JENNY OIL & GAS INSPECTOR ENVIRONMENTAL PROTECTION OFFICE P.O. BOX 507 **DULCE, NEW MEXICO 87528**

AND OIL & GAS ADMINISTRATION

AUG 1 3 1999

Operator: AMOCO PRODUCTION COMPANY	Telephone:	(505)326-9200
Address: 200 Amoco Court, Farmington,	NM 87401	
Facility or Well Name: JICARILIA C	8 A	
Location: Unit or Qtr/Qtr Sec A Sec 13 T.	26N RSW County RLO	Neelba
Pit Type: Separator Dehydrator Other	prod. Thek	•
Land Type: PAP6E		
(Attach diagram) Reference: wellhead X , Footage from reference:	Degrees X East of	_
Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	50 feet to 99 feet (20 points) 10 points) (0 points)
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)
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)		(10 points) (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 No	(20 points) (0 points)
Distance To SurfaceWater: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	100 feet to 1000 feet	(20 points) (10 points) (0 points)
	RANKING SCORE (TOTAL P	OINTS): O

Date Remediation Started:	Date Completed:
Pemediation Method: Excavation K	Approx. cubic yards
.ieck all appropriate sections) Landfarmed	Insitu Bioremediation
, ————————————————————————————————————	
General Description of Remedial Action: Excavation	INTO BEIROCK
Groundwater Encountered: NoX Yes	Depth
Final Pit: Sample location see Attached Closure Sampling: (if multiple samples,	
attach sample results and diagram of sample Sample depth6'	
	Sample time
Sample Results	
•	Water: Benzene (ppb)
Total BTEX (ppm)	m (1)
Field Headspace (ppm)	
TPH (ppm)	91H
Groundwater Sample: Yes NoX (I	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 9-((- 96 PRINTED NA	ME Buddy D. Shaw
SIGNATURE BURLY D. Show AND TITLE	- 1 Condinator
AFTER REVIEW OF THE PIT CLOSURE INFORMATION TO THE JICARILLA APACHE TRIBE PIT CLOSURE OR	I, PIT CLOSURE IS APPROVED IN ACCORDANCE DINANCE.
APPROVED: YES X NO (REASON)	
SIGNED: Kee C. Mand DATE:	9-17-96

CLIENT: Amo Co	BLAGG EN P.O. BOX 87, BL (505)	•		C.O.C. NO:
FIELD	REPORT: PIT	CLOSURE VE	RIFICATIO	ON
	TWP: 26 N RNG: 5 W	BM: NM CNTY: R	A ST: NM	DATE STARTED: 9-10-96 DATE FINISHED: ENVIRONMENTAL SPECIALIST: PEG
	OP-SITE LEASE:	REMEDIA	TION METHOD	LAMPAN
FIELD NOTES & REMAR				3
NMOCD RANKING SCORE:			AREST SURFACE	WATER: 27000
SOIL AND EXCAVATION D			BAND ON ED	
	Begent- No S			i
SCALE 0 5 10FT PIT PERIMI	.D. LAB No: WEIGHT (g)	OVM SULTS CALCULATIONS DILUTION	READING CALC	BED ROCK PROFILE
N BEEN PROD TANK	1 NS-4' 2 ES-4 3 WS-3 4 CB-6' 5		4 / /) 8	16'
TRAVEL NOTES: CALLOUT:	9-9-96	ONSITE:9	1-10-96	1330 FORM REVISED 7/95

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

SUBMIT 1 COPY TO

NATURAL RESOURCE DEPI

AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY	Telephone: (505)326-9200
Address: 200 Amoco Court, Farmington,	NM 87401
Facility or Well Name: JICAPILLA C *	8 A
Location: Unit or Qtr/Qtr Sec_A Sec_13 T	26 N R 5 County RIO ARRIGA
Pit Type: Separator X Dehydrator Other	
Land Type: RAP6E	
(Attach diagram) Reference: wellhead X	40', width 20', depth 7'
Footage from reference: Direction from reference:	
Direction from ference.	West South
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)
	RANKING SCORE (TOTAL POINTS):

Date Remediation Start	ted:	Date Completed:	9-10-96
	Excavation <u>K</u>	Approx. cubic yards	200
neck all appropriate sections)	Landfarmed <u>K</u>	Insitu Bioremediation	
	Other		
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)	Onsite X Offsite		
General Description of	Remedial Action: Excavation	INTO BENROCH	<u>c</u>
Groundwater Encounter	red: No <u>X</u> Yes	Depth	
Final Pit: Sa Closure Sampling: (if multiple samples,	ample location <u>see Attached D</u>	ocuments	
attach sample results and diagram of sample Sa	imple depth		
locations and denths)	imple date 9-10- 16	Sample time	
	mple Results		
	Soil: Benzene (ppm)	Water: Benzene	(ppb)
	Total BTEX (ppm)	Toluene	(ppb)
	Field Headspace (ppm) 14	<u>(</u> Ethylbenz	ene (ppb)
	ТРН (ppm) <u>М</u> А	Total Xyle	enes (ppb)
Groundwater Sample:	Yes NoX (If	yes, attach sample results)	
I HEREBY CERTIFY TI KNOWLEGE AND BELI	HAT THE INFORMATION ABOVE IS IEF	S TRUE AND COMPLETE	TO THE BEST OF MY
DATE 9-11	1-96 PRINTED NAMI	E Buddy D. Shaw	
SIGNATURE BULL	AND TITLE	Environmental Co	ordinator
	IE PIT CLOSURE INFORMATION, I PACHE TRIBE PIT CLOSURE ORDI		ED IN ACCORDANCE
APPROVED: YES X	NO (REASON)		
SIGNED: Kinc	M and DATE: 9-	-17-96	

CLIENT: AMOCO	BLAGG ENC P.O. BOX 87, BLC (505)		87413	C.O.C. NO:
FIELD	REPORT: PIT (CLOSURE VERI	FICATION	
QUAD/UNIT: A SEC: 13 T	LA C # 8 A WP: 26 N RNG: 5 W E VE CONT	BM: MM CNTY: RA S	ST: NM DA	TE STARTED: 9-10-96 TE FINISHED: VIRONMENTAL PED
	20 FT. x 40 FT. ON-SITE THEE LEASE:			1
FIELD NOTES & REMAR DEPTH TO GROUNDWATER: >10	KS: PIT LOCATED APPRE	IXIMATELY 90	FEET NOR	TH FROM WELLHEAD.
NMOCD RANKING SCORE: 0			SI SURFACE W	ATER:
SOIL AND EXCAVATION DE	ESCRIPTION: PIT DISP	OSITION:ABA	MONED	
NO 79H SAMPLES RI	FIELD 418.1 D. LAB No: WEIGHT (g) m	CALCULATIONS L. FREON DILUTION REA	DING CALC. pi	BENFOCH
PII PERIME	SURFACE SAMPLE	ULTS FIELD HEADSPACE	PII PI	ROFILE
N PED TO SEP	SANTE DE SANTE DE LAE	FIELD HEADSPACE PID (pprn) 3 2 1 466 - BEDDOCK 14 3 SAMPLES	BOOM	och
TRAVEL NOTES: CALLOUT:	9-9-96	ONSITE:9-10-	-96	245

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla C #8A

Unit B. Sec. 13, T26N, R5W

Separator Pit

Blanco Mesaverde

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered siltstone/claystone bedrock at 7 feet below grade.

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

- Past production fluids were contained locally by a relatively shallow siltstone/claystone bedrock located 7 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below siltstone/claystone 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 1.00 miles north northwest of the nearest vulnerable area boundary (Tapacito Creek).

(Refer to Lapis Point 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 siltstone/claystone 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.

BJ433

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	
Address: 200 Amoco Court, Farmington,	NM 87401
Facility or Well Name: JICARIUA C #	8A
Location: Unit or Qtr/Qtr Sec A Sec 3 T-2	SN RSW County RIO ARRISA
Land Type: RANGE	
Date Remediation Started: 9/10/96	Date Completed: 5/7/98
Remediation Method: Landfarmed	Approx. cubic yards ZZO
Composted	
Other	
oth To Groundwater: (pts.)	Final Closure Sampling:
Distance to an Ephemeral Stream (pts.)	Sampling Date: <u>5/6/98</u> Time: <u>0900</u>
Distance to Nearest Lake, Playa,	Sample Results:
	Field Headspace (ppm) 0.0
Treatment 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TPH (ppm) <u>/03</u> Method <u>8015</u>
Distance 10 Date 10 Da	Other
RANKING SCORE (TOTAL POINTS):	GOVERN PURE TO THE DEST OF MY
I HEREBY CERTIFY THAT THE INFORMATION ABOVE KNOWLEGE AND BELIEF	
DATE 5/7/98 , PRINTED I	NAME Buddy D. Shaw
II ,	NAME Buddy D. Shaw AND TITLE Environmental Coordinator
AFTER REVIEW OF THE SOIL REMEDIATION INFORM ACCORDANCE TO THE JICARILLA APACHE TRIBE P	
APPROVED: YES NO (REASON)	
SIGNED: DATI	E:

P.O. BOX 87, BLC	NEERING, INC. OMFIELD, NM 874 632-1199	FUCILITIES STATE
FIELD REPORT: LANDFARM/COM	POST PILE CLOS	URE VERIFICATION
LOCATION: NAME: JICARILLA C WELL #: 84		DATE STARTED: 5698 DATE FINISHED:
QUAD/UNIT: A SEC:/3 TWP: 26N RNG: 5W QTR/FUUTAGE: NE/4 NE/4 CONTRACTOR:		ENVIRONMENTAL SPECIALIST: NV
SOIL REMEDIATION:		
REMEDIATION SYSTEM: LANDFARM	ADDDOV CUD	IC VADDACE. ZZO
LAND USE: RANGE	LIFT DEPTH	(ft): 2-3
FIELD NOTES & REMARKS:	.	ì
DEPTH TO GROUNDWATER: >/DO' NEAREST WATER SOURCE	NEAREST S	URFACE WATER: >/000 '
NMOCD RANKING SCORE:O NMOCD TPH CLOSURE STI	: <u>5000</u> PPM	n and no
SOIL CONSIST OF MOSTLY CLIVE GENT	TO OLILE BLACK CH	AY PLASTIC TO HIGHLY
PLASTIC, SLIGHTLY MOIST TO MOIST	SAMPLE PTS. 0 + &	COLLECTED 5 PT.
PLASTIC, SLIGHTLY MOIST TO MOIST IN COMPOSITE FOR LAB ANALYSIS.		
FIELD 418	1 CALCULATIONS	
SAMP. TIME SAMPLE I.D. LAB No: WEIGHT	(g) mL. FREON DILUTION R	EADING CALC. ppm
SKETCH/SAMPLE LOCATIONS N #		
BRETOTI BRAIT BE BOOTHTONG (1)		
T		
€ 0 40'	OVM RESULTS	LAB SAMPLES
		SAMPLE ANALYSIS TIME RESULTS
3		1-1 (8015) 0900 103
115'		
TROM WELL HEAD		
WELL HEND		
2F-1	<u> </u>	
STAMPLE PT. DESIGNATION	SCALE	
-	DOALE	
	O FT	
TRAVEL NOTES: CALLOUT:	ONSITE: 5/6/98	



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

Client:	Blagg / Amoco	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	05-07-98
Laboratory Number:	D230	Date Sampled:	05-06-98
Chain of Custody No:	5771	Date Received:	05-06-98
Sample Matrix:	Soil	Date Extracted:	05-07-98
Preservative:	Cool	Date Analyzed:	05-07-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	54.5	0.2
Diesel Range (C10 - C28)	48.4	0.1
Total Petroleum Hydrocarbons	103	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 #8A Landfarm. 5 Pt. Composite.

Stacy W Sendler

	O	HAIN OF CUST	CHAIN OF CUSTODY RECORD	
Client/Project Name	Project Location	LANDFRAM	ANALYSIS/PARAMETERS	
ElASS Amoco	JICARULA	C #8A		
Sampler: (Signature)	Chain of Custody Tape No.	No.)	Remarks
Motion Vel	0175070	O		
Sample No./ Sample Sample Identification Date Time	Lab Number	Sample Matrix	No Conta	I MESERV COC
0260 86/9/5 1-27	D 230	5012	- <	5 PT. COMPOSITE
		SAMPLE	THE RECEIMED COOL & INTOCT	D.A
Relinquished by: (Signature)		Date Time	Received by: (Signature)	5.6.87 1424
Relinquished by: (Signature)			Received by: (Signature)	
Relinquished by: (Signature)			Received by: (Signature)	
Per cac's 5771 + 5775	79	ENVIROT 5796 U.S. Hig Farmington, Ne (505) 6	ENVIROTECH INC. 5796 U.S. Highway 64-3014 Farmington, New Mexico 87401 (505) 632-0615	