JICARILLA APACHE TRIBE Dennis 1. COPY TO THE PUT OIL & GAS INSPECTOR UNCLE DEPT

P.O. BOX 507 DULCE, NEW MEXICO 87528

AUG 1 3 1999

OIL CON. DIV.

DIST. 3 PIT REMEDIATION AND CLOSURE REPORT

TON COMPANY	Telephone:	(505)326-92	200
Operator: AMOCO PRODUCTION COMPANY			
Address: 200 Amoco Court, Farmington, M	WM 8/401		
Facility or Well Name:	# 36	^	
T Son 7 T	260 RSW County X10 A	RRIBA	
D. L. Juston Other	PRODUCTION TANK		
Pit Type: Separator Denydrator Other			
Land Type: RANGE			
	zz', width 16'	, depth 4'	
(Attach diagram)  Reference: wellhead X,	other		<del></del>
Footage from reference:	20'		
Direction from reference: 6	7 Degrees East of	North	
	_X West	South X	
Depth To Groundwater:	Less than 50 feet 50 feet to 99 feet	(20 points) (10 points) ( 0 points)	0
(Vertical distance from contaminants to seasonal high water elevation of groundwater)	Greater than 100 feet	,	
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet Greater than 100 feet	(10 points) ( 0 points)	<del></del>
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet Greater than 100 feet	(10 points) (0 points)	
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or: less than	Yes No	(20 points) ( 0 points)	0
Distance To SurfaceWater: (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) (10 points) ( 0 points)	0
·* .	RANKING SCORE (TOTA	L POINTS):	<u> </u>

	BJ681 PROD. TANK PIT
	Date Completed:/1/23 /98
Date Remediation Sta	arted: Date Completed: 48
Remediation Method:	Excavation Approx. cubic yards 40
Check all appropriate sections)	Landfarmed Insitu Bioremediation
•	Other
Remediation Location i.e. landfarmed onsite, name and location of official facility)	
General Description	of Remedial Action: Excavation, BEORDER BOTTOM.
Groundwater Encoun	tered: No X Yes Depth
Final Pit: Closure Sampling:	Sample location see Attached Documents
if multiple samples, attach sample results	Sample depth Z' (NORTH SIDEWALL)
and diagram of sample ocations and depths)	Sample date $\frac{1/19/98}{}$ Sample time $\frac{1500}{}$
	Sample Results  (npm) (2-101 Water: Benzene (ppb)
	Soil: Benzene (ppm)
	Total BTEX (ppin)
	Field Headspace (ppm) 39/ Ethylbenzene (ppb)
	TPH (ppm) 178 Total Xylenes (ppb)
Groundwater Sample	e: Yes No (If yes, attach sample results)
I HEREBY CERTIFY KNOWLEGE AND I	Y THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY BELIEF
DA TE	11/23/98 _ , PRINTED NAME Buddy D. Shaw
SIGNATURE BUS	PRINTED NAME Buddy D. Shaw  Oly D. Shaw  AND TITLE Environmental Coordinator
AFTER REVIEW OF	F THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE A APACHE TRIBE PIT CLOSURE ORDINANCE.
APPROVED: YES_	NO (REASON)
SIGNED:	= C Man DATE: 12-24-98

		22582
P.O.	BLAGG ENGINEERING, IN BOX 87, BLOOMFIELD, NM (505) 632-1199	C.D.C. ND: 6309
QUAD/UNIT: E SEC: ZO TWP:	CLOSURE VERIFICA  A WELL #: 3E PIT: PROP  : 26N RNG: SW PM:NM CNTY: R  FWL CONTRACTOR: P+S	DATE STARTED: 1119193  DATE FINISHED:  ENVIRONMENTAL NV  SPECIALIST:
EXCAVATION APPROX. 22 FT DISPOSAL FACILITY: 02 LAND USE: RANGE	T. x 16 FT. x 4 FT. DEEI  PREMEDIATIO  LEASE: JIC A	FORMATION: DK
DEPTH TO GROUNDWATER: >100' NE NMOCD RANKING SCORE: ON NE SOIL AND EXCAVATION DE	NEAREST WATER SOURCE:NE NE N	PIT ABANDONED  STEEL TANK INSTALLED  FIBERGLASS TANK INSTALLED
REDROCK (ST	T. GRAY CLAY PLASTIE, SLIEHTLY  BLE STAINING OBSERVED, STROP  THALE), PARE REN/LT. GRAY, LEAV  OUM SAMPLE.	SAMPLES.  HARD, SUGHT APPARENT 4C
BENZO EK CLOSED  BOTTON  SCALE  1500	FIELD 418.1 CAL ME SAMPLE I.D. LAB No: WEIGHT (g)	CULATIONS  ML. FREON DILUTION READING CALC. ppm
O FT PIT PERIMETE  FROD. TANK	RESULTS  SAMPLE FIELD HEADSPACE PID (ppm)  1 @ Z' 391	PIT PROFILE
	2 @ z'	BEDROER (Sh)
3 3 22' A'		



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

Parameter		Concentration (mg/Kg)	Det. Limit (mg/Kg)
Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix: Preservative: Condition:	Blagg / AMOCO 1 @ 2' E203 6309 Soil Cool Cool and Intact	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	04034-10 11-23-98 11-19-98 11-20-98 11-23-98 11-23-98 8015 TPH

Parameter	Concentration (mg/Kg)	Limit (mg/Kg)
Gasoline Range (C5 - C10)	155	0.2
Diesel Range (C10 - C28)	22.8	0.1
Total Petroleum Hydrocarbons	178	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 A #3E Production Tank.

Deer L. Oferen

Stacy W Sendler
Review



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

D	Date Extracted: 11-23-9 Analysis Requested: BTEX
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Parameter	Concentration (ug/Kg)	Limit (ug/Kg)
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	101 306 273 2,010 636	8.8 8.4 7.6 10.8 5.2
Total BTEX	3,330	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene Bromofluorobenzene	98 % 98 %

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 A #3E Production Tank Pit.

Deur L. Ogicken

Stacy W Sendler
Review

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

BJ681

NATURAL RESOURCE DEP

AND OIL & GAS ADMINISTRATIO:

# PIT REMEDIATION AND CLOSURE REPORT

	<b>Telephone:</b> (505)326-9200
Operator: AMOCO PRODUCTION COMPANY	
Farmington, NM	87401
Address: 200 Amoco Court, Farming  Facility or Well Name: JICARILLA A #3	RSW County RIO ARRIBS
Location: Unit or Qtr/Qtr Sec_2 Sec_2 12.5	K County
Pit Type: Separator Other	
Land Type:	
Pit Leastion: Pit dimensions: length 23	', width_ 37', depth_ 6'
(Attach diagram)  Reference: wellhead X, oth	her
Footage from reference: 138	North
Direction from reference:	Degrees East North  West South
	Less than 50 feet (20 points)
Depth To Groundwafer: (Vertical distance from contaminants to seasonal high water elevation of	So feet to 99 feet (10 points) Greater than 100 feet (0 points)
Distance to an Ephemeral Stream (Downgradient dry wash greater than	Less than 100 feet (10 points) Greater than 100 feet (0 points)
Distance to Nearest Lake, Playa, or Watering Pond	Less than 100 feet (10 points) Greater than 100 feet (0 points)
Wellhead Protection Area:	Yes (20 points) $\bigcirc$ No (0 points) $\_$
domestic water source, or: less than 1000 feet from all other water sources)  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):

	BJ681 2EP. PIT
	Date Completed:
Nate Remediation Sta	rted: Date Completed:
Remediation Method:	Excavation Approx. cubic yards
Theck all appropriate	Landfarmed X Insitu Bioremediation
ections)	
	Other
Remediation Location: i.e. landfarmed onsite, name and location of	Onsite Offsite
offsite facility)	REDROCK BOTTOM -
General Description (	of Remedial Action: Excavation. BEDROOK ROTTOM.
Groundwater Encoun	tered: No X Yes Depth
Groundwater 23.10	
	Sample locationsee Attached Documents
Final Pit: Closure Sampling:	Sample location
(if multiple samples,	
attach sample results and diagram of sample	Sample depth 3 (SOUTH SIDEWALL)
locations and depths)	Sample depth
	Sample Results
	Soil: Benzene (ppm) ND Water: Benzene (ppb)
	Toluene (ppb)
	Field Headspace (ppm) 170.3
	TPH (ppm) ND Total Xylenes (ppb)
	t comple regults)
Groundwater Sampl	e: Yes No _> (If yes, attach sample results)
	Y THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF M
I HEREBY CERTIF KNOWLEGE AND I	Y THAT THE INFORMATION ABOVE IS THE STREET OF THE INFORMATION ABOVE IS THE STREET OF T
KNOWLEGE AND	
DATE	PRINTED NAME Buddy D. Shaw  Oly D. Shaw  AND TITLE Environmental Coordinator
$\mathbb{R}$	AND TITLE Environmental Coordinator
	F THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDAN A APACHE TRIBE PIT CLOSURE ORDINANCE.
APPROVED: YES	NO (REASON)
	- C Man ( DATE: 12-28-98

		07(0)
P	BLAGG ENGINEERING, INC. O. BOX 87, BLOOMFIELD, NM 8741 (505) 632-1199	C.D.C. ND: 6329
FIELD REPORT	: CLOSURE VERIFICATION	PAGE No:
LOCATION: NAME: TICA	A WELL #: 36 PIT: 56P	DATE STARTED: 11/19/73
QUAD/UNIT: E SEC: ZO	130 FWL CONTRACTOR: P45	SPECIALIS.
EXCAVATION APPROX. 23 DISPOSAL FACILITY: 1336	FT. x 37 FT. x 6 FT. DEEP. CUI	FORMATION: DK
FIELD NOTES & REMARK  DEPTH TO GROUNDWATER: >/PC  NMOCD RANKING SCORE: -  SMIL AND EXCAVATION	S: PIT LOCATED APPROXIMATELY 138 FT  NEAREST WATER SOURCE: >1000 NEAREST SUR  NMOCD TPH CLOSURE STD: 5000 PPM  DESCRIPTION:	FACE WATER: >/DDD'  CHECK ONE:  PIT ABANDONED  STEEL TANK INSTALLED
	CX (SHALE), PALE ROLL, GRY, VERY HOR.	
BENCOCK CLOS	FIELD 418.1 CALCULATION	4S IN DILUTION READING CALC. ppm
SCALE	TIME SAMPLE I.D. LAB NO. WEIGHT (9)	
O FT		
PIT PERIMI	OVM OVM DESILTS	PIT PROFILE A'
2.3	SAMPLE FIELD HEADPACE PID (ppm)	37'
- 0 A	T (C) 2 @ 3' 81.1 3 @ 3' 190.3 4 @ 3' 0.0 5 @ 6' 0.0	BEDZOEK 7'
MARTION D 3	37 10 well	
3	LAB SAMPLES  SAMPLE ANALYSIS TIME	
• A'	PROD BOTH PRSTED	



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

Gasoline Range (C5 - C Diesel Range (C10 - C) Total Petroleum Hydro	28)	ND ND ND	0.2 0.1 0.2
Condition: Parameter	Cool and Intact	Analysis Requested:  Concentration  (mg/Kg)	Det. Limit (mg/Kg)
Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix: Preservative:	Blagg / AMOCO 3 @ 3' E204 6309 Soil Cool	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed:	04034-10 11-23-98 11-19-98 11-20-98 11-23-98 11-23-98 8015 TPH

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 A #3E Separator Pit.

Den L. Glecom

Stacy W Sendler



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene Total BTEX		ND ND ND 103 40.5	8.8 8.4 7.6 10.8 5.2	
Parameter		entration /Kg)	Det. Limit (ug/Kg)	
Client: Sample ID: Laboratory Number: Chain of Custody: Sample Matrix: Preservative: Condition:	Blagg / AMOCO 3 @ 3' E204 6309 Soil Cool Cool & Intact	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Date Extracted: Analysis Requested:	11 11 11 11	4034-10 1-23-98 1-19-98 1-20-98 1-23-98 1-23-98 TEX

ND - Parameter not detected at the stated detection limit.

Surrogate Rec	coveries:	Parameter	Percent Recovery
- 100		Trifluorotoluene Bromofluorobenzene	95 % 95 %
References:	Method 5030 December 1	pB, Purge-and-Trap, Test Methods for Evalua 1996.	ting Solid Waste, SW-846, USEPA,

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

USEPA, December 1996.

Comments: Jicarilla A #3E Separator Pit.

Aleur L. Cejewen

Review Stacy W Sendler

# CHAIN OF CUSTODY RECORD

Client / Project Name  BLAGE   Amoco  Sampler:  NTV  Sample   Sample   Sample   Identification   Date   Time    (1)	Project Location  TicARILLA  Client No.  Lab Number  = 204	Sample Sample Matrix	No. of Containers  TPH  (9015)  STEX  (8021)  ANALYSIS / PARAMETERS	RESERV COOL
) e z' 1/19/98		2017		
				12 2
				_
Relinquished by: (Signature) Relinquished by: (Signature)		Date Time R	Received by: (Signature) Received by: (Signature)	38
Relinquished by: (Signature)		7	Received by: (Signature)	
Rep cocs 6306-6309	9	ENVIROT	ENVIROTECH INC.	Sample Receipt Y N N/A
		5796 U.S. Farmington, Ne (505) 6	5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615	Received Intact  Cool - Ice/Blue Ice 1

# 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, Farmington,	NM 87401
Facility or Well Name: SICAEILLA A BE	
Location: Unit or Qtr/Qtr Sec E Sec 20 T	ZUN REW County RIO ARRIBA
Land Type: RANGE	
Date Remediation Started:	Date Completed: 6/4/99  Approx. cubic yards 190
Depth To Groundwater: (pts.)	Final Closure Sampling:
Distance to an Ephemeral Stream (pts.)	Sampling Date: 6.299 Time: 1/20
Distance to Nearest Lake, Playa, or Watering Pond (pts.)	Sample Results:
Wellhead Protection Area: (pts.)	Field Headspace (ppm) 4./  TPH (ppm) 1,210 Method (805)
Distance To SurfaceWater: (pts.)	Other
RANKING SCORE (TOTAL POINTS):	
I HEREBY CERTIFY THAT THE INFORMATION ABOV KNOWLEGE AND BELIEF	'E IS TRUE AND COMPLETE TO THE BEST OF MY
	NAME Buddy D. Shaw  AND TITLE Environmental Coordinator
AFTER REVIEW OF THE SOIL REMEDIATION INFORMACCORDANCE TO THE JICARILLA APACHE TRIBE PAPPROVED: YES NO (REASON)	IT CLOSURE ORDINANCE.
	E: 6-18-99

		·				
CLIENT: AMOCO	P.O. BOX 87,			_ { L	C.D.C. N	0: 83681 10: 7060
FIELD REPORT:	LANDFARM/	COMPOST	PILE CLOS	URE	VERIFIC	ATION
QUAD/UNIT: E SEC: 2	O TWP: ZON RNG:	SW PM: NM		NM D	NATE STARTED:  NOTE FINISHED:  NOTEONMENTAL  PECIALIST:	
SOIL REMEDIATION:  REMEDIATION SYS  LAND USE:	TEM: <u>LANDFAR</u> M		APPROX. CUI			190
FELD NOTES & REMARDED TO THE STATE OF THE GROUNDWATER: > 10 MODERATE - DARK 4	NEAREST WATER	URE STD 5000	РРМ			000
NO AFPARENT STATE DEPTHS BANGE FR FOR LAB ANALUS CLOSED	NING HC ODOR L OM 6"-10" COLL SIS	ETECTED IN	SAMPLING PT TOMPOSTE	T.S). SA	AMFLING	
SAMP. TIME SA	AMPLE I.D. LAB No:			READING	CALC. ppm	
SKETCH/SAMPI	LE LOCATIONS					-

OVM	RESULTS	LAB	SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	4.1	LF.1	(8015)	1120	1,210
	<u> </u>				
<u> </u>			<del> </del>		
			-		
				<del> </del>	

SCALE	
0	FT

TRAVEL NOTES:

ONSITE: 6.299



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

Client: Sample ID: Laboratory Number: Chain of Custody No: Sample Matrix: Preservative: Condition:	Blagg / AMOCO LF - 1 F450 7060 Soil Cool Cool and Intact	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	403410 06-04-99 06-02-99 06-03-99 06-03-99 06-04-99 8015 TPH
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Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	4.7	0.2
Diesel Range (C10 - C28)	1,210	0.1
Total Petroleum Hydrocarbons	1,210	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 A - 3E Landfarm. 5 Pt. Composite.

Deen L. Gener

Stacy W Sendler
Review

# CHAIN OF CUSTODY RECORD

<u> </u>	Cool - Ice/Blue Ice			(505) 632-0615	(505)				
7	Received Intact		64 5 87401	5796 U.S. Highway 64	5796 U.S. Highway 64 Farmington New Mexico 87401				
۲ 2									
eipt	Sample Receipt		S C	다 우	<b>ENVIROTECH IN</b>				
		)	: (Signature	Received by: (Signature)				ure)	Relinquished by: (Signature)
		1	: (Signature	Received by: (Signature)				ure)	Relinquished by: (Signature)
te Time 99 830	Date (-3.99	P. alum	: (Signature	Received by: (Signature)	Date Time			ure)	Relinquished by Signature)
Ē								:	
	Cool								
PESEDE	SAMPLE PRESERVE								
35176	SPT. COMPOSITE		7	,	5011	65h4	1120	6:2:99	1-72
			TP		Sample Matrix	Lab Number	Sample Time	Sample Date	Sample No./
			74 215)	o. of	10	403410			REP.
arks	Remarks		)	'n		Client No.			Sampler:
		2425			A-3E	JICARICLA		000	BLAGE / AMOCO
	METERS	ANALYSIS / BABAMETERS			ANDEMEN	Project Location LANDFARM			Client / Project Name
	VII.								