

District I  
P.O. Box 1980, Hobbs, NM  
District II  
P.O. Drawer DD, Artesia, NM 88211  
District III  
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

Risk - 6-1-10 80 216

Denial due to LF  
11/13/85

## PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company Telephone: (505) - 326-9200  
Address: 200 Amoco Court, Farmington, New Mexico 87401  
Facility Or: FEDERAL GC 1  
Well Name \_\_\_\_\_  
Location: Unit or Qtr/Qtr Sec A Sec 28 T 28N R 10W County SAN JUAN  
Pit Type: Separator ☒ Dehydrator \_\_\_\_\_ Other \_\_\_\_\_  
Land Type: BLM \_\_\_\_\_, State \_\_\_\_\_, Fee \_\_\_\_\_, Other COM. AGMT.

Pit Location: Pit dimensions: length 24', width 23', depth 7'  
(Attach diagram) Reference: wellhead ☒, other \_\_\_\_\_  
Footage from reference: 175'  
Direction from reference: 70 Degrees \_\_\_\_\_ East North ☒  
of \_\_\_\_\_  
☒ West South \_\_\_\_\_

Depth To Ground Water: Less than 50 feet (20 points)  
(Vertical distance from 50 feet to 99 feet (10 points)  
contaminants to seasonal Greater than 100 feet (0 Points) 0  
high water elevation of  
ground water)

Wellhead Protection Area: Yes (20 points)  
(Less than 200 feet from a private No (0 points) 0  
domestic water source, or; less than  
1000 feet from all other water sources)

Distance To Surface Water: Less than 200 feet (20 points)  
(Horizontal distance to perennial 200 feet to 1000 feet (10 points)  
lakes, ponds, rivers, streams, creeks, Greater than 1000 feet (0 points) 0  
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: \_\_\_\_\_ Date Completed: 2/11/95

Remediation Method: Excavation X Approx. cubic yards 100  
 (Check all appropriate sections) Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_  
 Other COMPOSTED

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

General Description Of Remedial Action: \_\_\_\_\_

Excavation BEDROCK BOTTOM - RISK ASSESSEDGround Water Encountered: No X 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'Sample date 2/9/95 Sample time 0855

## Sample Results

Benzene(ppm) NDTotal BTEX(ppm) 0.030Field headspace(ppm) 717TPH ND ppmGround Water 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 2/11/95

SIGNATURE

B. ShawPRINTED NAME  
AND TITLEBuddy D. Shaw  
Environmental Coordinator

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80216</u> COC. NO: <u>2625</u>
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FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
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LOCATION: NAME: <u>FEDERAL GC</u> WELL #: <u>1</u> PIT: <u>SEP</u>	DATE STARTED: <u>2/9/95</u> DATE FINISHED: _____
QUAD/UNIT: <u>A</u> SEC: <u>28</u> TWP: <u>28N</u> RNG: <u>10W</u> PM: <u>NM</u> CNTY: <u>ST NM</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>NE/4</u> <u>NE/4</u> CONTRACTOR: <u>EPC</u>	

EXCAVATION APPROX <u>24</u> FT. x <u>23</u> FT. x <u>7</u> FT. DEEP. CUBIC YARDAGE: <u>100</u>
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>COMPOSTED</u>
LAND USE: <u>RANGE</u> LEASE: <u>SF-077383</u> FORMATION: <u>OK</u>

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>175</u> FT. <u>N70W</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>2100'</u> NEAREST WATER SOURCE <u>21000'</u> NEAREST SURFACE WATER: <u>21000'</u>
NMOOD RANKING SCORE <u>0</u> NMOOD TPH CLOSURE STD: <u>5000</u> FPM
SOIL AND EXCAVATION DESCRIPTION:

CHECK ONE:

☐ PIT ABANDONED

☒ STEEL TANK INSTALLED

VERY LT. GRAY TO MED. LT. GRAY, LT. OLIVE GRAY (EAST SIDEWALL) SAND, NON-COHESIVE, SLIGHTLY MOIST, FIRM TO DENSE, STRONG HC ODOR IN EAST SIDEWALL DUM SAMPLE ONLY.

Bottom - 1" ROCK, HARD, OR GRAY, STRONG HC ODOR IN DUM SAMPLE.

RISK ASSESSED

Bed Rock

FIELD 4181 CALCULATIONS

TIME	SAMPLE ID	LAB No:	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
0255	② @ 4'	TPH-1367	5	20	1:1	5	ND

SCALE

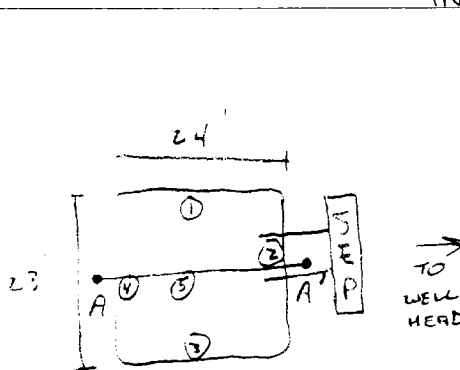


0 FT

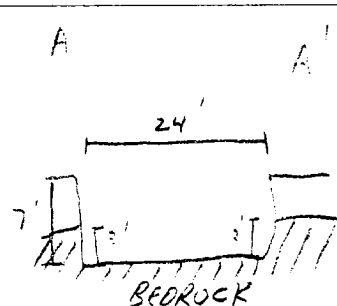
PIT PERIMETER

OVM RESULTS

PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 4'	51.2
2 @ 4'	717
3 @ 3'	44.2
4 @ 3'	3.2
5 @ 3'	516



SAMPLE ID	ANALYSIS	TIME
	BTEX	
B-	ND	ppb
TOT BTEX	30	ppb

PRSESSED

TRAVEL NOTES: CALLOUT: <u>2/8/95</u> ONSITE: <u>2/9/95</u>
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<b>Well Name:</b>	<b>Federal GC #1</b>
Well Site location:	Unit A, Sec. 28, T28N, R10W
Pit Type:	Separator 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 competent sandstone at 7 feet below grade.

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 shallow sandstone bedrock encountered at 7 feet below grade.
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 1.2 miles east southeast of the nearest vulnerable area boundary (Sullivan Canyon Wash).

**(Refer to Bloomfield Quadrangle, New Mexico - San Juan County, 7.5 Minute Series (Topographic), Provisional edition, 1985, (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 lateral impact from the earthen pit is very limited and that the sandstone bottom creates enough of a 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:	2 @ 4'	Date Analyzed:	02-10-95
Project Location:	Federal GC 1	Date Reported:	02-10-95
Laboratory Number:	TPH-1367	Sample Matrix:	Soil

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

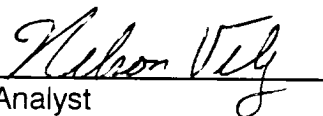
ND = Not Detectable at stated detection limits.


QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	4760	4400	7.86

\*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 - B0216

  
Analyst

  
Review

OFF: (505) 325-8786



LAB: (505) 325-5667

**AROMATIC VOLATILE ORGANICS**

Attn: *Nelson Velez*  
Company: *Blagg Engineering*  
Address: *P.O. Box 87*  
City, State: *Bloomfield, Nm 87413*

Date: *2/10/95*  
Lab ID: *2625*  
Sample ID: *5119*  
Job No. *2-1000*

Project Name: *Federal GC #1*  
Project Location: *2 @ 4' - Sep. Pit*  
Sampled by: *NV* Date: *2/9/95* Time: *8:55*  
Analyzed by: *DLA* Date: *2/10/95*  
Sample Matrix: *Soil*

**Aromatic Volatile Organics**

<b>Component</b>	<b>Measured Concentration ug/kg</b>	<b>Detection Limit Concentration ug/kg</b>
<i>Benzene</i>	<i>ND</i>	<i>0.2</i>
<i>Toluene</i>	<i>14.1</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>ND</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>15.9</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>ND</i>	<i>0.2</i>
	<i>TOTAL 30.0 ug/kg</i>	

*ND - Not Detectable*

**Method** - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*  
Date: *2/10/95*

P. O. BOX 2606 • FARMINGTON, NM 87499

- This report contains confidential information -

**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:

2 @ 4'

Date Analyzed:

02-10-95

Project Location:

Federal GC 1

Date Reported:

02-10-95

Laboratory Number:

TPH-1367

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

5 mg/kg

TPH Result:

20.0 mg/kg

Reported TPH Result:

20 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.

-----  
4760

-----  
4400

-----  
7.86

Comments:

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

Comments:

Separator Pit - B0216



CHAIN OF CUSTODY RECORD

2025

Page 1 of 1

Date: 2/19/95

657 W. Maple • P. O. Box 2606 • Farmington NM 87499  
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.:		Job No.		Name		Company		Mailing Address		City, State, Zip		Telephone No.		Title	
SEND INVOICE TO		Name		Company		Mailing Address		City, State, Zip		Telephone No.		Title		PG	
Name		Company		Mailing Address		City, State, Zip		Telephone No.		Title		PG			
Address		P.O. BOX 87		P.O. BOX 87		P.O. BOX 87		P.O. BOX 87		P.O. BOX 87		P.O. BOX 87			
City, State, Zip		FARMINGTON, NM 87401		FARMINGTON, NM 87401		FARMINGTON, NM 87401		FARMINGTON, NM 87401		FARMINGTON, NM 87401		FARMINGTON, NM 87401			
Sampling Location:		FEDERAL CC #1		FEDERAL CC #1		FEDERAL CC #1		FEDERAL CC #1		FEDERAL CC #1		FEDERAL CC #1			
Sampler:		John VTB		John VTB		John VTB		John VTB		John VTB		John VTB			
SAMPLE IDENTIFICATION		SAMPLE		DATE		TIME		MATRIX		PRES.		LAB ID			
(20E 4' - SEP. PIT)		2/19/95		0855		50/L						5111-2625			
RESULTS TO		REPORT		Number of Containers		ANALYSIS REQUESTED									
Relinquished by:		John VTB		Date/Time		2/19/95 14:00		Received by:		John VTB		Date/Time		2/19/95 14:00	
Relinquished by:				Date/Time				Received by:				Date/Time			
Relinquished by:				Date/Time				Received by:				Date/Time			
Method of Shipment:				Rush		24-48 Hours		10 Working Days		Special Instructions:					
Authorized by:				Date											
(Client Signature Must Accompany Request)															

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client



CLIENT: <u>Amoco</u>	<b>BLAGG ENGINEERING, INC.</b> P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80216</u>  C.D.C. NO: <u>AMALTA5</u>
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<b>FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION</b>		
LOCATION: <u>FEDERAL GAS COM</u>	LEASE: <u>SF-077383</u>	DATE STARTED: <u>5-8-96</u>
QUAD/UNIT: <u>A</u> SEC: <u>28</u> TWP: <u>28 N</u> RNG: <u>10 W</u> BM: <u>NM</u> CNTY: <u>ST</u> ST: <u>NM</u>		DATE FINISHED: _____
QTR/FOOTAGE: <u>NE/NE</u>	CONTRACTOR: <u>EPC</u>	ENVIRONMENTAL SPECIALIST: <u>RES</u>

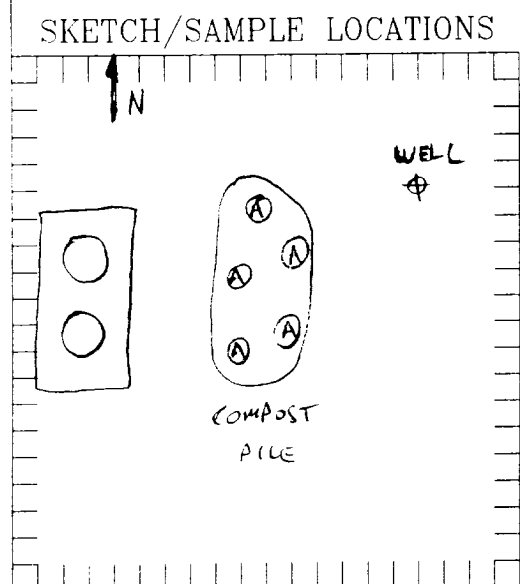
SOIL REMEDIATION:	
REMEDICATION SYSTEM: <u>STOCKPILE</u>	APPROX. CUBIC YARDAGE: <u>100</u>
LAND USE: <u>RANGE</u>	

FIELD NOTES & REMARKS:		
DEPTH TO GROUNDWATER: <u>&gt;100'</u>	NEAREST WATER SOURCE: <u>&gt;1000'</u>	NEAREST SURFACE WATER: <u>&gt;1000'</u>
NMDCD RANKING SCORE: <u>0</u>	NMDCD TPH CLOSURE STD: <u>5000</u> PPM	
SOIL CONSISTS OF MOIST HEAVY SANDY CLAY - LIGHT STAIN + ODOOR.		

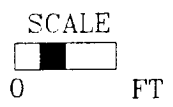
CLOSE S.P.

FIELD 418.1 CALCULATIONS

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



OVM RESULTS		LAB SAMPLES			
SAMPLE ID	FIELD HEADSPACE PIC (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
Comp. A	54	Comp. A	8015	0820	ND



TRAVEL NOTES:	CALLOUT: _____	ONSITE: <u>5-8-96</u> <u>0800</u>
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**TOTAL VOLATILE PETROLEUM HYDROCARBONS**  
**Gasoline Range Organics**

**Blagg Engineering, Inc.**

Project ID: Federal GC 1  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Intact

Report Date: 05/22/96  
Date Sampled: 05/08/96  
Date Received: 05/08/96  
Date Extracted: 05/20/96  
Date Analyzed: 05/20/96

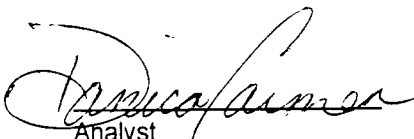
Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. A	3372	ND	20.5

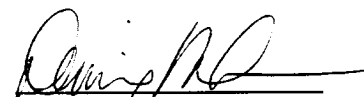
ND- Analyte not detected at the stated detection limit.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	104%	50 - 150%

**Reference:** Method for the Determination of Gasoline Range Organics,  
State of Tennessee, Department of Environment and Conservation, Division  
of Underground Storage Tanks.

**Comments:**

  
Analyst

  
Review



## TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

### Diesel Range Organics

#### Blagg Engineering, Inc.

Project ID: Federal GC 1  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Intact

Report Date: 05/22/96  
Date Sampled: 05/08/96  
Date Received: 05/08/96  
Date Extracted: 05/20/96  
Date Analyzed: 05/21/96

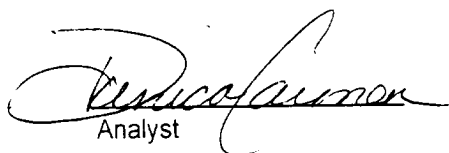
Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. A	3372	ND	18.7

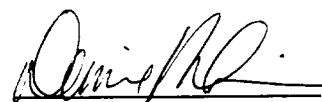
ND- Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptance Limits</u>
	o - Terphenyl	81%	50 - 150%

**Reference:** EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

#### Comments:

  
Analyst

  
Review