80143

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

Denny Foust
DEPUTY OIL & GAS INSPECTOR

SEP 19 1996

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: C. A. MCADAMS C #1E
Well Name

Location: Unit or Qtr/Qtr Sec B Sec 05 T 27 N R 10 W County SAN JUAN

Pit Type: Separator ___ Dehydrator X Other ___

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

Pit Location: (Attach diagram)
Pit dimensions: length 20', width 20', depth 6'
Reference: wellhead X, other ___
Footage from reference: 150
Direction from reference: 0 Degrees ___ 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

BO198

Date Remediation Started: _____ **Date Completed:** 4-17-95

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 75

Landfarmed ___ Insitu Bioremediation ___

Other compost

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

General Description Of Remedial Action: _____

Excavation - to Bedrock

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 3'

Sample date 4-17-95 Sample time _____

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 730

TPH 1800 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 4-19-95

SIGNATURE B J Shaw

PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

RESULTS TO MIKE - 4-17-95 PEO

CLIENT: AMOCO	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: 80198 C.O.C. NO: —

FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: C.A. MCADAMS C WELL #: 1E PIT: DEHY
QUAD/UNIT: B SEC: 05 TWP: 27 N RNG: 10 W BM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NW/NE CONTRACTOR: EPC

DATE STARTED: 4-17-95
DATE FINISHED: —
ENVIRONMENTAL SPECIALIST: PEO

EXCAVATION APPROX: 20 FT. x 20 FT. x 6 FT. DEEP. CUBIC YARDS: 75
DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: COMPOST
LAND USE: RANGE LEASE: SF-077941 FORMATION: —

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 150 FEET NORTH 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: STEEL TANK TO BE INSTALLED

PIT EXCAVATED TO BEDROCK BOTTOM, SIDEWALLS ARE SOFT SANDSTONE.
ALL SAMPLES COLLECTED FROM SOFT & HARD SANDSTONE.

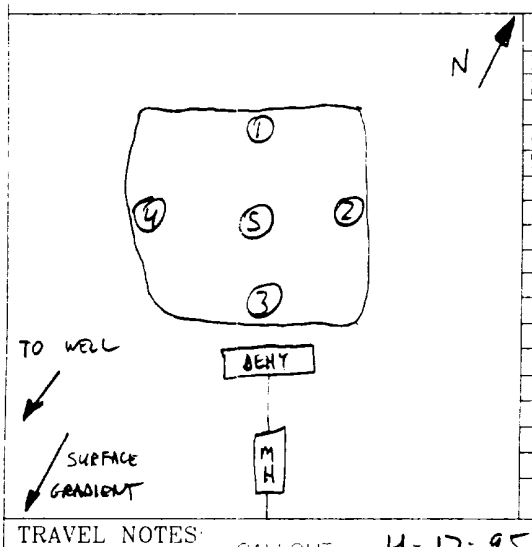
BEDROCK

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
WS-3'	1961	10.0	20.0	—	910	1820

SCALE
0 5 10FT

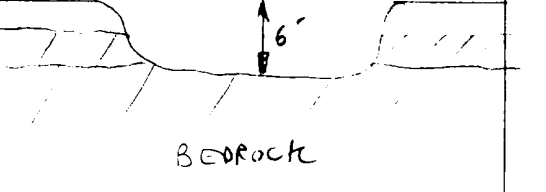
PIT PERIMETER



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 NS - 3'	593
2 ES - 3'	15
3 SS - 3'	319
4 WS - 3'	730
5 CB - 6'	139
LAB	SAMPLES

PIT PROFILE



TRAVEL NOTES: CALLOUT: 4-17-95 ONSITE: 4-17-95 0740

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:	WS @ 3'	Date Analyzed:	4-17-95
Project Location:	C. A. McAdams C 1E	Date Reported:	4-17-95
Laboratory Number:	TPH-1461	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	**1,800**	**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: Dehydrator Pit - B0198

R. E O'Neill
Analyst

Review

Well Name:	**C.A. McAdams C 1E**
Well Site location:	Unit B, Sec. 5, T27N, R10W
Pit Type:	Dehydrator Pit
Producing Formation:	Basin Dakota
Pit Category:	Area III
Horizonal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 6 feet below grade.

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

1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 6 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone 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 (double sidewall steel tank installed). Prior discharge into the pit is believed to be under 5 barrels per day.

4. 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 lateral impact from the earthen pit is very limited and that the sandstone bottom creates enough of a permeable 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.