District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
Crict III
1000 Rio Brazos Rd, Aztoc, NM 87410

Energy, Minerals and Natural Resources Department

Risk

Coll Conservation Division

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE MAR 2001

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

9/12/01

PIT REMEDIATION AND CLOSURE REPORT

Operator:	Amoco Production Company	Telephone: (505) - 326-9200
	200 Amoco Court, Farmington	n, New Mexico 87401
	6cu # 96	
Location: Unit	or Qtr/Qtr Sec 5 s	ec 18 T292 RIZW County SAN JUAN
)ther
Land Type: BL	M, State, Fee/	, Other
it Location: .ttach diagram)		n 26', width 24', depth 17
	Footage from reference:	140'
	Direction from reference	ce: Degrees East North
		of
Depth To Groun (Vertical distance contaminants to s high water elevat ground water)	e from	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)
domestic water so	ction Area: et from a private curce, or; less than l other water sources)	Yes (20 points) No (0 points)
	nce to perennial ers, streams, creeks,	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)
		RANKING SCORE (TOTAL POINTS):

Date Remediation St	arted:	Date * Completed:	2/9/00
emediation Method:	Excavation X		
(Check all appropriate sections)	Landfarmed X		
		· 	
Remediation Locatio (ie. landfarmed onsite, name and location of offsite facility)		Offsite X Amocs Clouch MESA	
		tion:	
Excavation	on . BEDROCK B	Collom .	
			
Ground Water Encoun	tered: No >	✓ Yes Depth	
Final Pit: Closure Sampling: (if multiple samples,	Sample location	see Attached Documents	
attach sample results and diagram of sample	Sample depth	11' (NORTH SIDELLALL)	
locations and depths)		Z/g/00 Sample time	1410
	Sample Results		
	- Benzene (pr	om) 0.0113	
		((ppm) _0.472	
		dspace(ppm) 372(
	TPH _ z 44		
	** ** <u>,</u>	· · · · · · · · · · · · · · · · · · ·	
Ground Water Sample:	Yes No	$\frac{1}{2}$ (If yes, attach sample r	results)
TE MY KNOWLEDGE AND	AT THE INFORMATI BELIEF	ON ABOVE IS TRUE AND COMPLETE	E TO THE BEST
DATE 2/9/00		RIINCI	
SIGNATURE BASA	aw AND T	PED NAME Buddy D. Sh PITLE Environmental Co	AU

BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	C.S.C. NG: 7460
	GE No: 1 of 1
LOCATION: NAME: GCW WELL #: 96 PIT: SEP.	STARTED: 2/8/60 FINISHED: 2/8/00
QUAD/UNIT: SEC: 18 TWP: Z9N RNG: 12W PM: NM CNTY: 3 T ST: NM	RONMENTAL NJ
EXCAVATION APPROX. 26 FT. x 24 FT. x 17 FT. DEEP. CUBIC YA	
DISPOSAL FACILITY: Armen Clouch MEST FACILITY REMEDIATION METHOD	i
LAND USE: RANGE / PREDEUELOPMENT LEASE: FEE FORMA	rion: bk
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 140 FT. DUE W	
DEPTH TO GROUNDWATER: 7100' NEAREST WATER SOURCE: 7100' NEAREST SURFACE WATER	TER: > 10 00 1
CELL AND EVOLVATION DECODIDITION	ABANDONED
	EL TANK INSTALLED ERGLASS TANK INSTALLED
NO. 5 30. TIDEWALLE COE F. ON	COLECTED MANIFEST OR BOL SHEETS BOL SHEETS
BOTTOM - DK. DLIVE GRAY SHARE BEDROOK, SOFT TO HARD, HC	ODOR DETECTED.
	1
(4,0550)	
BEDROCK CLOSED	
REDROCK	
BOTTON FIELD 418.1 CALCULATIONS	
FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB No: WEIGHT (g) ml. FREON DILUTIC	
FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (g) mL. FREON DILUTIC SCALE 1410 FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (g) mL. FREON DILUTIC	
SCALE OFT PIT PERIMETER OVM FIELD 418.1 CALCULATIONS FIELD 418.1 CALCULATIONS WEIGHT (g) ml. FREON DILUTIONS PIT PERIMETER OVM A	IN READING CALC. ppm
SCALE O FT PIT PERIMETER DOWN RESULTS FIELD 418.1 CALCULATIONS FIELD 418.1 CALCULATIONS WEIGHT (9) ML. FREON DILUTIONS PIT	N READING CALC. ppm
FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (g) mL. FREON DILUTIC SCALE 1410 PIT PERIMETER OVM RESULTS SAMPLE FIELD HEADSPACE PID (ppm)	N READING CALC. ppm
FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (9) ML. FREON DILUTIC SCALE 1410 OFT PIT PERIMETER OVM RESULTS SAMPLE FIELD 418.1 CALCULATIONS OVM RESULTS SAMPLE FIELD 418.1 CALCULATIONS PIT PIT PI OVM RESULTS SAMPLE FIELD HEADSPACE PID (ppm) 1 @ 11' 321 2 @ 12' 47.2 3 @ 11' 6.0	N READING CALC. ppm
FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (9) ML. FREON DILUTIC SCALE 1410 OFT PIT PERIMETER OVM RESULTS SAMPLE FIELD 418.1 CALCULATIONS PIT PIT PI OVM RESULTS SAMPLE FIELD 418.1 CALCULATIONS PIT PI OVM RESULTS SAMPLE FIELD 418.1 CALCULATIONS PIT PI A 2 12 1 3 21 2 12 47.2	N READING CALC. ppm
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FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (g) ml. FREON DILUTIC SCALE 1410 OFT PIT PERIMETER DOVM RESULTS SAMPLE PRO (ppm) 1 @ 11' 3ZI 2 @ 12' 4Z.Z. 3 @ 11' 6.0 4 @ 10' 0.0 5 @ 17' 2.3Z 11' 3' 8EEDLEUR LAB SAMPLES	ROFILE
FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (g) ml. FREON DILUTIC SCALE 1410 OFT PIT PERIMETER DOVM RESULTS SAMPLE FELD HEADSPACE PDD (ppm) 1 @ 11' 321 2 @ 12' 47.22 3 @ 11' 6.00 4 @ 10' 0.00 5 @ 17' 2.32 17' 14	ROFILE
FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (g) ML. FREON DILUTIC SCALE 1410 OFT PIT PERIMETER D OVM RESULTS SAMPLE FIELD HEADSPACE PD (ppm) 1 @ 11' 321 2 @ 12' 47.2 3 @ 11' 6.0 4 @ 10' 0.0 5 @ 17' 2.32 7' 14' 33 30' 11' 6.0 4 @ 10' 0.0 5 @ 17' 2.32 7' LAB SAMPLES SAMPLE ANALYSIS TIME	ROFILE
FIELD 418.1 CALCULATIONS TIME SAMPLE I.D. LAB NO: WEIGHT (g) ML. FREON DILUTIC SCALE 1410 OFT PIT PERIMETER N OVM RESULTS SAMPLE FIELD 418.1 CALCULATIONS PIT PIT PERIMETER PIT PI A RESULTS SAMPLE FIELD 418.1 CALCULATIONS A RESULTS SAMPLE FIELD 418.1 CALCULATIONS A A LAB SAMPLES SAMPLE FIELD 418.1 CALCULATIONS A LAB SAMPLE FIELD 418.1	ROFILE

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

GCU #96

Unit O, Sec. 18, T29N, R12W

Blow Pit

Basin Dakota

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered competent shale at 17 feet below grade.

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

- 1. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below shallow shall 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 0.32 miles north of the nearest vulnerable area boundary (canyon tributary to the San Juan River).

(Refer to Farmington South Quadrangle, New Mexico - San Juan County, 7.5 Minute Series (Topographic), Provisional edition, 1979, (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 lateral impact from the earthen pit is very limited and that the shale bottom creates enough of a 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). BP AMOCO therefore request pit closure approval on this location.



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	1 @ 11'	Date Reported:	02-09-00
Laboratory Number:	G803	Date Sampled:	02-08-00
Chain of Custody No:	7460	Date Received:	02-08-00
Sample Matrix:	Soil	Date Extracted:	02-09-00
Preservative:	Cool	Date Analyzed:	02-09-00
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,030	0.2
Diesel Range (C10 - C28)	410	0.1
Total Petroleum Hydrocarbons	2,440	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:

GCU # 96 Separator Pit.

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Misting Wasters
Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	1 @ 11'	Date Reported:	02-09-00
Laboratory Number:	G803	Date Sampled:	02-08-00
Chain of Custody:	7460	Date Received:	02-08-00
Sample Matrix:	Soil	Date Analyzed:	02-09-00
Preservative:	Cool	Date Extracted:	02-09-00
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	11.3	1.8
Toluene	88.5	1.7
Ethylbenzene	63.6	1.5
p,m-Xylene	176	2.2
o-Xylene	132	1.0
Total BTEX	472	

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:

GCU # 96 Separator Pit.

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Review Musters