

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

BJ476 OK
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

PIT REMEDIATION AND CLOSURE REPORT

RECEIVED
AUG 27 1999

OIL CON. DIV.
DIST. 36-9200

Operator: AMOCO PRODUCTION COMPANY **Telephone:** _____

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA CONTRACT # 155-12

Location: Unit or Qtr/Qtr Sec K Sec 32 T26N R5W County RIO ARriba

Pit Type: Separator _____ Dehydrator _____ Other BLOW

Land Type: RANGE

Pit Location: Pit dimensions: length 30', width 30', depth 13'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 450'

Direction from reference: 60 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>10</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>10</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)	<u>0</u>
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 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)	
	Greater than 1000 feet	(0 points)	<u>0</u>
RANKING SCORE (TOTAL POINTS):			<u>20</u>

Date Remediation Started: _____ Date Completed: 11/20/96

Remediation Method: Excavation Approx. cubic yards 300

Check all appropriate options) Landfarmed Insitu Bioremediation _____

Other _____

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

General Description of Remedial Action: Excavation

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 11/20/96

Sample date 14' Sample time 1230

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>40</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 11/20/96 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: Kurt Mammell DATE: 1-23-97

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>87476</u> C.O.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION PAGE No: 1 of 1

LOCATION: NAME: <u>JICARILLA CONTRACT WELL #155-12 PIT: BLOW</u>	DATE STARTED: <u>11/20/96</u> DATE FINISHED: _____
QUAD/UNIT: <u>K SEC: 32 TWP: 26N RNG: 5W PM: Nm CNTY: RA ST: NM</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>NEL4 SW/4</u> CONTRACTOR: <u>P+S</u>	

EXCAVATION APPROX. 30 FT. x 30 FT. x 13 FT. DEEP. CUBIC YARDAGE: 300
 DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMED
 LAND USE: RANGE LEASE: JICA. CONTR. #155 FORMATION: OR/PC

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 450 FT. N60W FROM WELLHEAD.
 DEPTH TO GROUNDWATER: <100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
 NMDCD RANKING SCORE: 10 NMDCD TPH CLOSURE STD: 1000 PPM

SOIL AND EXCAVATION DESCRIPTION:

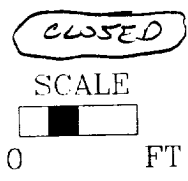
CHECK ONE:

PIT ABANDONED
 STEEL TANK INSTALLED
 FIBERGLASS TANK INSTALLED

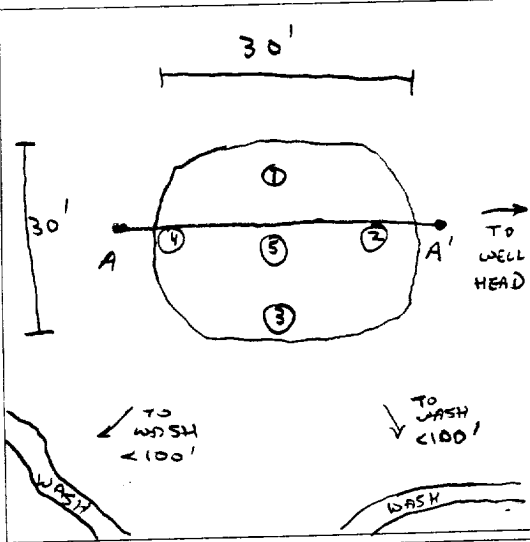
SAND TO CLAY W/ CLAY OBSERVED TOWARD UPPER 1/3 OF EXCAVATION, COLOR RANGING FROM DK. YELL. ORANGE TO OLIVE GRAY, SAND NON-COHESIVE FIRM, SLIGHTLY MOIST, CLAY SLIGHTLY PLASTIC, STIFF TO VERY STIFF, SLIGHTLY MOIST, NO APPARENT HC ODOR IN ANY OF THE OWN SAMPLES UNABLE TO DISCERN IF ANY CONTAMINATION REMAINS W/IN SIDEWALLS OR PIT BOTTOM, SMALL WASH SW OF PIT AREA (>10' IN WIDTH), NO INDICATION OF ANY SPILLS OR LEACHING FROM PIT INTO WASH.

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1230	⑤ @ 14'	TPH-1858	5	20	1:1	10	40



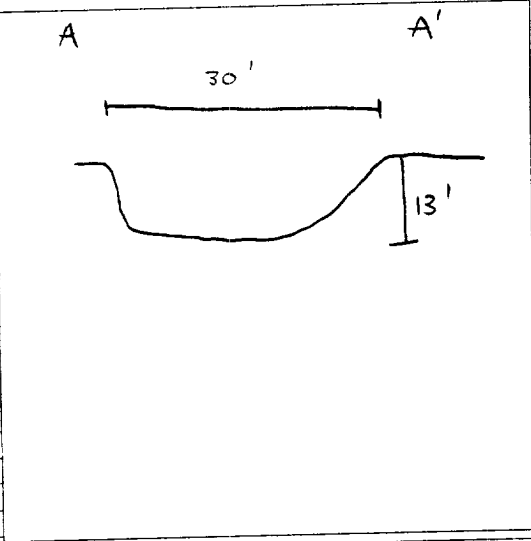
PIT PERIMETER



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 10'	0.0
2 @ 9'	0.0
3 @ 10'	0.0
4 @ 9'	0.0
5 @ 14'	0.0

PIT PROFILE



LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

TRAVEL NOTES: CALLOUT: 11/15/96 ONSITE: 11/20/96

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:	5 @ 14'	Date Analyzed:	11-20-96
Project Location:	Jicarilla Contract 155 - 12	Date Reported:	11-20-96
Laboratory Number:	TPH-1858	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	40	20

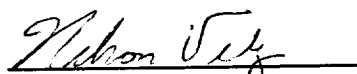
ND = Not Detectable at stated detection limits.

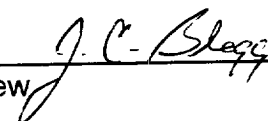
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	4640	4400	5.31

*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: Blow Pit - BJ476


Analyst

Review 

BLAGG ENGINEERING, INC.

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

Field TPH-Worksheet

Max Characters:

Client:

Sample ID:

Project Location:

Laboratory Number:

AMOCO

5 @ 14'

Jicarilla Contract 155 - 12

TPH-1858

Project #:

Date Analyzed:

Date Reported:

Sample Matrix:

11-20-96

11-20-96

Soil

Sample Weight: 5.00 grams
Volume Freon: 20.00 mL
Dilution Factor: 1 (unitless)
TPH Reading: 10 mg/kg

TPH Result: 40.0 mg/kg
Reported TPH Result: 40 mg/kg
Actual Detection Limit: 20.0 mg/kg
Reported Detection Limit: 20 mg/kg

QA/QC:

Original
TPH mg/kg

Duplicate
TPH mg/kg

%
Diff.

4640

4400

5.31

Comments:

*****Max Characters*****

Comments:

Blow Pit - BJ476

BT476

**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 155-12

Location: Unit or Qtr/Qtr Sec K Sec 32 T26N R5W County RIO ARRIBA

Land Type: RANGE

Date Remediation Started: 11/20/96 **Date Completed:** 8/25/97

Remediation Method: Landfarmed **Approx. cubic yards** 300
Composted
Other

Depth To Groundwater: (pts.) 10
Distance to an Ephemeral Stream (pts.) 10
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): 20

Final Closure Sampling:

Sampling Date: 8/19/97 **Time:** 1040

Sample Results:
Field Headspace (ppm) 14.6
TPH (ppm) 24.0 **Method** 8015
Other _____

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

DATE 8/25/97 **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: Kate C. Marshall **DATE:** 9-2-97

Amoco

CLIENT: CONOCO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: BJ476

C.O.C. NO: 5386

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION NAME: JICAZUMA CONTR 155 WELL #: 12 PITS: BLOW
QUAD/UNIT: K SEC: 3 2 TWP: 26N RNG: SW PM: NM CNTY: RA ST: NM
DTP/FOOTAGE: NE1/4 SW1/4 CONTRACTOR: P+S

DATE STARTED: 8/19/97

DATE FINISHED: _____

ENVIRONMENTAL SPECIALIST: NU

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARMED

APPROX. CUBIC YARDAGE: 300

LAND USE: RANGE

LIFT DEPTH (ft): 12"-18"

FIELD NOTES & REMARKS:

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

NMOC: PARKING SCOPE: 10 NMOC: TPH CLOSURE STD: 1000 PPM

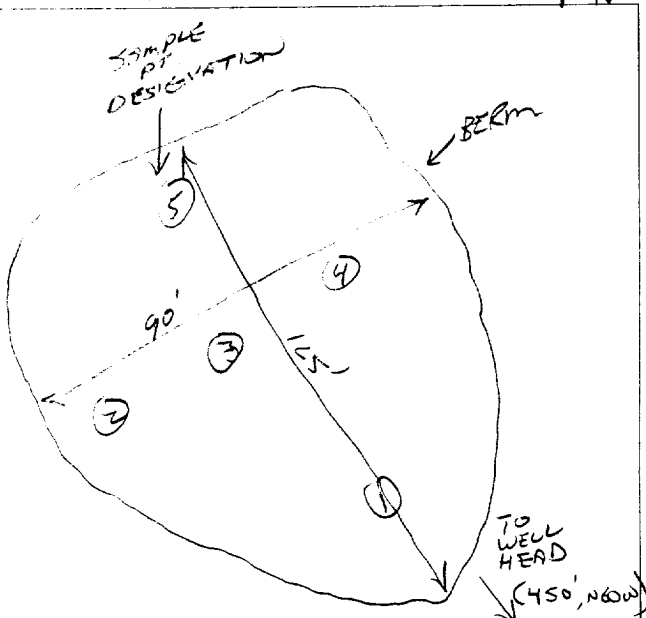
MOSTLY DR. YELL. BROWN SILTY SAND TO CLAY, NON COHESIVE TO HIGHLY PLASTIC, FIRM TO STIFF, SLIGHT DISCOLORATION OBSERVED IN ALL SAMPLE PTS. LANDFARM LOCATED @ SAME VICINITY AS BLOW PIT. 5 FT. COMPOSITE COLLECTED FOR LAB ANALYSIS.

CLOSED

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS ↑ N



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	14.6	LF-1	TPH (8015)	1040	24.0

SCALE



TRAVEL NOTES:

CALLOUT: NA

ONSITE: 8/19/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

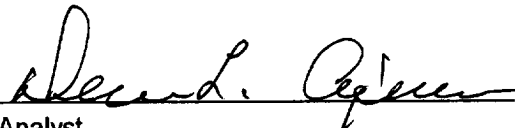
Client:	Blagg / Amoco	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	08-20-97
Laboratory Number:	B885	Date Sampled:	08-19-97
Chain of Custody No:	5386	Date Received:	08-19-97
Sample Matrix:	Soil	Date Extracted:	08-19-97
Preservative:	Cool	Date Analyzed:	08-20-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

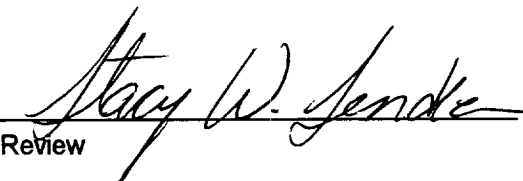
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2.0	0.2
Diesel Range (C10 - C28)	22.0	0.1
Total Petroleum Hydrocarbons	24.0	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: Jicarilla Contract 155-12 Landfarm. 5 pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name <i>BRES / Amoco</i>		Project Location <i>LANDFARM</i>		Chain of Custody Tape No. <i>04034-10</i>		ANALYSIS/PARAMETERS		Remarks									
Sampler: (Signature) <i>Wilson VJ</i>		Sample No./ Identification		Sample Date		Sample Time		Lab Number		Sample Matrix		No. of Containers		Date		Time	
		<i>LF-1</i>		<i>8/9/97</i>		<i>1040</i>		<i>B885</i>		<i>SOIL</i>		<i>1</i>					
Relinquished by: (Signature) <i>Wilson VJ</i>		Date <i>8/19/97</i>		Time <i>1402</i>		Receiver By: (Signature) <i>Allen R. Quisenberry</i>		Date <i>8-19-97</i>		Time <i>1402</i>							
Relinquished by: (Signature)						Received by: (Signature)											
Relinquished by: (Signature)						Received by: (Signature)											

*Ref core's 5388, 5384, 5385, 5386
5, 5387*

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

Sample received cool & in bag

*PRESENT - cool
5 PT. COMPOSITE*