Denny S. Fourt
DEPUTY OIL & GAS INSPECTOR
EN

JICARILLA APACHE TRIBE ENVIRONMENTAL PROTECTION OFFICE P.O. BOX 507

AUG 1 3 1999

**DULCE, NEW MEXICO 87528** 

NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

HON PEUC PIT REMEDIATION	AND CLOSURE REPORT
to a come minimum of framework and a second contraction of the second of	Telephone: (505)326-9200
Operator: AMOCO PRODUCTION COMPANY	Telephone: (555)
court, Farmington,	NM 87401
Facility or Well Name:	c #7A
Facility or Well Name:	5) 5 PIS APRICA
Location: Unit or Otr/Otr Sec Sec_13	1260 K32 County No.
Pit Type: Separator Dehydrator Other_	BLOW
Land Type: RANGE	
Ziana oji	てら', width ヱo', depth 역'
Pit Location: Pit dimensions: length	25 , width, depth
(Anach diagram)  Reference: wellhead X	_, other
Footage from reference:	90'
Footage non reference:	70 Degrees X East North X
Direction from reference.	of West South
- Caralyston	Less than 50 feet (20 points) 50 feet to 99 feet (10 points)
Depth To Groundwater: (Vertical distance from	50 feet to 99 feet (10 points) Greater than 100 feet (0 points)
contaminants to seasonal	Greater than
high water elevation of groundwater)	(10 maints)
Distance to an Ephemeral Stream	Less than 100 feet (10 points) Greater than 100 feet (0 points)
(Downgradient dry wash greater than	Glouior times
ten feet in width)	nd Less than 100 feet (10 points)
Distance to Nearest Lake, Playa, or Watering Por (Downgradient lakes, playas and	Greater than 100 feet (0 points)
livestock or wildlife watering ponds)	Yes (20 points)
Wellhead Protection Area:	No (0 points)
(Less than 200 feet from a private	
1000 feet from all other water sources)	Less than 100 feet (20 points)
Distance To SurfaceWater:	100 feet to 1000 feet (10 points)
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet (0 points)
irrigation canals and ditches)	
11 .	RANKING SCORE (TOTAL POINTS):
II '	

	87650 Brom bil
	Date Completed: 9/3/98
Date Remediation Started:	Approx. cubic yards
Remediation Method: Excavation 🔀	Approx. enoic juint
check all appropriate Landfarmed	Insitu Bioremediation
Other	
Remediation Location: Onsite <u>\( \times \)</u> Offsit i.e. landfarmed onsite, name and location of	te
	REDROCK BOTTOM
offsite facility) General Description of Remedial Action: <u>Ex</u>	Cavacion . Com
	Yes Depth
Groundwater Encountered	
Sample location See 7	Attached Documents
Final Pit: Sample location Closure Sampling:	
	(EAST SIDEWALL)
and diagram of sample Sample depthS	98 Sample time
locations and depths)  Sample date9/3	Sample time
Sample Results	( <b>1</b> -)
Soil: Benzene	(ppm) Water: Benzene (ppb)
Total BTEX	(ppm) Toluene (ppb)
Field Headspace	ce (ppm) 6.0 Ethylbenzene (ppb)
	(ppm) 52 Total Xylenes (ppb)
Groundwater Sample: Yes N	o (If yes, attach sample results)
	TION ABOVE IS TRUE AND COMPLETE TO THE BEST OF M
KNOWLEGE AND BELLER	
DATE 9/3/98I	PRINTED NAME Buddy D. Shaw
SIGNATURE BURLY S. Show	AND TITLE Environmental Coordinator
AFTER REVIEW OF THE PIT CLOSURE IN TO THE JICARILLA APACHE TRIBE PIT C	FORMATION, PIT CLOSURE IS APPROVED IN ACCORDANC CLOSURE ORDINANCE.
APPROVED: YES NO (REAS	ON)
" SIGNED: Keen C Manual	DATE: <u>9-9-98</u>

3003921641 LOCATION NO: BT620 BLAGG ENGINEERING, INC. CLIENT: AMOCO P.O. BOX 87, BLOOMFIELD, NM 87413 C.D.C. ND: \_\_\_\_\_ (505) 632-1199CLOSURE VERIFICATION PAGE No: 1 of FIELD REPORT: DATE STARTED: 9/3/98 LOCATION: NAME: JICARILLA C WELL #: TA PIT: BLOW DATE FINISHED: \_\_\_ QUAD/UNIT: I SEC: 13 TWP: Z60 RNG: 50 PM: NM CNTY: RA ST: NM ENVIRONMENTAL QTR/FOOTAGE: 1610 FSL 920 FEL CONTRACTOR: P45 SPECIALIST: EXCAVATION APPROX. 25 FT. x 25 FT. x 9 FT. DEEP. CUBIC YARDAGE: 125 DISPOSAL FACILITY: 02-50E REMEDIATION METHOD: LANDFALM \_\_ LEASE: \_\_\_\_\_C FORMATION: ~~ LAND USE: RANGE FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 50 FT. NOE FROM WELLHEAD. DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: > 1000 NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM ✓ PIT ABANDONED \_\_\_\_ STEEL TANK INSTALLED SOIL AND EXCAVATION DESCRIPTION: \_\_ FIBERGLASS TANK INSTALLED SIDEWOUS - DK. YELL, ORTHER TO BROWN JAND FICET EAST SIDEWALL (MED. GRAM) NON CONFESIVE, SLIGHTLY MOIST TO MOIST, FIRM, NO APPARENT STAINING OR HE ODOX OBSERVED DETECTED WIN EXCAUATION OR IN ANY OF THE OUM SAMPLES. BOTTOM - BEDROCK /SANOSTONE) OK. YELL. ORANGE IN COLOR, VERLY HARD NO APPALENT HE DOOR IN OUM SAMPLE. CUPSED FIELD 418.1 CALCULATIONS BEDROCK SAMPLE I.D. LAB No: WEIGHT (g) ML. FREON DILUTION READING CALC. ppm **βοπο**∼ TIME <u>5</u> Z 1:1 ② € 5' TPH-2024 0815 SCALE FT PROFILE PIT PERIMETER OVM RESULTS DIZECTION FIELD HEADSPACE PID (ppm) SAMPLE 0.0 0.0 0.0 BEDROCK (55) were LAB SAMPLES スピカン TIME ONSITE: 9/3/98 - MOCH. TRAVEL NOTES: CALLOUT:

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

### FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Amoco

Sample ID:

2 @ 5'

Jicarilla C # 7A

Laboratory Number:

Project Location:

TPH-2024

Project #:

Date Reported:

09-03-98 09-03-98

Date Reported: Sample Matrix:

Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg 
Total Recoverable Petroleum Hydrocarbons	52	20

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample	Duplicate	%
TPH mg/kg	TPH mg/kg	*Diff.
236	220	7.02

<sup>\*</sup>Administrative Acceptance limits set at 30%.

Method:

Modified Method 418.1, Petroleum Hydrocarbons, Total

Recoverable, Chemical Analysis of Water and Waste,

USEPA Storet No.4551, 1978

Comments:

Blow Pit - BJ620

Analyst

**Review** 

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Client: Amoco Project #:

Sample ID: 2 @ 5' Date Analyzed: 09-03-98 Project Location: Jicarilla C # 7A Date Reported: 09-03-98

Laboratory Number: TPH-2024 Sample Matrix: Soil

Sample Weight: 5.00 grams Volume Freon: 20.00 mL

Dilution Factor: 1 (unitless) TPH Reading: 13 mg/kg

TPH Result: 52.0 mg/kg
Reported TPH Result: 52 mg/kg
Actual Detection Limit: 20.0 mg/kg
Reported Detection Limit: 20 mg/kg

QA/QC: Original Duplicate %

TPH mg/kg TPH mg/kg Diff.

----236 220 7.02

Comments: Blow Pit - BJ620

# 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

### PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY	Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington, N	M 87401
JICARUA	# 717
Location: Unit or Qtr/Qtr Sec I Sec 13 T2	60 R 5w County LIO ARRIBA
Pit Type: Separator Z Dehydrator Other	
Land Type: RANGE	
	רב' , width <u>בב'</u> , depth   16'
Reference: wellhead X Footage from reference:	other
Footage from reference: 7	S Degrees East North X
Direction from reference.	West South
Depth To Groundwater: (Vertical distance from contaminants to seasonal	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)
high water elevation of groundwater)  Distance to an Ephemeral Stream (Downgradient dry wash greater than	Less than 100 feet (10 points) Greater than 100 feet (0 points)
ten feet in width)  Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and	Less than 100 feet (10 points) Greater than 100 feet (0 points)
livestock or wildlife watering ponds)  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)
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet (20 points) 100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)
	RANKING SCORE (TOTAL POINTS):

				RT 67	o sep.	PIT
						<del></del>
	rted:		Date	Completed	:9/3	3/98
			 Appro	x. cubic yar	rds3	50
Pemediation Method:  _heck all appropriate	Excavation X		Imaita	Bioremediat	ion	
sections)	Landfarmed >		Insitu	Diotemen		
	Other					
Remediation Location (i.e. landfarmed onsite, name and location of offsite facility)						
General Description	of Remedial Action: <u>Exc</u>	avation	n . BEI	SOCK D	7110171	
			<del></del>			
Groundwater Encoun	tered: No X	Yes	_ Der	oth		
Final Pit: Closure Sampling: (if multiple samples, attach sample results	Sample locationsee At					
and diagram of sample locations and depths)	Sample depth	Clockin	4 3126	0 1 4	me 0955	
neations and departs	Sample date	18		Sample ti		
	Sample Results					
li	Soil: Benzene	(ppm) _		Water:	Benzene	(ppb)
	Total BTEX	(ppm) _			Toluene	(ppb)
	Field Headspace	(ppm)	0.0		Ethylbenzene	(ppb)
	ТРН	(ppm) _			Total Xylenes	(ppb)
Groundwater Sample						
I HEREBY CERTIFY KNOWLEGE AND B	Y THAT THE INFORMATI BELIEF	ON ABOV	E IS TR	UE AND CO	OMPLETE TO	THE BEST OF M
DATE	9/3/98 PR	INTED N		Buddy D.		
SIGNATURE BUS		AND TIT			ental Coord	
AFTER REVIEW OF	THE PIT CLOSURE INFO	ORMATIC OSURE O	N, PIT ( RDINAN	CLOSURE IS CE.	S APPROVED	IN ACCORDANG

APPROVED: YES NO \_\_\_\_ (REASON) \_\_\_\_

DATE: 9-9-98

CLIENT: AMOCO BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413	C.D.C. ND:
(505) 632-1199	
FIELD REPORT: CLOSURE VERIFICATION	PAGE No: of
LOCATION: NAME: TICARINA C WELL #: 7A PIT: SEP	DATE STARTED: 9/3/98 DATE FINISHED:
QUAD/UNIT: I SEC: 13 TWP: ZEN RNG: 5W PM: NM CNTY: RA ST: NM  QTR/FOOTAGE: 1610 FSL   920 FEL CONTRACTOR: 13+5	ENVIRONMENTAL SPECIALIST:
EXCAVATION APPROX. 27 FT. x 25 FT. x 16 FT. DEEP. CUBIC DISPOSAL FACILITY: 00-51TE REMEDIATION METHO	YARDAGE: 350  D: Landfarm
LAND USE: RANGE LEASE: C FOR	RMATION: MU
COTI AND EXCAVATION DESCRIPTION:	FROM WELLHEAD.  E WATER: >>>>>' CHECK ONE: PIT ABANDONED STEEL TANK INSTALLED FIBERGLASS TANK INSTALLED
SIDEWALLS - DK. YELL. BROWN SILTY FAND TO SILTY CLAY, COHESILE, MUIST, FIRM, NO APPARENT STAINING OR HC ODDIE WIN EXCAUATION OR IN ANY OF THE DUM SAMP  BOTTOM - BEDROCK (SANDSTONE) DK. YELL. ORANGE IN COUR, UE HC ODOL IN DUM SAMPLE.	CES,
BEDROCK  BOTTOM  TIME SAMPLE I.D. LAB NO: WEIGHT (9) ML. FREON D	HELTION READING CALC. DDM
	1:1 27 /08
O FT	
PIT PERIMETER N OVM Score DIRECTION RESULTS	PROFILE
SAMPLE PIELD HEADSPACE PID (ppm)  1 @ 11'	
A S A	85)20CK (55)
LAB SAMPLES  SAMPLE ANALYSIS TIME  ID ANALYSIS TIME	
TRAVEL NOTES: CALLOUT: ONSITE: 9/3/98 - NO.	2N .

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

### FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Amoco

Sample ID:

1 @ 11'

Project Location: Laboratory Number: Jicarilla C # 7A

TPH-2025

Project #:

Date Analyzed:

09-03-98 09-03-98

Date Reported: Sample Matrix:

Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	110	20

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample	Duplicate	%
TPH mg/kg	TPH mg/kg	*Diff.
236	220	7.02

<sup>\*</sup>Administrative Acceptance limits set at 30%.

Method:

Modified Method 418.1, Petroleum Hydrocarbons, Total

Recoverable, Chemical Analysis of Water and Waste,

USEPA Storet No.4551, 1978

Comments:

Separator Pit - BJ620

Miller Manager

Review

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:

\*\*\*\*\*\*\*\*

Client:

Amoco

Project #:

Sample ID:

1 @ 11'

Date Analyzed:

09-03-98

Project Location:

Jicarilla C # 7A

Date Reported:

09-03-98

Laboratory Number:

TPH-2025

Sample Matrix:

Soil

Sample Weight: Volume Freon:

5.00 grams 20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

27 mg/kg

**TPH Result:** 

108.0 mg/kg

Reported TPH Result: Actual Detection Limit:

110 mg/kg 20.0 mg/kg

Reported Detection Limit:

20 mg/kg

QA/QC:

Original TPH mg/kg

Duplicate TPH mg/kg

% Diff.

236

220

7.02

Comments:

Comments:

Separator Pit - BJ620

# 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, Farming	ton, NM 87401			
Facility or Well Name: JICARIWA C 7	A			
Location: Unit or Qtr/Qtr Sec/ Sec_/3	T 24N R SIN County BIO ARRIBA			
Land Type: PANGE				
	Date Completed: Z/2Z/99			
Remediation Method: Landfarmed	Approx. cubic yards 475			
Composted				
Other				
Depth To Groundwater: (pts.)				
Distance to an Ephemeral Stream (pts.)	Sampling Date: <u>2.18.99</u> Time: <u>0910</u>			
Distance to Nearest Lake, Playa, or Watering Pond (pts.)	Sample Results:			
_	Field Headspace (ppm) 3.6			
Wellhead Protection Area: (pts.)	TPH (ppm) $20.3$ Method $30.5$			
Distance To SurfaceWater: (pts.)	Other			
RANKING SCORE (TOTAL POINTS):				
I HEREBY CERTIFY THAT THE INFORMATION A KNOWLEGE AND BELIEF	ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY			
DATE z/27/99 PRINTED NAME Buddy D. Shaw				
SIGNATURE Bully J. Show AND TITLE Environmental Coordinator				
AFI'ER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.				
APPROVED: YES NO (REASON)				
SIGNED: 110	DATE: 3-31-99			

AMOCO	BLAGG ENG	INEERING, INC.	LOCATION NO: 85020
CLIENT: AMOCO	DO BOY 87 BL	OOMFIELD, NM 87413	C.O.C. NO: 4575
	(505)	632-1199	TIPLET CAMION
FIELD REPORT:	LANDFARM/COM	MPOST PILE CLOSURE	VERIFICATION
	WELL #:	7 A PITS: SEP., BLOW	DATE STARTED: 2.18.99 DATE FINISHED:
QUAD/UNIT: / SEC: /	3 TWP: 24N RNG: 5K	PM: NM CNTY: SZ ST: NM	ENVIRONMENTAL SPECIALIST:
QTR/FOOTAGE: NE4		2: P45	SPECIALIST.
SOIL REMEDIATION:	•	ADDDOV CURIC N	YARDAGE: 475
REMEDIATION SYS	STEM: LANDFARM		
LAND USE:	RANGE	LIFT DEPTH (IC).	
FIELD NOTES & REMA	RKS:	CEI > 1000 NEAREST SURFAC	CE WATER > 1000 '
DEPTH TO GROUNDWATER >	NEAREST WATER SHUR	STD CARD PPM	
NMOCD RANKING SCORE:	ADDIEST SAND APAN ADMES	IVE MOIST FIRM, SMALL AREA	15
l .		E SKETCH BELOW) SOME HC OD S RANGE FROM 6" - 12" TOO	
COMPOSITE SAMPLE	FOR LAS AWALUSIS.	The second secon	
CLOSED			
	FIELD LAB NO. WEIG	418.1 CALCULATIONS  HT (g) mL. FREON DILUTION READI	NG CALC. ppm
- SAMP. TIME	SAMPLE I.D. LAB NO. WEIG	(3)	
SKĘŢÇH/SAMF	LE LOCATIONS	·	
FAREN G	4		
72	7	OVM RESULTS	LAB SAMPLES
3 2		SAMPLE FIELD HEADSPACE SAMP	70H 32 7
The state of the s	1 36	. LF-1 3.6 LF-1	(BOIS) 0910 20.3
36	AREA#2		
PROO 20W	98.5720-		
FANK 354		/	
ATOMED AREA	STAINED AREA 1	0	
40.		SCALE	
AREA#,		O FT	1
32'	1	1 -	

CALLOUT: N/L

TRAVEL NOTES:

ONSITE: 2 18 99



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

Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix:	Blagg / AMOCO LF - 1 E687 6575 Soil	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed:	403410 02-22-99 02-18-99 02-19-99 02-19-99 02-22-99
Preservative: Condition:	Cool Cool and Intact	Date Analyzed: Analysis Requested:	02-22-99 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.6	0.2
Diesel Range (C10 - C28)	16.7	0.1
Total Petroleum Hydrocarbons	20.3	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 C - 7A Landfarm.

5 Pt. Composite.

Analyst

Stacy W Sendler

# **CHAIN OF CUSTODY RECORD**

Blue Ice	Cool - Ice/Blue Ice	2-0615	(505) 632-0615				
Intact	Received Intact	ghway 64 Mexico 87401	5796 U.S. Highway 64 Farmington New Mexico 87401				
۲ 2 8							
Sample Receipt	60	CHINC	FOVIROTECH IO				
		Received by: (Signature)	Rec			ture)	Relinquished by: (Signature)
		Received by: (Signature)	Rez			ture)	Relinquished by: (Signature)
2.19.79 1013		Received by: (Signature)	Date Time Rec 2.499 1015			ture)	Relinquished by: (Signature)
-							<i>V</i>
-							
-					-		
Cool							
SAME PRESENT	S.						
Sri Cadrosite	Ų		3016	E 68 1	0170	218970	1-47
	<i>}</i>	Ì			•	5	
			Sample Matrix	Lab Number	Sample	Sample	Sample No./
		o. of tainers	-10	04034-10			REP
Remarks				- 1			Sampler:
	AMETERS	ANALYSIS / PARAMETERS	C-7A	SKAPULA C - 7A		000	ELECT / AMOCO
			a lathan				