

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

AUG 13 1999

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

87459

OK

1 pit visited

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

Approved
PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200
Address: 200 Amoco Court, Farmington, NM 87401
Facility or Well Name: JICARILLA B #7
Location: Unit or Qtr/Qtr Sec H Sec 16 T 26N R 5W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 18', width 42', depth 19'
(Attach diagram) Reference: wellhead ☒ other ☐
Footage from reference: 100'
Direction from reference: 0 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)	<u>0</u>
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)	<u>0</u>
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)	<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 100 feet	(20 points)	
	100 feet to 1000 feet	(10 points)	<u>0</u>
	Greater than 1000 feet	(0 points)	

RANKING SCORE (TOTAL POINTS): 0

BT 459 / SEP. PIT

Date Remediation Started: _____ Date Completed: 10/16/96

Remediation Method: Excavation ☒ Approx. cubic yards 500
Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____
Other _____

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

General Description of Remedial Action: Excavation. ENTIRE EXCAVATION CONSIST MOSTLY OF BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED.

Groundwater Encountered: No ☒ 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 14'

Sample date 10/16/96 Sample time 1120

Sample Results

Soil: Benzene (ppm)	_____	Water: Benzene (ppb)	_____
Total BTEX (ppm)	_____	Toluene (ppb)	_____
Field Headspace (ppm)	<u>744</u>	Ethylbenzene (ppb)	_____
TPH (ppm)	_____	Total Xylenes (ppb)	_____

Groundwater Sample: Yes _____ No ☒ (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 10/16/96 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 ☒ NO _____ (REASON) Spray

SIGNED: [Signature] DATE: 10/23/96

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJ459</u> C.O.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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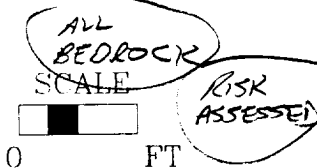
LOCATION: NAME: <u>JICARILLA</u> <u>8</u> WELL #: <u>7</u> PIT: <u>SEP</u>	DATE STARTED: <u>10/16/96</u> DATE FINISHED: _____
QUAD/UNIT: <u>H</u> SEC: <u>16</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>
OTR/FOOTAGE: <u>1850' FUL</u> / <u>1150' REL</u> CONTRACTOR: <u>P+S</u>	

EXCAVATION APPROX. <u>18</u> FT. x <u>42</u> FT. x <u>19</u> FT. DEEP. CUBIC YARDAGE: _____
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARMED</u>
LAND USE: <u>RANGE</u> LEASE: <u>JICA. CONTR. #109</u> FORMATION: <u>GP/DK</u>

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>100</u> FT. <u>DUE EAST</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>>100'</u> NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>
NMCD RANKING SCORE: <u>0</u> NMCD TPH CLOSURE STD: <u>5000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:

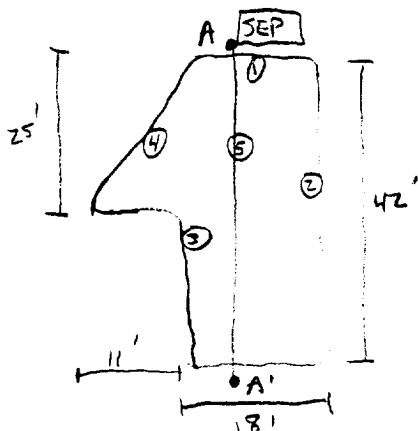
CHECK ONE:
☒ PIT ABANDONED
☐ STEEL TANK INSTALLED
☐ FIBERGLASS TANK INSTALLED

EXCAVATION CONSIST MOSTLY OF BEDROCK (SARLE), SIDEWALLS GRAYISH RED IN COLOR, APPARENTLY SOFT TO SURFACE TO VERY HARD (BOTTOM HALF), VERY FRIABLE, PIT BOTTOM APPEARANCE GRAYISH ORANGE PINK IN COLOR, VERY HARD NO APPARENT HC DOOR IN DUM SAMPLE, DOES NOT APPEAR TO BE ANY DISTINCTION BETWEEN HC STAINING & APPARENT NATURAL COLOR WITH BEDROCK HOWEVER HC DOOR OBVIOUS IN EAST & WEST SIDEWALLS NO TPH ANALYSIS CONDUCTED DUE TO BEDROCK, SOUTH END OF EXCAVATION FIELD 418.1 CALCULATIONS DRAMATICALLY SLOPED.



TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1120							

PIT PERIMETER



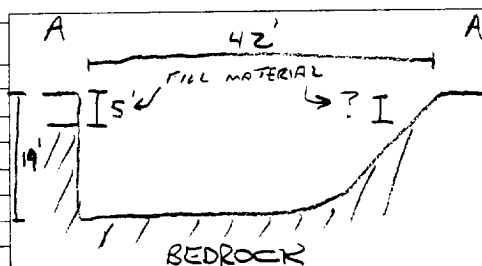
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE FID (ppm)
1 @ 15'	105.1
2 @ 14'	744
3 @ 14'	1.9
4 @ 15'	636
5 @ 19'	15.3

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE



TRAVEL NOTES: CALLOUT: <u>10/15/96 MORN.</u> ONSITE: <u>10/16/96 MORN.</u>
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Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla B #7

Unit H. Sec. 16, T26N, R5W

Separator Pit

Gallup/Basin Dakota

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered very hard shale bedrock at 19 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 19 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 1.02 miles north northwest of the nearest vulnerable area boundary (Tapacito Creek).

(Refer to Lapis Point 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 lateral impact of the excavation is limited and that the very hard 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.

8J459

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

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

ON-SITE SOIL REMEDIATION REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA B #7

Location: Unit or Qtr/Qtr Sec H Sec 16 T 26N R 5W County RIO ARIZONA

Land Type: RANGE

Date Remediation Started: 10/16/96 Date Completed: 4/30/98

Remediation Method: Landfarmed X Approx. cubic yards 700

Composted

Other

Depth To Groundwater: (pts.) 0

Distance to an Ephemeral Stream (pts.) 0

Distance to Nearest Lake, Playa, or Watering Pond (pts.) 0

Wellhead Protection Area: (pts.) 0

Distance To Surface Water: (pts.) 0

RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:

Sampling Date: 4/28/98 Time: 1020

Sample Results:

Field Headspace (ppm) 0.0

TPH (ppm) 149 Method 8015

Other

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 4/30/98 PRINTED NAME Buddy D. Shaw

SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO (REASON) Not for use as Backfill

SIGNED: Kate C Mammal DATE: 5-7-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BT 459</u> C.D.C. NO: <u>5878</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA</u> B WELL #: <u>7</u> PITS: <u>SEP.</u> QUAD/UNIT: <u>H</u> SEC: <u>16</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> DTR/FOOTAGE: <u>SE 1/4 NE 1/4</u> CONTRACTOR: <u>P & S</u>	DATE STARTED: <u>4/28/98</u> DATE FINISHED: <u>4/30/98</u> ENVIRONMENTAL SPECIALIST: <u>NV</u>
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SOIL REMEDIATION:

REMEDIATION SYSTEM: LANDFARMED APPROX. CUBIC YARDAGE: 700
 LAND USE: RANGE LIFT DEPTH (ft): 1'-3'

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
 NMOCB RANKING SCORE: 0 NMOCB TPH CLOSURE STD: 5000 PPM

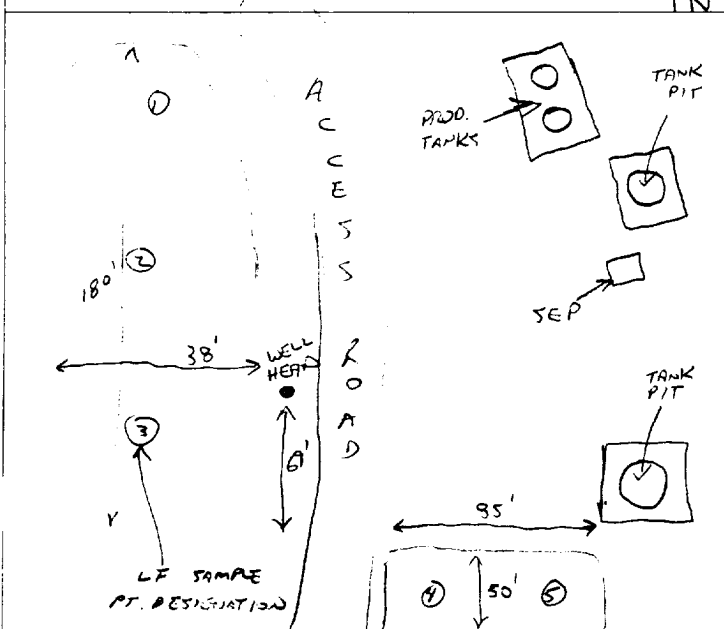
SOIL COLOR RANGING FROM PALE ORANGE TO DUSKY BROWN SAND TO CLAY NON COHESIVE TO PLASTIC, SLIGHTLY MOIST, FIRM TO STIFF, LANDFARM AREA WEST OF WELL ORIGINALLY LANDFARM, THEN STOCKPILED AUG '97, THEN LANDFARMED AGAIN 4/17/98. NO APPARENT HC ODOR OBSERVED IN ANY OF THE SAMPLE PTS. OR OVM SAMPLE.

CLOSED

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF-1	TPH (8015)	1020	149

SCALE



TRAVEL NOTES:	CALLOUT: <u>NA</u>	ONSITE: <u>4/28/98</u>
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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
Sample ID: LF - 1 75
Laboratory Number: D194
Chain of Custody No: 5878
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

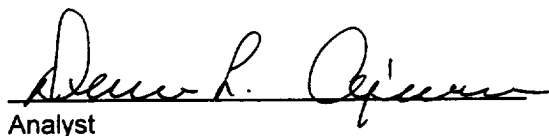
Project #: 04034-10
Date Reported: 05-01-98
Date Sampled: 04-28-98
Date Received: 04-28-98
Date Extracted: 04-29-98
Date Analyzed: 04-30-98
Analysis Requested: 8015 TPH

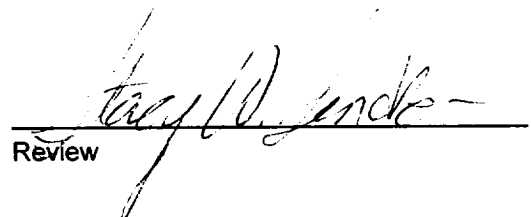
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	149	0.1
Total Petroleum Hydrocarbons	149	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla B #7 Landfarm 5 Pt. Composite.


Analyst


Review

(505) 632-0615