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

AND OIL & GAS ADMINISTRATION

DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REP

	Telephone: () 3 () 3 () 3 () 3 () 4
Operator: AMOCO PRODUCTION COMPANY	S
200 Amogo Court, Farmington, N	M 87401
Facility or Well Name: TICARILLA APACHE	#102-10
Location: Unit or Otr/Otr Sec_ D Sec_ 4 T26	6P R YW County A
Pit Type: Separator Dehydrator Other	
Land Type:R & E	
Pit Location: Pit dimensions: length	28', width 25', depth 21' other
Engage from reference:	4′ <u> </u>
Direction from reference:	Degrees Bast North
	West South
	Less than 50 feet (20 points)
Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	50 feet to 99 feet (10 points) Greater than 100 feet (0 points)
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points) Greater than 100 feet (0 points)
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet (10 points) Greater than 100 feet (0 points)
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):

	Date Completed: 9/16/98
Date Remediation Sta	Approx cubic vards 360
Remediation Method: heck all appropriate sections)	Excavation Insitu Bioremediation
	Other
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)	Onsite Offsite
General Description	of Remedial Action: Excavation
Groundwater Encount	tered: No × Yes Depth
Final Pit: Closure Sampling: (if multiple samples,	Sample location see Attached Documents
attach sample results and diagram of sample locations and depths)	Sample depth 25° (PIT 8011001) Sample date $9/10/98$ Sample time 0805
	Sample Results Water: Benzene (ppb)
11	Soil: Benzene (ppm) O. 100
·	Total BTEX (ppm) A 470 Toluene (ppb)
	Field Headspace (ppm) 653 Ethylbenzene (pph)
	TPH (ppm) 381 Total Xylenes (ppb)
Groundwater Sample	
I HEREBY CERTIFY KNOWLEGE AND B	Y THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY BELIEF
DATE R	9/16/98, PRINTED NAME Buddy D. Shaw Oly D. Shaw AND TITLE Environmental Coordinator
SIGNATURE Dub	F THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE
TO THE JICARILLA	APACHE TRIBETTI CHOBORIZ GRAMMA
APPROVED: YES_	NO (REASON)
" SIGNED:	Ma DATE: 10-1-98

3003**9**06754 LOCATION NO: 85626 BLAGG ENGINEERING, INC. CLIENT: AMOCO P.O. BOX 87, BLOOMFIELD, NM 87413 C.O.C. NO: 6203 (505) 632-1199 FIELD REPORT: CLOSURE VERIFICATION PAGE No: ____ of ___! DATE STARTED: 9/10/98 LOCATION: NAME: JICA. AP. 102 WELL #: 10 PIT: SEP DATE FINISHED: QUAD/UNIT: D SEC: 4 TWP: 260 RNG: 4W PM: NM CNTY: RA ST:NM ENVIRONMENTAL NV SPECIALIST: OTR/FOOTAGE: 890 FNL 1030 FWL CONTRACTOR: P+S EXCAVATION APPROX. 28 FT. x 25 FT. x 21 FT. DEEP. CUBIC YARDAGE: 360 DISPOSAL FACILITY: ON - SITE REMEDIATION METHOD: LANDFARM LEASE: JIC 102 FORMATION: OK LAND USE: RANGE FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 114 FT. NZ4W FROM WELLHEAD. DEPTH TO GROUNDWATER: _ >100 / NEAREST WATER SOURCE: _ >/000 / NEAREST SURFACE WATER: _ >/000 / NMOCD RANKING SCORE: O NMOCD TPH CLOSURE STD: 5000 PPM ✓ PIT ABANDONED ___ STEEL TANK INSTALLED SOIL AND EXCAVATION DESCRIPTION: __ FIBERGLASS TANK INSTALLED MOSTLY OK. YELL. BROWN SAND, NON COHESINE, JLIGHTLY MOIST FIRM, MED. GROY DISCOLDERTION / STRIKING OBSERVED BET. 9-11 BELOW GRADE ON NORTH & WEST SIDEWALLS NO APPARENT HE ODOR DETECTED WIN EXCAUATION, STRONG HE ODOR DETECTED WIN NORTH WEST SIDEWALLS, & PIT BOTTOM DUM SAMPLES. CLOSED FIELD 418.1 CALCULATIONS SAMPLE I.D. LAB NO: WEIGHT (g) mL. FREON DILUTION READING CALC. ppm TIME SCALE 0 PROFILE PIT PERIMETER N OVM RESULTS TANK FIELD HEADSPACE SAMPLE @ 161 0.0 @ 15' 0 @ n' 571 3 STAINING wert HEAD PIPING LAB SAMPLES TPH STEX DUZZED BOTH ONSITE: 9/10/98 - MOKN. TRAVEL NOTES: CALLOUT:



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix: Preservative:	Blagg / AMOCO 5 @ 25' D928 6203 Soil Cool	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed:	04034-10 09-16-98 09-10-98 09-15-98 09-16-98 8015 TPH
Condition:	Cool and Intact	Analysis Requested:	0013 11 11

oncentration (mg/Kg)	Det. Limit (mg/Kg)		
279	0.2		
102	0.1		
381	0.2		
	oncentration (mg/Kg) 279 102		

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 Apache #102 - 10 Separator Pit.

Aller P. Ogleece

Stacy W Sendler



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Chain of Custody: Sample Matrix: Preservative: Condition:	Blagg / AMOCO 5 @ 25' D928 6203 Soil Cool Cool & Intact	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Date Extracted: Analysis Requested:	04034-10 09-16-98 09-10-98 09-15-98 09-16-98 09-16-98 BTEX
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Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	706 2,670 1,720 17,860 6,510	8.8 8.4 7.6 10.8 5.2	
Total BTEX	29,470		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

Jicarilla Apache #102 - 10 Separator Pit.

Allin P. Queen

Stacy W Sendler
Review

CHAIN OF CUSTODY RECORD

(505) 632-0615	5796 U.S. Highway 64 Farmington New Mexico 87401		ENVIROTECH INC	Relinquished by: (Signature)	Relinquished by: (Signature)	Relinquished by: (Signature) Date 7/15/98 1538 Time Received by: (Signature)					(S) @ 25' 9/10/98 0805 D928 5012 1 1 1	Con TI	1-42040	Client No.	Amoco TICAPINA PLANCHE # 102-10	Client / Project Name Project Location SEPALOTOR PIT
Cool - Ice/Blue Ice	Received Intact	۲ Z	Sample Receipt			Date Time 9-17-96 173 6					PRESERV cool			Remarks	ANALYSIS / PAHAME I EHS	VOIO / DATIAMETEDO

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	Telephone: (505) 326-9200				
· · · · · · · · · · · · · · · · · · ·					
Address: 200 Amoco Court, Farmington,					
Facility or Well Name: SICAPILLA APACHE 102					
Location: Unit or Qtr/Qtr Sec D Sec A T2	CN RAW County RIO ARRIBA				
Land Type: PANGE					
Date Remediation Started: 9.10.98	Date Completed: 4/12/99				
Remediation Method: Landfarmed	Approx. cubic yards 360				
Composted					
Other					
The Commitment (min)	Final Closure Sampling:				
pth To Groundwater: (pts.)	Sampling Date: 4 · 8 · 9				
Distance to an Ephemeral Stream (pts.)					
Distance to Nearest Lake, Playa, or Watering Pond (pts.)	Sample Results:				
Wellhead Protection Area: (pts.)	Field Headspace (ppm)				
Distance To SurfaceWater: (pts.)	TPH (ppm) <u>0.5</u> Method <u>8015</u>				
Distance to surface water. (p)	Other				
RANKING SCORE (TOTAL POINTS):					
I HEREBY CERTIFY THAT THE INFORMATION ABOVE KNOWLEGE AND BELIEF	E IS TRUE AND COMPLETE TO THE BEST OF MY				
DATE $\frac{4/12/99}{8.000}$ PRINTED I	NAME Buddy D. Shaw				
SIGNATURE Buddy S. Shaw	AND TITLE Environmental Coordinator				
AFTER 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: La CMan DATE	: 6-18-99				

P.O. BOX 87, BLOO	NEERING, INC. OMFIELD, NM 87413 32-1199 c.d.c. Nd: 4885
FIELD REPORT: LANDFARM/COMP	OST PILE CLOSURE VERIFICATION
_ DOCATION: NAME: SICARILLA AFACHE 102 WELL #: 10	PITS: SEP DATE STARTED: 4.8 99 DATE FINISHED:
QUAD/UNIT: D SEC: 4 TWP: 26N RNG: 4W STP/FEETAGE NW/4 NW/4 CONTRACTOR:	
SOIL REMEDIATION:	
REMEDIATION SYSTEM: LANDFARM LAND USE: RANGE	APPROX. CUBIC YARDAGE: 360 LIFT DEPTH (ft): 2
FIFT NOTES & REMARKS:	
DEFT- IZ GROUNDWATER: 2/00' NEAREST WATER SOURCE:	NEAREST SURFACE WATER: 77020
MITT RANKING SCORE: O NMOCD THE CLOSURE STD:	SUDC PPM
DK. VELLOWISH BECWN SAND, NOW COHESIVE, SI NO APPARENT STAINING OBSERVED, NO HC ODD DEPTES RANGE FROM 6" - 18", TOOK A SPT FOR LAB ANALYSIS	e detected, sampling
FIELD 418.	1 CALCULATIONS
SAMP. TIME SAMPLE I.D. LAB No: WEIGHT	(g) mL. FREON DILUTION READING CALC. ppm
SKETCH/SAMPLE LOCATIONS	
03:-589°W	OVM RESULTS SAMPLE FIELD HEADSPACE PID (ppm) LF-1 0.0 LF-1 Bors) 1320 0.5 SCALE O FT

TRAVEL NOTES: CALLOUT: AA ONSITE: 48.99



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

		D. 1. 4.4	403410
Client:	Blagg / AMOCO	Project #:	
Sample ID:	LF - 1	Date Reported:	04-12-99
Laboratory Number:	E999	Date Sampled:	04-08-99
Chain of Custody No:	6885	Date Received:	04-09-99
Sample Matrix:	Soil	Date Extracted:	04-09-99
Preservative:	Cool	Date Analyzed:	04-12-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.5	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.5	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 Apache 102 - 10. 5 Pt. Composite.

Dec R. Orgenser

Stacy W Sendler

7	Cool - Ice/Blue Ice	-0615	Farmington, New Mexico of to 1				
7	Received Intact	hway 64	5796 U.S. Highway 64				
Z Z							
eipt .	Sample Receipt	CHICC	FOVIDOTECH IO				
		Received by: (Signature)	Rece			ature)	Relinquished by: (Signature)
		Received by: (Signature)				ature)	Relinquished by: (Signature)
.99 P.//2	Date 49.99	Received by: (Signature)	Date Time Rece			ature)	Relinquished by (Signature)
	2001						
person	SAMPLE PRESERVE						
rosi C	071.cg/resite	-	3016	1999	1320	4.899	LF-1
TX ITAL			Matrix		Time	Date	Identification
		Conf	Sample	Lab Number	Sample	Sample	Sample No./
		o. of tainers	34-10	04034-10			RA
urks .	Remarks	S		Client No.			Sampler:
	METERS	ANALYSIS / PARAMETERS	ACKE 102.10	SICAPIUA A PACHE		1000	Client / Project Name BLAUS / ALCO
				Project I ocetion			Office A Name