

010W 115N UG 200K  
BT662

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

RECEIVED  
AUG 20 1999

OIL CON. DIV.  
DIST. 3

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 # 151-3

Location: Unit or Qtr/Qtr Sec B Sec 4 T 26N R SW County RIO ARriba

Pit Type: Separator      Dehydrator      Other BLOW

Land Type: RANGE

Pit Location:  
(Attach diagram)

Pit dimensions: length 22', width 22', depth 25'

Reference: wellhead X, other     

Footage from reference: 183'

Direction from reference: 30 Degrees      East of North       
X West of South X

**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)	<u>0</u>
Greater than 100 feet	(0 points)	<u>    </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)	<u>    </u>

**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)	<u>    </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)	<u>0</u>
No	(0 points)	<u>    </u>

**Distance To Surface Water:**

(Horizontal distance to perennial  
lakes, ponds, rivers, streams, creeks,  
irrigation canals and ditches)

Less than 100 feet	(20 points)	<u>0</u>
100 feet to 1000 feet	(10 points)	<u>    </u>
Greater than 1000 feet	(0 points)	<u>    </u>

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

BJ662

BLow PIT

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

Date Completed: 10/13/98Remediation Method: Excavation ☒  
(Check all appropriate sections) Landfarmed ☒Approx. cubic yards 400

Insitu Bioremediation \_\_\_\_\_

Other \_\_\_\_\_

Remediation Location: Onsite ☒ Offsite \_\_\_\_\_  
(i.e. landfarmed onsite, name and location of offsite facility)General Description of Remedial Action: Excavation. BEDROCK BOTTOM. 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 DocumentsSample depth 16' (NORTH SIDEWALK)Sample date 10/13/98 Sample time 1015

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>ND</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 10/13/98 PRINTED NAME Buddy D. ShawSIGNATURE 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. AttachedSIGNED: K. C. Mann DATE: 11-18-98

3003920597

CLIENT: AMOCBLAGG ENGINEERING, INC.  
P.O. BOX 87, BLOOMFIELD, NM 87413  
(505) 632-1199LOCATION NO: 8J662

C.D.C. NO: \_\_\_\_\_

## FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1LOCATION: NAME: JICA. AP. TRIBAL 151 WELL #: 3 PIT: BLOW  
QUAD/UNIT: 8 SEC: 4 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM  
QTR/FOOTAGE: 1060' FNL / 1650' FEL CONTRACTOR: P+SDATE STARTED: 10/13/98

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

ENVIRONMENTAL  
SPECIALIST: NVEXCAVATION APPROX. 22 FT. x 22 FT. x 25 FT. DEEP. CUBIC YARDAGE: 400  
DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARM  
LAND USE: RANGE LEASE: TIC 151 FORMATION: OKFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 183 FT. S30W 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:

## CHECK ONE:

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

SIDEWALLS - VERY PALE ORANGE TO MOD. YELL. ORANGE SAND (TOP 2/3'S OF EXCAVATION), NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT STAINING OBSERVED NO APPARENT HC ODOR DETECTED W/IN EXCAVATION OR IN ANY OF THE OVM SAMPLES, BOTTOM 1/3 CONSISTED OF BEDROCK VARYING IN COLOR FROM VERY PALE ORANGE TO OLIVE GRAY.

BOTTOM - BEDROCK (SANDSTONE), LT. OLIVE GRAY IN COLOR, VERY HARD, STRONG HC ODOR IN OVM SAMPLE.

BEDROCK  
BOTTOM

RISK ASSESSED

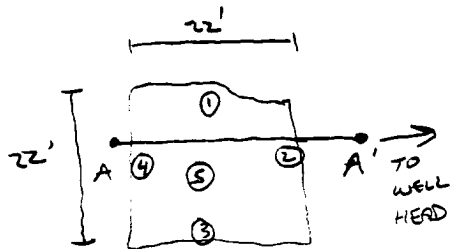
## FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1015	① @ 16'	TPH-2053	5	20	1:1	4	ND

SCALE

0 FT

## PIT PERIMETER

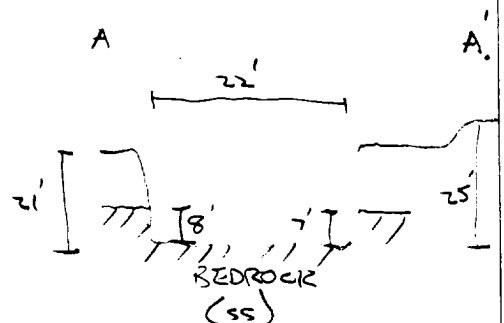
OVM  
RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 16'	0.0
2 @ 17'	0.0
3 @ 16'	0.0
4 @ 19'	0.0 RIR
5 @ 25'	509 RIR

## LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

## PIT PROFILE



TRAVEL NOTES:

CALLOUT: 10/12/98 - MORN.ONSITE: 10/13/98 - MORN.

<b>Well Name:</b>	<b>Jicarilla Apache Tribal 151 #3</b>
Well Site location:	Unit B, Sec. 4, T26N, R5W
Pit Type:	Blow Pit
Producing Formation:	Basin Dakota
Pit Category:	Non Vulnerable
Horizontal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

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

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 25 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 sandstone bedrock located 25 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone 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 0.74 miles southeast of the nearest vulnerable area boundary (Cereza 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 sandstone 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.

**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:	1 @ 16'	Date Analyzed:	10-13-98
Project Location:	Jicarilla Apache Tribal # 151 - 3	Date Reported:	10-13-98
Laboratory Number:	TPH-2053	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	<b>ND</b>	<b>20</b>

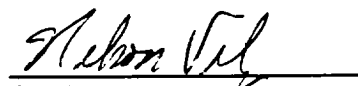
ND = Not Detectable at stated detection limits.

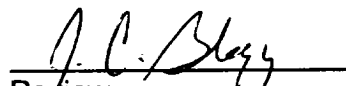
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	236	220	7.02

\*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 - BJ662

  
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:

Amoco

Project #:

Sample ID:

1 @ 16'

Date Analyzed:

10-13-98

Project Location:

Jicarilla Apache Tribal # 151 - 3

Date Reported:

10-13-98

Laboratory Number:

TPH-2053

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

4 mg/kg

TPH Result:

16.0 mg/kg

Reported TPH Result:

16 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.

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236

220

7.02

Comments:

\*\*\*\*\*Max Characters\*\*\*\*\*

Comments:

Blow Pit - BJ662

87662

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 APACHE TRIBAL #151-3

**Location:** Unit or Qtr/Qtr Sec B Sec 4 T 26N R 4W County RIO ARriba

**Pit Type:** Separator ☒ Dehydrator ☐ Other ☐

**Land Type:** RANGE

**Pit Location:** (Attach diagram) Pit dimensions: length 21', width 34', depth 25'

Reference: wellhead ☒, other ☐

Footage from reference: 160'

Direction from reference: 65 Degrees ☒ East of North ☐  
West of 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)	<u>0</u>
	Greater than 100 feet (0 points)	
<b>Distance to an Ephemeral Stream</b> (Downgradient dry wash greater than ten feet in width)	Less than 100 feet (10 points)	<u>0</u>
	Greater than 100 feet (0 points)	
<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)	<u>0</u>
	Greater than 100 feet (0 points)	
<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)	<u>0</u>
	No (0 points)	
<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)	<u>0</u>
	Greater than 1000 feet (0 points)	

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

BT66Z SEP. PIT

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

Date Completed: 10/14/98Remediation Method: Excavation ☒  
(Check all appropriate sections) Landfarmed ☒Approx. cubic yards 375

Insitu Bioremediation \_\_\_\_\_

Other \_\_\_\_\_

Remediation Location:  
(i.e. landfarmed onsite,  
name and location of  
offsite facility)Onsite ☒ Offsite \_\_\_\_\_General Description of Remedial Action: Excavation - CONDITIONAL CLOSURE - JICARILLA EPO,  
RISK ASSESSED - UNOCD.

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 26' (PIT BOTTOM)Sample date 10/13/98Sample time 0915

Sample Results

Soil: Benzene (ppm) 20.840

Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) 96.450

Toluene (ppb) \_\_\_\_\_

Field Headspace (ppm) 774

Ethylbenzene (ppb) \_\_\_\_\_

TPH (ppm) 4,660

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

10/14/98

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)

Conditional / R.A. Attached

SIGNED:

Ken C. M...ll

DATE:

11-18-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>87662</u> C.D.C. NO: <u>6295</u>
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FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>TICA AP. TRIBAL</u> IS1 WELL #: <u>3</u> PIT: <u>SEP.</u>		DATE STARTED: <u>10/13/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>3</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>		ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>1060' FM / 1650' FEL</u> CONTRACTOR: <u>P+S</u>		

EXCAVATION APPROX. <u>21</u> FT. x <u>34</u> FT. x <u>25</u> FT. DEEP.	CUBIC YARDAGE: <u>375</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDIAL METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u>	LEASE: <u>TIC 151</u> FORMATION: <u>DR</u>

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>160</u> FT. <u>565E</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>2100'</u>	NEAREST WATER SOURCE: <u>21000'</u> NEAREST SURFACE WATER: <u>21000'</u>

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

### SOIL AND EXCAVATION DESCRIPTION:

OK. YELL. BROWN TO DK. GRAY SILTY SAND, MIN COHESIVE TO COHESIVE, SLIGHTLY MOIST TO MOIST FIRM TO SLIGHTLY DENSE, STAINING EVIDENT THROUGHOUT ENTIRE EXCAVATION EXCEPT NORTH SIDEWALL, NO ODOR DETECTED w/in EXCAVATION, STRONG NO ODOR IN WEST SIDEWALL & PIT BOTTOM, BEDROCK (SANDSTONE) PRESUMED TO BE RELATIVELY NEAR PIT BOTTOM BASED UPON ESCURT - ELINE C Blow PIT ON-SITE.

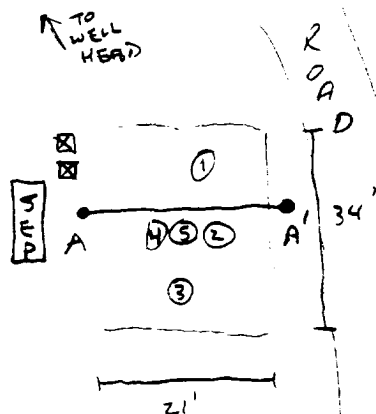
CONDITIONAL CLOSURE - TICARILLA EPO  
RISK ASSESSED - NMOC D

### FIELD 418.1 CALCULATIONS

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

SCALE  
0 FT

### PIT PERIMETER



### OVM RESULTS

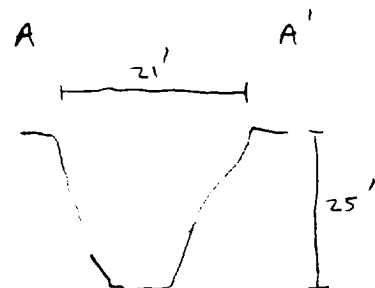
SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 20'	32.7
2 @ 20'	93.2
3 @ 20'	89.2
4 @ 20'	468
5 @ 26'	774

### LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
5 @ 26'	5 @ 26'	0915

TPH - PASSED  
BEN - FAILED  
TOT. BTEX - FAILED

### PIT PROFILE



### TRAVEL NOTES:

CALLOUT: 10/12/98 - MORN.

ONSITE: 10/13/98 - MORN.

<b>Well Name:</b>	<b>Jicarilla Apache Tribal 151 #3</b>
<b>Well Site location:</b>	<b>Unit B, Sec. 4, T26N, R5W</b>
<b>Pit Type:</b>	<b>Separator Pit</b>
<b>Producing Formation:</b>	<b>Basin Dakota</b>
<b>Pit Category:</b>	<b>Non Vulnerable</b>
<b>Horizontal Distance to Surface Water:</b>	<b>&gt; 1000 ft.</b>
<b>Vicinity Groundwater Depth:</b>	<b>&gt; 100 ft.</b>

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

Pit remediation activities were terminated when trackhoe reached practical extent (25 ft. below grade) and for safety concerns (underground piping and surface equipment).

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

1. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below presumed shallow sandstone bedrock (based on sandstone exposure at blow pit).
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 0.74 miles southeast of the nearest vulnerable area boundary (Cereza 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 vertical impact to groundwater is very unlikely. AMOCO requests pit closure approval on this location.

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

Client: Blagg / AMOCO  
Sample ID: 5 @ 26'  
Laboratory Number: E065  
Chain of Custody No: 6295  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

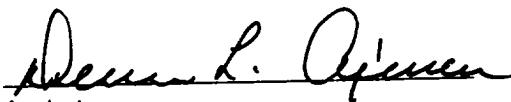
Project #: 04034-10  
Date Reported: 10-14-98  
Date Sampled: 10-13-98  
Date Received: 10-14-98  
Date Extracted: 10-14-98  
Date Analyzed: 10-14-98  
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3,030	0.2
Diesel Range (C10 - C28)	1,630	0.1
Total Petroleum Hydrocarbons	4,660	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 Tribal #151 - 3 Separator Pit.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	5 @ 26'	Date Reported:	10-14-98
Laboratory Number:	E065	Date Sampled:	10-13-98
Chain of Custody:	6295	Date Received:	10-14-98
Sample Matrix:	Soil	Date Analyzed:	10-14-98
Preservative:	Cool	Date Extracted:	10-14-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	20,840	8.8
Toluene	30,340	8.4
Ethylbenzene	3,510	7.6
p,m-Xylene	27,910	10.8
o-Xylene	13,850	5.2
Total BTEX	96,450	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	97 %
	Bromofluorobenzene	97 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla Apache Tribal #151 - 3 Separator Pit.

  
Analyst

  
Review

6295

Ref's CEX's 6293-6294

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

8566A  
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 TRIBAL 151-3

Location: Unit or Qtr/Qtr Sec E Sec 4 T 26N R 5W County RIO ARRIEA

Land Type: \_\_\_\_\_

Date Remediation Started: 10-13-98

Date Completed: 5/17/99

Remediation Method: Landfarmed ☒

Approx. cubic yards 775

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: 5-14-99 Time: 1035

**Sample Results:**

Field Headspace (ppm) 428.6

TPH (ppm) 128 Method TPH (8015) + BTEX (8021)

Other BENZENE 0.145 ppm

TOT. BTEX 9.690 ppm

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

DATE 5/17/99 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: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BS662</u> C.D.C. NO: <u>6931</u>
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# FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>SILABILLA APACHE TRIBAL 151</u> WELL #: <u>3</u> PITS: <u>SEP, FLOW</u>	DATE STARTED: <u>5.14.99</u> DATE FINISHED: _____
QUAD/UNIT: <u>B SEC: 4 TWP 26N RNG: 5W PM: NM CNTY: RA ST: NM</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>
SPT/FOOTAGE: <u>NW/4 NE/4</u> CONTRACTOR: <u>P+S</u>	

## SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 775

LAND USE: RANGE

LIFT DEPTH (ft): 1.5

## 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

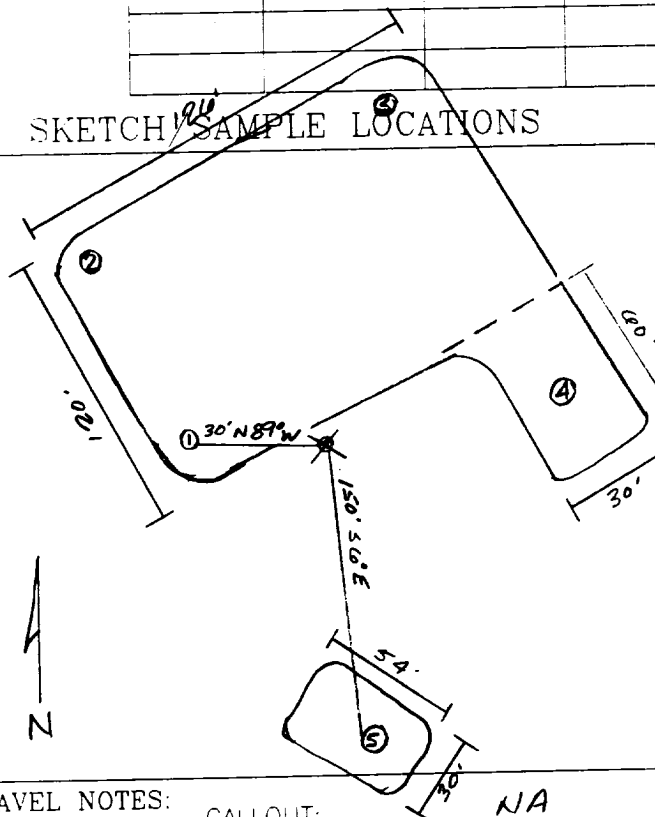
PALE YELLOWISH BROWN SAND, NON ADHESIVE, SLIGHTLY MOIST, FIRM.  
NO APPARENT STAINING. HC. ODDOR DETECTED IN SAMPLING PTS. ①, ③ & ④.  
SAMPLING DEPTHS RANGE FROM 6" - 12". COLLECTED A SPT. COMPOSITE  
SAMPLE FOR LAB ANALYSIS.

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	428.6	LF-1	TPH (8015)	1035	128
			BENZENE		145 ppb
			TOT. BTEX		9690 ppb

## SCALE



## TRAVEL NOTES:

CALLOUT: NA

ONSITE: 5.14.99

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

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

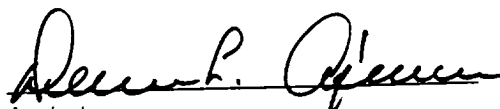
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-17-99
Laboratory Number:	F261	Date Sampled:	05-14-99
Chain of Custody No:	6931	Date Received:	05-17-99
Sample Matrix:	Soil	Date Extracted:	05-17-99
Preservative:	Cool	Date Analyzed:	05-17-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

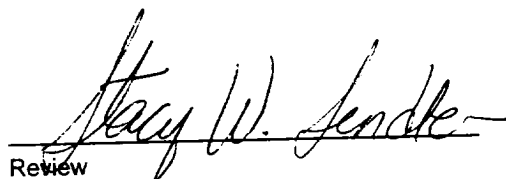
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	59.2	0.2
Diesel Range (C10 - C28)	69.0	0.1
Total Petroleum Hydrocarbons	128	0.2

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 Tribal 151 - 3 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-17-99
Laboratory Number:	F261	Date Sampled:	05-14-99
Chain of Custody:	6931	Date Received:	05-17-99
Sample Matrix:	Soil	Date Analyzed:	05-17-99
Preservative:	Cool	Date Extracted:	05-17-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	145	8.8
Toluene	989	8.4
Ethylbenzene	206	7.6
p,m-Xylene	6,180	10.8
o-Xylene	2,170	5.2
Total BTEX	9,690	

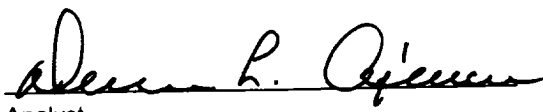
ND - Parameter not detected at the stated detection limit.

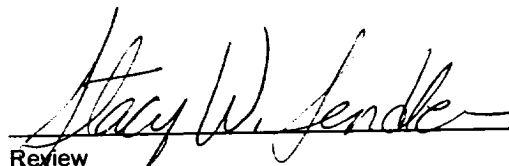
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla Apache Tribal 151 - 3 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

6931

[illegible]