

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

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

AUG 24 1999

PIT REMEDIATION AND CLOSURE REPORT

Operator: CONOCO, INC. Telephone: (505) 324-5884
Address: 3315 Bloomfield Hwy., Farmington, NM 87401
Facility or Well Name: AXI APACHE K # GA
Location: Unit or Qtr/Qtr Sec 0 Sec 9 T 36N R 5W County KIO ARIZONA
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 16', width 17', depth 11'
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 75'
Direction from reference: 7 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) Greater than 1000 feet (0 points) | <u>0</u> |

RANKING SCORE (TOTAL POINTS): 0

CA 583

SEP. PIT

Date Remediation Started: _____ Date Completed: 7/7/98

Remediation Method: Excavation ☒ Approx. cubic yards 110
(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, EXCAVATION REVEALS BEDROCK,
THEREFORE NO TPH ANALYSIS WAS CONDUCTED - NAK ASSESSED

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 7' (WEST SIDEWALL)

Sample date 7/2/98 Sample time 0925

Sample Results

| | | | |
|-----------------|-------------------|----------------|-------------|
| Soil: Benzene | (ppm) _____ | Water: Benzene | (ppb) _____ |
| Total BTEX | (ppm) _____ | Toluene | (ppb) _____ |
| Field Headspace | (ppm) <u>2762</u> | Ethylbenzene | (ppb) _____ |
| TPH | (ppm) <u>NA</u> | 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 7/7/98 PRINTED NAME Jeffrey C. Blagg, P.E. #11607

SIGNATURE Jeffrey C. Blagg AND TITLE President

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) R.A. Attached

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

| | | |
|-----------------------|--|---|
| CLIENT: <u>CONOCO</u> | BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199 | LOCATION NO: <u>CA583</u> C.O.C. NO: _____ |
|-----------------------|--|---|

| | | |
|--|--|---|
| FIELD REPORT: CLOSURE VERIFICATION | | PAGE No: <u>1</u> of <u>1</u> |
| LOCATION: NAME: <u>AXI APACHE K</u> WELL #: <u>6A</u> PIT: <u>SEP</u> | | DATE STARTED: <u>7/7/98</u> DATE FINISHED: _____ |
| QUAD/UNIT: <u>0</u> SEC: <u>9</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> |
| QTR/FOOTAGE: <u>SE 1/4</u> <u>SW 1/4</u> CONTRACTOR: <u>JVC</u> | | |

| | |
|--|--|
| EXCAVATION APPROX. <u>16</u> FT. x <u>17</u> FT. x <u>11</u> FT. DEEP. | CUBIC YARDAGE: <u>110</u> |
| DISPOSAL FACILITY: <u>ON-SITE</u> | REMEDIALATION METHOD: <u>LANDFARM</u> |
| LAND USE: <u>RANGE</u> | LEASE: <u>CONTRACT #151</u> FORMATION: <u>MU</u> |

| | |
|--|--|
| FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>78</u> FT. <u>N7W</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: | |

| |
|--|
| CHECK ONE: |
| <input checked="" type="checkbox"/> PIT ABANDONED |
| <input type="checkbox"/> STEEL TANK INSTALLED |
| <input type="checkbox"/> FIBERGLASS TANK INSTALLED |

EXCAVATION CONSIST OF MOSTLY BEDROCK (SHALE), OVERALL APPEARANCE - DUSKY RED TO MED. GRAY IN COLOR, FRIABLE, TO VELY HARD, NO OBVIOUS STAINING OR HE ODOR OBSERVED W/IN EXCAVATION, STRONG HE ODOR IN NORTH, EAST, & WEST SIDEWALL DUM SAMPLES, ALL DUM SAMPLES CONSIST OF BEDROCK, THEREFORE NO TPH ANALYSIS W/AS CONDUCTED.

EXCAVATION
MOSTLY
BEDROCK

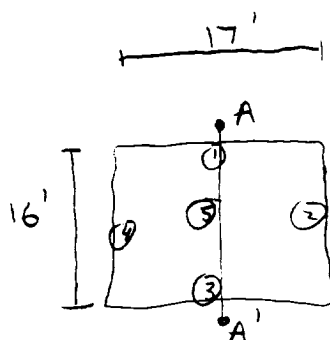
RISK ASSESSED

SCALE
0 FT

FIELD 418.1 CALCULATIONS

| TIME | SAMPLE I.D. | LAB No: | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|------|-------------|---------|------------|-----------|----------|---------|-----------|
| 0925 | | | | | | | |
| | | | | | | | |
| | | | | | | | |

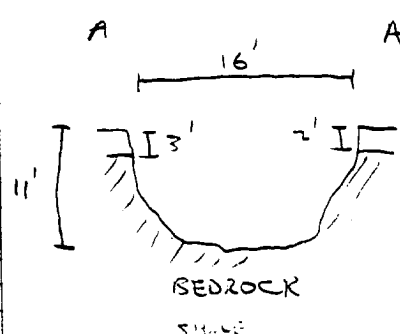
PIT PERIMETER RESULTS



| SAMPLE ID | FIELD HEADSPACE PID (ppm) |
|-----------|---------------------------|
| 1 @ 7' | 202 |
| 2 @ 7' | 195.2 |
| 3 @ 6' | 115.2 |
| 4 @ 7' | 2,262 |
| 5 @ 11' | 0.0 |

| LAB SAMPLES | | |
|-------------|----------|------|
| SAMPLE ID | ANALYSIS | TIME |
| | | |
| | | |
| | | |
| | | |

PIT PROFILE



| | | |
|---------------|------------------------|-----------------------|
| TRAVEL NOTES: | CALLOUT: <u>7/2/98</u> | ONSITE: <u>7/7/98</u> |
|---------------|------------------------|-----------------------|

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Axi Apache K # 6A
Unit O, Sec. 9, T26N, R4W
Separator pit

Non Vulnerable
> 1000 ft.
> 100 ft.

RISK ASSESSMENT (Non Vulnerable Area)

Pit remediation activities were terminated when trackhoe encountered shale bedrock at 11 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 11 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 1.7 miles 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 subsurface lateral impact from the earthen pit is very limited and 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). CONOCO requests pit closure approval on this location.

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

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

ON-SITE SOIL REMEDIATION REPORT

Operator: Conoco, Inc. Telephone: (505) 324-5884

Address: 3315 Bloomfield Hwy., Farmington, NM 87401

Facility or Well Name: AXI APACHE K #6A

Location: Unit or Qtr/Qtr Sec 0 Sec 9 T 26N R 5W County KIO ARIZONA

Land Type: RANGE

Date Remediation Started: 7/7/98 Date Completed: 5/14/99

Remediation Method: Landfarmed ☒ Approx. cubic yards 110

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: 5/12/99 Time: 1130

Sample Results:

Field Headspace (ppm) 0.0

TPH (ppm) ND Method 8015

Other ☐

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

DATE 5/14/99 PRINTED NAME Jeffrey C. Blagg, P.E. #11607

SIGNATURE Jeffrey C. Blagg AND TITLE President

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

APPROVED: YES ☒ NO ☐ (REASON) ☐

SIGNED: Keith M. ... DATE: 6-3-99

CLIENT CONOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: CA583C.O.C. NO: 6659

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION NAME: AXI APACHE K WELL #: 6A PITS: SEP.
QUAD UNIT: 0 SEC: 9 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM
STR/FOOTAGE: SW1/4 SE1/4 CONTRACTOR: JUCDATE STARTED: 5/12/99

DATE FINISHED: _____

ENVIRONMENTAL
SPECIALIST: NV

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARMAPPROX. CUBIC YARDAGE: 110LAND USE: RANGELIFT DEPTH (ft): 1

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER >100' NEAREST WATER SOURCE >1000' NEAREST SURFACE WATER >1000'NMED RANKING SCORE 0 NMED TPH CLOSURE STD: 5000 PPM 7/7/98

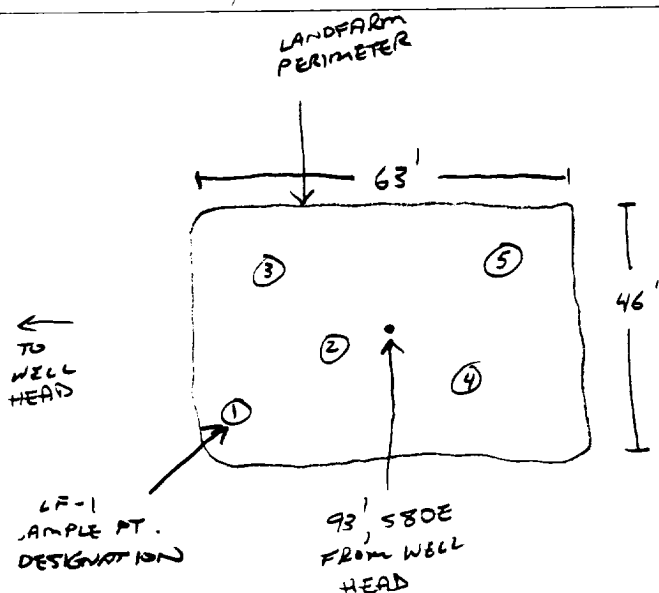
MOSTLY DUSKY RED TO DK. YELL. BROWN SILTY CLAY, NON COHESIVE TO SLIGHTLY COHESIVE,
MOSTLY DRY FIRM, SAMPLING DEPTHS RANGE FROM 6 TO 12 INCHES, NO NOTICEABLE
DISCOLORATION OBSERVED, NO APPARENT HC OR DR DETECTED W/IN OVM SAMPLE,
COLLECTED 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

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

| SAMPLE ID | FIELD HEADSPACE PID (ppm) |
|-----------|---------------------------|
| LF-1 | 0.0 |
| | |
| | |
| | |
| | |
| | |

LAB SAMPLES

| SAMPLE ID | ANALYSIS | TIME | RESULTS |
|-----------|------------|------|---------|
| LF-1 | TPH (8015) | 1130 | ND |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

SCALE

0 FT

TRAVEL NOTES:

CALLOUT: NAONSITE: 5/12/99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / CONOCO
Sample ID: LF - 1
Laboratory Number: F224
Chain of Custody No: 6659
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

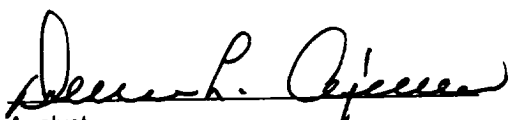
Project #: 403410
Date Reported: 05-14-99
Date Sampled: 05-12-99
Date Received: 05-13-99
Date Extracted: 05-13-99
Date Analyzed: 05-14-99
Analysis Requested: 8015 TPH

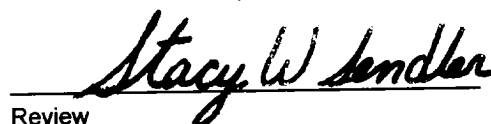
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | ND | 0.2 |
| Diesel Range (C10 - C28) | ND | 0.1 |
| Total Petroleum Hydrocarbons | ND | 0.2 |

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: AXI Apache K #6 A Landfarm. 5 Pt. Composite.


Analyst


Review

6659

[illegible]