

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

80220
SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

Approved
01/30/97

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: FRED FEASEL L #1E
Well Name

Location: Unit or Qtr/Qtr Sec I sec 32 T28N R10W county SAN JUAN

Pit Type: Separator Dehydrator Other Blow/TANK

Land Type: BLM X, State, Fee, Other

Pit Location: Pit dimensions: length 30', width 30', depth 8'
(Attach diagram)

Reference: wellhead X, other

Footage from reference: 250'

Direction from reference: 0 Degrees East North
of
West South X

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

Date Remediation Started: _____ Date Completed: 2-17-95

Remediation Method: Excavation X Approx. cubic yards 250
 (Check all appropriate sections) Landfarmed _____ Insitu Bioremediation _____
 Other Compost

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

General Description Of Remedial Action: _____

Excavation TO CLAY / SANDSTONE Bottom.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Sample location see Attached Documents

Closure Sampling:
 (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample depth 4'

Sample date 2-17-95 Sample time _____

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 1102

TPH 792 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 2-23-95

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
ENVIRONMENTAL COORDINATOR

RESULTS TO JOHNNY 2-17-95 REC

CLIENT: <u>Amoco</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80220</u> C.O.C. NO: <u>—</u>
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FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: <u>FRED FEASEL L</u>	WELL #: <u>1E</u>	PIT: <u>Blow / m/h</u>	DATE STARTED: <u>2-16-95</u>
QUAD/UNIT: <u>I</u>	SEC: <u>32</u>	TWP: <u>28 N</u>	DATE FINISHED: <u>2-17-95</u>
RNG: <u>10 W</u>	BM: <u>NM</u>	CNTY: <u>SJ</u>	ST: <u>NM</u>
STR/FOOTAGE: <u>NE / SE</u>	CONTRACTOR: <u>EPL</u>	ENVIRONMENTAL SPECIALIST: <u>REO</u>	
EXCAVATION APPROX. <u>30</u> FT. x <u>30</u> FT. x <u>8</u> FT. DEEP.			CUBIC YARDS: <u>250</u>
DISPOSAL FACILITY: <u>ON SITE</u>		REMEDICATION METHOD: <u>COMAST</u>	
LAND USE: <u>RANGE</u>		LEASE: <u>SF - 046563</u>	FORMATION: _____

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>250</u> FEET <u>SOUTH</u> FROM WELLHEAD		
DEPTH TO GROUNDWATER: <u>2100'</u>	NEAREST WATER SOURCE: <u>21000'</u>	NEAREST SURFACE WATER: <u>21000'</u>	
NMOC RANKING SCORE: <u>0</u>	NMOC TPH CLOSURE STD: <u>5000</u> PPM		

SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: ACTIVE - TO BE ABANDONED

MOIST, BROWN, SOFT SAND STONE OVERLYING HARD CLAY, SILT STONE.

MIGRATION OF CONTAMINATION UNLIKELY DUE TO LITHOLOGY.

Bottom is GRAY SAND.

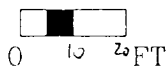
RISK ASSESSED

850 FUCH

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
WS-4'	1373	10.0	20.0	-	396	792

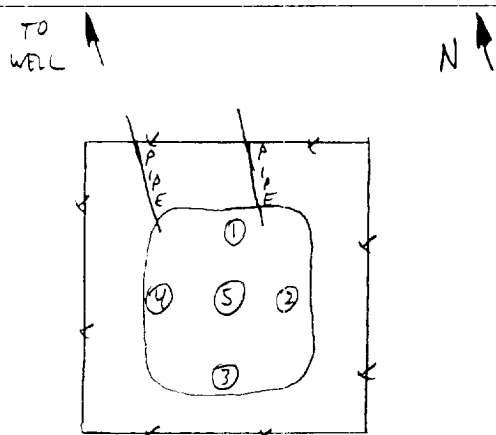
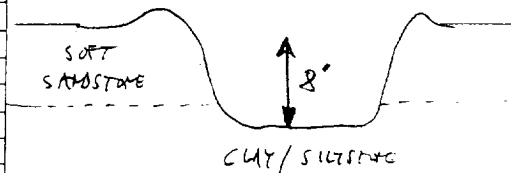
SCALE



PIT PERIMETER

OVM RESULTS

PIT PROFILE

[illegible]

TRAVEL NOTES: CALLOUT: 2-15-95 ONSITE: 2-6-95 1400

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Fred Feasel L #1E

Unit I, Sec. 32, T28N, R10W

Blow/Tank Pit

Basin Dakota

Area III

> 1000 ft.

> 100 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 8 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 8 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 (pit abandoned). 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 US EPA 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.

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:	W. Side @ 4'	Date Analyzed:	2-17-95
Project Location:	Fred Feasel L 1E	Date Reported:	2-17-95
Laboratory Number:	TPH-1373	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	790	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	4,760	4,400	8

*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: Blow/Tank Pit - B0220

R. E. O'Neill
Analyst

Heleen Vail
Review

BLAGG ENGINEERING, INC.

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Field TPH-Worksheet

Max Characters:

Client:

Sample ID:

Project Location:

Laboratory Number:

Amoco

W. Side @ 4'

Fred Feasel L 1E

TPH-1373

Project #:

Date Analyzed:

Date Reported:

Sample Matrix:

2-17-95

2-17-95

Soil

Sample Weight:

10.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

396 mg/kg

TPH Result:

792.0 mg/kg

Reported TPH Result:

790.0 mg/kg

Actual Detection Limit:

10.0 mg/kg

Reported Detection Limit

10 mg/kg

QA/QC:

Original
TPH mg/kg

Duplicate
TPH mg/kg

%
Diff.

4760

4400

8

Comments:

*****Max Characters*****

Comments:

Blow/Tank Pit - B0220