

*Benjamin T. ...*  
DEPUTY OIL & GAS INSPECTOR

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

BJ531

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

OCT 6 8 1999

*OK*

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200  
Address: 200 Amoco Court, Farmington, NM 87401  
Facility or Well Name: JICARILLA CONTRACT 148-15  
Location: Unit or Qtr/Qtr Sec N Sec 15 T 25N R 5W County RIO ARriba  
Pit Type: Separator      Dehydrator      Other BLOW  
Land Type: RANGE

Pit Location: Pit dimensions: length 17', width 21', depth 15'  
(Attach diagram) Reference: wellhead X, other       
Footage from reference: 117'  
Direction from reference: 69 Degrees      East      North       
X West      South X

RECEIVED  
AUG 24 1999  
OIL CON. DIV.  
DIST. 3

**Depth To Groundwater:**

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

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

**Distance to an Ephemeral Stream**

(Downgradient dry wash greater than  
ten feet in width)

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

**Distance to Nearest Lake, Playa, or Watering Pond**

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

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

**Wellhead Protection Area:**

(Less than 200 feet from a private  
domestic water source, or: less than  
1000 feet from all other water sources)

Yes (20 points)  
No (0 points) 0

**Distance To Surface Water:**

(Horizontal distance to perennial  
lakes, ponds, rivers, streams, creeks,  
irrigation canals and ditches)

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

RANKING SCORE (TOTAL POINTS): 0

BT531

BLOW PIT

Date Remediation Started: \_\_\_\_\_

Date Completed: 2/4/98Remediation Method: Excavation ☒  
(Check all appropriate sections)Approx. cubic yards 90Landfarmed ☒

Insitu Bioremediation \_\_\_\_\_

Other \_\_\_\_\_

Remediation Location:  
(i.e. landfarmed onsite,  
name and location of  
offsite facility)Onsite ☒ Offsite \_\_\_\_\_General Description of Remedial Action: Excavation BEDROCK BOTTOM.

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 DocumentsSample depth 9' (SOUTH SIDEWALL)Sample date 2/3/98 Sample time 1300

Sample Results

Soil: Benzene (ppm) \_\_\_\_\_

Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) \_\_\_\_\_

Toluene (ppb) \_\_\_\_\_

Field Headspace (ppm) 0.0

Ethylbenzene (ppb) \_\_\_\_\_

TPH (ppm) 27.4

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

2/4/98

PRINTED NAME

Buddy D. Shaw

SIGNATURE

Buddy D. Shaw

AND TITLE

Environmental Coordinator

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

APPROVED: YES ☒ NO \_\_\_\_\_ (REASON) \_\_\_\_\_

SIGNED:

Kurt C. Mamm

DATE:

2-6-98

|                      |  |   |
|----------------------|--|---|
| CLIENT: <u>AMOCO</u> | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>8J531</u><br>C.D.C. NO: <u>5724</u> |
|----------------------|--|---|

|   |  |   |
|---|--|---|
| <b>FIELD REPORT: CLOSURE VERIFICATION</b>   |  | PAGE No: <u>1</u> of <u>1</u>                       |
| LOCATION: NAME: <u>JICA CONTR. 148</u> WELL #: <u>15</u> PIT: <u>BLOW</u>                                     |  | DATE STARTED: <u>2/3/98</u><br>DATE FINISHED: _____ |
| QUAD/UNIT: <u>N</u> SEC: <u>15</u> TWP: <u>ZSN</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> |  | ENVIRONMENTAL SPECIALIST: <u>NV</u>                 |
| QTR/FOOTAGE: <u>SE/4 SW/4</u> CONTRACTOR: <u>P &amp; S</u>  |  |   |

|  |
|--|
| EXCAVATION APPROX. <u>17</u> FT x <u>21</u> FT x <u>15</u> FT DEEP. CUBIC YARDAGE: <u>90</u> |
| DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>                        |
| LAND USE: <u>RANGE</u> LEASE: <u>JIC 148</u> FORMATION: _____                                |

|  |  |
|--|--|
| FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>117</u> FT. <u>561W</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 RANKING SCORE: <u>0</u> NMOC TPH CLOSURE STD: <u>5000</u> PPM   |  |
| SOIL AND EXCAVATION DESCRIPTION:   |  |

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

MOSTLY MOD. YELL. BROWN SAND, NON COHESIVE SLIGHTLY MOIST, FIRM,  
 NO APPARENT STAINING OR HC ODOR OBSERVED W/IN EXCAVATION,  
 NO APPARENT HC ODOR OBSERVED IN ANY OF THE OUM SAMPLES,  
 EXPOSED BEDROCK ON EAST SIDEWALL & PIT BOTTOM, UNABLE TO COLLECT  
 OUM SAMPLE FOR EAST SIDEWALL DUE TO HARDNESS OF BEDROCK.

**BEDROCK BOTTOM**

**CLOSED**

SCALE

0 FT

P & A DATE - 9/8/93

FIELD 418.1 CALCULATIONS

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

**PIT PERIMETER**

**PIT PROFILE**

**OVM RESULTS**

| SAMPLE ID | FIELD HEADSPACE PID (ppm) |
|-----------|---------------------------|
| 1 @ 10'   | 0.0                       |
| 2         | —                         |
| 3 @ 9'    | 0.0                       |
| 4 @ 10'   | 0.0                       |
| 5 @ 15'   | 0.0                       |

**LAB SAMPLES**

| SAMPLE ID | ANALYSIS | TIME |
|-----------|----------|------|
| ③ @ 9'    | TPH 48.1 | 1300 |

PASSED

|                              |                       |
|------------------------------|-----------------------|
| TRAVEL NOTES: CALLOUT: _____ | ONSITE: <u>2/3/98</u> |
|------------------------------|-----------------------|

|                      |                 |                  |           |
|----------------------|-----------------|------------------|-----------|
| Client:              | Blagg / AMOCO   | Project #:       | 04034-10  |
| Sample ID:           | 3 @ 9'          | Date Reported:   | 02-04-98  |
| Laboratory Number:   | C875            | Date Sampled:    | 02-03-98  |
| Chain of Custody No: | 5724            | Date Received:   | 02-04-98  |
| Sample Matrix:       | Soil            | Date Extracted:  | 02-04-98  |
| Preservative:        | Cool            | Date Analyzed:   | 02-04-98  |
| Condition:           | Cool and Intact | Analysis Needed: | TPH-418.1 |


| Parameter                    | Concentration<br>(mg/kg) | Det.<br>Limit<br>(mg/kg) |
|------------------------------|--------------------------|--------------------------|
| Total Petroleum Hydrocarbons | 27.4                     | 5.0                      |

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Jicarilla Contract 148-15 Blow Pit.

  
Analyst

  
Review

**ENVIROTECH INC.**  
5796 U.S. Highway 64-3014  
Farmington, New Mexico 87401

85531  
SUBMIT 1 COPY TO  
NATURAL RESOURCE DEPT  
AND OIL & GAS ADMINISTRATION

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

**ON-SITE SOIL REMEDIATION REPORT**

|   |  |   |
|---|--|---|
| <b>Operator:</b> <u>AMOCO PRODUCTION COMPANY</u>  |  | <b>Telephone:</b> <u>(505) 326-9200</u>   |
| <b>Address:</b> <u>200 Amoco Court, Farmington, NM 87401</u>  |  |   |
| <b>Facility or Well Name:</b> <u>JICARILLA CONTRACT 148.15</u>  |  |   |
| <b>Location:</b> Unit or Qtr/Qtr Sec <u>N</u> Sec <u>15</u> T <u>25N</u> R <u>5W</u> County <u>RIO ARIZONA</u>  |  |   |
| <b>Land Type:</b> <u>RANGE</u>  |  |   |
| <b>Date Remediation Started:</b> <u>2.3.98</u>  |  | <b>Date Completed:</b> <u>1.13.99</u>   |
| <b>Remediation Method:</b> Landfarmed <input checked="" type="checkbox"/><br>Composted <input type="checkbox"/><br>Other <input type="checkbox"/>           |  | <b>Approx. cubic yards</b> <u>90</u>  |
| <b>Depth To Groundwater:</b> (pts.) <u>0</u>  |  | <b>Final Closure Sampling:</b><br><b>Sampling Date:</b> <u>1.11.99</u> <b>Time:</b> <u>1020</u><br><b>Sample Results:</b><br>Field Headspace (ppm) <u>0.0</u><br>TPH (ppm) <u>2.6</u> <b>Method</b> <u>8015</u><br>Other <input type="checkbox"/> |
| <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 Surface Water:</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 KNOWLEDGE AND BELIEF</b>  |  |   |
| <b>DATE</b> <u>1/13/99</u> <b>PRINTED NAME</b> <u>Buddy D. Shaw</u>   |  | <b>AND TITLE</b> <u>Environmental Coordinator</u>   |
| <b>SIGNATURE</b> <u>Buddy D. Shaw</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>[Signature]</u>   |  | <b>DATE:</b> <u>3-31-99</u>   |

|                      |  |   |
|----------------------|--|---|
| CLIENT: <u>AMOCO</u> | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>B5531</u><br>C.O.C. NO: <u>0543</u> |
|----------------------|--|---|

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

|   |   |
|---|---|
| LOCATION: NAME: <u>JCARROLL CONTRACT 14B</u> WELL #: <u>15</u> PITS: <u>BLOW</u>                              | DATE STARTED: <u>1.11.99</u><br>DATE FINISHED: <u>1.13.99</u> |
| QUAD/UNIT: <u>N</u> SEC: <u>15</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> | ENVIRONMENTAL SPECIALIST: <u>REP</u>                          |
| QTR/FOOTAGE: <u>SE/A SW/A</u> CONTRACTOR: <u>P+S</u>  |   |

### SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 90

LAND USE: RANGE

LIFT DEPTH (ft): 1.2

### FIELD NOTES & REMARKS:

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

NMDCD RANKING SCORE: 0 NMDCD TPH CLOSURE STD: 5000 PPM

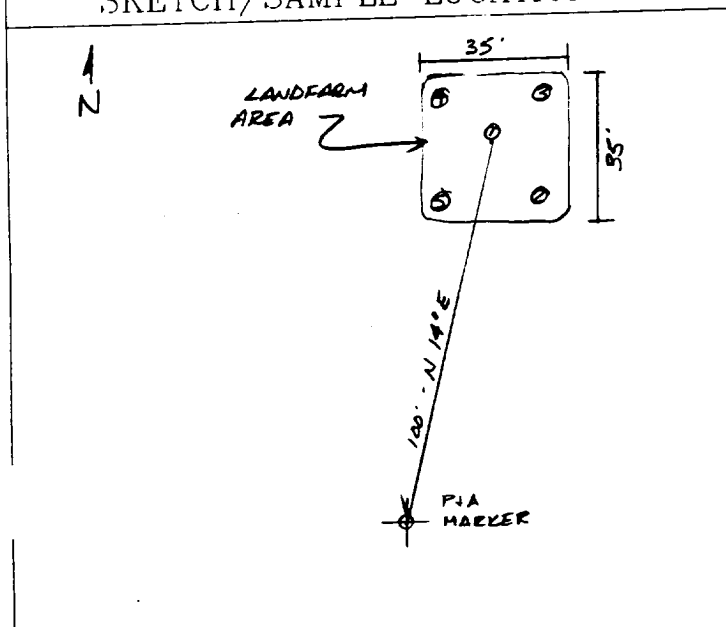
LT. YELLOW CRANGE - LT. BROWN SAND. NDN COHESIVE, SLIGHTLY MOIST, LOOSE.  
NO APPARENT STAINING, OR HC. ODOR DETECTED. SAMPLING DEPTHS RANGE  
FROM 6" TO 18" TOOK A 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS

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      | 0.0                       | LF-1      | TPH (BOLIS) | 1020 | 2.6     |
|           |                           |           |             |      |         |
|           |                           |           |             |      |         |
|           |                           |           |             |      |         |
|           |                           |           |             |      |         |
|           |                           |           |             |      |         |

### SCALE

0 10 FT

### TRAVEL NOTES:

CALLOUT: N/A

ONSITE: 1.11.99

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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


|                      |                 |                     |          |
|----------------------|-----------------|---------------------|----------|
| Client:              | Blagg / AMOCO   | Project #:          | 04034-10 |
| Sample ID:           | LF - 1          | Date Reported:      | 01-13-99 |
| Laboratory Number:   | E493            | Date Sampled:       | 01-11-99 |
| Chain of Custody No: | 6543            | Date Received:      | 01-12-99 |
| Sample Matrix:       | Soil            | Date Extracted:     | 01-12-99 |
| Preservative:        | Cool            | Date Analyzed:      | 01-13-99 |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH |

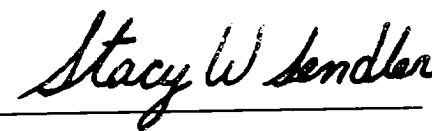
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 2.3                      | 0.2                      |
| Diesel Range (C10 - C28)     | 0.3                      | 0.1                      |
| Total Petroleum Hydrocarbons | 2.6                      | 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 Contract 148 - 15 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review



6543

[illegible]