

*Denny E. Faust*  
DEPUTY OIL & GAS INSPECTOR

AUG 24 1999

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

CAS98 *OK*  
SUBMIT 1 COPY TO  
NATURAL RESOURCE DEPT  
AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

*Approved*

Operator: CONOCO, INC. Telephone: (505) 324-5884  
Address: 3315 Bloomfield Hwy., Farmington, NM 87401  
Facility or Well Name: JICARILLA A #13E  
Location: Unit or Qtr/Qtr Sec N Sec 13 T 26N R 4W County RIO ARIZONA  
Pit Type: Separator ☒ Dehydrator ☐ Other PRODUCTION TANK  
Land Type: RANGE

Pit Location: Pit dimensions: length 32', width 13', depth \_\_\_\_\_  
(Attach diagram) Reference: wellhead ☒, other \_\_\_\_\_  
Footage from reference: 87'  
Direction from reference: 82 Degrees \_\_\_\_\_ East of North \_\_\_\_\_  
☒ West of South ☒

|                                                                                                                                                           |                        |             |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------|----------|
| <b>Depth To Groundwater:</b><br>(Vertical distance from<br>contaminants to seasonal<br>high water elevation of<br>groundwater)                            | Less than 50 feet      | (20 points) |          |
|                                                                                                                                                           | 50 feet to 99 feet     | (10 points) |          |
|                                                                                                                                                           | Greater than 100 feet  | (0 points)  | <u>0</u> |
| <b>Distance to an Ephemeral Stream</b><br>(Downgradient dry wash greater than<br>ten feet in width)                                                       | Less than 100 feet     | (10 points) |          |
|                                                                                                                                                           | Greater than 100 feet  | (0 points)  | <u>0</u> |
| <b>Distance to Nearest Lake, Playa, or Watering Pond</b><br>(Downgradient lakes, playas and<br>livestock or wildlife watering ponds)                      | Less than 100 feet     | (10 points) | <u>0</u> |
|                                                                                                                                                           | Greater than 100 feet  | (0 points)  |          |
| <b>Wellhead Protection Area:</b><br>(Less than 200 feet from a private<br>domestic water source, or: less than<br>1000 feet from all other water sources) | Yes                    | (20 points) | <u>0</u> |
|                                                                                                                                                           | No                     | (0 points)  |          |
| <b>Distance To Surface Water:</b><br>(Horizontal distance to perennial<br>lakes, ponds, rivers, streams, creeks,<br>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

CA598

SEP. / PROD. TANK PIT

Date Remediation Started: \_\_\_\_\_ Date Completed: 8/13/98

Remediation Method: Excavation ☒ Approx. cubic yards 200  
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

Groundwater Encountered: No ☒ Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents & TPH - 4 PT. COMPOSITE OF SIDEWALLS.

Sample depth 4' (SOUTH SIDEWALL - OUM SAMPLE)

Sample date 8/12/98 Sample time 1200

Sample Results

|                 |       |               |                |       |       |
|-----------------|-------|---------------|----------------|-------|-------|
| Soil: Benzene   | (ppm) | <u>ND</u>     | Water: Benzene | (ppb) | _____ |
| Total BTEX      | (ppm) | <u>10.140</u> | Toluene        | (ppb) | _____ |
| Field Headspace | (ppm) | <u>928</u>    | Ethylbenzene   | (ppb) | _____ |
| TPH             | (ppm) | <u>23.4</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 8/13/98 PRINTED NAME Jeffrey C. Blagg, P.E. #11607

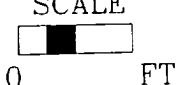
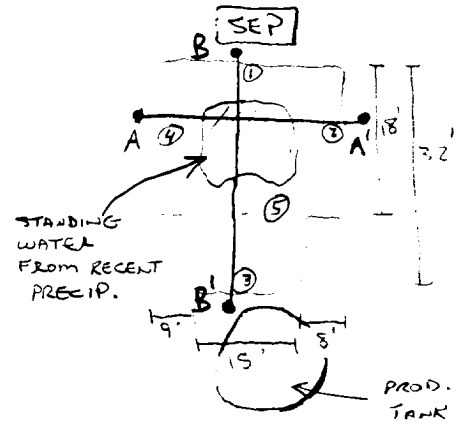
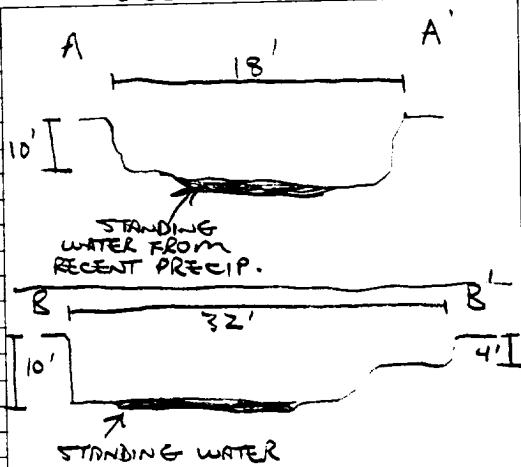
SIGNATURE Jeffrey C. Blagg AND TITLE President

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) \_\_\_\_\_

SIGNED: Kenn C. M... [Signature] DATE: 9-9-98

3003922356

| CLIENT: <u>CONOCO</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>CA598</u><br>C.D.C. NO: <u>6118</u>  |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------|------------|---------------------------|----------|------------|-----------|----------|-------------|-----------|--------|---------|----------|-----|----|-----|----|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| FIELD REPORT: <u>CLOSURE VERIFICATION</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                | PAGE No: <u>1</u> of <u>1</u>                        |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LOCATION: NAME: <u>JICA2114A</u> A WELL #: <u>13E</u> PIT: <u>SEP</u> PROD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                | DATE STARTED: <u>8/12/98</u><br>DATE FINISHED: _____ |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| QUAD/UNIT: <u>N</u> SEC: <u>13</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                | ENVIRONMENTAL SPECIALIST: <u>NV</u>                  |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| QTR/FOOTAGE: <u>1120' PSL/1635' FWL</u> CONTRACTOR: <u>JVC</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| EXCAVATION APPROX. <u>32</u> FT. x <u>15</u> FT. x <u>10</u> FT. DEEP. CUBIC YARDAGE: <u>200</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LAND USE: <u>RANGE</u> LEASE: <u>CONTRACT #105</u> FORMATION: <u>MV</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>87</u> FT. <u>382W</u> FROM WELLHEAD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DEPTH TO GROUNDWATER: <u>2100'</u> NEAREST WATER SOURCE: <u>&gt;1000'</u> NEAREST SURFACE WATER: <u>&gt;1000'</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NMOC D RANKING SCORE: <u>0</u> NMOC D TPH CLOSURE STD: <u>5000</u> PPM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SOIL AND EXCAVATION DESCRIPTION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>             DUSKY RED/LT. GRAY TO DK. GREENISH GRAY (DISCOLORATION) SILTY CLAY TO CLAY,<br/>             COHESIVE TO SLIGHTLY PLASTIC, SLIGHTLY MOIST FIRM TO VERY STIFF<br/>             DISCOLORATION OBSERVED ON MAJORITY OF NORTH SIDEWALL &amp; BOTTOM <math>\frac{1}{2}</math><br/>             OF SOUTH SIDEWALL (EXCAVATED ONLY TO 4' BELOW GRADE), STRONG HC ODOR<br/>             ASSOCIATED W/ DISCOLORATION, BOTTOM APPEARS TO BE FREE OF ANY DISCOLOR-<br/>             ATION OR HC ODOR @ SAMPLE AT VICINITY, COLLECTED 4 PT. COMPOSITE<br/>             OF SIDEWALL SAMPLING PTS. FOR LAB ANALYSIS.           </p>                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> <p style="text-align: center;">CLOSED</p> <p>SCALE</p>  <p>0 FT</p> </div> <div style="width: 65%;"> <p style="text-align: center;">FIELD 418.1 CALCULATIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <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> </thead> <tbody> <tr> <td>1200</td> <td>⑤ @ 11'</td> <td>TPH-2011</td> <td>5</td> <td>20</td> <td>1:1</td> <td>11</td> <td>44</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> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> </div> </div> |                                                                                |                                                      | TIME       | SAMPLE I.D.               | LAB No:  | WEIGHT (g) | mL. FREON | DILUTION | READING     | CALC. ppm | 1200   | ⑤ @ 11' | TPH-2011 | 5   | 20 | 1:1 | 11 | 44 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | SAMPLE I.D.                                                                    | LAB No:                                              | WEIGHT (g) | mL. FREON                 | DILUTION | READING    | CALC. ppm |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ⑤ @ 11'                                                                        | TPH-2011                                             | 5          | 20                        | 1:1      | 11         | 44        |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <div style="display: flex; justify-content: space-between;"> <div style="width: 33%;"> <p style="text-align: center;">PIT PERIMETER</p>  </div> <div style="width: 33%;"> <p style="text-align: center;">OVM RESULTS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1 @ 4'</td><td>774</td></tr> <tr><td>2 @ 5'</td><td>0.0</td></tr> <tr><td>3 @ 4'</td><td>928</td></tr> <tr><td>4 @ 5'</td><td>42.4</td></tr> <tr><td>5 @ 11'</td><td>0.0</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> </tbody> </table> </div> <div style="width: 33%;"> <p style="text-align: center;">PIT PROFILE</p>  </div> </div>                                                                 |                                                                                |                                                      | SAMPLE ID  | FIELD HEADSPACE PID (ppm) | 1 @ 4'   | 774        | 2 @ 5'    | 0.0      | 3 @ 4'      | 928       | 4 @ 5' | 42.4    | 5 @ 11'  | 0.0 |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SAMPLE ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | FIELD HEADSPACE PID (ppm)                                                      |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 @ 4'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 774                                                                            |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 @ 5'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.0                                                                            |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 @ 4'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 928                                                                            |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 @ 5'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 42.4                                                                           |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 @ 11'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.0                                                                            |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>LAB SAMPLES</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>SUB-C</td> <td>TPH/BTEX</td> <td>1200</td> </tr> <tr> <td colspan="3" style="text-align: center;">BOTH PASSED</td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> </div> <div style="width: 50%;"> <p>TRAVEL NOTES: CALLOUT: <u>8/4/98 -</u> ONSITE: <u>8/5/98 - MORN. 8/12/98 - MORN.</u></p> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                |                                                      | SAMPLE ID  | ANALYSIS                  | TIME     | SUB-C      | TPH/BTEX  | 1200     | BOTH PASSED |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SAMPLE ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ANALYSIS                                                                       | TIME                                                 |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SUB-C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TPH/BTEX                                                                       | 1200                                                 |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BOTH PASSED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                |                                                      |            |                           |          |            |           |          |             |           |        |         |          |     |    |     |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

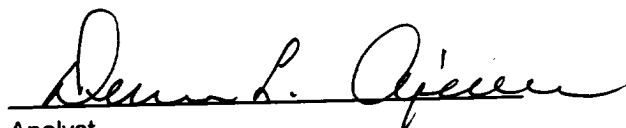
|                      |                 |                     |          |
|----------------------|-----------------|---------------------|----------|
| Client:              | Blagg / CONOCO  | Project #:          | 04034-10 |
| Sample ID:           | SW - C          | Date Reported:      | 08-13-98 |
| Laboratory Number:   | D800            | Date Sampled:       | 08-12-98 |
| Chain of Custody No: | 6118            | Date Received:      | 08-12-98 |
| Sample Matrix:       | Soil            | Date Extracted:     | 08-13-98 |
| Preservative:        | Cool            | Date Analyzed:      | 08-13-98 |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH |

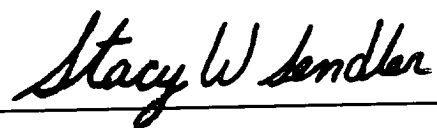
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 10.5                     | 0.2                      |
| Diesel Range (C10 - C28)     | 12.9                     | 0.1                      |
| Total Petroleum Hydrocarbons | 23.4                     | 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 A #13E Separator / Production Tank Pit. 4 Pt. Composite.

  
Analyst

  
Review

**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: CONOCO  
Sample ID: 5 @ 11'  
Project Location: Jicarilla A # 13E  
Laboratory Number: TPH-2011

Project #:   
Date Analyzed: 08-12-98  
Date Reported: 08-12-98  
Sample Matrix: Soil

| Parameter                                   | Result, mg/kg | Detection<br>Limit, mg/kg |
|---------------------------------------------|---------------|---------------------------|
| Total Recoverable<br>Petroleum Hydrocarbons | 44            | 20                        |

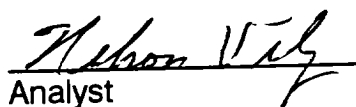
ND = Not Detectable at stated detection limits.

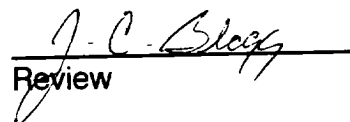
| QA/QC: | QA/QC Sample<br>TPH mg/kg | Duplicate<br>TPH mg/kg | %<br>*Diff. |
|--------|---------------------------|------------------------|-------------|
|        | 228                       | 244                    | 6.78        |

\*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 / Production Tank Pit - CA598

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

|                    |                |                     |          |
|--------------------|----------------|---------------------|----------|
| Client:            | Blagg / CONOCO | Project #:          | 04034-10 |
| Sample ID:         | SW - C         | Date Reported:      | 08-13-98 |
| Laboratory Number: | D800           | Date Sampled:       | 08-12-98 |
| Chain of Custody:  | 6118           | Date Received:      | 08-12-98 |
| Sample Matrix:     | Soil           | Date Analyzed:      | 08-13-98 |
| Preservative:      | Cool           | Date Extracted:     | 08-13-98 |
| Condition:         | Cool & Intact  | Analysis Requested: | BTEX     |

| Parameter    | Concentration<br>(ug/Kg) | Det.<br>Limit<br>(ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene      | ND                       | 8.8                      |
| Toluene      | 1,260                    | 8.4                      |
| Ethylbenzene | 85.0                     | 7.6                      |
| p,m-Xylene   | 6,920                    | 10.8                     |
| o-Xylene     | 1,870                    | 5.2                      |
| Total BTEX   | 10,140                   |                          |

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter          | Percent Recovery |
|-----------------------|--------------------|------------------|
|                       | Trifluorotoluene   | 97 %             |
|                       | Bromofluorobenzene | 97 %             |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla A #13E Separator / Production Tank Pit.  
4 Pt. Composite.

  
Analyst

  
Review

6118

# ENVIROTECH INC.

**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**Field TPH-Worksheet**

\*\*\*\*\*

Max Characters:

Client:

Sample ID:

Project Location:

Laboratory Number:

CONOCO

5 @ 11'

Jicarilla A # 13E

TPH-2011

Project #:

Date Analyzed:

Date Reported:

Sample Matrix:

08-12-98

08-12-98

Soil

Sample Weight: 5.00 grams  
Volume Freon: 20.00 mL  
Dilution Factor: 1 (unitless)  
TPH Reading: 11 mg/kg

TPH Result: 44.0 mg/kg  
Reported TPH Result: 44 mg/kg  
Actual Detection Limit: 20.0 mg/kg  
Reported Detection Limit: 20 mg/kg

| QA/QC: | Original<br>TPH mg/kg<br>----- | Duplicate<br>TPH mg/kg<br>----- | %<br>Diff.<br>---- |
|--------|--------------------------------|---------------------------------|--------------------|
|        | 228                            | 244                             | 6.78               |

Comments: \*\*\*\*\*Max Characters\*\*\*\*\*

Comments: Separator / Production Tank Pit - CA598



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

CA598

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

**ON-SITE SOIL REMEDIATION REPORT**

|                                                                                                                                                             |                                                                                                                                                                                                                                       |                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <b>Operator:</b> <u>Conoco, Inc.</u>                                                                                                                        |                                                                                                                                                                                                                                       | <b>Telephone:</b> <u>(505) 324-5884</u> |
| <b>Address:</b> <u>3315 Bloomfield Hwy., Farmington, NM 87401</u>                                                                                           |                                                                                                                                                                                                                                       |                                         |
| <b>Facility or Well Name:</b> <u>JICARILLA A #13E</u>                                                                                                       |                                                                                                                                                                                                                                       |                                         |
| <b>Location:</b> Unit or Qtr/Qtr Sec <u>N</u> Sec <u>13</u> T <u>26N</u> R <u>4W</u> County <u>RIO ARriba</u>                                               |                                                                                                                                                                                                                                       |                                         |
| <b>Land Type:</b> <u>RANGE</u>                                                                                                                              |                                                                                                                                                                                                                                       |                                         |
| <b>Date Remediation Started:</b> <u>8/5/98</u>                                                                                                              |                                                                                                                                                                                                                                       | <b>Date Completed:</b> <u>4/15/99</u>   |
| <b>Remediation Method:</b> Landfarmed <input checked="" type="checkbox"/>                                                                                   |                                                                                                                                                                                                                                       | <b>Approx. cubic yards</b> <u>200</u>   |
| Composted <input type="checkbox"/>                                                                                                                          |                                                                                                                                                                                                                                       |                                         |
| Other <input type="checkbox"/>                                                                                                                              |                                                                                                                                                                                                                                       |                                         |
| <b>Depth To Groundwater:</b> (pts.) <u>0</u>                                                                                                                | <b>Final Closure Sampling:</b><br><br><b>Sampling Date:</b> <u>4/14/99</u> <b>Time:</b> <u>1115</u><br><br><b>Sample Results:</b><br><br>Field Headspace (ppm) <u>31.1</u><br>TPH (ppm) <u>50.9</u> Method <u>8015</u><br>Other _____ |                                         |
| <b>Distance to an Ephemeral Stream</b> (pts.) <u>0</u>                                                                                                      |                                                                                                                                                                                                                                       |                                         |
| <b>Distance to Nearest Lake, Playa, or Watering Pond</b> (pts.) <u>0</u>                                                                                    |                                                                                                                                                                                                                                       |                                         |
| <b>Wellhead Protection Area:</b> (pts.) <u>0</u>                                                                                                            |                                                                                                                                                                                                                                       |                                         |
| <b>Distance To SurfaceWater:</b> (pts.) <u>0</u>                                                                                                            |                                                                                                                                                                                                                                       |                                         |
| <b>RANKING SCORE (TOTAL POINTS):</b> <u>0</u>                                                                                                               |                                                                                                                                                                                                                                       |                                         |
| <b>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEGE AND BELIEF</b>                                               |                                                                                                                                                                                                                                       |                                         |
| <b>DATE</b> <u>4/15/99</u> <b>PRINTED NAME</b> <u>Jeffrey C. Blagg, P.E. #11607</u>                                                                         |                                                                                                                                                                                                                                       |                                         |
| <b>SIGNATURE</b> <u>Jeffrey C. Blagg</u> <b>AND TITLE</b> <u>President</u>                                                                                  |                                                                                                                                                                                                                                       |                                         |
| <b>AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.</b> |                                                                                                                                                                                                                                       |                                         |
| <b>APPROVED:</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) _____                                                         |                                                                                                                                                                                                                                       |                                         |
| <b>SIGNED:</b> <u>K. C. Mammill</u> <b>DATE:</b> <u>6-3-99</u>                                                                                              |                                                                                                                                                                                                                                       |                                         |

|                       |                                                                                |                                                     |
|-----------------------|--------------------------------------------------------------------------------|-----------------------------------------------------|
| CLIENT: <u>CONOCO</u> | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>CA598</u><br>C.O.C. NO: <u>6647</u> |
|-----------------------|--------------------------------------------------------------------------------|-----------------------------------------------------|

# FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

|                                 |                |                          |                           |                                     |
|---------------------------------|----------------|--------------------------|---------------------------|-------------------------------------|
| LOCATION NAME: <u>JICARILLA</u> | A              | WELL #: <u>13E</u>       | PITS: <u>SEP. / PROD.</u> | DATE STARTED: <u>4/14/99</u>        |
| QUAD/UNIT: <u>N</u>             | SEC: <u>13</u> | TWP: <u>26N</u>          | RNG: <u>4W</u>            | PM: <u>NM</u>                       |
| CNTY: <u>RA</u>                 | ST: <u>NM</u>  | STR/FOOTAGE: <u>SEL4</u> | CONTRACTOR: <u>JVC</u>    | ENVIRONMENTAL SPECIALIST: <u>NV</u> |

## SOIL REMEDIATION:

REMEDATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 200

LAND USE: RANGE

LIFT DEPTH (ft): 1.5

## FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

AMMOE RAINING SCORE: 0 NMOC TPH CLOSURE STD: 5000 PPM 8/5/98

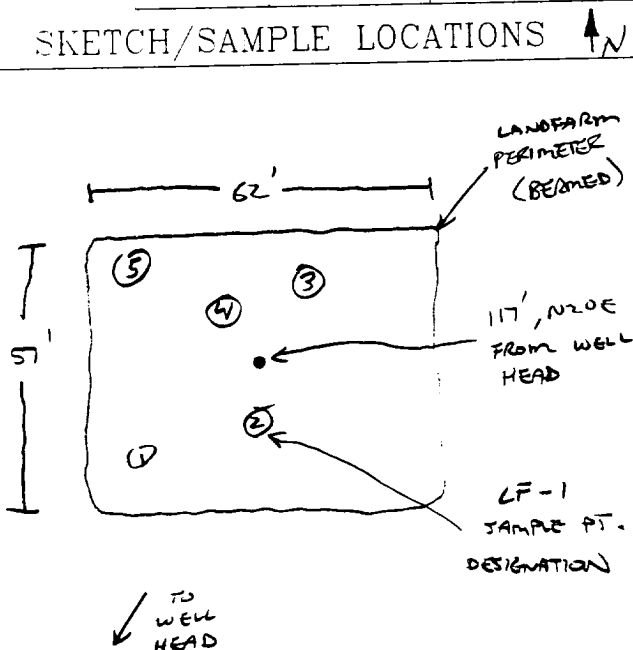
SOIL MOSTLY DR. YELL. BROWN TO DUSKY RED SILTY SAND TO SILTY CLAY, NON COHESIVE TO SLIGHTLY PLASTIC, SLIGHTLY MOIST TO MOIST FIRM, SAMPLING DEPTHS RANGE FROM 8-18 INCHES, NO APPARENT STAINING OBSERVED, SLIGHT HC ODDOR DETECTED IN COMPOSITE SOIL, COLLECTED 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

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

## LAB SAMPLES

| SAMPLE ID | FIELD HEADSPACE PID (ppm) | SAMPLE ID | ANALYSIS   | TIME | RESULTS |
|-----------|---------------------------|-----------|------------|------|---------|
| LF-1      | 31.1                      | LF-1      | TPH (8015) | 1115 | 50.9    |
|           |                           |           |            |      |         |
|           |                           |           |            |      |         |
|           |                           |           |            |      |         |
|           |                           |           |            |      |         |

## SCALE

0 1 FT

## TRAVEL NOTES:

CALLOUT: NA

ONSITE: 4/14/99

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

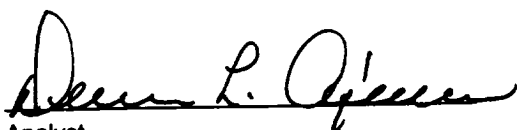
|                      |                 |                     |          |
|----------------------|-----------------|---------------------|----------|
| Client:              | Blagg / CONOCO  | Project #:          | 403410   |
| Sample ID:           | LF - 1          | Date Reported:      | 04-15-99 |
| Laboratory Number:   | F026            | Date Sampled:       | 04-14-99 |
| Chain of Custody No: | 6647            | Date Received:      | 04-14-99 |
| Sample Matrix:       | Soil            | Date Extracted:     | 04-15-99 |
| Preservative:        | Cool            | Date Analyzed:      | 04-15-99 |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH |

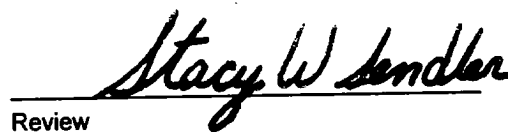
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 8.6                      | 0.2                      |
| Diesel Range (C10 - C28)     | 42.3                     | 0.1                      |
| Total Petroleum Hydrocarbons | 50.9                     | 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 A #13 E Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

## 6647

[illegible]