit: Sample location see Attached Closure Sampling: (if multiple samples,	EXERCISED OF MOSTLY  as Calacted. Disk Assessed.  Depth
attach sample results and diagram of sample Sample depth 3' (P)	BOTTOM)
locations and depths)  Sample date 4/7/99	Sample time /345
Sample Results	
Soil: Benzene (ppm)	Water: Benzene (ppb)
Total BTEX (ppm)	
Field Headspace (ppm)	
TPH (ppm)	Total Aylenes (pps)
Groundwater Sample: Yes No _X (	f yes, attach sample results)
I HEREBY CERTIFY THAT THE INFORMATION ABOVE KNOWLEGE AND BELIEF	E IS TRUE AND COMPLETE TO THE BEST OF MY
DATE 4/7/99 PRINTED NA	ME Buddy D. Shaw
SIGNATURE BURLY D. Show AND TITLE	- I to a Consultantian
AFTER REVIEW OF THE PIT CLOSURE INFORMATION TO THE JICARILLA APACHE TRIBE PIT CLOSURE OR	I, PIT CLOSURE IS APPROVED IN ACCORDANCE
APPROVED: YES NO (REASON)	
· ,	
SIGNED: DATE:	

BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	C.D.C. ND:
FIELD REPORT: CLOSURE VERIFICATION  LOCATION: NAME: TICA. CONTR. 155 WELL #: 18 PIT: BLOW  QUAD/UNIT: P SEC: 31 TWP: 260 RNG: 5W PM: NM CNTY: RA ST: NM  QTR/FDDTAGE: 1140 FEL CONTRACTOR: P+5	PAGE No: of DATE STARTED:/7/99 DATE FINISHED: ENVIRONMENTAL NV SPECIALIST:
SOIL AND EXCAVATION DESCRIPTION:	D: LANDFARTA  MATION: CK  MATION: CK  MATER: >1000  CHECK DNE:  PIT ABANDONED  STEEL TANK INSTALLED  FIBERGLASS TANK INSTALLED
EXERUATION  AND STLY  EXERUATION  AND STLY  EXERCISED  FIELD 418.1 CALCULATIONS  TIME SAMPLE I.D. LAB NO: WEIGHT (g) ML. FREON DIE	
SCALE  O FT  PIT PERIMETER  OVM  RESULTS  SAMPLE FIELD HEADSPACE PID (ppm)  1 @ 3	PROFILE  I'
A O A ZZZ SAMPLES  SAMPLE ANALYSIS TIME  PERD  TANK  PIT	EÓROCK (55)

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla Contract 155 #18

Unit P, Sec. 31, T26N, R5W

Blow Pit

Otero Chacra

Non Vulnerable > 1000 ft.

> 100 ft.

## **RISK ASSESSMENT (non-vulnerable area)**

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 3 feet below grade.

No past or future threat to surface water or groundwater is likely based on the following considerations:

- 1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 3 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone bedrock.
- 2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
- 3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
- 4. Well site located within the <u>non-vulnerable area</u> and is approximately 0.41 miles southeast of the nearest vulnerable area boundary (Tapacito Creek).

(Refer to Gonzales Mesa Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), 1963, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the sandstone bottom creates enough of an impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). AMOCO requests pit closure approval on this location.

87718

# 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: AMOCO PRODUCTION COMPANY	<b>Telephone:</b> (505) 326-9200								
Address: 200 Amoco Court, Farmingt	on, NM 87401								
Facility or Well Name: JICARLLA CONTRACT	156.18								
Location: Unit or Qtr/Qtr Sec_P Sec_\$/	TEGN REW County RIO ARRIBA								
Land Typ⊕: RANGE									
Date Remediation Started: 4/8/99 Date Completed: 6/16/99									
Remediation Method: Landfarmed	Approx. cubic yards								
Composted									
Other									
epth To Groundwater: (pts.) o	Final Closure Sampling:								
Distance to an Ephemeral Stream (pts.)	Sampling Date: 6 15 9 9 Time: 1220								
Distance to Nearest Lake, Playa, or Watering Pond (pts.)	Sample Results:  Field Headspace (ppm) 2.0								
Wellhead Protection Area: (pts.) _ o	TPH (ppm) /8.5 Method (80.5)								
Distance To SurfaceWater: (pts.) 6	Other								
RANKING SCORE (TOTAL POINTS):O									
I HEREBY CERTIFY THAT THE INFORMATION AT KNOWLEGE AND BELIEF	BOVE IS TRUE AND COMPLETE TO THE BEST OF MY								
DATE 6/16/99, PRINT	ED NAME Buddy D. Shaw								
	AND TITLE Environmental Coordinator								
AFTER REVIEW OF THE SOIL REMEDIATION INF ACCORDANCE TO THE JICARILLA APACHE TRIE	ORMATION, ON-SITE REMEDIATION IS APPROVED IN SE PIT CLOSURE ORDINANCE.								
APPROVED: YES NO (REASON) _									
SIGNED: D	ATE:								

CLIENT: AMOCO	P.O. BOX 87	ENGINEE , BLOOMFI 505) 632-	ELD, NM				8J718 7882
FIELD REPORT:	LANDFARM/	COMPOST	PILE CL	OSURE	VERI	FICA	TION
LOCATION: NAME: CONTRAC	CT 155 WELL		= =		DATE STAF		15.99
QUAD/UNIT: P SEC:31 OTR/FOOTAGE: SE/4				ST: NM	ENVIRONMI SPECIALIST	ENTAL R	EP_
SOIL REMEDIATION:							
REMEDIATION SYS	TEM: <u>LANDFARA</u>	<u> </u>	APPROX.	CUBIC Y	ARDAGE	:5	0
LAND USE:	RANGE		LIFT DEPT	TH (ft):	0.5-1		
FIELD NOTES & REMAR	≀KS:						
DEPTH ID GROUNDWATER: >/6	NEAREST WATER	SOURCE: > 100	O' NEARE	ST SURFAC	E WATER:	> 100	0'
NMOCD RANKING SCORE: 0	NMOCD TPH CLOS	SURE STD: 500	PPM				
DK VELLOWISH BROWN	<del>-</del>	•					
NO APPARENT STAINING RANGE FROM 6"-10							
LAB ANALYSIS		37, 60,470	3110 30117	<i>a</i> • • • • • • • • • • • • • • • • • • •			
	DED						
SAMP. TIME SA	<u> </u>	ELD 418.1 CALC WEIGHT (g) ml		ON READIN	G CALC.	maa	
		(3)					
SKETCH/SAMPL	E LOCATIONS	<del>.l</del>					
1							
Å							
V	WELL D	OVN	RESULTS	_	LAB SA	AMPL	ES
7	<b>*</b> ***	SAMF ID	LE FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
		25.1	2.0	2F-1	(8015)	1220	18.5
/				╢			
0	6) T						
2				J			
	32		N. I. 17				
	<b>∕</b> <u> </u>		CALE				
35'		0	FT				
TRAVEL NOTES: CALLOUT	: <u> </u>	ONS	SITE: <u>6: 15</u>	- 99		-	



### EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-16-99
Laboratory Number:	F517	Date Sampled:	06-15-99
Chain of Custody No:	7083	Date Received:	06-16-99
Sa⊪nple Matrix:	Soil	Date Extracted:	06-16-99
Preservative:	Cool	Date Analyzed:	06-16-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

D⊪esel Range (C10 - C28)	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	18.5	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	18.5	0.2

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

Jicarilla Contract 155 - 18 Landfarm. 5 Pt. Composite.

Analyst . (delecen

Stacy W Sendler

# CHAIN OF CUSTODY RECORD

				Relir	Relir	Relir									Sampler:	Clier
				Relinquished by: (Signature)	Relinquished by: (Signature)	Relinquished by: (Signature)						2-1	Sample No./ Identification	REP	pler:	Client / Project Name  BLAGE / AHOCO
			وروده والمراجعة	ure)	ure)	ure)						6:1599 1220	Sample Date			1000
												1220	Sample Time			
		: E-1						. All the second				FS17	Lab Number	014807	Client No.	Project Location CANDFART  STCARILLA CONTRACT 15
(505)	5796 U.S. Highway 64 Farmington, New Mexico 87401		<b>ENVIROTECH IC</b>			Date Time <b>5</b> %. <b>9</b> 9 7:25						5016	Sample Matrix	10		Project Location LANDFALDY  STLARILLA CONTRACT 155-18
(505) 632-0615	5796 U.S. Highway 64 nington. New Mexico 8:		Н Н	Received by: (Signature)	Received by: (Signa	Received by: (Signature)								o. of		ŌS.
	64 ) 87401		<u></u>	(Signature)	(Signature)	(Signature)						1	1P		)	
					1	. Olem									-	ANALYSIS
Cool - ice/Blue ice	Received Intact		S								594	SA				ANALYSIS / PARAMETERS
lue ice	Intact	~	Sample Receipt			Date C-16-89				cool	SAME PRESERVE	SA. COMPOSITE			Remarks	
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