0-200

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

State of New Mexico
Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO

APPROPRIATE

DISTRICT OFFICE

AND 1 COPY TO:

OIL CONSERVATION DIVISION DEPUTY OIL & GAS ANSFECTEROFFICE

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

SEP 11 9 1996

PIT REMEDIATION AND C	CLOSURE 1	REPORT	•
III KUNDOWILEG		Approved!	′
	±	II AMAMA	

Operators	Amoco Production Company	Telephone: (505) - 326-9200		
	200 Amoco Court, Farmington,			
Well Name	6 ALLE 605 008			
Location: Unit	or Qtr/Qtr Sec M Se	c 34 T26 N R 11 W County SAN JUAN		
pit Type: Sepa	rator $X$ Dehydrator O	her		
Land Type: BL	M, State, Fee	, Other Com. Abmt,		
Pit Location: (Attach diagram)	Reference: wellhead $X$	35', width 35', depth 13',		
	Footage from reference:			
Direction from reference: O Degrees East North Of				
		West South $\underline{\mathcal{X}}$		
Depth To Ground (Vertical distance contaminants to shigh water elevations)	ce from seasonal	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)		
domestic water s	ection Area: eet from a private ource, or; less than ll other water sources)	Yes (20 points) No (0 points)		
Distance To St (Horizontal dist lakes, ponds, ri irrigation canal	ance to perennial vers, streams, creeks,	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)		
		RANKING SCORE (TOTAL POINTS): 30		

Date Remediation Sta	arted:	Date Completed:	4-21-95
Remediation Method:		Approx. cubic yards	
	Landfarmed $\frac{\chi}{\chi}$	Insitu Bioremediation	
	Other		
Remediation Location (ie. landfarmed onsite, name and location of offsite facility)		fsite	-
General Description	Of Remedial Actio	n:	
Excavation	on		
Ground Water Encoun	tered: No X	Yes Depth	
Final Pit: Closure Sampling: (if multiple samples,	Sample location _	see Attached Documents	
attach sample results and diagram of sample	Sample depth	13'	
locations and depths)	Sample date	4-21-45 Sample time	
	Sample Results		
	Benzene(ppm)	NΩ	
	Total BTEX(	opm) ND	
	Field heads	pace(ppm) 365	
	<b>трн</b> <u>16 РР</u>		
Ground Water Sample	e: Yes No	$\chi$ (If yes, attach sample	e results)
I HEREBY CERTIFY TO	HAT THE INFORMATION	N ABOVE IS TRUE AND COMPL	ETE TO THE BEST
DATE 5-2.95		RIIN	L
SIGNATURE BAS	haw PRINTE AND TI	D NAME Buddy D.S.	Coordinator

BLAGG ENGINEERING, INC.         LOCATION NO.         RCXCS           P.O. BOX 87, BLOOMFIELD, NM 87413         C.D.C. NO.         @340
FIELD REPORT: PIT CLOSURE VERIFICATION  LOCATION: NAME: 6ALLE60S WELL #: 098 PIT: Set. Date started: 4-21-95  QUAD/UNIT: M SEC: 34 TWP: 26 N RNG: II W BM: NM CNTY: 5 J ST: NM  CONTRACTOR: MOSS  ENVIRONMENTAL RECTORMENTAL RECTO
EXCAVATION APPROX. 35 FT. x 35 FT. x 13 FT. DEEP. CUBIC YARDS: 600  DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: LF  LAND USE: RN 6E LEASE: 96-004285 FORMATION: DAHOM  FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 120 FEET SOUTH FROM WELLHEAD.  DEPTH TO GROUNDWATER: 250 NEAREST WATER SOURCE: 71000 NEAREST SURFACE WATER: 21000  MMDCD RANKING SCORE: 30 NMDCD TPH CLOSURE STD: 100 PPM
SOIL AND EXCAVATION DESCRIPTION: PIT DISPOSITION: A BANDONED  MOIST, BADOW, SILTY SWA TO CLAFET SILT - MIMOR STAIN LENSES IN  SIDEWALLS. BOTTOM SOFT SILT STAVE.  FIELD 418.1 CALCULATIONS  SAMPLE I.D. LAB NO: WEIGHT (g) INL. FREON DILUTION READING CALC. ppm  WS-8' 1469 [0.0 20.0 - 17 34 16 16]  SCALE  O 10 20FT  DIT DEPIMETER  OVM  PIT PROFILE
TO   MASH   TO   SAMPLE   FIELD HEADSPACE   PID (ppm)
TRAVEL NOTES: 4-21-95 ONSITE: 4-21-95

# **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: Sample ID: Project Loca Laboratory N		Amoco CB @ 13' Gallegos 008 TPH-1470		Project #: Date Analyzed: Date Reported: Sample Matrix:	4-21-95 4-24-95 Soil
Paramete	er		Result, mg/kg		ection , mg/kg
Total Recove		าร	16		10
ND = Not D	etectable	at stated detection	on limits.		
QA/QC:		QA/QC Sam TPH mg/l	=	Duplicate TPH mg/kg	% *Diff.
	*Adminis	3,000 trative Acceptance limi		3,182	6
Method:	Recove		Petroleum Hydrod Analysis of Water 1978		
Comments:	Separa	tor Pit - B0265			
<u>β.</u> ξ. β. Analyst	o'nall			Daview	
$\neg$ ilalyət				Review	

## **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: Sample ID: Project Location Laboratory Nu		Amoco WS @ 8' Gallegos 008 TPH-1469		Project #: Date Analyzed: Date Reported: Sample Matrix:	4-21-95 4-24-95 Soil
Parameter			Result, mg/kg		ection :, mg/kg
Total Recover Petroleum Hyd		5	34		10
ND = Not De	etectable a	t stated detection	on limits.		
QA/QC:		QA/QC Sam TPH mg/l		Duplicate TPH mg/kg	% *Diff`.
	*Administr	3,000 rative Acceptance limi		3,182	6
Method:	Recover		Petroleum Hydrod Analysis of Water 1978		
Comments:	Separat	or Pit - B0265			
R. E.	o hall			Daview	
Analyst				Review	



#### **VOLATILE AROMATIC HYDROCARBONS**

#### Blagg Engineering, Inc.

Project ID:

Gallegos 008

04/25/95

Sample ID:

WS @ 8' Sep. Pit

Report Date: 04/25

Lab ID:

800

Date Sampled: 04

04/21/95

Sample Matrix:

890

Date Received:
Date Extracted:

04/21/95

Preservative:

Soil Cool

Date Analyzed:

04/21/95 04/24/95

Condition:

Intact

Target Analyte	Concentration (ug/kg)	Detection Limit (ug/kg)
Benzene	ND	25.1
Toluene	ND	25.1
Ethylbenzene	ND	25.1
m,p-Xylenes	ND	50.2
o-Xylene	ND	25.1

ND - Analyte not detected at the stated detection limit.

**Quality Control:** 

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

101

81 -117%

Bromofluorobenzene

100

74 -121%

Reference:

Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics;

Test Methods for Evaluating Solid Wastes, SW-846, United States

Environmental Protection Agency, Final Update I, July, 1992.

Comments:

migh

Well Name:
Well Site location:
Pit Type:
Producing Formation:
Pit Category:
Horizonal Distance to Surface Water:
Vicinity Groundwater Depth:

Gallegos #8
Unit M, Sec. 34, T26N, R11W
Separator Pit
Basin Dakota
Vulnerable Area
> 1000 ft.
< 50 ft.

### RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 13 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 13 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 (double sidewall steel tank installed). Prior discharge into the pit is believed to be under 5 barrels per day.
- 4. Field headspace readings (OVM/PID) on Basin Dakota type locations do not reflect direct correlation to total BTEX per USEPA Method 8020 concentrations. Listed below are several typical AMOCO Basin Dakota pit soil analyses comparing headspace to Benzene and total BTEX results.

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
Frost, Jack B 1E	1100	0.011	5.889
Berger A1	482	0.084	0.681
Mudge Com B 1E	684	0.017	16.438
L.C. Kelly #5	1235	0.643	13.908

The comparisons listed above demonstrates that headspace testing is not an accurate measurement to Benzene or total BTEX concentrations when above standards for Basin Dakota type pits.

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 permeable 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.