

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

OCT 08 1999

BJS 40

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

Blow-risk-bedrock  
change environment

## 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 148 - 11

Location: Unit or Qtr/Qtr Sec H Sec 13 T 25N R 5W County RIO ARriba

Pit Type: Separator      Dehydrator      Other BLOW

Land Type: RANGE

**Pit Location:** Pit dimensions: length 15', width 25', depth 1'  
(Attach diagram) Reference: wellhead X, other \_\_\_\_\_  
Footage from reference: 180'  
Direction from reference: 12 Degrees X East of North \_\_\_\_\_  
West of South X

<b>Depth To Groundwater:</b> (Vertical distance from contaminants to seasonal high water elevation of groundwater)	RECEIVED AUG 24 1999 OIL CON. DIV. DIST. 3	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 SurfaceWater:</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>

**RANKING SCORE (TOTAL POINTS):**

Date Remediation Started: \_\_\_\_\_ Date Completed: 4/13/98

Remediation Method: Excavation ☒ Approx. cubic yards 5  
(Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation \_\_\_\_\_  
Other \_\_\_\_\_

Remediation Location: Onsite ☒ Offsite CONTAINS SOIL FROM JICARILLA  
(i.e. landfarmed onsite, name and location of offsite facility) CONTRACT 148-40

General Description of Remedial Action: Excavation. ENTIRE EXCAVATION CONSIST OF 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 1' (PIT BOTTOM)

Sample date 4/13/98 Sample time 1135

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>0.0</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 4/13/98 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: Kenneth M. Marshall DATE: 4-29-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJ340</u> C.D.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>JICA. CONTR. 148</u> WELL #: <u>11</u> PIT: <u>BLOW</u> QUAD/UNIT: <u>H</u> SEC: <u>13</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>SE 1/4 NE 1/4</u> CONTRACTOR: <u>P&amp;S</u>	DATE STARTED: <u>4/13/98</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NU</u>
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EXCAVATION APPROX. <u>15</u> FT. x <u>25</u> FT. x <u>1</u> FT. DEEP.	CUBIC YARDAGE: <u>5</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIATION METHOD: <u>LANDFARMED</u>
LAND USE: <u>RANGE</u>	LEASE: <u>JICA. 148</u> FORMATION: <u>PC</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>180</u> FT. <u>SIZE</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>&gt;100'</u> NEAREST WATER SOURCE: <u>&gt;1000'</u> NEAREST SURFACE WATER: <u>&gt;1000'</u> NMDCD RANKING SCOPE: <u>0</u> NMDCD TPH CLOSURE STD: <u>5000</u> PPM
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CHECK ONE:  
☒ PIT ABANDONED  
☐ STEEL TANK INSTALLED  
☐ FIBERGLASS TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

MOSTLY MED. YELL. BROWN SAND, POSSIBLY WIND BLOWN MATERIAL,  
 PIT WAS PROBABLY BERMED ONLY ON TOP OF SANDSTONE, NO STRAINING  
 EVIDENT IN PIT AREA OR ADJACENT AREA, NO EVIDENCE OF ANY FLUID  
 MIGRATION TO THE SOUTH ON TOP OF SANDSTONE. COLLECTED ONLY  
 CUM SAMPLE

ENTIRE EXCAVATION BEDROCK

SCALE

0 FT

CLOSED

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1135							

PIT PERIMETER

PIT PROFILE

OVM RESULTS

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

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

NOT APPLICABLE

TRAVEL NOTES: CALLOUT: _____	ONSITE: _____
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NATURAL RESOURCE DEPT  
AND OIL & GAS ADMINISTRATION

**ON-SITE SOIL REMEDIATION REPORT**

<b>Operator:</b> <u>AMOCO PRODUCTION COMPANY</u>		<b>Telephone:</b> <u>(505) 326-9200</u>
<b>Address:</b> <u>200 Amoco Court, Farmington, NM 87401</u>		
<b>Facility or Well Name:</b> <u>JICARILLA CONTRACT 148-11</u>		
<b>Location:</b> Unit or Qtr/Qtr Sec <u>H</u> Sec <u>13</u> T <u>25N</u> R <u>5W</u> County <u>BLA</u>		
<b>Land Type:</b> <u>RANGE</u>		
<b>Date Remediation Started:</b> <u>4-13-98</u>		<b>Date Completed:</b> <u>1-19-99</u>
<b>Remediation Method:</b> Landfarmed <input checked="" type="checkbox"/> Composted <input type="checkbox"/> Other <input type="checkbox"/>		<b>Approx. cubic yards</b> <u>655</u>
<b>Distance To Groundwater:</b> (pts.) <u>0</u> <b>Distance to an Ephemeral Stream</b> (pts.) <u>0</u> <b>Distance to Nearest Lake, Playa, or Watering Pond</b> (pts.) <u>0</u> <b>Wellhead Protection Area:</b> (pts.) <u>0</u> <b>Distance To Surface Water:</b> (pts.) <u>0</u>		<b>Final Closure Sampling:</b> <b>Sampling Date:</b> <u>1-13-99</u> <b>Time:</b> <u>1200</u> <b>Sample Results:</b> <b>Field Headspace (ppm)</b> <u>0.0</u> <b>TPH (ppm)</b> <u>LF2 252</u> <b>Method</b> <u>8015</u> <b>Other</b> <u>MULTIPLE SAMPLES - SEE ATTACHED FORM</u>
<b>RANKING SCORE (TOTAL POINTS):</b> <u>0</u>		
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF  <b>DATE</b> <u>1/19/99</u> <b>PRINTED NAME</b> <u>Buddy D. Shaw</u> <b>SIGNATURE</b> <u>Buddy D. Shaw</u> <b>AND TITLE</b> <u>Environmental Coordinator</u>		
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.  <b>APPROVED:</b> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) _____  <b>SIGNED:</b> <u>Ken C. M...</u> <b>DATE:</b> <u>3-31-99</u>		

CLIENT: <u>AMOCO</u>	<b>BLAGG ENGINEERING, INC.</b> P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJS40</u> C.O.C. NO: <u>6546</u>
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## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>JICARILLA CONTRACT 148</u> WELL #: <u>11</u> PITS: <u>BLOW</u>	DATE STARTED: <u>1.13.99</u> DATE FINISHED: <u>1.19.99</u>
QUAD/UNIT: <u>H</u> SEC: <u>13</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> STNM: <u></u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>
QTR/FOOTAGE: <u>SE/4 NE/4</u> CONTRACTOR: <u>P+S</u>	

SOIL REMEDIATION:

REMEDIATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>655</u>
LAND USE: <u>RANGE</u>	LIFT DEPTH (ft): <u>1.2</u>

### FIELD NOTES & REMARKS:

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

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

**DK YELLOWISH BROWN. CLAYEY SAND. COHESIVE, SLIGHTLY MOIST, FIRM**  
**NO APPARENT STAINING OBSERVED, OR HC ODOR DETECTED, SAMPLING DEPTHS**  
**RANGE FROM 6"-18", TOOK A SPT. COMPOSITE SAMPLE FROM EACH**  
**LANDFARM AREA FOR LAB. ANALYSIS.**

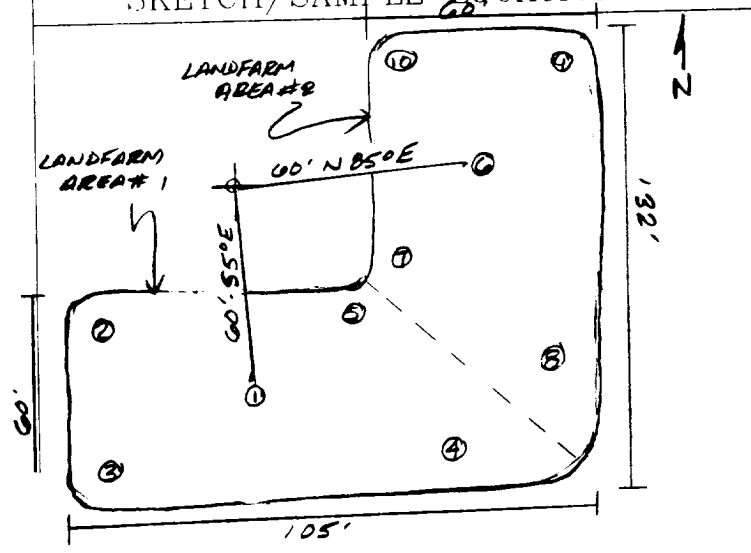
**CLOSED**

APPROX. 650 C.Y. DEPOSED  
FROM 148-40

### FIELD 418.1 CALCULATIONS

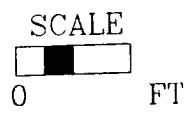
SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

### 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 (BDIS)	1200	114
LF-2	0.0	LF-2	" "	1230	252



TRAVEL NOTES: CALLOUT: N/A      ONSITE: 1.13.99

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

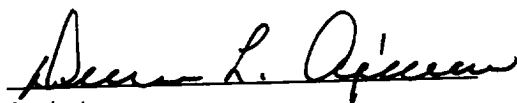
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	01-19-99
Laboratory Number:	E522	Date Sampled:	01-13-99
Chain of Custody No:	6546	Date Received:	01-15-99
Sample Matrix:	Soil	Date Extracted:	01-15-99
Preservative:	Cool	Date Analyzed:	01-19-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.1	0.2
Diesel Range (C10 - C28)	111	0.1
Total Petroleum Hydrocarbons	114	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 148 - 11 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

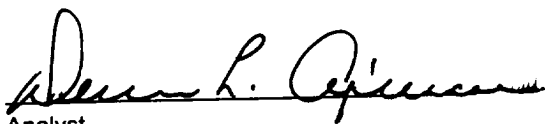
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 2	Date Reported:	01-19-99
Laboratory Number:	E523	Date Sampled:	01-13-99
Chain of Custody No:	6546	Date Received:	01-15-99
Sample Matrix:	Soil	Date Extracted:	01-15-99
Preservative:	Cool	Date Analyzed:	01-19-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.9	0.2
Diesel Range (C10 - C28)	248	0.1
Total Petroleum Hydrocarbons	252	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 148 - 11 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

# CHAIN OF CUSTODY RECORD

6546

Client / Project Name <b>BLAGG/AMOCO</b>			Project Location <b>LANDFILL</b>			ANALYSIS / PARAMETERS					
Client No. <b>04034-10</b>			SICARILLA CONTRACT 148-11								
Sampler: <b>REP</b>						No. of Containers <b>TPH (8015)</b>		Remarks			
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix							
LF-1	1/13/99	1200	ES02	SOIL	1	✓					SPT. COMPOSITE
LF-2	1/13/99	1230	ES03	SOIL	1	✓					SPT. COMPOSITE
											SAMPLES PRESERVED
											400L
Relinquished by: (Signature) <i>[Signature]</i>			Date 1/15/99	Time 0815	Received by: (Signature) <i>[Signature]</i>			Date 1/15/99	Time 815		
Relinquished by: (Signature)						Received by: (Signature)					
Relinquished by: (Signature)						Received by: (Signature)					
Relinquished by: (Signature)						Received by: (Signature)					

**22 CACS 67415-1557**

**ENVIROTECH INC.**

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

**Sample Receipt**

Received Intact	Y	N	N/A
Cool - Ice/Blue Ice	✓		