

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

0100-01  
BJ688 bedrock  
sep  
NATURAL RESOURCE DEPT  
AND OIL & GAS ADMINISTRATION

RECEIVED  
AUG 27 1999

PIT REMEDIATION AND CLOSURE REPORT

OIL CON. DIV.  
DIST. 3

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9200  
Address: 200 Amoco Court, Farmington, NM 87401  
Facility or Well Name: JICARILLA CONTRACT #155-29  
Location: Unit or Qtr/Qtr Sec F Sec 32 T 26N R 5W County RIO ARIZONA  
Pit Type: Separator      Dehydrator      Other BLOW  
Land Type: RANGE

Pit Location: Pit dimensions: length 44', width 39', depth 6'  
(Attach diagram) Reference: wellhead X, other       
Footage from reference: 145'  
Direction from reference: 41 Degrees      East of North X  
X West of South     

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)	<u>0</u>
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet	(10 points)	<u>0</u>
	Greater than 100 feet	(0 points)	
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet	(10 points)	<u>0</u>
	Greater than 100 feet	(0 points)	
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)	<u>0</u>
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)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: \_\_\_\_\_ Date Completed: 11/24/98

Remediation Method: Excavation ☒ Approx. cubic yards 275  
 (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.

Groundwater 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 3' (NORTH SIDEWALL)

Sample date 11/24/98 Sample time 1330

## Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>46.0</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 11/24/98 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: K. C. Maull DATE: 12-28-98

22531

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J688</u> C.D.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>TICR. CONTR. 155</u> WELL #: <u>29</u> PIT: <u>BLOW</u>		DATE STARTED: <u>11/24/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>F SEC: 32 TWP: 26N RNG: 5W PM: NM CNTY: RA STNM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>1810' FWL (1520' FWL)</u> CONTRACTOR: <u>P &amp; S</u>		

EXCAVATION APPROX. <u>44</u> FT. x <u>39</u> FT. x <u>6</u> FT. DEEP.	CUBIC YARDAGE: <u>275</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u>	LEASE: <u>TIC 155</u> FORMATION: <u>MV</u>

FIELD NOTES & REMARKS:	
PIT LOCATED APPROXIMATELY <u>145</u> FT. <u>N41W</u> FROM WELLHEAD.	
DEPTH TO GROUNDWATER: <u>2100'</u>	NEAREST WATER SOURCE: <u>21000'</u> NEAREST SURFACE WATER: <u>21000'</u>
NMOC RANKING SCORE: <u>0</u>	NMOC TPH CLOSURE STD: <u>5000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	
EXCAVATION CONSISTED OF MOSTLY BEDROCK (SANDSTONE), OLIVE GRAY TO DK. GRAY IN COLOR, FRIABLE @ BEDROCK TOP TO VERY HARD @ PIT BOTTOM, STAINING EVIDENT THROUGHOUT BEDROCK PORTION OF EXCAVATION, HC DOOR DETECTED W/IN EXCAVATION, NORTH SIDEWALL & PIT BOTTOM OVIH SAMPLES, ALL SAMPLES COLLECTED FROM BEDROCK THEREFORE NO TPH ANALYSIS WAS CONDUCTED.	
CHECK ONE: <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED <input type="checkbox"/> FIBERGLASS TANK INSTALLED	

EXCAVATION  
MOSTLY  
BEDROCK

SCALE

0 FT

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1330							

PIT PERIMETER

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 3'	46.0
2 @ 3'	0.0
3 @ 3'	0.0
4 @ 4'	4.3
5 @ 6'	41.5

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE

TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
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8J688

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**

**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 # 155-29  
**Location:** Unit or Qtr/Qtr Sec F Sec 32 T 26N R 5W County RIO ARIZONA  
**Pit Type:** Separator ☒ Dehydrator ☐ Other ☐  
**Land Type:** RANGE

**Pit Location:** Pit dimensions: length 18', width 24', depth 4'  
(Attach diagram) Reference: wellhead ☒, other ☐  
Footage from reference: 153'  
Direction from reference: 88 Degrees ☒ East of North ☒  
West South

<b>Depth To Groundwater:</b> (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)	<u>0</u>
<b>Distance to an Ephemeral Stream</b> (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
<b>Distance to Nearest Lake, Playa, or Watering Pond</b> (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet (10 points) Greater than 100 feet (0 points)	<u>0</u>
<b>Wellhead Protection Area:</b> (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)	<u>0</u>
<b>Distance To Surface Water:</b> (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)	<u>0</u>

**RANKING SCORE (TOTAL POINTS):** 0

BJ688

SEP. PIT

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

Date Completed: 11/24/98Remediation Method: Excavation ☒  
(Check all appropriate sections) Landfarmed ☒Approx. cubic yards 50

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.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 4' (PIT BOTTOM)Sample date 11/24/98 Sample time 1415

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>18.9</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

11/24/98

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:

Ken C Mammell

DATE:

12-28-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J688</u> C.D.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>JICA. CONTR.</u> ISS WELL #: <u>29</u> PIT: <u>SEP.</u>		DATE STARTED: <u>11/24/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>F</u> SEC: <u>32</u> TWP: <u>26N</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>1810' FNL/1520' FNL</u> CONTRACTOR: <u>P &amp; S</u>		

EXCAVATION APPROX. <u>18</u> FT. x <u>24</u> FT. x <u>4</u> FT. DEEP.	CUBIC YARDAGE: <u>50</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIALATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u>	LEASE: <u>JIC 155</u> FORMATION: <u>MV</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>153</u> FT. <u>N88E</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>&gt;100'</u>	NEAREST WATER SOURCE: <u>&gt;1000'</u> NEAREST SURFACE WATER: <u>&gt;1000'</u>
NMOCD RANKING SCORE: <u>0</u>	NMOCD TPH CLOSURE STD: <u>5000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	

EXCAVATION CONSISTED OF MOSTLY BEDROCK (SANDSTONE), DK. YELL. ORANGE TO MED. GRAY (PIT BOTTOM) VERY HARD, ONLY DISCOLORATION OBSERVED ON PIT BOTTOM, NO APPARENT HC OOR, W/IN EXCAVATION NO APPARENT HC OOR IN OVM SAMPLES, ALL SAMPLES COLLECTED FROM BEDROCK THEREFORE NO TPH ANALYSIS WAS CONDUCTED.

EXCAVATION  
MOSTLY  
BEDROCK

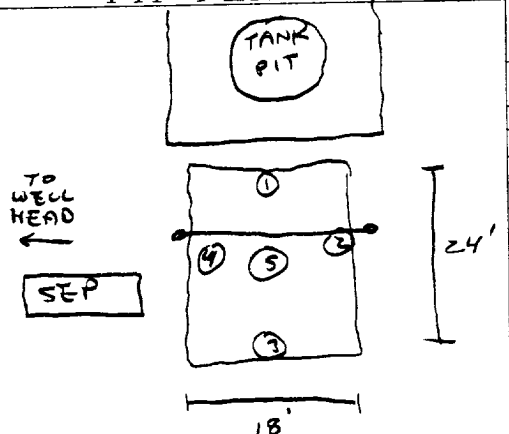
CLOSED

SCALE  
0 FT

#### FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1415							

#### PIT PERIMETER



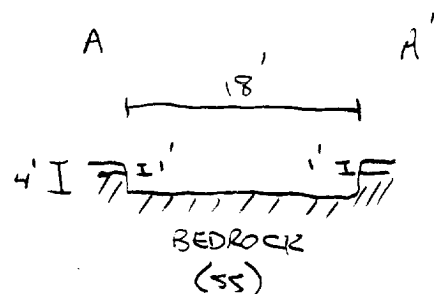
#### OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 2'	0.0
2 @ 2'	0.0
3 @ 2'	0.0
4 @ 2'	0.0
5 @ 4'	18.9

#### LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

#### PIT PROFILE



TRAVEL NOTES:	CALLOUT: _____	ONSITE: _____
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B5688

**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 CONTRACT 155.29

Location: Unit or Qtr/Qtr Sec F Sec 32 T26N R5W County ZIO ARZIBA

Land Type: RANGE

Date Remediation Started: 11-24-99

Date Completed: 6/10/99

Remediation Method: Landfarmed ☒

Approx. cubic yards 325

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: 6-9-99 Time: 1020

**Sample Results:**

Field Headspace (ppm) 29.5

TPH (ppm) 1,610 Method TPH (8015)

Other ☐

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

DATE 6/10/99 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: \_\_\_\_\_ DATE: \_\_\_\_\_

CLIENT: AMOCOBLAGG ENGINEERING, INC.  
P.O. BOX 87, BLOOMFIELD, NM 87413  
(505) 632-1199LOCATION NO: BS488C.D.C. NO: 7073

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: SICABULA CONTRACT ISS WELL #: 29 PITS: SEP, BLOW  
QUAD/UNIT: F SEC: 32 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM  
QTR/FOOTAGE: SE/4 NW/4 CONTRACTOR: P+SDATE STARTED: 6.9.99

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

ENVIRONMENTAL  
SPECIALIST: REP

## SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARMAPPROX. CUBIC YARDAGE: 325LAND USE: RANGELIFT DEPTH (ft): 1'

## FIELD NOTES &amp; REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMOCB RANKING SCORE: 0 NMOCB TPH CLOSURE STD: 5000 PPM

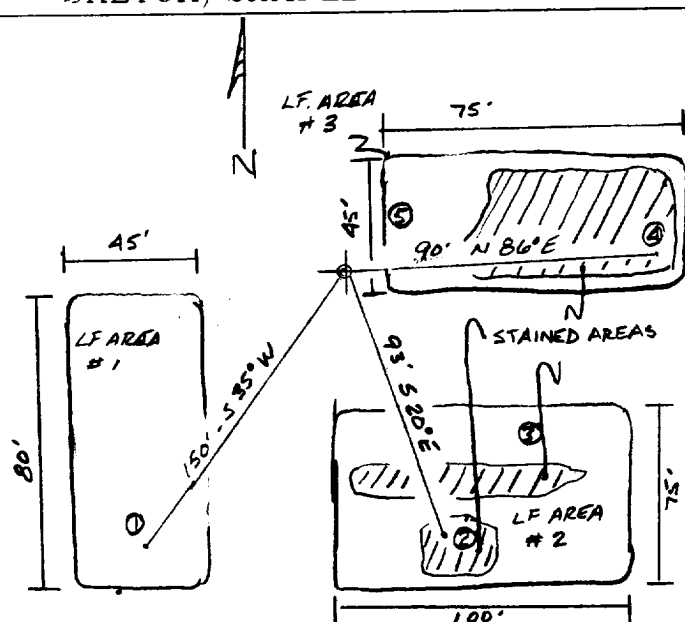
PALE BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM. TWO AREAS OF STAINING IN LF #2 AREA + ONE LARGE AREA OF STAINING IN LF#3 AREA (SEE SKETCH BELOW) HC ODOR DETECTED IN SAMPLING DTS. ③ + ④. SAMPLING DEPTHS RANGE FROM 6"-10" COLLECTED A SPT. COMPOSITE SAMPLE FOR LAB ANALYSIS

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	29.5	LF-1	TPH (6015)	1020	1,610

SCALE

0 FT

## TRAVEL NOTES:

CALLOUT: NAONSITE: 6.9.99



# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

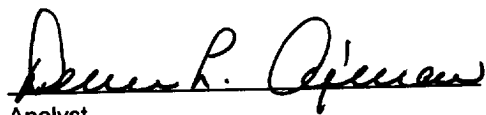
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	06-10-99
Laboratory Number:	F481	Date Sampled:	06-09-99
Chain of Custody No:	7073	Date Received:	06-10-99
Sample Matrix:	Soil	Date Extracted:	06-10-99
Preservative:	Cool	Date Analyzed:	06-10-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	21.5	0.2
Diesel Range (C10 - C28)	1,590	0.1
Total Petroleum Hydrocarbons	1,610	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 155 - 29 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

## 7073

[illegible]