

BT628 04  
SUBMIT 1 COPY TO  
NATURAL RESOURCE DEPT  
AND OIL & GAS ADMINISTRATION

**AND OIL & GAS ADMINISTRATION**

**OIL CON. DIV.**  
**DIST. 3**

**RANKING SCORE (TOTAL POINTS):**

Date Remediation Started: \_\_\_\_\_ Date Completed: 9/16/98  
 Remediation Method: Excavation ☒ Approx. cubic yards 600  
 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. EXCAVATION MOSTLY BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED. RISK ASSESSED.

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

Sample depth 7' (WEST SIDEWALL - HIGHEST OUM READING - BEDROCK)

Sample date 9/16/98 Sample time 1035

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>1,095</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>NA</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 9/16/98 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) R.A. Attached

SIGNED: Kevin M. Marshall DATE: 10-1-98

3003906718

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J628</u> C.O.C. NO: _____
----------------------	--	---

## FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: JICA AP. 102 WELL #: 5 PIT: BLOW  
 QUAD/UNIT: 6 SEC: 4 TWP: 26N RNG: 4W PM: NM CNTY: RA ST: NM  
 QTR/FOOTAGE: 1450' ENL / 1450' FEL CONTRACTOR: P & S

DATE STARTED: 9/16/98  
 DATE FINISHED: \_\_\_\_\_

ENVIRONMENTAL  
 SPECIALIST: NV

EXCAVATION APPROX. 30 FT. x 40 FT. x 11 FT. DEEP. CUBIC YARDAGE: 600

DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARM

LAND USE: RANGE LEASE: JIC 102 FORMATION: MV

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 213 FT. N25E FROM WELLHEAD.

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

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

## SOIL AND EXCAVATION DESCRIPTION:

## CHECK ONE:

- ☒ PIT ABANDONED  
☐ STEEL TANK INSTALLED  
☐ FIBERGLASS TANK INSTALLED

EXCAVATION CONSIST OF MOSTLY BEDROCK (SHALE) DUSKY RED/LT. GRAY  
 SOFT TOWARD (GROUND) SURFACE TO VERY HARD @ PIT BOTTOM, NO APPARENT  
 OR OBVIOUS STAINING OBSERVED SLIGHT HC ODOR DETECTED W/IN  
 EXCAVATION STRONG HC ODOR IN ALL OVM SAMPLES, OVM SAMPLES  
 COLLECTED FROM BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED.

EXCAVATION  
 MOSTLY  
 BEDROCK

RISK ASSESSED

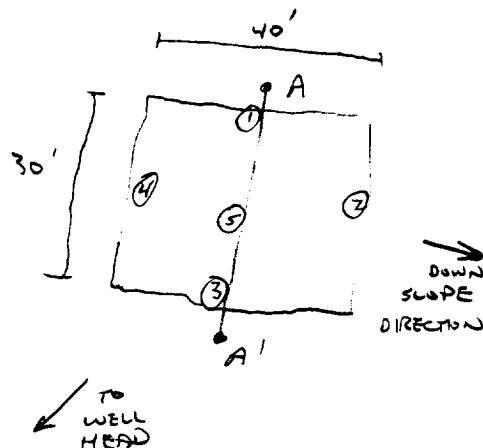
## FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1035							

SCALE

0 FT

## PIT PERIMETER



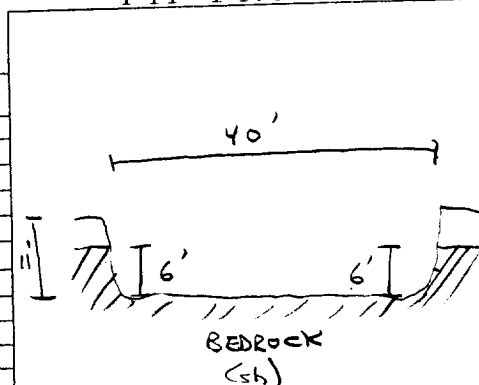
## OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 6'	549
2 @ 7'	149.3
3 @ 7'	464
4 @ 7'	1,095
5 @ 11'	967

## LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

## PIT PROFILE



TRAVEL NOTES:

CALLOUT: \_\_\_\_\_

ONSITE: \_\_\_\_\_

9/16/98 - MORN.

**Well Name:**

**Well Site location:**

**Pit Type:**

**Producing Formation:**

**Pit Category:**

**Horizontal Distance to Surface Water:**

**Vicinity Groundwater Depth:**

**Jicarilla Apache 102 #5**  
Unit G, Sec. 4, T26N, R4W  
Blow Pit  
Mesa Verde  
Non Vulnerable  
> 1000 ft.  
> 100 ft.

## **RISK ASSESSMENT (non-vulnerable area)**

Pit remediation activities were terminated when trackhoe encountered shale bedrock at 11 feet below grade.

No past or future threat to surface water or groundwater is likely based on the following considerations:

1. Past production fluids were contained locally by a relatively shallow shale bedrock located 11 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below shale bedrock.
2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
4. Well site located within the **non-vulnerable area** and is approximately 0.78 miles southeast of the nearest vulnerable area boundary (Jaramillo Canyon wash).

**(Refer to Vigas Canyon Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), photorevised 1982, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).**

Based upon the information given, we conclude that the subsurface lateral impact from the earthen pit is very limited and that the shale bottom creates enough of an impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). AMOCO requests pit closure approval on this location.

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

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

ON-SITE SOIL REMEDIATION REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200  
Address: 200 Amoco Court, Farmington, NM 87401  
Facility or Well Name: JICARILLA APACHE 102 - 5  
Location: Unit or Qtr/Qtr Sec G Sec 4 T 26N R 4W County RIO ARriba  
Land Type: RANGE

Date Remediation Started: 9-16-98 Date Completed: 4/12/99  
Remediation Method: Landfarmed ☒ Approx. cubic yards 600  
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: 4-8-99 Time: 1110  
Sample Results:  
Field Headspace (ppm) 0.0  
TPH (ppm) 0.4 Method 8015  
Other ☐

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

DATE 4/12/99 PRINTED NAME Buddy D. Shaw  
SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

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: K. C. Mendenhall DATE: 6-18-99

CLIENT: <u>AMOCO</u>	<b>BLAGG ENGINEERING, INC.</b> P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>B5628</u>  C.D.C. NO: <u>6883</u>
----------------------	---	---

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>SICARILLA APACHE 102</u> WELL #: <u>5</u> PITS: <u>BLOW</u> QUAD/UNIT: <u>G</u> SEC: <u>4</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>SW/4 NE/4</u> CONTRACTOR: <u>P+S</u>	DATE STARTED: <u>4-8-99</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>REP</u>
--	---

SOIL REMEDIATION: REMEDIATION SYSTEM: <u>LANDFARM</u> LAND USE: <u>RANGE</u>	APPROX. CUBIC YARDAGE: <u>600</u> LIFT DEPTH (ft): <u>1-1.5</u>
--	--

**FIELD NOTES & REMARKS:**

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

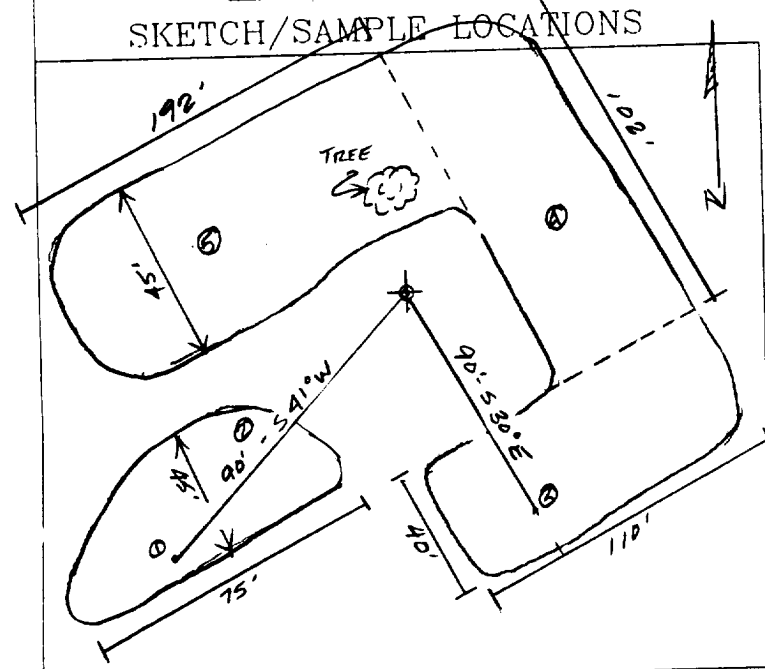
NMOC D RANKING SCORE: 0 NMOC D TPH CLOSURE STD: 5000 PPM

*DK. YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM. NO APPARENT STAINING OBSERVED. NO HC ODOR DETECTED. SAMPLING DEPTHS RANGE FROM 6" - 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



## OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	0.0

## LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	TPH (80'S)	1110	0.4

SCALE

0

FT

TRAVEL NOTES: CALLOUT: <u>N/A</u>	ONSITE: <u>4-8-99</u>
-----------------------------------	-----------------------

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

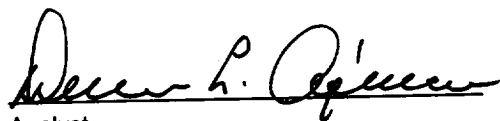
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	04-12-99
Laboratory Number:	E997	Date Sampled:	04-08-99
Chain of Custody No:	6883	Date Received:	04-09-99
Sample Matrix:	Soil	Date Extracted:	04-09-99
Preservative:	Cool	Date Analyzed:	04-12-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.4	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.4	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 Apache 102 - 5 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

## 6883

[illegible]