JICARILLA APACHE TRIBE SEENVIRONMENTAL PROTECTION OFFICE

P.O. BOX 507 DULCE, NEW MEXICO 87528 SUBMIT I COPY TO

NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

NECEIVED AUG 2 0 1999

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY	Telephone: (50) 29-9200
Address: 200 Amoco Court, Farmington, M	NM 87401
Facility or Well Name: TICARILLA APACHE	TRIBAL ISI - SE
	6A R SW County RIO ARRIBA
The state of the s	BLOW
Dand Type.	
In Location.	28', width_ 30'_, depth_ 13'
	other
Footage from reference:9	<u>0'</u>
Direction from reference: $\frac{3}{2}$	9 Degrees X East North Of West South X
	West SouthX_
Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet (20 points) 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)
li .	RANKING SCORE (TOTAL POINTS):

	BJ573 BLOW PIT
	7/10/98
Date Remediation Sta	rted: Date Completed:
mediation Method:	Excavation Approx. cubic yards 300
eck all appropriate sections)	Landfarmed Insitu Bioremediation
·	Other
Remediation Location: (i.e. landfarmed onsite, name and location of	Onsite Offsite
offsite facility) General Description of	of Remedial Action: Excavation, BEDROCK BOTTOM.
Groundwater Encount	tered: No X Yes Depth
Closure Sampling:	Sample location see Attached Documents
attach sample results	Sample depth 7 (EAST SIDEWAL)
locations and depths)	Sample date $\frac{6/29 98}{}$ Sample time $\frac{1030}{}$
	Sample Results
h	Soil: Benzene (ppm) ND Water: Benzene (ppb)
	Total BTEX (ppm) 5.960 Toluene (ppb)
	Field Headspace (ppm) 2749 Ethylbenzene (ppb)
	TPH (ppm) 49.5 Total Xylenes (ppb)
1	: Yes No X (If yes, attach sample results)
I HEREBY CERTIFY KNOWLEGE AND B	THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY ELIEF
DATE	7/10/98 PRINTED NAME Buddy D. Shaw
SIGNATURE BY	ly J. Show AND TITLE Environmental Coordinator
AFTER REVIEW OF TO THE JICARILLA	THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE APACHE TRIBE PIT CLOSURE ORDINANCE.
APPROVED: YES 2	NO (REASON)
SIGNED:	CMc DATE: <u>1-27-98</u>

· · · · · · · · · · · · · · · · · · ·	LOCATION NO: 87573
BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	C.D.C. ND: 6040
FIELD REPORT: CLOSURE VERIFICATION	PAGE No: of
OCATION: NAME: THE AP TRIBOL IST WELL #: SE PIT: BLOW	DATE STARTED: 6/29/98 DATE FINISHED:
QUAD/UNIT: E SEC: 9 TWP: ZEN RNG: 5W PM: NM CNTY: RA ST: NM OTP/FOOTAGE: 1795 FNL 795 FNL CONTRACTOR: P+5	ENVIRONMENTAL SPECIALIST:
EXCAVATION APPROX. 28 FT. x 30 FT. x 13 FT. DEEP. CUBIC DISPOSAL FACILITY: DN-SITE REMEDIATION METHO LAND USE: RANGE LEASE: TIC IS! FOR SIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 90 FT. SIEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >100' NEAREST SURFACE STD: 5000 PPM	EMATION: DK 39E FROM WELLHEAD. E WATER: >1000' CHECK DNE: PIT ABANDONED STEEL TANK INSTALLED FIBERGLASS TANK INSTALLED CLAY PLATTIC, DUIN EXCOURTON
ROTTOM TIME SAMPLE I.D. LAB NO: WEIGHT (g) ml. FREON D	HULTION READING CALC DOM
SCALE O FT PIT PERIMETER N OVM RESULTS SAMPLE FIELD HEADSPACE PID (ppm) 1 @ 8' 2,675 2 @ 7' 2,749 3 @ 8' 8,78 LUCLL D LUCLL D OVM RESULTS 2 # 7' 2,749 3 @ 8' 8,78	PROFILE 23'
TO TO TANK PIT LAE SAMPLES SAMPLE ANALYSIS TIME DOTAL PRESED BOTH PRESED	3 EN 20 CIC



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 2 @ 7' D572 6040 Soil Cool Cool and Intact	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed: Analysis Requested:	04034-10 07-02-98 06-29-98 06-30-98 07-01-98 07-01-98 8015 TPH
Parameter		Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5	- C10)	31.4	0.2
Dissel Penns (C10		18.1	0.1

ND - Parameter not detected at the stated detection limit.

References:

Diesel Range (C10 - C28)

Total Petroleum Hydrocarbons

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

49.5

SW-846, USEPA, December 1996.

Comments:

Jicarilla Apache Tribal #151 - 5E Blow Pit.

Analyst P. Queen

Stacy W Sendler
Review

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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Chain of Custody: Sample Matrix: Preservative: Condition:	Blagg / AMOCO 2 @ 7' D572 6040 Soil Cool Cool & Intact	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Date Extracted: Analysis Requested:	04034-10 07-02-98 06-29-98 06-30-98 07-01-98 07-01-98 BTEX
Parameter		entration Kg)	Det. Limit (ug/Kg)
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene		ND 222 287 4,210 1,240	8.8 8.4 7.6 10.8 5.2
Total BTEX		5,960	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery	
	Trifluorotoluene Bromofluorobenzene	100 % 100 %	

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

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-84

USEPA, December 1996.

Jicarilla Apache Tribal #151 - 5E Blow Pit. **Comments:**

Stacy W Sendler

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

87573 SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT

AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

	Telephone: (505) 326-9200
Operator: AMOCO PRODUCTION COMPANY	
Address: 200 Amoco Court, Farmington, NM 8	37401
Facility or Well Name: JICARILLA APACHE TR	180L 151 - 5€
Location: Unit or Qtr/Qtr Sec_ E Sec_ 9 T26N	RSW County RIO ARRIBA
N Laborary Other	
Pit Type: Separator X Denydrator Other Land Type: RANGE	
Land Type: KANGE	
Pit Location: Pit dimensions: length 31'	, width34', depth16'
(Attach diagram) Reference: wellhead X, other	er
Footage from reference: 115	
Direction from reference: 77	Degrees East North X
	West South
contaminants to seasonal high water elevation of	Less than 50 feet (20 points) 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) o No (0 points)
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, rrigation canals and ditches)	Less than 100 feet (20 points) 100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)
	ANKING SCORE (TOTAL POINTS):

RJ573 SEP. PIT

		134313	
Data Domadiation Sta	rted:	Date Completed:	7/10/98
		Approx. cubic yards	600
mediation Method: eck all appropriate	Excavation		
ections)	Landfarmed X		
	Other		
Remediation Location i.e. landfarmed onsite, name and location of	: Onsite X Offsite		
Chien facility)	of Remedial Action: Excavation	on, BEDROCK BOTTOM	
Groundwater Encoun	tered: No X Yes	Depth	-
Final Pit: Closure Sampling: (if multiple samples,	Sample locationsee Attached		
attach sample results	Sample depth10' (west	SIDEWALL)	
and diagram of sample locations and depths)	Sample date6/29/98	Sample time	0915
	Sample Results		
	•	0.293 Water: Benze	ne (ppb)
	Total BTEX (ppm)		ne (ppb)
	Field Headspace (ppm)		penzene (ppb)
			Xylenes (ppb)
	e: Yes No _X		
I HEREBY CERTIFY KNOWLEGE AND I	Y THAT THE INFORMATION ABO BELIEF	VE IS TRUE AND COMPLE	TE TO THE BEST OF M
DATE	7/10/98 PRINTED N	NAME Buddy D. Shaw	
SIGNATURE BY	Our A. Show AND TIT	TLE Environmental	Coordinator
SIGIVITO III	F THE PIT CLOSURE INFORMATION A APACHE TRIBE PIT CLOSURE (ON PIT CLOSURE IS APPI	ROVED IN ACCORDANC
APPROVED: YES_	NO (REASON)		
SIGNED:	DATE:	: 1-27-98	

3003923164 LOCATION NO: BT573 BLAGG ENGINEERING, INC. CLIENT: AMOCO P.O. BOX 87, BLOOMFIELD, NM 87413 C.D.C. ND: 6040 (505) 632-1199FIELD REPORT: CLOSURE VERIFICATION PAGE NO: _ DATE STARTED: 6/29/98 LOCATION: NAME: JICA. AP. TRIBAL 151 WELL # 5E PIT: SEP. DATE FINISHED: QUAD/UNITE SEC: 9 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM ENVIRONMENTAL OTR/FOOTAGE: 1795 FWL 795 FWL CONTRACTOR: P +5 CUBIC YARDAGE: 600 EXCAVATION APPROX. 31 FT. x 34 FT. x 16 FT. DEEP. DISPOSAL FACILITY: ON- SITE REMEDIATION METHOD: LANDFARM LAND USE: RANGE LEASE: JIC 151 FORMATION: FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 115 FT. MIN FROM WELLHEAD. DEPTH TO GROUNDWATER: >/OO' NEAREST WATER SOURCE: >/OOO' NEAREST SURFACE WATER: >/OOO' NMOCD RANKING SCORE: O NMOCD TPH CLOSURE STD: 5000 PPM ✓ PIT ABANDONED ____ STEEL TANK INSTALLED SOIL AND EXCAVATION DESCRIPTION: _ FIBERGLASS TANK INSTALLED SIDEWALLS - MOSTLY DUSKY RED/MED. GRAY SILTY CLAY SUGATLY PLASTIC TO PLASTIC, SLIGHTLY MOIST FIRM TO STIFF, STRING HE OWR OBSERVED WILL EXCOUNTED + OUM SAMPLES, LIVERE TO DISCERN STRINING burING SAMPLING. BEDIDOK (SHALE), VERY PAIR DRANGE TO IT, GRAY IN COLOR, WERY HALD, NO APPARENT HE ODOR IN OUM SUMPLE. CLOSED BEDROCK FIELD 418.1 CALCULATIONS SAMPLE I.D. LAB No: WEIGHT (g) ML. FREON DILUTION READING CALC. ppm BOTTOM TIME 0915 SCALE FT PROFILE PIT PERIMETER 1 OVMRESULTS FIELD HEADSPACE PID (ppm) SAMPLE 1,604 € 10 3.108 3**e** 10 3 BEDROCK SEP LAB SAMPLES ANALYSIS 4) E10' TPH BTEX 0915 BOTH ASSED TRAVEL NOTES CALLOUT: 6/25/98 - AFTER. ONSITE: 6/29/98 - MORN.



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / AMOCO Sample ID: 4 @ 10' Laboratory Number: D571 Chain of Custody No: 6040 Sample Matrix: Soil Preservative: Cool Condition: Cool and Intact	Project #: 04034-10 Date Reported: 07-02-98 Date Sampled: 06-29-98 Date Received: 06-30-98 Date Extracted: 07-01-98 Date Analyzed: 07-01-98 Analysis Requested: 8015 TPH
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Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	50.9	0.2
Diesel Range (C10 - C28)	29.8	0.1
Total Petroleum Hydrocarbons	80.7	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 Tribal #151 - 5E Separator Pit.

Analyst

Stacy W Sendler
Review

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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Blagg / AMOCO Sample ID: 4 @ 10' Laboratory Number: D571 Chain of Custody: 6040 Sample Matrix: Soil Preservative: Cool Condition: Cool & Intact	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Date Extracted: Analysis Requested:	04034-10 07-02-98 06-29-98 06-30-98 07-01-98 07-01-98 BTEX
---	---	--

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Donnena	293	8.8
Benzene Toluene	148	8.4
Ethylbenzene	253	7.6
p,m-Xylene	3,150	10.8
o-Xylene	971	5.2
Total BTEX	4,820	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene Bromofluorobenzene	97 % 97 %

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-82

USEPA, December 1996.

Comments:

Jicarilla Apache Tribal #151 - 5E Separator Pit.

Analyst P. Ogicer

Stacy W Sendler
Review

CHAIN OF CUSTODY RECORD

Farmington, I (505)	5796 U.		1040 - 1041	Relinquished by: (Signature)	12	Relinquished by: (Signature) Date Time				E)@7' 6/29/98/030 D572 5012	4) @ 10' 6/29/980915 D571 5012	Sample No./ Sample Sample Lab Number Sample Matrix	NTV Client No. 04.34-10	TRIBAL #151 -
Farmington, New Mexico 8/401 (505) 632-0615	5796 U.S. Highway 64		TECH IOC.	Received by: (Signature)	Received by: (Signature)	Received by: (Signature)				1 \ \ \	\ \ \	Cor	lo. of intainers PH (15)	SE ANALYSIS / PARAMETERS
Cool - Ice/Blue Ice	Received Intact	Y N NA	Sample Receipt			0.30.98 1425				BLOW PIT	SEPARATOR MT	PROBLY - COOL	BOTH SAMMES	AMETERS

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,	NM 87401
Facility or Well Name: SICABILLA APACHE TRIBAL	151. 5E
Location: Unit or Qtr/Qtr Sec & Sec 9 T2	PLN R SW County BIO ARRIBA
Land Type: RANGE	
Date Remediation Started: 6 29 98	
Remediation Method: Landfarmed	Approx. cubic yards 900
Composted Other	
oth To Groundwater: (pts.)	Final Closure Sampling:
Distance to an Ephemeral Stream (pts.)	Sampling Date: 1.2099 Time: 1100
Distance to Nearest Lake, Playa, or Watering Pond (pts.) Wellhead Protection Area: (pts.) Distance To SurfaceWater: (pts.)	Sample Results: Field Headspace (ppm) 0.0 TPH (ppm) 3.0 Method 8015
RANKING SCORE (TOTAL POINTS):	Other
I HEREBY CERTIFY THAT THE INFORMATION ABOVE KNOWLEGE AND BELIEF	E IS TRUE AND COMPLETE TO THE BEST OF MY
SIGNATURE Bully S. Shaw	NAME Buddy D. Shaw AND TITLE Environmental Coordinator
AFTER REVIEW OF THE SOIL REMEDIATION INFORM ACCORDANCE TO THE JICARILLA APACHE TRIBE PI	1 CLOSURE ORDINANCE.
APPROVED: YES X NO (REASON)	
DATE	: 3-31-99

BLAGG ENGINEERING, INC. CLIENT: _ AMOCO

P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199

LOCATION NO: BJ578

C.O.C. NO: 6561

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

SICABILLA APACHE

LOCATION: NAME:

TRIBAL 151 WELL #: SE PITS: SEP., BLOW

DATE STARTED: 1.2099 DATE FINISHED: 1 22 99

QUAD/UNIT: E SEC: 9 TWP: 20N RNG: SW PM: NM CNTY: RA ST: NM

SPECIALIST:

ENVIRONMENTAL REP

OTP/FOOTAGE: SW/4 NW/4 CONTRACTOR: P+5

SOIL REMEDIATION:

REMEDIATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 900

LAND USE:

RANGE

LIFT DEPTH (ft): /:/.s__

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: > 100' NEAREST WATER SOURCE: > 1000' NEAREST SURFACE WATER: > 1000'

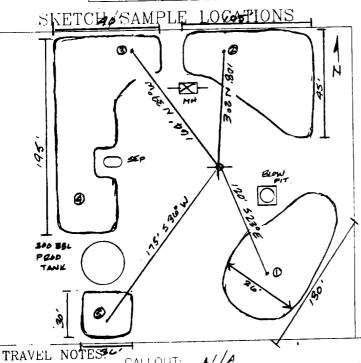
NMBCI: RANKING SCORE: ______ NMBCD TPH CLOSURE STD: _____ PPM

DK. YELLOWEH ORANGE - BROWN SAND, NON CONESIVE, SLIGHTLY MOIST, FIRM NO STAINING OBSERVED OR HE ODOR DETECTED SAMPLING DEPTHS BANGE FROM 6"-12", TOOK A SPT COMPOSITE SAMPLE FOR LAB ANALYSIS

CLOSED

FIELD 418.1 CALCULATIONS

SAMPLE L	D. LAE	No:	WEIGHT	(g)	mL.	FREON	DILUTION	READING	CALC.	ppm
								_		
			1							
										
	į									
										
										SAMPLE I.D. LAB No: WEIGHT (g) ML. FREON DILUTION READING CALC.



CALLOUT: _ A/A

OVM RESULTS LAB SAMPLES

O V IVI	CEDUCIE				
SAMPLE	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF.1	(BO15)	1100	3.0
			<u></u>		

SCALE

FT

ONSITE: _ 1.20 99



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #: Date Reported: Date Sampled: Date Received: Date Extracted:	04034-10
Sample ID:	LF - 1		01-22-99
Laboratory Number:	E563		01-20-99
Chain of Custody No:	6561		01-21-99
Sample Matrix:	Soil		01-22-99
Preservative: Condition:	Cool and Intact	Date Analyzed: Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.4	0.2
Diesel Range (C10 - C28)	1.6	0.1
Total Petroleum Hydrocarbons	3.0	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 Tribal 151 - 5E Landfarm. 5 Pt. Composite.

Analyst L. Cheur

Stacy W Sendler.
Review

CHAIN OF CUSTODY RECORD

	Cool - Ice/Blue Ice		(505) 632-0615	(505)				
+	Received Intact	1	5796 U.S. Highway 64	5796 U.S. Highway 64 Farmington, New Mexico 87401				
Z	4					(6	18000
X	Sample Receipt		ECH ECH	FOVIDOTECH IO		-65-6	3	0-0000 (174-656)
		Signature)	Received by: (Signature)				lure)	Relinquished by: (Signature)
		Signature)	Received by: (Signature)				ure)	Relinquished by: (Signature)
Date Time	Date /.2/-9	signature), Oleccom	Received by: (Signature)	Date Time			/ ure)	Relinquished by: Signature)
	COOL							
34.08.3	SAMPLE PRESENTE							
SHE	SPT. COMPOSITE	7		SOIL	£513	lloo	1.20.99 1100	LF. 1
		177	Con	Sample Matrix	Lab Number	Sample Time	Sample Date	Sample No./ Identification
		, s)	o. of	-10	01-450+0			Campier.
-	Remarks				Client No.			curry).
	TERS	ANALYSIS / PARAMETERS	٦	Project Location LANDFARM TICAPILLA APACHE TEIBAL	Project Location 24		000	Client / Project Name RADIAL / AMOCO