

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

BT610

SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

RECEIVED
AUG 27 1999

PIT REMEDIATION AND CLOSURE REPORT

OIL CON. DIV.
DIST. 3

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA CONTRACT #155-11
Location: Unit or Qtr/Qtr Sec K Sec 31 T 26N R 5W County RIO ARRIBA
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location:
(Attach diagram)

Pit dimensions: length NA, width NA, depth NA
Reference: wellhead ☒, other ☐
Footage from reference: 75'
Direction from reference: 64 Degrees ☒ East of North ☐
West of South ☒

Depth To Groundwater:

(Vertical distance from
contaminants to seasonal
high water elevation of
groundwater)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points) 0

Distance to an Ephemeral Stream

(Downgradient dry wash greater than
ten feet in width)

Less than 100 feet (10 points)
Greater than 100 feet (0 points) 0

Distance to Nearest Lake, Playa, or Watering Pond

(Downgradient lakes, playas and
livestock or wildlife watering ponds)

Less than 100 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 100 feet (20 points)
100 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 8/20/98
Remediation Method: Excavation X Approx. cubic yards NA
(check all appropriate sections) Landfarmed _____ Insitu Bioremediation _____
Other CLOSE AS IS

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

General Description of Remedial Action: Excavation, TEST HOLE ADVANCED TO BEDROCK
(TOTAL DEPTH = 3') THEREFORE NO TPH ANALYSIS WAS CONDUCTED. RISK ASSESSED

Groundwater 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' (PIT BOTTOM - BEDROCK)

Sample date 8/20/98

Sample time 1045

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>256</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>ND</u>	Total Xylenes	(ppb)	_____

Groundwater 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 8/20/98 PRINTED NAME Buddy D. Shaw
SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) R.A. Attached

SIGNED: Ken C. Mamm DATE: 9-9-98

CLIENT: <u>AMOCO</u>		BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199		LOCATION NO: <u>BT610</u> C.D.C. NO: _____																																																																																											
FIELD REPORT: CLOSURE VERIFICATION				PAGE No: <u>1</u> of <u>1</u>																																																																																											
LOCATION: NAME: <u>JICA CONTR. 155</u> WELL #: <u>11</u> PIT: <u>SEP</u>				DATE STARTED: <u>8/20/98</u> DATE FINISHED: _____																																																																																											
QUAD/UNIT: <u>K SEC: 31 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM</u>				ENVIRONMENTAL SPECIALIST: <u>NV</u>																																																																																											
QTR/FOOTAGE: <u>1660' FSL / 1740' FUL</u> CONTRACTOR: <u>P+S</u>																																																																																															
EXCAVATION APPROX. <u>NA</u> FT. x <u>NA</u> FT. x <u>NA</u> FT. DEEP. CUBIC YARDAGE: <u>NA</u>																																																																																															
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>																																																																																															
LAND USE: <u>RANGE</u> LEASE: <u>JIC 155</u> FORMATION: <u>PC</u>																																																																																															
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>75</u> FT. <u>S 64E</u> FROM WELLHEAD																																																																																															
DEPTH TO GROUNDWATER: <u>>100'</u> NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>																																																																																															
NMOC D RANKING SCORE: <u>0</u> NMOC D TPH CLOSURE STD: <u>5000</u> PPM																																																																																															
SOIL AND EXCAVATION DESCRIPTION:																																																																																															
<div>TEST HOLE CONDUCTED @ CENTER OF PIT, BEDROCK (SHALE) ENCOUNTERED @ 3' BELOW GRADE, DR. GRAY TO BLACK DISCOLORATION W/ STRONG HC ODOR COLLECTED FOR OVM READING @ PIT BOTTOM, OVM SAMPLE COLLECTED FROM BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED.</div> <div><div>BEDROCK BOTTOM</div><div>SCALE 0 FT</div><div>RISK ASSESSED</div><table><tr><th colspan="8">FIELD 418.1 CALCULATIONS</th></tr><tr><th>TIME</th><th>SAMPLE I.D.</th><th>LAB No:</th><th>WEIGHT (g)</th><th>mL. FREON</th><th>DILUTION</th><th>READING</th><th>CALC. ppm</th></tr><tr><td>1045</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table><div><div>PIT PERIMETER</div><div>PIT PROFILE</div><div><div>OVM RESULTS</div><table><tr><th>SAMPLE ID</th><th>FIELD HEADSPACE PID (ppm)</th></tr><tr><td>1 <u>23'</u></td><td><u>256</u></td></tr><tr><td>2</td><td></td></tr><tr><td>3</td><td></td></tr><tr><td>4</td><td></td></tr><tr><td>5</td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table><div>LAB SAMPLES</div><table><tr><th>SAMPLE ID</th><th>ANALYSIS</th><th>TIME</th></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table></div></div></div>						FIELD 418.1 CALCULATIONS								TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm	1045																								SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 <u>23'</u>	<u>256</u>	2		3		4		5																SAMPLE ID	ANALYSIS	TIME																					
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TRAVEL NOTES: CALLOUT: 8/19/98 - MORN ONSITE: 8/20/98 - MORN

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla Contract 155 #11

Unit K, Sec. 31, T26N, R5W

Separator Pit

Pictured Cliffs

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered shale bedrock at 3 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 shale bedrock located 3 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below shale 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. Well site located within the **non-vulnerable area** and is approximately 0.13 miles southeast of the nearest vulnerable area boundary (Tapacito Creek).

(Refer to Gonzales Mesa Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), 1963, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the shale bottom creates enough of an impermeable 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.