



## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



**BRUCE KING** GOVERNOR

ANITA LOCKWOOD

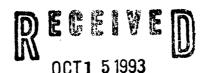
October 6, 1993

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

CABINET SECRETARY

Amoco. Production Company P.O. Box 800 Denver, CO 80201

Attention: J.W. Hawkins



OIL CON. DIV. DIST. 3

Administrative Order NSL-3318 Nr Clarged

Dear Mr. Hawkins:

Reference is made to your application dated September 2, 1993 for an unorthodox gas well location in both the Blanco Mesaverde and Basin Dakota Pools for your proposed Barnes "B" Well No. 18 to be drilled 1255 feet from the South line and 670 feet from the West line (Unit M) of Section 13, Township 32 North, Range 11 West, NMPM, San Juan County, New Mexico. It is our understanding that said well is to be dually completed in both the Blanco Mesaverde and Basin Dakota Pools, also this well is to be a replacement well in the Mesaverde interval for Amoco's Barnes "B" Well No. 9, located 1100 feet from the South line and 990 feet from the West line (Unit M) of said Section 13, which will be plugged back and abandoned in the Mesaverde formation.

By the authority granted me under the provisions of Rule 2(c) of the General Rules and Regulations for the Prorated Gas Pools of New Mexico, the Special Rules and Regulations for the Basin Dakota Pool and the Special Rules and Regulations for the Blanco Mesaverde Pool, as promulgated by Division Order No. R-8170, as amended, the above-described unorthodox gas well location is hereby approved.

The S/2 of said Section 13, being a standard 320-acre gas spacing and proration unit, shall be dedicated to said well in both intervals.

Further, the subject well and units shall be subject to all applicable rules governing said pools.

Sincerely,

William J. LeMa Director

WJL/MES/amg

cc:

Oil Conservation Division - Aztec

US Bureau of Land Management - Farmington



### STATE OF NEW MEXICO

# ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD AZTEC, NEW MEXICO 87410 (505) 334-6178

Date: 9-7-93 Alln: Mike Stoguer
Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87504-2088
RE: Proposed MC Proposed DHC Proposed SWD Proposed WFX Proposed PMX Proposed NSP Proposed DD
Gentlemen:
I have examined the application received on $9-7-93$
for the American Department of LEASE & WELL NO.
$\frac{M-13-32N}{UL-S-T-R}$ and my recommendations are as follows:
Magnove
·
Yours truly,
Gene Brand



September 2, 1993

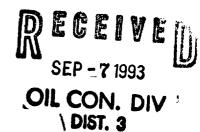
Mr. William J. LeMay, Director New Mexico Oil Conservation Division PO Box 2088 Santa Fe, New Mexico 87504

File: CAW-237-986.511

Application for Unorthodox Location Barnes B #9M Well SW/4 Section 13-T32N-R11W Basin Dakota Pool and Blanco Mesaverde Pool San Juan County, New Mexico

#### **Amoco Production Company**

Southern Rockies Business Unit Amoco Building 1670 Broadway Post Office Box 800 Denver, Colorado 80201 303-830-4040



Amoco Production Company hereby requests administrative approval for an unorthodox location in the Basin Dakota Pool and Blanco Mesaverde Pool. Amoco proposes to drill the Barnes B #9M Well at a location 1255' FSL and 670' FWL of Section 13. This will be a dual Dakota/Mesaverde well and will replace the Barnes B #9 well which will be plugged back and abandoned in the Mesaverde formation. We will be utilizing an existing wellpad since we are limited by the archeological conditions in the area. This spacing unit is in the S/2 Section 13, T32N-R11W. The offset operators will receive a copy of the application by certified mail with a request that they furnish your Santa Fe office with a waiver of objection and return one copy to Amoco.

Sincerely,

Mawhins

J. W. Hawkins

JWH/jmc

cc: Julie Acevedo

Frank Chavez, Supervisor NMOCD District III 1000 Rio Brazos Rd. Aztec, NM 87410

#### WAIVER

unorthodox well Pool and Blanco	location for	ives object r the Barne ool as prop	s B #9M	Well in	appli n the	cation Basin	l for Dakota
Rv:		Date:				_	

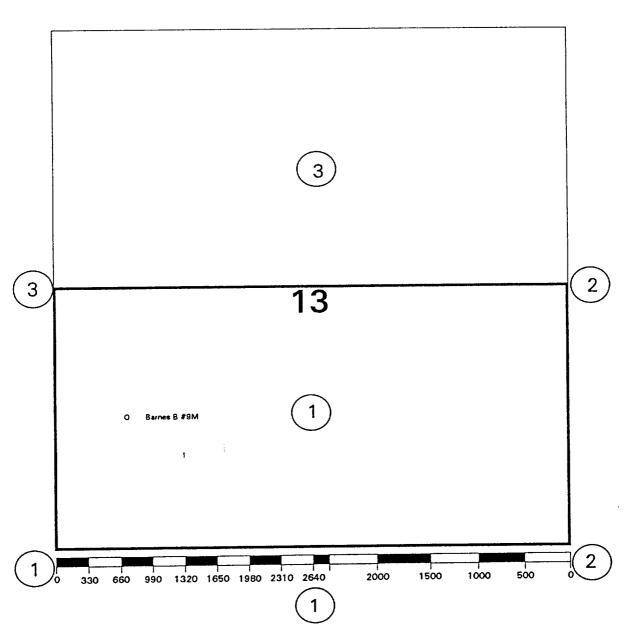
## VERIFICATION AND AFFIDAVIT

) ss COUNTY OF DENVER )
J. W. Hawkins, of lawful age, being first duly sworn on his oath, deposes and says:
That he is employed in an engineering capacity by Amoco Production Company in its Denver, Colorado office; that he has been qualified as an expert engineering witness by the New Mexico Oil Conservation Division and his qualifications have been made of record; that Amoco's application for administrative approval for unorthodox location for the Barnes B #9M well in the Basin Dakota Pool and Blanco Mesaverde Pool, San Juan County, New Mexico was prepared under his direction and supervision; that the matter and things therein set forth are true and correct to the best of his knowledge and beliefs. Copies of the application have been mailed by certified mail to the affected operators.  J. W. Hawkins
Subscribed and sworn to before me this 2nd day of September, 1993.
Notary Public
My Commission expires: 4-7-94

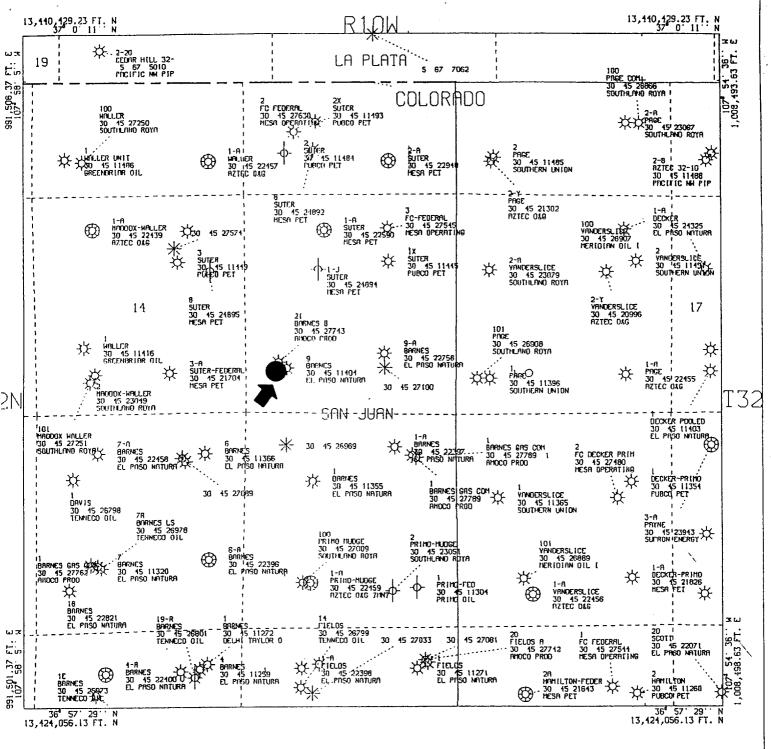
## Amoco Production Company Offset Operator Plat

### Barnes B #9M

Township 32North - Range 11West 1255' FSL, 670' FWL Sec. 13 Blanco Mesaverde/ Basin Dakota Formation



- 1. Amoco Production Company, P.O. Box 800, Denver, Co. 80201
- 2. Meridian Oil Prod., P.O. Box 4289, Farmington, NM 87499
- 3. Conoco Inc., 10 Desta Dr. #100W, Midland, TX 79705-4500



All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amoco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

197

POLYCONIC CENTRAL MERIDIAN - 107° 56' 21' H LON SPHEROLD - 6

AMOCO PRODUCTION COMPANY
BARNES B #9M
SEC 13-T32N-R11W
, SAN JUAN NM

SCALE 1 IN. = 2,000 FT. AUG 13, 1993

HORIZONTAL DATUH NAD27

JLV22588--RUN-9322512225

## State of New Mexico Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I P.O. Bux 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

## WELL LOCATION AND ACREAGE DEDICATION PLAT

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Operator			Lesse			<u> </u>
AMOCO	PRODUCTION	COMPANY	Barnes B		16	#9M •
Unit Letter	Section	Township	Range		County	
M	13	32 NORTH	11 WEST	NMPM	<u> </u>	SAN JUAN
Actual Footage Loc	· · · · · · · · · · · · · · · · · · ·					
1255	_	SOUTH line and	670	feet from	the WE	
Ground level Elev.	feet from the Producing	Formation	Pool			Dedicated Acreage:
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1. Outlin	ne the acreage dedicated	to the subject well by colored p	encil or hachure marks on the plat be	low.		
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If answe	er is "no" list the owner	and tract descriptions which ha	To actually occur occurrence (			
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or until	a pon-standard unit, elir	minating such interest, has been	approved by the Division.		· · · · · · · · · · · · · · · · · · ·	
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## State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

## OIL CONSERVATION DIVISION

P.O. Box 2088

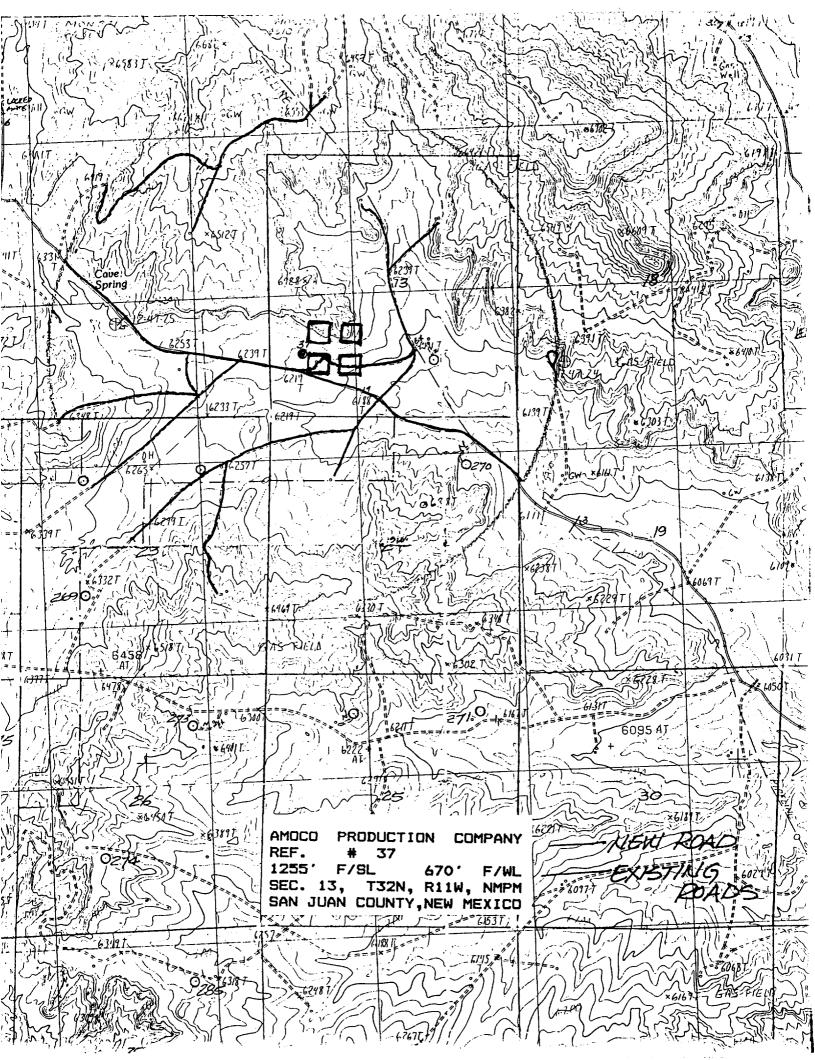
Santa Fe, New Mexico 87504-2088

DISTRICT I P.O. Bux 1980, Hobbe, NM 88240 DISTRICT II P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

## WELL LOCATION AND ACREAGE DEDICATION PLAT

1000 Rio Brazos Rd., Aztec, NM 874	10 All Distances must be	from the outer boundaries of the		
Operator		Leik	Well No.	
1 -	ON COMPANY	Barnes B	#9M	*
Unit Letter   Section	Township	Range	County	
	32 NORTH	11 WEST	NMPM SAN JUAN	
Actual Footage Location of Well:	02 1101111			
	SOUTH line and	670	feet from the WEST line	
1255 feet from the Ground level Elev. Produ	SUUTH line and ucing Formation	Pool	Dedicated Acreage:	
	=		S/2 320 As	cres
6223 Blanc	o Mesaverde	Blanco Mesaverde		
2. If more than one lease is	dedicated to the well, outline each and	l identify the ownership thereof (bo	th as to working interest and royalty).	
<ol> <li>If more than one lease of unitization, force-pooling</li> </ol>	different ownership is dedicated to the r. etc.?	e well, have the interest of all owner	rs been consolidated by communitization,	[
	No. If answer is "yes" ty	pe of consolidation		
If answer is "no" list the ow	voers and tract descriptions which have	actually been consolidated. (Use i	reverse side of	
			ion, unitization, forced-pooling, or otherwise)	
No allowable will be assign	ed to the well until all interests have been ap, eliminating such interest, has been ap	removed by the Division.	out amazzadu, rottos promegi et am	
or until a non-standard unit	, eliminating such interest, has been ap	provided by the Extended		
		1	OPERATOR CERTIFICAT	
		i	I hereby certify that the is contained herein in true and compl	Normalion
		1	best of my knowledge and belief.	
			Signature/	<del>}                                    </del>
			Juli La Cheanne	
		<u> </u>	Julie L. Acevedo	
			Position	
		l I	Sr. Staff Assistant	<u></u>
			Amoco Production Com	pany
		İ	Date	
i i	1		8/13/93	
1	13		SURVEYOR CERTIFICA	MOIT
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16			actual surveys made by me or	under my
		!	supervison, and that the same is	s true and
Phone		· .	correct to the best of my know belief.	utalt and
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7-670-0		j	Signature & Seal of D. 1/4	
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An Archaeological Survey of a Proposed Well Pad Ref #37 San Juan County, New Mexico 'T32N, R11W, Section 13 1265'FSL, 670'FWL

for Amoco Production

prepared and submitted

by John M. Kershner

Arboles Contract Archaeology

August 18, 1993 🕟

Technical report No. 309

## Abstract

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On August 3, 1993, Arboles Contract Archaeology completed a cultural resources survey of the proposed well pad Ref #37 for Amoco Production. The survey is located north of Aztec, San Juan County, New Mexico and is under the jurisdiction of the Bureau of Land Management. Approximately 7.8 acres were closely inspected for cultural resources.

John Kershner, ACA archaeologist, surveyed the project areas for archaeological material.

A single isolate was recorded during the survey of the proposed well pad. No other archaeological material was encountered during the survey. Recordation of the isolate has exhausted its research potential. Archaeological clearance is recommended for the proposed well pad.

### Introduction

On August 3, 1993 Arboles Contract Archaeology (ACA) conducted an archaeological survey for Amoco Production of Farmington, New Mexico. Glen Benfield of G and L Services requested the survey on July 28, 1993 and John Schwarz administered the project for Amoco Production. John Kershner administered the project for ACA.

Because of the finite and nonrenewable extent of archaeological remains, the Federal government of the United States has enacted legislation that will conserve and protect these resources. Key legislative enactments consist of the Antiquities Act of 1906 (PL 52-209), the Historic Preservation Act of 1966 (PL 89-655) and as amended (PL 96-515), the National Environmental Act of 1969 (PL 91-852), the 1971 Executive Order No. 11593, the Archaeological and Historical Conservation Act of 1974 (PL 93-291), and the Archaeological Resources and Protection Act of 1979 (PL 96-95). To ensure compliance with federal legislation within specific jurisdictional areas, the Navajo Nations and the states of New Mexico, Arizona, Colorado and Utah have enacted legislation to protect cultural resources.

#### Methods

The project area was completely surveyed employing straight line transects spaced 5-8m apart. The projects consisted of a primary impact area around the well head, a construction zone of 50 feet around the primary impact area, and a cultural resource buffer zone of 100 feet around the construction zone. All archaeological and relevant environmental data were recorded under the guidelines defined by the lead agency on the project area. Archaeological sites were recorded using a Brunton compass and a 30m and 3m tapes.

## Previously Recorded Sites

Prior to the cultural resources survey of the project areas, a records search was conducted at the Bureau of Land Management (BLM) Farmington Resource Area office to identify sites that may have been previously recorded within the project area.

The records search on July 28, 1993 yielded 46 sites within one mile of the surveyed area and, of those sites, seven are within 1000' of the outside of the proposed well pad's buffer zone.

NM-01:	site type	distance from outside
		of buffer zone
36541	BMIII-PII village	5001
36542	BMIII-PI hamlet	100′
36544	BMIII-PI multiple habitation	450
36561	BMIII-PII village	8001
36603	Pil artifact scatter	075
38001	PI multiple habitation	2001
38002	Pl multiple habitation	5001

## **Project Description**

Proposed Well Pad Ref #37:

Legal Description:

T32N, R11W, Section 13; 1265'FSL, 670'FWL S 1/2 NW1/4 SW1/4

N 1/2 SW1/4 SW1/4

N.M.P.M., San Juan County, New Mexico

Map Source: U.S.G.S. 7.5' Cedar Hill, New Mexico-prov. ed. 1985

Land Jurisdiction: Bureau of Land Management

Project Area: 365' X 400' (proposed well pad and construction

zone)

Surveyed Area: 565' X 600' (proposed well pad, construction and

buffer zones)

7.8 total acres surveyed

Project Environment: The proposed well pad is located in Cottonwood Canyon east of Cave Spring. The surveyed area is 50% disturbed by an existing well pad with only 25% of the western portion of the proposed well pad and construction zone in undisturbed terrain. Soils are sand sediments supporting sage, greasewood and chamisa. Access to the proposed location will be from an existing well pad and is contained within the surveyed area.

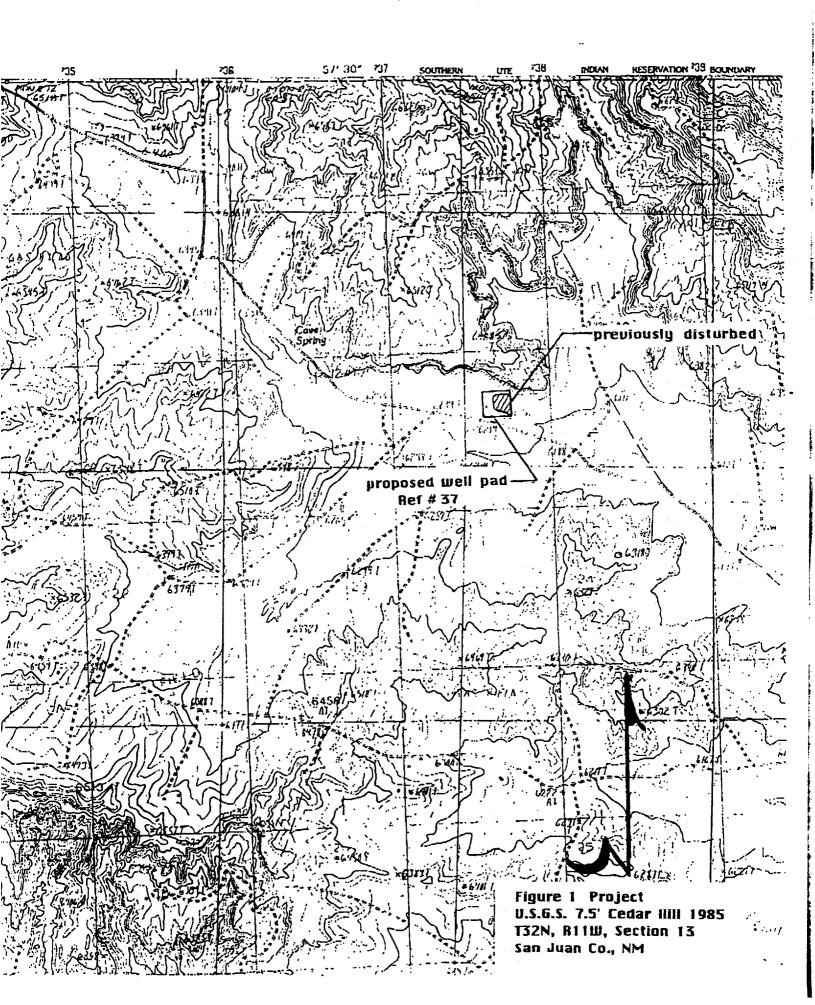
Cultural resources: A single IL was found during the survey. No other archaeological material was found during the survey.

## Isolated Artifact

11.#	I-R-S 1/4, 1/4, 1/4	IM (Zona 1	3) Iopo Veg	Description
1	32-11-13 NW/SW/SW	F237600	canyon sage	1 sherd-Piedra Gray
		N4096650	bottom	2x1x.75cm
				too small to determine vessel
				form, plain surfaces
	•			18m, 255° from rear center stake
			•	

The IL was found in an area of colluvial silty sand. Two 40x30x40cm deep shovel tests around the sherd yielded no cultural material. NM-01-36603 was relocated. This site is separated by a brushed area in the proposed well pad buffer zone and 75° of undisturbed terrain between the proposed well pad buffer zone and NM-01-36603. A deeply bladed road separate the proposed well pad surveyed area and the two previously recorded sites NM-01-38001 and NM-01-36542.

Recommendations: Recordation of The IL has exhausted its research potential. Archaeological clearance is recommended for the proposed well pad.

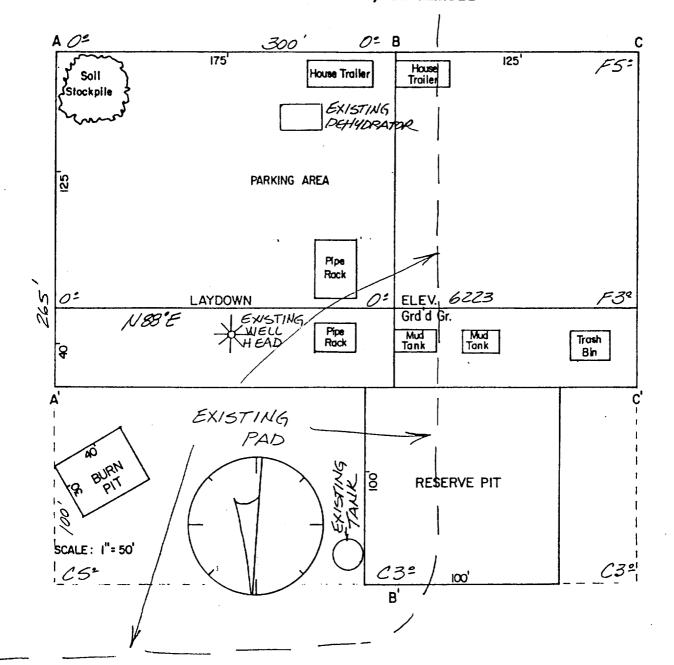


AMOCO PRODUCTION COMPANY

REF. # 37

1255' F/SL 670' F/WL

SEC. 13, T32N, R11W, NMPM SAN JUAN COUNTY, NEW MEXICO



NOTE: Contractor should call 1-800-321-2537 for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least 2 days prior to construction.

EXHIBIT "D"

AMDCO PRODUCTION COMPANY REF. # 37 1255' F/SL 670' F/WL SEC. 13, T32N, R11W, NMPM SAN JUAN COUNTY, NEW MEXICO

