

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

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

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

*Denny S. Faust*  
DEPUTY OIL & GAS INSPECTOR

NOV 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: REID LS 1  
Well Name  
Location: Unit or Qtr/Qtr Sec M Sec 8 T 28N R 9W County SAN JUAN  
Pit Type: Separator ☒ Dehydrator ☐ Other ☐  
Land Type: BLM ☐ State ☐ Fee ☐ Other COM. AGMT.

Pit Location: Pit dimensions: length 28', width 23', depth 9'  
(Attach diagram) Reference: wellhead ☒, other ☐  
Footage from reference: 79'  
Direction from reference: 50 Degrees ☐ East North ☒  
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) <u>0</u>
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) <u>0</u>
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) <u>0</u>
RANKING SCORE (TOTAL POINTS): <u>0</u>	

RECEIVED  
APR 11 1995  
OIL CON. DIV.  
DMC

Date Remediation Started: \_\_\_\_\_ Date Completed: 3/9/95

Remediation Method: Excavation X Approx. cubic yards 165  
(Check all appropriate sections) Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_  
other COMPOSTED

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

General Description Of Remedial Action: \_\_\_\_\_

Excavation - BOTTOM BEDROCK

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 6'Sample date 3/8/95 Sample time 1445

Sample Results

Benzene(ppm) \_\_\_\_\_

Total BTEX(ppm) \_\_\_\_\_

Field headspace(ppm) 0.0TPH 28 ppmGround 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 3/9/95

SIGNATURE

B. ShawPRINTED NAME  
AND TITLEBuddy D. Shaw  
Environmental Coordinator

CLIENT: AMOCO

BLAGG ENGINEERING, INC.  
P.O. BOX 87, BLOOMFIELD, NM 87413  
(505) 632-1199

LOCATION NO: 80245  
C.O.C. NO: \_\_\_\_\_

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: REID LS WELL #: 1 PIT: SEP  
QUAD/UNIT: M SEC: 8 TWP: 28N RNG: 9W PM: NM CNTY: SJ ST: NM  
QTR/FOOTAGE: W30' FSL, 921' FWL CONTRACTOR: EPC

DATE STARTED: 3/8/95  
DATE FINISHED: \_\_\_\_\_  
ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 28 FT. x 23 FT. x 9 FT. DEEP. CUBIC YARDAGE: 165

DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: COMPOSTED

LAND USE: RANGE LEASE: NM - 01772 A FORMATION: MV

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 79 FT. USOW FROM WELLHEAD.  
DEPTH TO GROUNDWATER: 2100' NEAREST WATER SOURCE: 21000' NEAREST SURFACE WATER: 71000'  
NMOCB PANKING SCORE: 0 NMOCB TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION: ELEV. 6088'

CHECK ONE:  
☒ PIT ABANDONED  
☐ STEEL TANK INSTALLED

MOD. TO DR. YELL. BROWN SAND, NON-COHESIVE, SLIGHTLY MOIST, FIRM,  
NO APPARENT HC ODOR IN ANY OF THE SIDEWALL OVM SAMPLES.

BOTTOM - BEDROCK, HARD, MED. LT. GRAY, STRONG HC ODOR.

SCALE  

0

FT

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1445	① @ 6'	TPH-1416	5	20	1:1	7	28

PIT PERIMETER

OVM RESULTS

PIT PROFILE

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 6'	0.0
2 @ 5'	0.0
3 @ 6'	0.0
4 @ 6'	0.0
5 @ 9'	475

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

TRAVEL NOTES: CALLOUT: 3/8/95 ONSITE: 3/8/95

**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:	1 @ 6'	Date Analyzed:	03-09-95
Project Location:	Reid LS 1	Date Reported:	03-09-95
Laboratory Number:	TPH-1416	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	28	20

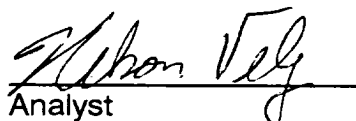
ND = Not Detectable at stated detection limits.

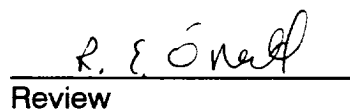
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	3000	3182	5.89

\*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 - B0245

  
Analyst

  
Review

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Reid LS #1

Unit M, Sec. 8, T28N, R09W

Separator Pit

Mesaverde

Area III

> 1000 ft.

> 100 ft.

**RISK ASSESSMENT**

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 9 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 9 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.

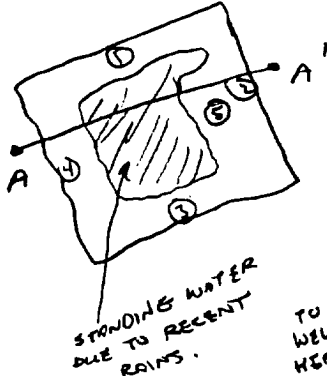
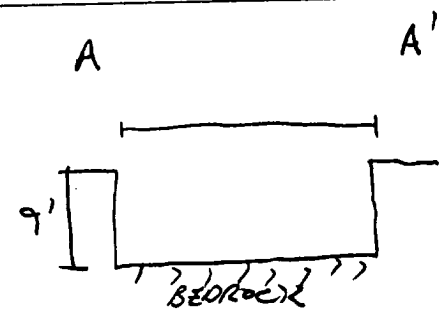
Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
4.

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

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
L.C. Kelly #6A	833	0.033	2.857
Johnston LS 7	998	0.017	24.985
Neil LS 7A	819	0.282	0.440

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

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80245</u>  C.D.C. NO: _____																																																
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