

DEPUTY OIL & GAS INSPECTOR

AUG 13 1999

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

01/15 BJ427  
 SUBMIT 1 COPY TO  
 NATURAL RESOURCE DEPT  
 AND OIL & GAS ADMINISTRATION

## 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 C #5 M

Location: Unit or Qtr/Qtr Sec A Sec 24 T26N R5W County RIO ARriba

**Pit Type:** Separator Dehydrator Other PRODUCTION TANK

Land Type: RANGE

**Pit Location:** Pit dimensions: length 20', width 20', depth 14'

(Attach diagram)

Reference: wellhead X, other \_\_\_\_\_

Footage from reference: 130'

Direction from reference: 30 Degrees X East of North X  
West 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)	
Greater than 100 feet	( 0 points)	<u>0</u>

### 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) 0  
No (0 points) \_\_\_\_\_

### Distance To SurfaceWater:

(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)	0
Greater than 1000 feet	( 0 points)	<u>          </u>

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

Date Remediation Started: \_\_\_\_\_ Date Completed: 9/3/96

Remediation Method: Excavation ☒ Approx. cubic yards 200  
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: ExcavationGroundwater 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 15'  
Sample date 8/29/96 Sample time 1516  
Sample Results

Soil: Benzene	(ppm)	<u>0.485</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>47,760</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>243</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>920</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 9/3/96 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: [Signature] DATE: 9-3-96

CLIENT: <u>Amoco</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85427</u> C.O.C. NO: <u>4900</u>
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## FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: JICAPILLA C * 5 m (E)	PIT TYPE: PROD. <del>PAUL</del>	DATE STARTED: 8-29-96
QUAD/UNIT: A SEC: 24 TWP: 26 N RNG: 5 W BM: NM CNTY: RA ST: NM		DATE FINISHED: _____
RIR/FOOTAGE: 960' FNL. 960' FEL	CONTRACTOR: PAUL	ENVIRONMENTAL SPECIALIST: PEG

EXCAVATION APPROX. 20 FT. x 20 FT. x 14 FT. DEEP. CUBIC YARDS: 200  
DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LAND FARM  
LAND USE: RANGE LEASE: JIL # 108 FORMATION: MU/DAK.

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 130 FEET N 30° E FROM WELLHEAD.  
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'  
NMOC D RANKING SCORE: 0 NMOC D TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: Abandoned

SOIL CONSISTS OF MOIST BROWN SILTY SAND, BOTTOM HARD + STAIN.

CLOSED

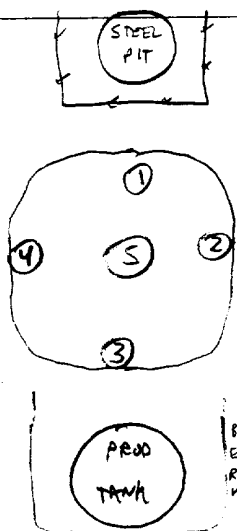
## FIELD 418.1 CALCULATIONS

FIELD 418-1 CALCULATIONS						
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
CB@15'	1812	10.0	20.0	1	460	920

SCALE

0 5 10 FT

## PIT PERIMETER

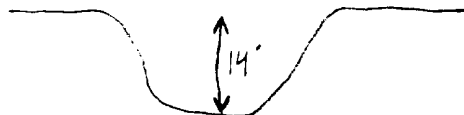


TO  
WEU.

## OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 NS-10'	0
2 ES-10'	0
3 SS-10'	286
4 WS-8'	23
5 CB-15'	243
LAB	SAMPLES
CB@15'	BTEX
BENZ.	y85
TOTAL	47,760

# PIT PROFILE



TRAVEL NOTES: CALLOUT: 8-29-96 ONSITE: 8-29-96 1500

**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

**FIELD MODIFIED EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS**

Client:	Amoco	Project #:	
Sample ID:	Center Bottom @ 15'	Date Analyzed:	8-29-96
Project Location:	Jicarilla C #5M	Date Reported:	8-30-96
Laboratory Number:	TPH #1812	Sample Matrix:	Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	<b>920</b>	<b>10</b>

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	1,420	1,344	5

\*Administrative Acceptance limits set at 30%.

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

Comments: Production Tank Pit - BJ427

R. E. Orall  
Analyst

Melvin Velf 11/4/96  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco / Blagg	Project #:	04034
Sample ID:	C.B. @ 15'	Date Reported:	08-30-96
Laboratory Number:	A518	Date Sampled:	08-29-96
Chain of Custody:	4900	Date Received:	08-30-96
Sample Matrix:	Soil	Date Analyzed:	08-30-96
Preservative:	Cool	Date Extracted:	08-30-96
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	485	17.5
Toluene	10,390	16.7
Ethylbenzene	3,470	15.2
p,m-Xylene	24,950	21.6
o-Xylene	8,470	10.4
<b>Total BTEX</b>	<b>47,760</b>	

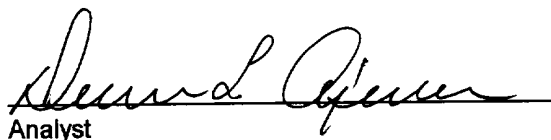
ND - Parameter not detected at the stated detection limit.

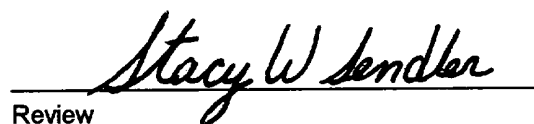
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	101 %

References: Method 5030, 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. 1994.

Comments: Jicarilla C #5M Prod. Tank Pit.

  
Analyst

  
Review

## CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSIS/PARAMETERS										
AMO Co / 6466		TICAPILLA C # 5 M												
Sampler: (Signature)		Chain of Custody Tape No.		No. of Containers	PREX									Remarks
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix										
C.B. @ 15'	8-29	1516	A-578	Soil	1	✓								PROD. MARK PIT
Relinquished by: (Signature)	R. E. Ornel													
Relinquished by: (Signature)														
Relinquished by: (Signature)														
Received by: (Signature)		Received by: (Signature)		Received by: (Signature)		Received by: (Signature)		Received by: (Signature)		Received by: (Signature)		Received by: (Signature)		
Date		Date		Date		Date		Date		Date		Date		
8-30-96		8-30-96		8-30-96		8-30-96		8-30-96		8-30-96		8-30-96		
Time		Time		Time		Time		Time		Time		Time		
0818		0818		0818		0818		0818		0818		0818		

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

**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

**PIT REMEDIATION AND CLOSURE REPORT**

<b>Operator:</b> AMOCO PRODUCTION COMPANY		<b>Telephone:</b> (505) 326-9200	
<b>Address:</b> 200 Amoco Court, Farmington, NM 87401			
<b>Facility or Well Name:</b> JICARILLA C #5M			
<b>Location:</b> Unit or Qtr/Qtr Sec <u>A</u> Sec <u>24</u> T <u>26N</u> R <u>5W</u> County <u>RIO ARIZONA</u>			
<b>Pit Type:</b> Separator <input checked="" type="checkbox"/> Dehydrator <input type="checkbox"/> Other <input type="checkbox"/>			
<b>Land Type:</b> <u>RANGE</u>			

<b>Pit Location:</b> (Attach diagram)	<b>Pit dimensions:</b> length <u>20'</u> , width <u>20'</u> , depth <u>12'</u> <b>Reference:</b> wellhead <input checked="" type="checkbox"/> , other <input type="checkbox"/> <b>Footage from reference:</b> <u>90</u> <b>Direction from reference:</b> <u>20</u> Degrees <input type="checkbox"/> East of North <input checked="" type="checkbox"/> <div style="display: flex; justify-content: space-around;"> <span><input checked="" type="checkbox"/> West</span> <span><input type="checkbox"/> South</span> </div>
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<b>Depth To Groundwater:</b> (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) ( 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 Greater than 100 feet	(10 points) ( 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 Greater than 100 feet	(10 points) ( 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 No	(20 points) ( 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 100 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) ( 0 points)	<u>0</u>
<b>RANKING SCORE (TOTAL POINTS):</b> <u>0</u>			

Date Remediation Started: \_\_\_\_\_ Date Completed: 8-29-96

Remediation Method: Excavation X Approx. cubic yards 175  
 Check all appropriate sections) Landfarmed X Insitu Bioremediation \_\_\_\_\_  
 Other \_\_\_\_\_

Remediation Location: Onsite X Offsite \_\_\_\_\_  
 (i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavation

Groundwater Encountered: No X 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 13'  
 Sample date 8-21-96 Sample time \_\_\_\_\_  
 Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>0</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>ND</u>	Total Xylenes	(ppb)	_____

Groundwater Sample: Yes \_\_\_\_\_ No X (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 8-30-96 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 X NO \_\_\_\_\_ (REASON) \_\_\_\_\_

SIGNED: Rene C. Munn DATE: 9-3-96





**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413  
Phone: (505)632-1199 Fax: (505)632-3903

**FIELD MODIFIED EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS**

Client:	Amoco	Project #:	
Sample ID:	Center Bottom @ 13'	Date Analyzed:	8-29-96
Project Location:	Jicarilla C #5M	Date Reported:	8-30-96
Laboratory Number:	TPH #1811	Sample Matrix:	Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	ND	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	1,420	1,344	5

\*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit - BJ427

R. E. O'Neil  
Analyst

William V. J. 11/4/96  
Review

BT427

NATURAL RESOURCE DEPT

**SIGNED:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

CLIENT: <u>AMOCO</u>	<b>BLAGG ENGINEERING, INC.</b> P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85427</u> C.O.C. NO: <u>5773</u>
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## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA</u> C WELL #: <u>5M</u> PITS: _____ QUAD/UNIT: <u>A</u> SEC: <u>24</u> TWP: <u>26N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>NE/4</u> <u>NE/4</u> CONTRACTOR: <u>P&amp;S</u>	DATE STARTED: <u>5/6/98</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
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### SOIL REMEDIATION:

REMEDICATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>375</u>
LAND USE: <u>RANGE</u>	LIFT DEPTH (ft): <u>1'-3'</u>

### FIELD NOTES & REMARKS:

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

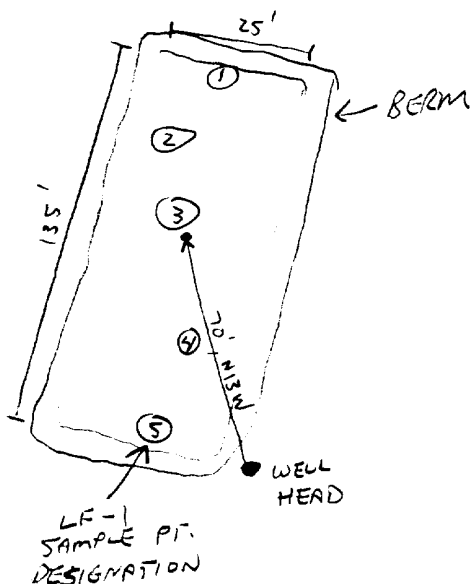
NMDCD RANKING SCORE: 0 NMDCD TPH CLOSURE STD: 5000 PPM

SOIL CONSIST OF MOSTLY MOD. TO DK. YELL. BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, DK. GRAY TO BLACK DISCOLORATION W/ HC ODOR OBSERVED IN SAMPLE PT. ③ ONLY, SAMPLING DEPTH RANGE FROM 6" TO 2 1/2', COLLECTED 5 PT. COMPOSITE 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	TPH (8015)	1045	124

### SCALE

0 1 FT

### TRAVEL NOTES:

CALLOUT: NA

ONSITE: 5/6/98

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client: Blagg / Amoco Project #: 04034-10
Sample ID: LF - 1 Date Reported: 05-07-98
Laboratory Number: D232 Date Sampled: 05-06-98
Chain of Custody No: 5773 Date Received: 05-06-98
Sample Matrix: Soil Date Extracted: 05-07-98
Preservative: Cool Date Analyzed: 05-07-98
Condition: Cool and Intact Analysis Requested: 8015 TPH

Table with 3 columns: Parameter, Concentration (mg/Kg), Det. Limit (mg/Kg). Rows include Gasoline Range (C5 - C10), Diesel Range (C10 - C28), and Total Petroleum Hydrocarbons.

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 CSM Landfarm. 5 Pt. Composite.

Analyst: [Signature]

Review: [Signature]

Table with 12 columns and 2 rows. Handwritten labels include 'Time', 'Composite', and 'Cool'.