

District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer 100, Lordsburg, NM 88021

District III

Rio Brazos Rd, Aztec, NM 87410  
MAY 03 1999

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

OK  
C4920  
SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

RECEIVED  
FEB 17 1999

**PIT REMEDIATION AND CLOSURE REPORT**

Operator: Amoco Production Company Telephone: (505) - 326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: FEDERAL GC 3-1  
Well Name

Location: Unit or Qtr/Qtr Sec N Sec 23 T29N R10W County SAN JUAN

Pit Type: Separator Dehydrator Other Blow

Land Type: BLM X, State, Fee, Other

Pit Location: Pit dimensions: length 40', width 40', depth 14'  
attach diagram)

Reference: wellhead X, other

Footage from reference: 39'

Direction from reference: 0 Degrees East North X  
of  
West South

Depth To Ground Water:

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

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

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  
rivers, ponds, rivers, streams, creeks,  
irrigation canals and ditches)

Less than 200 feet (20 points)  
200 feet to 1000 feet (10 points)  
Greater than 1000 feet (0 points) 10

RANKING SCORE (TOTAL POINTS): 30

Date Remediation Started: \_\_\_\_\_ Date Completed: 8/4/93

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

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

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

Excavation . GROUNDWATER ENCOUNTEREDGround Water Encountered: No \_\_\_\_\_ Yes ☒ Depth 14'Final Pit: Sample location see Attached Documents

## Closure Sampling:

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

Sample depth 14'Sample date 8/2/93 Sample time 1230

## 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 OF MY KNOWLEDGE AND BELIEF

DATE 8/4/93

SIGNATURE

B. ShawPRINTED NAME  
AND TITLEBuddy D. Shaw  
ENVIRONMENTAL COORDINATOR

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

Co 2874  
C4920

JOB No: 92140

PAGE No: 1 of 1

LOCATION: LEASE: FEDERAL GAS UNIT 3 WELL: 1 QD: SE/4 SW/4 (N)  
SEC: 23 TWP: 29N RNG: 10W BM: NMM CNTY: JS ST: NM PIT: BLOW  
CONTRACTOR: P. VELASQUEZ  
EQUIPMENT USED: TRACK HOE

DATE STARTED: 8-2-93

DATE FINISHED: 8-2-93

ENVIRONMENTAL SPECIALIST: RMY

SOIL REMEDIATION: QUANTITY: 40' x 40' x 14' deep

DISPOSAL FACILITY:

LAND USE: RANGE - FED LSE NO. NM-020502

SURFACE CONDITIONS:

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 13 YARDS N O E FROM WELLHEAD.

DEPTH TO GROUNDWATER: 14'

NEAREST WATER SOURCE: >1000'

NEAREST SURFACE WATER: 700'-1000'

SURFACE VISIBLE CONTAMINATION NOT APPARENT.

BLACK SOILS ENCOUNTERED IN CENTER BOTTOM, BELOW

THE STATIC GROUNDWATER LEVEL. THEN FILM

OF DARK BROWN OIL PRESENT ON GROUNDWATER.

RECOMMEND Additional Remediation and

### Emplacement of a down-gradient test hole

to MONITOR CONTAMINATION OF GROUNDWATER

LAB SAMPLES:

PIT WATER @ 14' FOR STEW WATER

CB014' for 418.1 size

FIELD 418.1 CALCULATIONS

| FIELD 418.1 CALCULATIONS |         |            |           |          |         |           |
|--------------------------|---------|------------|-----------|----------|---------|-----------|
| SAMPLE I.D.              | LAB No: | WEIGHT (g) | mL. FREON | DILUTION | READING | CALC. ppm |
|                          |         |            |           |          |         |           |
|                          |         |            |           |          |         |           |
|                          |         |            |           |          |         |           |

### SCALE

SURF FLOW  
& SUSP GWD  
DOWN GRAD  
FEET

# PIT PERIMETER

## OVM RESULTS

[illegible]

## PIT PROFILE

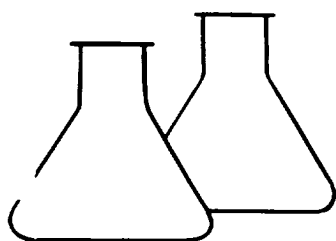
0-6' S/M/L PALL YELLOWISH  
BROWN SILTY SAND. DRY.  
FIRM. NON-COH. NO VISIBLE  
CONTAMINATION.

6'-14'

SW/GW. FINE YELLOWISH BROWN  
SANDS WITH GRAVELS  
AND COBBLES. WET.  
LOOSE. NON-CON. NO  
VISIBLE CONTAM ABOVE  
STATIC GROUNDWATER LEVEL.

TRAVEL NOTES:      CALLOUT:

ON SITE:



# ENVIROTECH LABS

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

## EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

|                    |               |                  |          |
|--------------------|---------------|------------------|----------|
| Client:            | Amoco         | Project #:       | 92140    |
| Sample ID:         | CB @ 14'      | Date Sampled:    | 08-02-93 |
| Laboratory Number: | 5798          | Date Received:   | 08-02-93 |
| Sample Matrix:     | Soil          | Date Analyzed:   | 08-03-93 |
| Preservative:      | Cool          | Date Reported:   | 08-03-93 |
| Condition:         | Cool & Intact | Analysis Needed: | TPH      |

| Parameter                       | Concentration<br>(mg/kg) | Det.<br>Limit<br>(mg/kg) |
|---------------------------------|--------------------------|--------------------------|
| -----                           | -----                    | -----                    |
| Total Petroleum<br>Hydrocarbons | 132                      | 5.0                      |

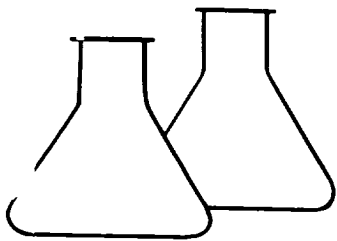
ND = Parameter not detected at the stated detection limit.  
N/A = Not applicable

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

Comments: Federal Gas Unit 3-1, Blow Pit, C4920.

Ar Chahon  
Analyst

Maris D Young  
Review



# 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 @ 14' | Date Reported:      | 08-04-93 |
| Laboratory Number: | 5799            | Date Sampled:       | 08-02-93 |
| Sample Matrix:     | Water           | Date Received:      | 08-02-93 |
| Preservative:      | HgCl & Cool     | Date Analyzed:      | 08-03-93 |
| Condition:         | Cool & Intact   | Analysis Requested: | BTEX     |

| Parameter    | Concentration<br>(ug/L) | Det.<br>Limit<br>(ug/L) |
|--------------|-------------------------|-------------------------|
| Benzene      | ND                      | 0.2                     |
| Toluene      | ND                      | 0.4                     |
| Ethylbenzene | ND                      | 0.2                     |
| p,m-Xylene   | ND                      | 0.4                     |
| o-Xylene     | ND                      | 0.3                     |

| SURROGATE RECOVERIES: | Parameter          | Percent Recovery |
|-----------------------|--------------------|------------------|
|                       | Trifluorotoluene   | 91 %             |
|                       | Bromofluorobenzene | 99 %             |

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

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: Federal Gas Unit 3-1 Blow Pit C4920

*Kevin L. Jensen*  
Analyst

*Kevin L. Jensen*  
Review

**ENVIROTECH INC.**

5796 U.S. Highway 64-3014

Farmington, New Mexico 87401

**(505) 632-0615**

|                      |                                                                                |                                                     |
|----------------------|--------------------------------------------------------------------------------|-----------------------------------------------------|
| CLIENT: <u>AMOCO</u> | BLAGG ENGINEERING, INC.<br>P.O. BOX 87, BLOOMFIELD, NM 87413<br>(505) 632-1199 | LOCATION NO: <u>C4920</u><br>C.D.C. NO. <u>5649</u> |
|----------------------|--------------------------------------------------------------------------------|-----------------------------------------------------|

# FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

|                                                                                                                  |                                        |
|------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| LOCATION: NAME: <u>FEDERAL GC</u> WELL #: <u>3-1</u> PITS: <u>BLOW</u>                                           | DATE STARTED: <u>12-5-97</u>           |
| QUAD/UNIT: <u>(N)</u> SEC: <u>23</u> TWP: <u>29N</u> RNG: <u>10W</u> PM: <u>NM</u> CNTY: <u>SS</u> ST: <u>NM</u> | DATE FINISHED: _____                   |
| QTP/FOOTAGE: <u>SE/4 SW/4</u> CONTRACTOR: <u>P+S</u>                                                             | ENVIRONMENTAL SPECIALIST: <u>NV/EP</u> |

## SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 830

LAND USE: PANCRE

LIFT DEPTH (ft): NA

## FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: < 50' NEAREST WATER SOURCE: > 1000' NEAREST SURFACE WATER: < 1000'

NMOCID RANKING SCORE: 30 NMOCID TPH CLOSURE STD: 100 PPM

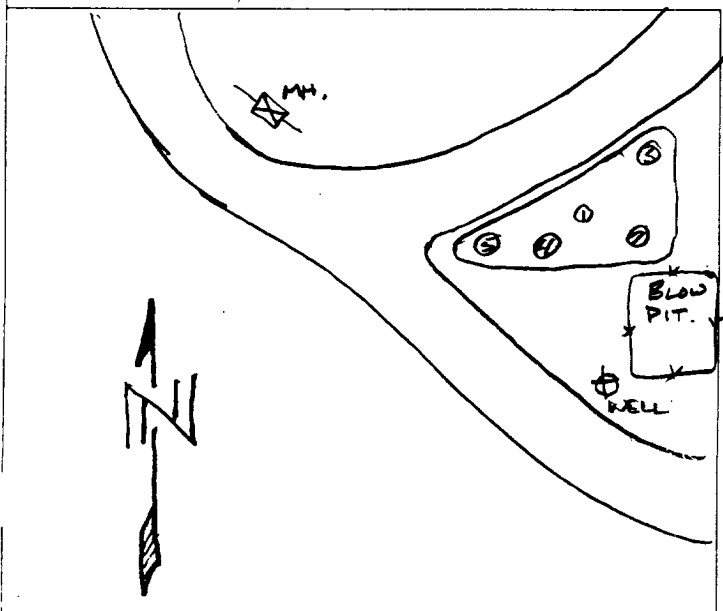
SOIL IS A DRY DARK YELLOW W/LIGHT BROWN SILTY SAND.  
NO STAIN OR HC ODOR.

TOOK A 5 PT COMPOSITE SAMPLE FROM LANDFARM  
AREA FOR LAB ANALYSIS.

## 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     | 1010 | ND      |
|           |                           |           |          |      |         |
|           |                           |           |          |      |         |
|           |                           |           |          |      |         |
|           |                           |           |          |      |         |
|           |                           |           |          |      |         |
|           |                           |           |          |      |         |

## SCALE



0

FT

|                                   |                                    |
|-----------------------------------|------------------------------------|
| TRAVEL NOTES: CALLOUT: <u>N/A</u> | ONSITE: <u>12-5-97</u> <u>1010</u> |
|-----------------------------------|------------------------------------|

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

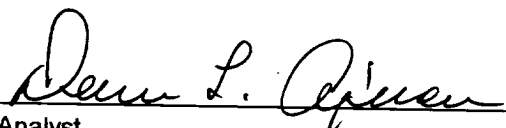
|                      |                 |                     |          |
|----------------------|-----------------|---------------------|----------|
| Client:              | Blagg / AMOCO   | Project #:          | 04034-10 |
| Sample ID:           | LF - 1          | Date Reported:      | 12-16-97 |
| Laboratory Number:   | C690            | Date Sampled:       | 12-05-97 |
| Chain of Custody No: | 5649            | Date Received:      | 12-15-97 |
| Sample Matrix:       | Soil            | Date Extracted:     | 12-15-97 |
| Preservative:        | Cool            | Date Analyzed:      | 12-15-97 |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH |

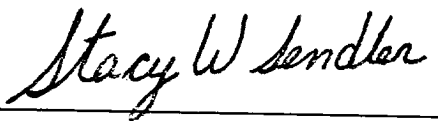
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | ND                       | 0.2                      |
| Diesel Range (C10 - C28)     | ND                       | 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: **Federal GC 3 - 1 Landfarm. 5 Pt. Composite.**

  
Analyst

  
Review



**ENVIROTECH INC.**  
5796 U.S. Highway 64-3014  
Farmington, New Mexico 87401  
(505) 632-0615