

District I *E. Faust*  
P.O. Box 1980, Hobbs, NM  
District Oil & Gas Inspector  
Drawer DD, Artesia, NM 88211  
Erect MAY 03 1999  
Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department  
OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

*OK*  
C4163  
SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

*Approved*

**PIT REMEDIATION AND CLOSURE REPORT**

|                                                                                                                                                                                                   |  |                                                                                                                                             |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------|--|
| Operator: <u>Amoco Production Company</u>                                                                                                                                                         |  | Telephone: <u>(505) - 326-9200</u>                                                                                                          |  |
| Address: <u>200 Amoco Court, Farmington, New Mexico 87401</u>                                                                                                                                     |  |                                                                                                                                             |  |
| Facility Or: <u>HARE GC F #1</u>                                                                                                                                                                  |  |                                                                                                                                             |  |
| Well Name                                                                                                                                                                                         |  |                                                                                                                                             |  |
| Location: Unit or Qtr/Qtr Sec <u>6</u> Sec <u>23</u> T <u>29N</u> R <u>11W</u> County <u>San Juan</u>                                                                                             |  |                                                                                                                                             |  |
| Pit Type: Separator <input checked="" type="checkbox"/> Dehydrator <input type="checkbox"/> Other <input type="checkbox"/>                                                                        |  |                                                                                                                                             |  |
| Land Type: BLM <input type="checkbox"/> , State <input type="checkbox"/> , Fee <input type="checkbox"/> , Other <input type="checkbox"/>                                                          |  |                                                                                                                                             |  |
| Pit Location: Pit dimensions: length <u>30'</u> , width <u>30'</u> , depth <u>9'</u><br>(attach diagram) Reference: wellhead <input checked="" type="checkbox"/> , other <input type="checkbox"/> |  |                                                                                                                                             |  |
| Footage from reference: <u>315'</u>                                                                                                                                                               |  |                                                                                                                                             |  |
| Direction from reference: <u>60</u> Degrees <input type="checkbox"/> East North <input checked="" type="checkbox"/><br><input checked="" type="checkbox"/> West of South <input type="checkbox"/> |  |                                                                                                                                             |  |
| Depth To Ground Water:<br>(Vertical distance from<br>contaminants to seasonal<br>high water elevation of<br>ground water)                                                                         |  | Less than 50 feet (20 points)<br>50 feet to 99 feet (10 points)<br>Greater than 100 feet (0 Points) <u>20</u>                               |  |
| Wellhead Protection Area:<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><br>No (0 points) <input type="checkbox"/>                                                                          |  |
| Distance To Surface Water:<br>(Horizontal distance to perennial<br>lakes, ponds, rivers, streams, creeks,<br>irrigation canals and ditches)                                                       |  | Less than 200 feet (20 points)<br>200 feet to 1000 feet (10 points) <u>20</u><br>Greater than 1000 feet (0 points) <input type="checkbox"/> |  |
| RANKING SCORE (TOTAL POINTS):                                                                                                                                                                     |  | <u>40</u>                                                                                                                                   |  |

C4163 SER PIT

Date Remediation Started: \_\_\_\_\_ Date Completed: 11/10/93

Remediation Method: Excavation ☒  
(Check all appropriate sections)

Approx. cubic yards \_\_\_\_\_

Landfarmed ☒

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

Other \_\_\_\_\_

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

General Description Of Remedial Action: \_\_\_\_\_

Excavation - GROUNDWATER ENCOUNTERED.

Ground Water Encountered: No \_\_\_\_\_ Yes ☒ Depth 9'

Final Pit:

Sample location see Attached Documents

Closure Sampling:

(if multiple samples,  
attach sample results  
and diagram of sample  
locations and depths)

Sample depth 9'

Sample date 11/9/93

Sample time 1140

Sample Results

Benzene(ppm) \_\_\_\_\_

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

Field headspace(ppm) \_\_\_\_\_

TPH \_\_\_\_\_

Ground Water Sample: Yes ☒ No \_\_\_\_\_ (If yes, attach sample results)

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

DATE

11/10/93

SIGNATURE

B. Shaw

PRINTED NAME  
AND TITLE

Buddy D. Shaw  
ENVIRONMENTAL COORDINATOR

11/12/93 Lab Results to C. RANDEMAN - NO RECOMMENDATIONS - Rmy

94163

CX 3173

ENVIROTECH INC.

5796 US HWY 64 FARMINGTON NM 87401  
(505) 632-0615

## FIELD REPORT CLOSURE VERIFICATION

92140

1 - 1

LOCATION LEASE HARE GAS COM 'F' WELL 1 QD SW 1/4 NE 1/4 (G)  
SEC 23 TWP 29N RNG. 11W BM NMPM CNTY SJ STNM PIT BLOW?  
CONTAINER MOSS EXCAVATION  
EQUIPMENT USED TRACKHOE SEP

DATE STARTED 11/09/93  
DATE FINISHED 11/09/93

EQUIPMENT Rmy

SOIL REMEDIATION QUANTITY 30' x 30' x 9' deep  
DISPOSAL FACILITY UNKNOWN

LAND USE UNDEVELOPED RURAL

OFFICE LOCATION PIT EXCAVATED UPON ARRIVAL, GROUNDWATER IN BOTTOM.

FIELD NOTES & REMARKS PIT LOCATED APPROXIMATELY 105 YARDS N60°W FROM WELLHEAD

DEPTH TO GROUNDWATER 8'  
NEAREST WATER SOURCE UNKNOWN  
NEAREST SURFACE WATER 100' (POND TO NORTH)

SAMPLE "PIT WATER" TAKEN FOR BTEX ANALYSES.

VISUAL DISCOLORATION ON NORTH AND WEST SIDEWALLS.  
MILD HYDROCARBON ODOR APPARENT DOWNWIND FROM  
PIT. NO RECOMMENDATIONS.

No Free product observed on water

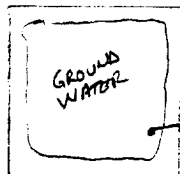
### FIELD DATA COLLECTION

SAMPLE NO. LAB NO. WEIGHT OF SOIL FREQUENTLY FEED

SCALE

0 10 20 FEET

PIT PERIMETER



SURFACE FLOW  
N

### QVM RESULTS

SAMPLE FIELD MEASUREMENTS

### PIT PROFILE

SURFACE TO GROUNDWATER -

SMALL PLUS MINOR CLAYS.

MODERATE YELLOWISH BROWN

SILTY SAND PLUS MINOR CLAY.

Slightly Cohesive, MOIST TO WET,

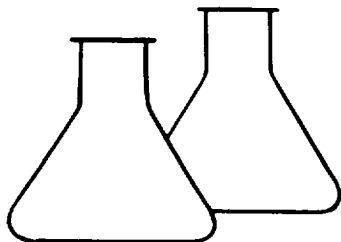
LOOSE TO SLIGHTLY FIRM. ROOTS

OBSERVED IN ALL SIDEWALLS EXTENDING  
TO GROUNDWATER.

TRAVEL NOTES

TAILOUT

ON SITE



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

|                    |                 |                     |          |
|--------------------|-----------------|---------------------|----------|
| Client:            | Amoco           | Project #:          | 92140    |
| Sample ID:         | Pit Water       | Date Reported:      | 11-10-93 |
| Laboratory Number: | 6460            | Date Sampled:       | 11-09-93 |
| Sample Matrix:     | Water           | Date Received:      | 11-09-93 |
| Preservative:      | HgCl and Cool   | Date Analyzed:      | 11-10-93 |
| Condition:         | Cool and Intact | Analysis Requested: | BTEX     |

| Parameter    | Concentration<br>(ug/L) | Det.<br>Limit<br>(ug/L) |
|--------------|-------------------------|-------------------------|
| Benzene      | 4.0                     | 1.0                     |
| Toluene      | 52                      | 1.5                     |
| Ethylbenzene | 8.1                     | 1.5                     |
| p,m-Xylene   | 153                     | 2.0                     |
| o-Xylene     | 45.2                    | 2.0                     |

| SURROGATE RECOVERIES: | Parameter          | Percent Recovery |
|-----------------------|--------------------|------------------|
|                       | Trifluorotoluene   | 99 %             |
|                       | Bromofluorobenzene | 96 %             |

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Hare GC "F" 1 Separator Pit C4163

*Kevin L. Gencer*  
Analyst

*Morris D. Young*  
Review



CLIENT: AMOCOBLAGG ENGINEERING, INC.  
P.O. BOX 87, BLOOMFIELD, NM 87413  
(505) 632-1199LOCATION NO: C4163C.O.C. NO: 5654

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: HARE GC F WELL #: 1 PITS: SEP.DATE STARTED: 12.13.97QUAD/UNIT: (G) SEC: 23 TWP: 29N RNG: 11W PM: NM CNTY: SJ ST: NM

DATE FINISHED: \_\_\_\_\_

QTR/FOOTAGE: SW/4 NE/4CONTRACTOR: MOSSENVIRONMENTAL  
SPECIALIST: NV/EP

## SOIL REMEDIATION:

REMEDIATION SYSTEM: LANDFARMAPPROX. CUBIC YARDAGE: 300LAND USE: RANGELIFT DEPTH (ft): NA

## FIELD NOTES &amp; REMARKS:

DEPTH TO GROUNDWATER: <50' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: <200'NMOCB RANKING SCORE: 40 NMOCB TPH CLOSURE STD: 100 PPM

SOIL IS A SLIGHTLY MOIST NONCOHESIVE DL YELLOW W/LT. GRAY SILTY SAND.

NO STAIN OR HC ODOR. NO LANDFARM ON LOCATION.

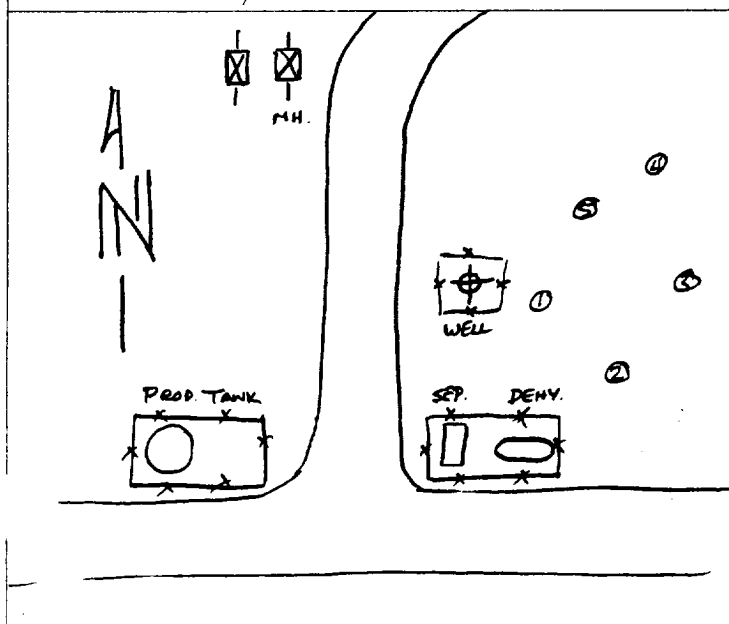
TOOK 5 PT COMPOSITE FOR LAB ANALYSIS.

NO ACTUAL LANDFARM OBSERVED ON WELL LOCATION.

## 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      | 8015     | 1125 | ND      |
|           |                           |           |          |      |         |
|           |                           |           |          |      |         |
|           |                           |           |          |      |         |
|           |                           |           |          |      |         |

## SCALE



0 FT

## TRAVEL NOTES:

CALLOUT: N/AONSITE: 12.13.97 1125

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

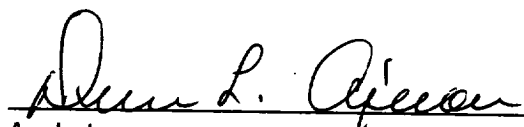
|                      |                 |                     |          |
|----------------------|-----------------|---------------------|----------|
| Client:              | Blagg / AMOCO   | Project #:          | 04034-10 |
| Sample ID:           | LF - 1          | Date Reported:      | 12-16-97 |
| Laboratory Number:   | C697            | Date Sampled:       | 12-13-97 |
| Chain of Custody No: | 5654            | Date Received:      | 12-15-97 |
| Sample Matrix:       | Soil            | Date Extracted:     | 12-15-97 |
| Preservative:        | Cool            | Date Analyzed:      | 12-16-97 |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH |

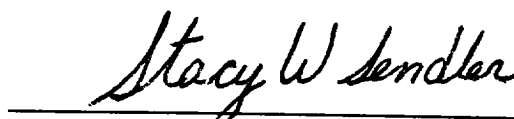
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | ND                       | 0.2                      |
| Diesel Range (C10 - C28)     | ND    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

ND - Parameter not detected at the stated detection limit.

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

Comments: Hare GC F #1 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

**(505) 632-0615**