District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

District III

.00 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Department

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

MAY 2001

### PIT REMEDIATION AND CLOSURE REPORT

		(505) - 326-0200
Operator:	Amoco Production Company	Telephone: (505) - 326-9200
Address:	200 Amoco Court, Farmington	n, New Mexico 87401
Pacility Or: Well Name	FLORANCE #45	
		- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ - \ \ - \ \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \ - \
		ec 72 T30N R8W County 5AN JWAN
Pit Type: Sepa	Aggwovw€D Dehydrator ✓ C	ther
Land Type: BI	M √, State, Fee	, Other
Pit Location: (Attach diagram)	Reference: wellhead $\times$	15', width 25', depth 6',
	Footage from reference:	180
		•
	Direction from reference	e: 8 Degrees / East North
		West South/
		West boutin
		tone then so seek (20 moints)
Depth To Groun		Less than 50 feet (20 points) 50 feet to 99 feet (10 points)
(Vertical distant		Greater than 100 feet (0 Points)
contaminants to		Greater than 100 reet (0 Points)
high water elevat ground water)	cion of	
ground masse,		
Wellhead Prote		Yes (20 points)
)	eet from a private	No (0 points)
	ource, or; less than	
1000 reet from a	ll other water sources)	
Distance To Su	rface Water:	Less than 200 feet (20 points)
II .	ance to perennial	200 feet to 1000 feet (10 points)
	vers, streams, creeks,	Greater than 1000 feet (0 points)
irrigation canal	s and ditches)	_
		RANKING SCORE (TOTAL POINTS):
		amminate pools (south)

80796 ABAN. DEHY.

Date Remediation St	arted:	Date Completed:	9/27/00
		Approx. cubic yards	
(Check all appropriate		Insitu Bioremediation	
sections)	Other Composted		·
	OCHET COLIBORIED		
		eito nur (= 0-etc (= -	- 79-9)
Remediation Location (ie. landfarmed onsite,	u. OnsiteOff	TRANSPORTED TO CROUCH I	MESA 3/01.
name and location of offsite facility)		THE PARTY OF THE P	<u> </u>
		:	
Excavation	on, mostly bedrock	. RISK ASSESSED.	<del></del>
Ground Water Encoun	tered: No _/	Yes Depth	
		Annat 1 D	
Final Pit: Closure Sampling:	Sample location	see Attached Documents	
(if multiple samples, attach sample results		21/	
and diagram of sample locations and depths)		3 (SONTH SIDEWALL)	/350
	Sample date 9/zs/	Sample time	1530
	Sample Results		
·	Benzene(ppm)		
	Total BTEX(pp	I WATH SIDEWALL (BE	FORECK)
	Field headspa	ce(ppm) 138.1 / 1,544	,
	TPH <u>0.5 ppm</u>		
		/ /76	acultal
Ground Water Sample	Yes No V	/ (If yes, attach sample r	esuics)
		ABOVE IS TRUE AND COMPLETE	TO THE BEST
OF MY KNOWLEDGE AND			
DATE 9/27/00	PRINTED	NAME Buddy D. Sh E Environmental Co	AW,
SIGNATURE ( )	aw and titl	E Environmental Co	pordinator

300450935Z CLIENT: AMOCO BLAGG ENGINEERING, INC. LOCATION NO: 80796 P.O. BOX 87, BLOOMFIELD, NM 87413 C.O.C. NO: 7498 (505) 632-1199FIELD REPORT: CLOSURE VERIFICATION PAGE No: / of / DATE STARTED: 9/25/00 LOCATION: NAME: FLORENCE WELL #: 45 PIT: ABAN . DEHY DATE FINISHED: QUAD/UNIT: G SEC: ZZ TWP: 300 RNG: 8W PM: NM CNTY: 5J ST: NM ENVIRONMENTAL QTR/FOOTAGE: 1550 > (1500) E SUNW CONTRACTOR: FUNT SPECIALIST: EXCAVATION APPROX. 15 FT. x 25 FT. x 6 FT. DEEP. CUBIC YARDAGE: 60 DISPOSAL FACILITY: NYE GC BIE (E-7-19-9) REMEDIATION METHOD: COMPOSTED LAND USE: \_ RANGE LEASE: 91-00/247 FORMATION: FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>180</u> FT. <u>586</u> FROM WELLHEAD DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000' CHECK DNE NMOCD RANKING SCORE: \_\_\_\_ NMOCD TPH CLOSURE STD: \_5000 PPM PIT ABANDONED SDIL AND EXCAVATION DVM CALIB. READ. 52-3 ppm \_\_\_\_\_ STEEL TANK INSTALLED TIME: 1351 am/pm 9/25/00 \_ \_\_\_ FIBERGLASS TANK INSTALLED DESCRIPTION: EXERCIATION CONSIST OF MOSTLY BEORDOCK (SHOLE/SANDSTONE) OR YELL ORDINGE TO MED OK. GRAY (BOTTOM & BOTTOM Z FT. OF SLOTUALLS) SOFT NEOR TOP TO UTRY HAND & BOTTOM STILLING HE ODOR PETECTED IN NORTH SIDEWALL & PIT BUITOM OUR TAMPLES (COLLECTED FROM BEORDEX) EAST I SOUTH TIDEWALL OUR SAMPLES COLLECTED FROM 5012 (OX. YELL. GRANGE SILTY SAND) DIKELTLY ABOVE BEDROCK WEST SIDEWALL OUT JAMPLE COLLECTED FROM SOIL (OX. YELL, BROWN JAND) poirectly aroue bedrock as well. MOSTLY BEORCEX RISK ASSESSED (5h/55) FIELD 418.1 CALCULATIONS WEIGHT (g) mL. FREON DILUTION READING CALC. ppm SAMPLE I.D. TIME LAB No: SCALE 1350 0 FT PIT PERIMETER AN PROFILE OVM RESULTS wer FIELD HEADSPACE PID (ppm) SAMPLE HEAD 0.0 138.1 6 93.5 5 0 6 SHALE / SANDSTONE ➂ LAB SAMPLES zuk pact 15 T ANALYSIS V GRADIENT TPH (80 %) 1350 Be3 DIRECTION BTGX (8021) BOTH PASSED TRAVEL NOTES: CALLOUT: 9/25/00 -marn. ONSITE: 9/25/00 -AFTEX.

Well Name: Well Site location:

Pit Type: **Producing Formation:** 

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Florance #45 Unit G, Sec. 22, T30N, R8W Abandoned Dehydrator Pit Mesa Verde Non Vulnerable > 1000 ft. > 100 ft.

## RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when backhoe encountered competent shale/sandstone at 6 feet below grade.

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

- Groundwater levels located on or close to the well pad are estimated to be at a much 1. greater depth below shallow shale/sandstone bedrock.
- Topographic information does not indicate off site lateral fluid migration near the earthen 2.
- Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge 3. into the pit is believed to be under 5 barrels per day.
- Well site located within the non-vulnerable area and is approximately 0.15 miles north of 4. the nearest vulnerable area boundary (Gobernador Canyon wash).

(Refer to Archuleta Quadrangle, New Mexico - San Juan County, 7.5 Minute Series (Topographic), Provisional edition, 1985, (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 subsurface vertical and lateral impact from the earthen pit is very limited and that the shale/sandstone bottom creates enough of a impermeable barrier as to subdue impact to groundwater below it (please refer to BP AMOCO's (formerly Amoco Production Company) report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). BP AMOCO therefore request pit closure approval on this location.



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

Client:	Blagg / BP	Project #:	403410
Sample ID:	3 @ 3'	Date Reported:	09-27-00
Laboratory Number:	18235	Date Sampled:	09-25-00
Chain of Custody No:	7498	Date Received:	09-27-00
Sample Matrix:	Soil	Date Extracted:	09-27-00
Preservative:	Cool	Date Analyzed:	09-27-00
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.3	0.2
Diesel Range (C10 - C28)	0.2	0.1
Total Petroleum Hydrocarbons	0.5	0.1

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:

Florance #45 Abandoned Dehydrator Pit.

Analyst Cefeee

Christin m Walters



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / BP	Project #:	403410
Sample ID:	3 @ 3'	Date Reported:	09-27-00
Laboratory Number:	18235	Date Sampled:	09-25-00
Chain of Custody:	7498	Date Received:	09-27-00
Sample Matrix:	Soil	Date Analyzed:	09-27-00
Preservative:	Cool	Date Extracted:	09-27-00
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
- urumotor	(ugmg)	(49/1/9/
Benzene	ND	1.8
Toluene	31.6	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	87.4	2.2
o-Xylene	67.4	1.0
Total BTEX	186	

ND - Parameter not detected at the stated detection limit.

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

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:

Florance #45 Abandoned Dehydrator Pit.

Allen L. Opence

Misting Mades

# CHAIN OF CUS FODY RECORD

Sample   National Property   Sample	Client / Project Name  \$246  &P			Project Location A	Project Location ABA・DoweD DSHKのATOL PTT デジスタハンモ ギ イS				ANALYSIS / PARAMETERS	/ PARAN	AETERS		
Sample   Sample   Sample   Zero   Sample   Zero   Sample   Zero   Sample   Zero   Sample   Zero   Sample   Zero	Sampler:				410	o. of	H9T.	SEX.				Remarks	
1350   1352   1304   1   1   1   1   1   1   1   1   1	Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	N Cont	رد. و <b>9</b>	(£0.r.)					
Date   Time   Received by: (Signature)   Part   Time   Paceived by: (Signature)   Part   Time   Paceived by: (Signature)   Part   Time   Paceived by: (Signature)   Part   Paceived by: (Signature)   Pa	æ3'	25/00	/350	18235	2015	~	>	`>			PRESE	3	700
Date Time Received by: (Signature)  Proposed by: (Signature)  Received Infact  Farmington, New Mexico 87401  Cool - LoadBue Ice													
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Date Time Received by: (Signature)  And													
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					5796 U.S.	Highway Mexico	64 87401			<u> </u>	Received Inta	lot /	
					(505)	532-0615		_			Cool - Ice/Blue	8	