

*Denny B. Foust*  
DEPUTY OIL & GAS INSPECTOR

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

CA636  
SUBMIT 1 COPY TO  
NATURAL RESOURCE DEPT  
AND OIL & GAS ADMINISTRATION

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: JICARILLA BR E #7  
Location: Unit or Qtr/Qtr Sec K Sec 20 T 25N R 4W County RIO ARriba  
Pit Type: Separator ☒ Dehydrator ☐ Other ☐  
Land Type: RANGE

Pit Location: Pit dimensions: length 15', width 17', depth 8'  
(Attach diagram) Reference: wellhead ☒, other ☐  
Footage from reference: 23'  
Direction from reference: 47 Degrees ☒ East of North ☐  
West 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) | <u>0</u> |
|   | 50 feet to 99 feet     | (10 points) |          |
|   | Greater than 100 feet  | (0 points)  |          |
| <b>Distance to an Ephemeral Stream</b><br>(Downgradient dry wash greater than<br>ten feet in width)   | Less than 100 feet     | (10 points) | <u>0</u> |
|   | Greater than 100 feet  | (0 points)  |          |
| <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) | <u>0</u> |
|   | 100 feet to 1000 feet  | (10 points) |          |
|   | Greater than 1000 feet | (0 points)  |          |

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: \_\_\_\_\_ Date Completed: 9/15/98

Remediation Method: Excavation ☒ Approx. cubic yards 60  
Check all appropriate (options) Landfarmed ☒ Insitu Bioremediation \_\_\_\_\_  
Other \_\_\_\_\_

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

General Description of Remedial Action: ExcavationGroundwater 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 11' (PIT BOTTOM)Sample date 9/15/98 Sample time 1245

## Sample Results

|                 |       |            |                |       |       |
|-----------------|-------|------------|----------------|-------|-------|
| Soil: Benzene   | (ppm) | _____      | Water: Benzene | (ppb) | _____ |
| Total BTEX      | (ppm) | _____      | Toluene        | (ppb) | _____ |
| Field Headspace | (ppm) | <u>0.0</u> | Ethylbenzene   | (ppb) | _____ |
| TPH             | (ppm) | <u>ND</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 9/15/98 PRINTED NAME Jeffrey C. Blagg, P.E. #11607SIGNATURE 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: Karen C. Mammall DATE: 10-1-98

3003905907

|                       |  |   |
|-----------------------|--|---|
| CLIENT: <u>CONOCO</u> | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>CA636</u><br>C.D.C. NO: _____ |
|-----------------------|--|---|

|   |  |                                     |
|---|--|-------------------------------------|
| FIELD REPORT: CLOSURE VERIFICATION  |  | PAGE No: <u>1</u> of <u>1</u>       |
| LOCATION: NAME: <u>JCARILLA BR E</u> WELL #: <u>7</u> PIT: <u>SEP</u>   |  | DATE STARTED: <u>9/15/98</u>        |
| QUAD/UNIT: <u>K</u> SEC: <u>20</u> TWP: <u>25N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> |  | DATE FINISHED: _____                |
| QTR/FOOTAGE: <u>650' FSL/1650' FWH</u> CONTRACTOR: <u>JVC</u>   |  | ENVIRONMENTAL SPECIALIST: <u>NV</u> |

|   |  |
|---|--|
| EXCAVATION APPROX. <u>15</u> FT. x <u>17</u> FT. x <u>8</u> FT. DEEP. | CUBIC YARDAGE: <u>60</u>                         |
| DISPOSAL FACILITY: <u>ON-SITE</u>                                     | REMEDIALATION METHOD: <u>LANDFARM</u>            |
| LAND USE: <u>RANGE</u>  | LEASE: <u>CONTRACT # 64</u> FORMATION: <u>PC</u> |


  

|  |  |
|--|--|
| FIELD NOTES & REMARKS:   | PIT LOCATED APPROXIMATELY <u>23</u> FT. <u>S47E</u> FROM WELLHEAD.             |
| DEPTH TO GROUNDWATER: <u>&gt;100'</u>  | NEAREST WATER SOURCE: <u>&gt;1000'</u> NEAREST SURFACE WATER: <u>&gt;1000'</u> |
| NMOC D RANKING SCOPE: <u>0</u>   | NMOC D TPH CLOSURE STD: <u>5000</u> PPM  |
| <u>SOIL AND EXCAVATION DESCRIPTION:</u>  |  |
| <p>DR. YELL. BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT STAINING OBSERVED NO APPARENT HC ODOR W/IN EXCAVATION OR IN ANY OF THE OVM SAMPLES.</p> |  |

CLOSED

SCALE



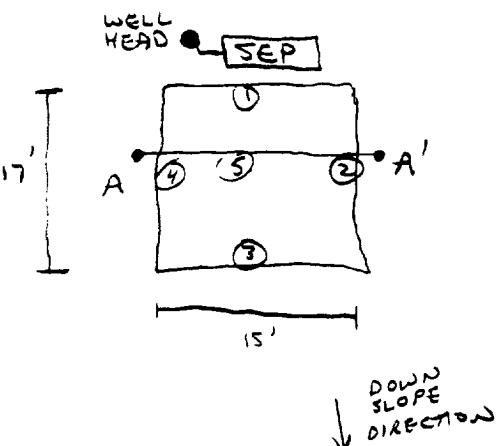
0 FT

FIELD 418.1 CALCULATIONS

| TIME | SAMPLE I.D. | LAB No:  | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|------|-------------|----------|------------|-----------|----------|---------|-----------|
| 1245 | ⑥ 11'       | TAH-2036 | 5          | 20        | 1:1      | 5       | ND        |
|      |             |          |            |           |          |         |           |
|      |             |          |            |           |          |         |           |

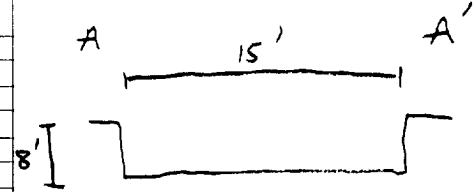
PIT PERIMETER



OVM RESULTS

| SAMPLE ID | FIELD HEADSPACE PID (ppm) |
|-----------|---------------------------|
| 1 ⑥ 5'    | 0.0                       |
| 2 ⑥ 4'    | 0.0                       |
| 3 ⑥ 4'    | 0.0                       |
| 4 ⑥ 5'    | 0.0                       |
| 5 ⑥ 11'   | 0.0                       |
|           |                           |
|           |                           |
|           |                           |
|           |                           |
|           |                           |

PIT PROFILE



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

|               |                |                        |
|---------------|----------------|------------------------|
| TRAVEL NOTES: | CALLOUT: _____ | ONSITE: <u>9/15/98</u> |
|---------------|----------------|------------------------|

# 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             | Project #:     |          |
| Sample ID:         | 5 @ 11'            | Date Analyzed: | 09-15-98 |
| Project Location:  | Jicarilla BR E # 7 | Date Reported: | 09-15-98 |
| Laboratory Number: | TPH-2036           | Sample Matrix: | Soil     |

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

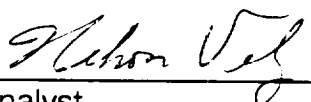
ND = Not Detectable at stated detection limits.

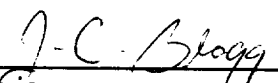
| QA/QC: | QA/QC Sample<br>TPH mg/kg | Duplicate<br>TPH mg/kg | %<br>*Diff. |
|--------|---------------------------|------------------------|-------------|
|        | -----                     | -----                  | -----       |
|        | 236                       | 220                    | 7.02        |

\*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 Pit - CA636

  
Analyst

  
Review

# BLAGG ENGINEERING, INC.

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

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

Max Characters: Field TPH-Worksheet  
\*\*\*\*\*  
Client: Conoco Project #:   
Sample ID: 5 @ 11' Date Analyzed: 09-15-98  
Project Location: Jicarilla BR E # 7 Date Reported: 09-15-98  
Laboratory Number: TPH-2036 Sample Matrix: Soil

Sample Weight: 5.00 grams  
Volume Freon: 20.00 mL  
Dilution Factor: 1 (unitless)  
TPH Reading: 5 mg/kg

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

| QA/QC: | Original<br>TPH mg/kg | Duplicate<br>TPH mg/kg | %<br>Diff. |
|--------|-----------------------|------------------------|------------|
|        | -----                 | -----                  | -----      |
|        | 236                   | 220                    | 7.02       |

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

Comments: Separator Pit - CA636

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

CA636

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: JICARILLA BR E # 7  
Location: Unit or Qtr/Qtr Sec K Sec 20 T 25N R 4W County RIO ARriba  
Land Type: RANGE

Date Remediation Started: 9/15/98 Date Completed: 4/19/99  
Remediation Method: Landfarmed ☒ Approx. cubic yards 60  
Composted ☐  
Other ☐

Depth To Groundwater: (pts.) 0  
Distance to an Ephemeral Stream (pts.) 0  
Distance to Nearest Lake, Playa, or Watering Pond (pts.) 0  
Wellhead Protection Area: (pts.) 0  
Distance To Surface Water: (pts.) 0  
RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:  
Sampling Date: 4/15/99 Time: 1400  
Sample Results:  
Field Headspace (ppm) 33.1  
TPH (ppm) 3.2 Method 8015  
Other ☐

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

DATE 4/19/99 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: Kent M. M... DATE: 6-3-99

|                      |   |   |
|----------------------|---|---|
| CLIENT <u>CONOCO</u> | <b>BLAGG ENGINEERING, INC.</b><br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>CA636</u><br><br>C.O.C. NO: <u>6655</u> |
|----------------------|---|---|

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

|  |   |
|--|---|
| LOCATION: NAME: <u>JICARILLA BR E</u> WELL #: <u>7</u> PITS: <u>SEP.</u><br>QUAD/UNIT: <u>K</u> SEC: <u>20</u> TWP: <u>25N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u><br>STRAFOOTAGE: <u>NELLY SW14</u> CONTRACTOR: <u>JVC</u> | DATE STARTED: <u>4/15/99</u><br>DATE FINISHED: _____<br>ENVIRONMENTAL SPECIALIST: <u>NV</u> |
|--|---|

### SOL REMEDIATION:

REMEDIATION SYSTEM: LANDFARM      APPROX. CUBIC YARDAGE: 60  
 LAND USE: RANGE      LIFT DEPTH (ft): 1-1.5

### FIELD NOTES & REMARKS:

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

WASTE RANKING SCORE: 0    NMCD TPH CLOSURE STD: 5000 PPM    9/15/98

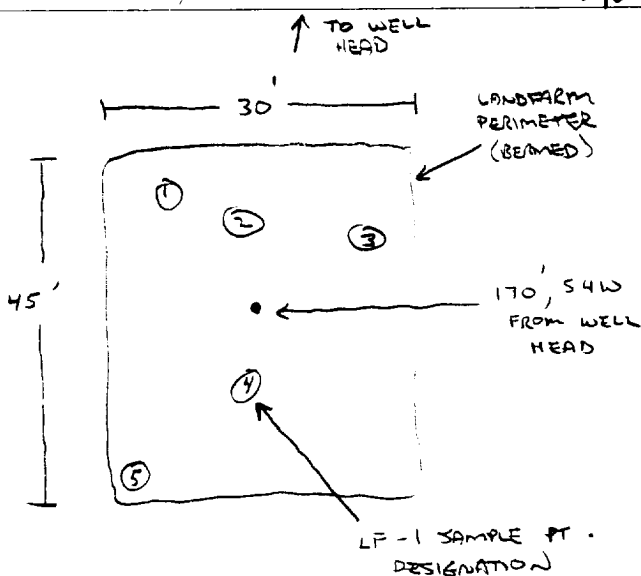
OK. YELL. BROWN SILTY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, SAMPLING DEPTH @ APPROX 12-15 INCHES, NO APPARENT STRAINING OBSERVED, SLIGHT HC ODOOR DETECTED w/in COMPOSITE OVM SAMPLE, COLLECTED 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

CLOSED

### FIELD 418.1 CALCULATIONS

| SAMP. TIME | SAMPLE ID | LAB No: | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|------------|-----------|---------|------------|-----------|----------|---------|-----------|
|            |           |         |            |           |          |         |           |
|            |           |         |            |           |          |         |           |
|            |           |         |            |           |          |         |           |

### SKETCH/SAMPLE LOCATIONS ↑ N



### OVM RESULTS

### LAB SAMPLES

| SAMPLE ID | FIELD HEADSPACE PID (ppm) | SAMPLE ID | ANALYSIS   | TIME | RESULTS |
|-----------|---------------------------|-----------|------------|------|---------|
| LF-1      | 33.1                      | LF-1      | TPH (8015) | 1400 | 3.2     |
|           |                           |           |            |      |         |
|           |                           |           |            |      |         |
|           |                           |           |            |      |         |
|           |                           |           |            |      |         |

### SCALE

0      FT

### TRAVEL NOTES:

CALLOUT: NA

ONSITE: 4/15/99

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

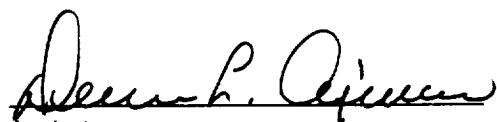
|                      |                 |                     |          |
|----------------------|-----------------|---------------------|----------|
| Client:              | Blagg / CONOCO  | Project #:          | 403410   |
| Sample ID:           | LF - 1          | Date Reported:      | 04-19-99 |
| Laboratory Number:   | F048            | Date Sampled:       | 04-15-99 |
| Chain of Custody No: | 6655            | Date Received:      | 04-16-99 |
| Sample Matrix:       | Soil            | Date Extracted:     | 04-16-99 |
| Preservative:        | Cool            | Date Analyzed:      | 04-17-99 |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH |

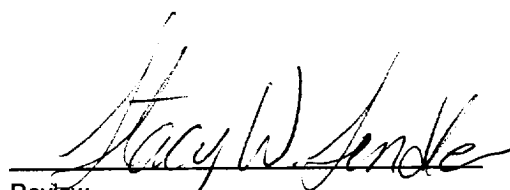
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 3.2                      | 0.2                      |
| Diesel Range (C10 - C28)     | ND                       | 0.1                      |
| Total Petroleum Hydrocarbons | 3.2                      | 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 BR E #7 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review



## 6655

**ENVIROTECH INC.**