

District I

P.O. Box 1100, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

DEPUTY OIL & GAS INSPECTOR

1000 Rio Brazos Rd., Aztec, NM 87410

DEC 03 1996

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 OFFICEPIT REMEDIATION AND CLOSURE REPORT

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: 6CU 163
Well Name

Location: Unit or Qtr/Qtr Sec 0 sec 26 T29N R13W County SAN JUAN

Pit Type: Separator Dehydrator Other BLOW

Land Type: BLM, State, Fee, other UNIT AGMT.

Pit Location: Pit dimensions: length 40', width 40', depth 6'
(Attach diagram)

Reference: wellhead X, other

Footage from reference: 140

Direction from reference: 75 Degrees X 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

RECEIVED
DEC - 3 1996OIL CON. DIV.
DIST. 2

Date Remediation Started: _____ Date Completed: 2-8-95

Remediation Method: Excavation X Approx. cubic yards 340
 (Check all appropriate sections) Landfarmed X Insitu Bioremediation _____

Other _____

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

General Description Of Remedial Action: _____

Excavation TO 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 3' , 6'

Sample date 2-8-95 Sample time _____

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 89 @ 3' , 1053 @ 6' BEDROCK

TPH @ 3' = ND

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 2-9-95

SIGNATURE B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
ENVIRONMENTAL COORDINATOR

TRAVEL NOTES: CALLOUT: 2-8-95 ONSITE: 2-8-95 0900

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
Sample ID: N. Side @ 3'
Project Location: GCU 163
Laboratory Number: TPH-1365

Project #:
Date Analyzed: 2-8-95
Date Reported: 2-8-95
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	ND	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: Abandoned Blow Pit - B0215

R. E. O'Neill
Analyst

Nelson Vely
Review

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 2-8-95

Remediation Method: Excavation X Approx. cubic yards 60
(Check all appropriate sections) Landfarmed X Insitu Bioremediation _____
Other _____

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

General Description Of Remedial Action: _____

Excavation - TO BEDROCK - LATERAL EXCAVATION DISCONTINUED
DUE TO PIPELINE & EQUIPMENT.

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 3'Sample date 2-8-95 Sample time _____

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) 1181TPH 13,700 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 2-9-95
SIGNATURE B. Shaw PRINTED NAME AND TITLE Buddy D. Shaw
ENVIRONMENTAL COORDINATOR

TRAVEL NOTES: CALL OUT: 2-8-95 ONSITE: 2-8-95 1030

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
Sample ID: S. Side @ 3'
Project Location: GCU 163
Laboratory Number: TPH-1366

Project #:
Date Analyzed: 2-8-95
Date Reported: 2-8-95
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	13,700	100

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: Abandoned Separator Pit - B0215

R. E. O'Neill
Analyst

Heleen Tey
Review

Well Name:	GCU #163
Well Site location:	Unit O, Sec. 26, T29N, R13W
Pit Type:	Blow Pit
Producing Formation:	Basin Dakota
Pit Category:	Area III
Horizontal 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.

Well Name:**Well Site location:****Pit Type:****Producing Formation:****Pit Category:****Horizontal Distance to Surface Water:****Vicinity Groundwater Depth:****GCU #163**

Unit O, Sec. 26, T29N, R13W

Separator Pit

Basin Dakota

Area III

> 1000 ft.

> 100 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 4 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 4 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 USEPA Method 8020 concentrations. Listed below are several typical AMOCO Basin Dakota pit soil analyses comparing headspace to Benzene and total BTEX results.

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Frost, Jack B 1E	1100	0.011	5.889
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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.