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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

DEPUTY OIL & GAS INSPECTOR

MAY 13 1997

PIT REMEDIATION AND CLOSURE REPORT

Approved

Operator: Amoco Production Company **Telephone:** (505) - 326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: 6C4 191E
Well Name

Location: Unit or Qtr/Qtr Sec G Sec 32 T 28N R 12W County SAN JUAN

Pit Type: Separator X Dehydrator ___ Other ___

Land Type: BLM X, State ___, Fee ___, Other UNIT AGREEMENT

Pit Location: (Attach diagram)
Pit dimensions: length 20', width 15', depth 15'
Reference: wellhead X, other ___
Footage from reference: 140
Direction from reference: 30 Degrees X East North X of ___ West South ___

Depth To Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)	0
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)	0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	0
	RANKING SCORE (TOTAL POINTS):	0

RECEIVED
DEC 1 8 1997
OIL CON. DIV.
DIST. 3

B0255

Date Remediation Started: _____ **Date Completed:** 3-31-95

Remediation Method: (Check all appropriate sections)
Excavation X Approx. cubic yards 100
Landfarmed X Insitu Bioremediation ___
Other _____

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility)
Onsite X Offsite _____

General Description Of Remedial Action: Excavation

Ground Water Encountered: No X Yes ___ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample location see Attached Documents
Sample depth 10'
Sample date 3-31-95 Sample time _____
Sample Results
Benzene(ppm) _____
Total BTEX(ppm) _____
Field headspace(ppm) 570
TPH 2800 ppm

Ground Water Sample: Yes ___ No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 4-6-95
SIGNATURE B.D. Shaw
PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

RESULTS TO ROM - 3-31-95 PEC

NAPI

CLIENT: Amoco	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: B0255 C.O.C. NO: —

FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: GCU WELL #: 191E PIT: SEP. DATE STARTED: 3-31-95

QUAD/UNIT: G SEC: 32 TWP: 28N RNG: 12W BM: NM CNTY: SJ ST: NM DATE FINISHED:

QTR/FOOTAGE: SW/NE CONTRACTOR: MOSS ENVIRONMENTAL SPECIALIST: RCO

EXCAVATION APPROX: 15 FT. x 20 FT. x 15 FT. DEEP. CUBIC YARDS: 100

DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: LANDFARM

LAND USE: AGRI. LEASE: SF-079346-A FORMATION: DAKOTA

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 140 FEET N30°E FROM WELLHEAD.

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

NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: ABANDONED

LOCATION OFF EDGE OF IRRIGATION CIRCLE.

SOIL IS MOIST, BROWN, SAND. - ODOR + STAIN IN WEST SIDEWALL.

OVM IS LOW - BTEX WOULD PASS.

CLOSE PIT

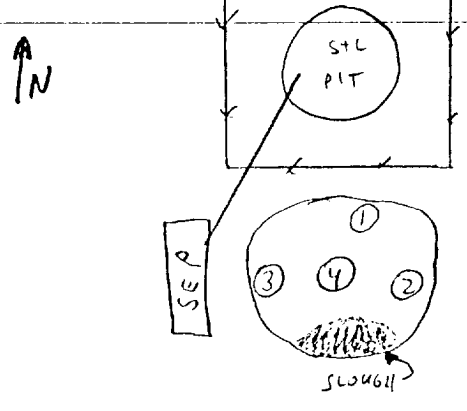
FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
WS @10'	1434	10.0	20.0	10	139	2780

SCALE

0 5 10FT

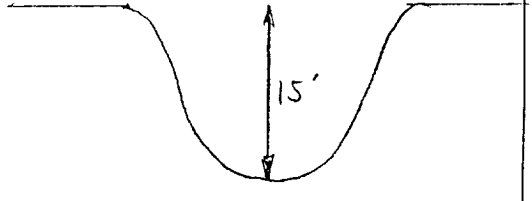
PIT PERIMETER



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 NS-10'	0
2 ES-10'	0
3 WS-10'	570
4 CB-16'	490
5	
LAB	SAMPLES

PIT PROFILE



SURFACE GRADIENT

TO WELL HEAD

TRAVEL NOTES: CALLOUT: 3-30-95 ONSITE: 3-31-95 0905

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	
Sample ID:	West Side @ 10'	Date Analyzed:	3-31-95
Project Location:	GCU 191E	Date Reported:	3-31-95
Laboratory Number:	TPH-1434	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	**2,800**	**100**

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	14,000	13,000	7

*Administrative Acceptance limits set at 30%.

Method: Modified Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Separator Pit - B0255

R. E. O'Neill
Analyst

Review

Well Name:	**GCU #191E**
Well Site location:	(1,460 FNL, 1,460 FEL) Unit G, Sec. 32, T28N, R12W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
Pit Category:	Non Vulnerable
Horizonal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when practical vertical extent was reached with a trackhoe. Horizontal extent was ceased due to surrounding equipment and piping.

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 presumed shallow sandstone bedrock based on topographic information.

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 **non-vulnerable area** and is approximately 0.15 miles east of the nearest vulnerable area boundary (Gallegos Canyon Wash).

   (Refer to Hugh Lake Quadrangle, New Mexico - San Juan County, 7.5 Minute Series (Topographic), 1965, photorevised, 1979, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

5. Field headspace readings (OVM/PID) on Basin Dakota type locations do not reflect direct correlation to total BTEX per USEPA Method 8020 concentrations. Listed below are several typical AMOCO Basin Dakota pit soil analyses comparing headspace to Benzene and total BTEX results.

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
Frost, Jack B 1E	1100	0.011	5.889
Berger A1	482	0.084	0.681
Mudge Com B 1E	684	0.017	16.438
L.C. Kelly #5	1235	0.643	13.908

The comparisons listed above demonstrates that headspace testing is not an accurate measurement to Benzene or total BTEX concentrations when above standards for Basin Dakota type pits.

Based upon the information given, we conclude that the subsurface vertical impact to groundwater is very unlikely. AMOCO requests pit closure approval on this location.