OIL CONSERVE (UN DIVISION RECEIVED



93 SE 7 AM 1 37 Amoco Production Company

Amoco Building

1670 Broadway Post Office Box 800

303-830-4040

Denver, Colorado 80201

Southern Rockies Business Unit

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 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

	hereby wai	ves objection	to Amoco'	's appl:	icatior	ı for
unorthodox wel	l location for	the Barnes B	#9M Well	in the	Basin	Dakota
Pool and Blanc	o Mesaverde Po	ol as propose	d above.			
Bv:		Date:				

VERIFICATION AND AFFIDAVIT

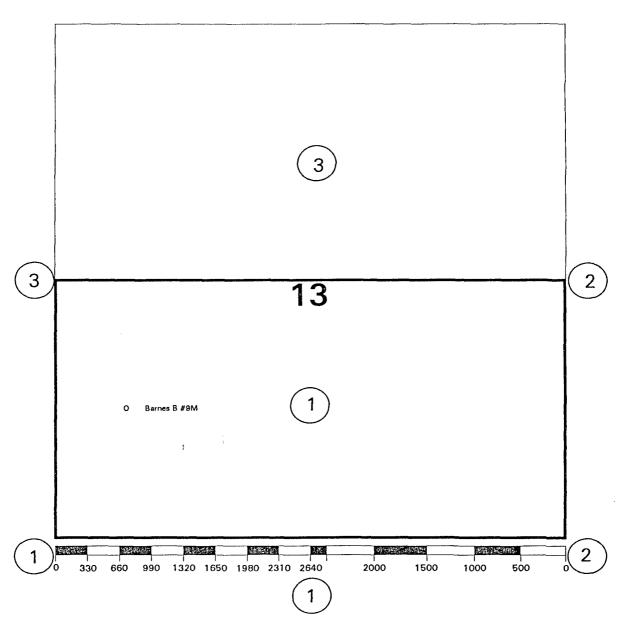
COUNTY OF DENVER)
J. W. Hawkins, of lawful age, being first duly sworn on his oath, deposes and says:
That he is employed in an engineering capacity by Amoco Production Company in its Denver, Colorado office; that he has been qualified as an expert engineering witness by the New Mexico Oil Conservation 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.
Motary Public

My Commission expires: 4-7-94

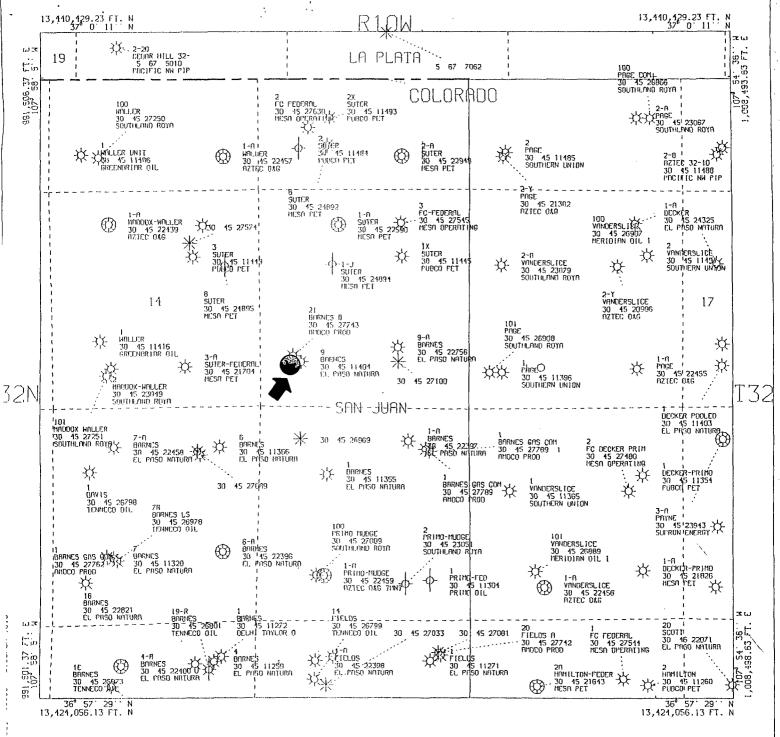
Amoco Production Company Offset Operator Plat

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 Amaco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

POLYCONIC CENTRAL MERIDIAN - 107° 56' 21'' $\rm W$ 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

¥.

Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

OIL CONSERVATION DIVISION DISTRICT 1 P.O. Bux 1980, Hobbs, NM 88240

1980 2310 2640

330

660

990

1320 1650

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT_I P.O. Drawer DD, Artesia, NM 88210

WELL LOCATION AND ACREAGE DEDICATION PLAT

1000 Rio Brazos Rd., Aztec, NM 87410 All Distances must be from the outer boundaries of the section Well No. CASC Operator AMOCO PRODUCTION COMPANY #9M Barnes B Range County Unit Letter Section Township 32 NORTH SAN JUAN 11 WEST NMPM Actual Footage Location of Well: SOUTH line and 670 WEST 1255 feet from the line feet from the Ground level Elev. Producing Formation Pool Dedicated Acreage: Basin Dakota Basin DAkota 6223 S/2 320 Acres 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? Yes If answer is "yes" type of consolidation If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if neccessary. No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division. OPERATOR CERTIFICATION I hereby certify that the information contained herein in true and complete to the best of my knowledge and belief. Printed Name Julie L. Acevedo Sr. Staff Assistant Company Amoco Production Company Date 8/13/93 SURVEYOR CERTIFICATION 13 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed August 3, 1993 Signature & Seal of Krobr D. Professional, PVEYOR 016 53 Gart Certific Lings 7016 POFESSIONAL

1000

500

0

2000

1500

Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies

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

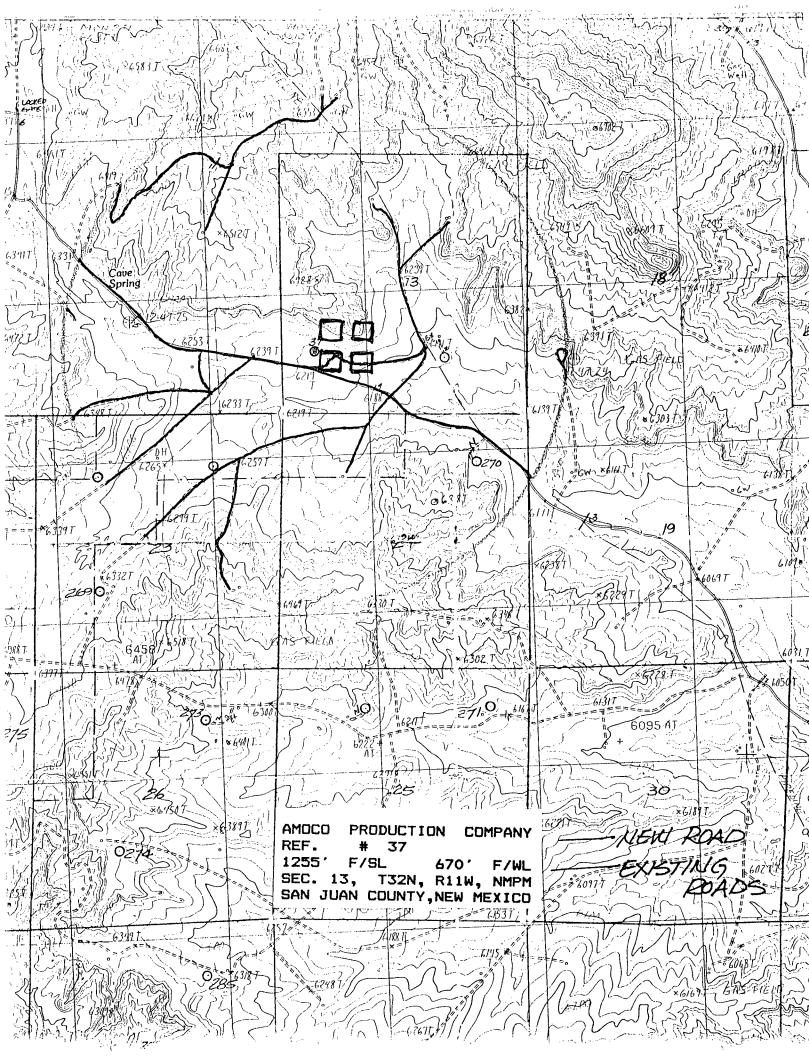
DISTRICT | P.O. Bux 1980, Hobbs, NM 88240

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

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or until a non-standard unit, eliminating such interest, has been approved by the Division.					
OPERATOR CERTIFICATI	אר				
OPERATOR CERTIFICATI I hereby certify that the info contained herein in true and complet best of my knowledge and belief.					
contained herein in true and complet					
best of my knowledge and belief.					
Signature/					
	_				
Printed Name					
Julie L. Acevedo					
Amuce Production Co. Position					
Barnes B' Will No. 9h Sr. Staff Assistant					
1560 F34 - 1750 FEL COMPANY					
Syst 2/2/18 Amoco Production Comp	iny				
Blanco Mesaverde	<u> </u>				
Completion 8/13/93					
13 SURVEYOR CERTIFICATI	NC				
purior de la company de la com					
Amoca Production Co. I hereby certify that the well location	shown				
Homocal Production Co. Bismes "B" Well No. 21 God the sell location on this plat was plotted from field actual surveys made by me or w					
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5 Spect 7/27/87 / Correct to the best of my knowled					
Basin Fruita of Coal bus Comp. & belief.					
Date Surveyed					
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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

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	4 50´
36561	BMIII-PII village	800
36603	PII 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.

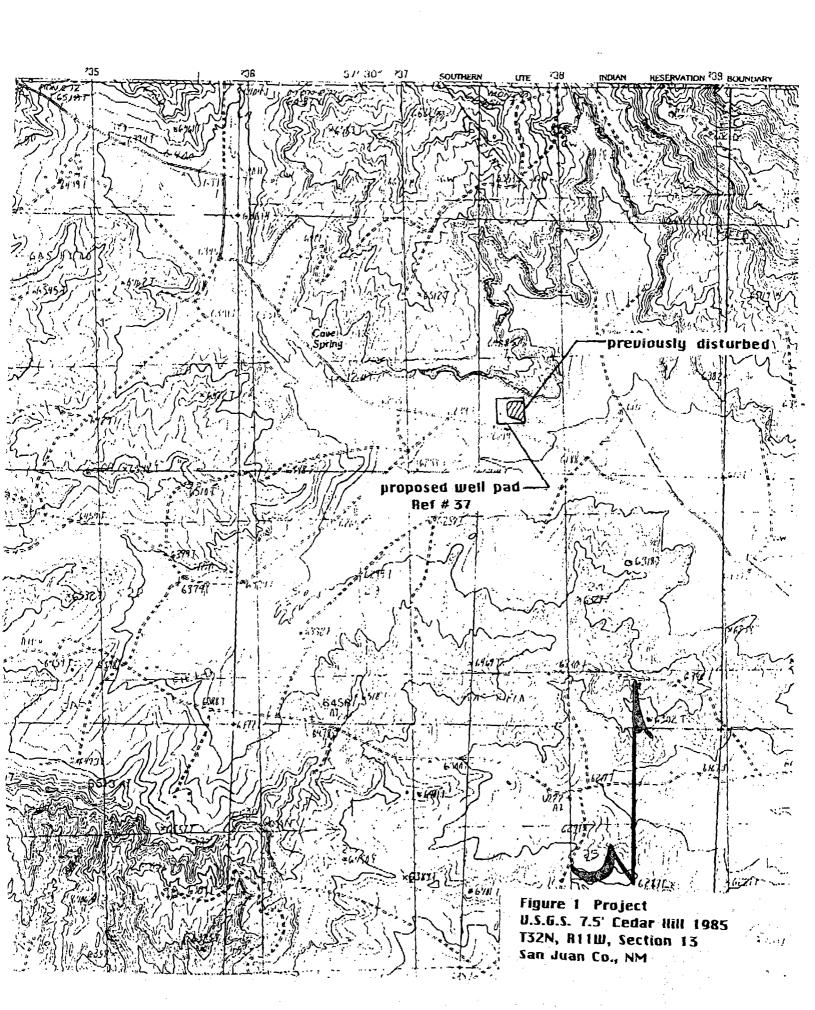
Cultural resources: A single IL was found during the survey. No other archaeological material was found during the survey.

Isolated Artifact

IL	# I-R-S. L.	/4, 1/4,	1/4UTM	(Zone	13) Topo	Veg	Description
1	32-11-13 I	nwiswis	W :	F237600	canyon	sage	1 sherd-Piedra Gray
				14096650	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.

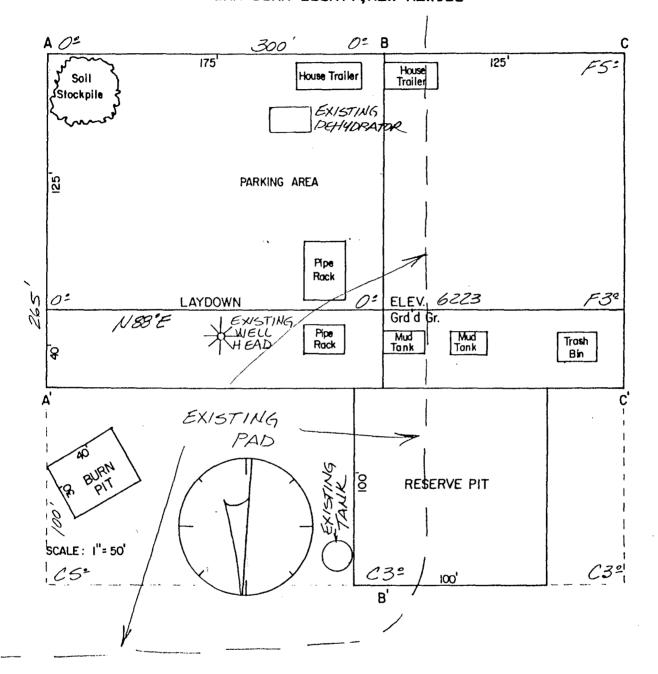


AMOCO PRODUCTION COMPANY

REF. # 37

1255' F/SL 670' F/WL SEC. 13, T32N, R11W, NMPM

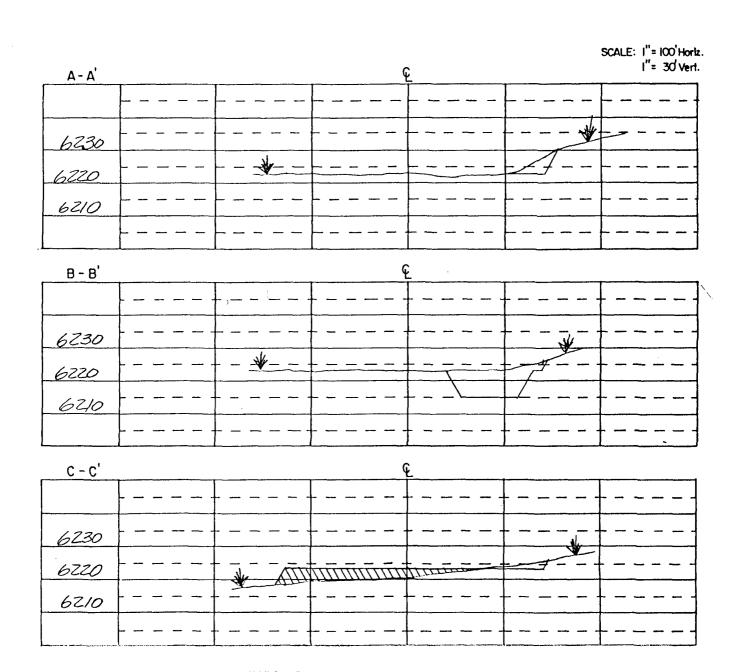
SAN JUAN COUNTY, NEW MEXICO

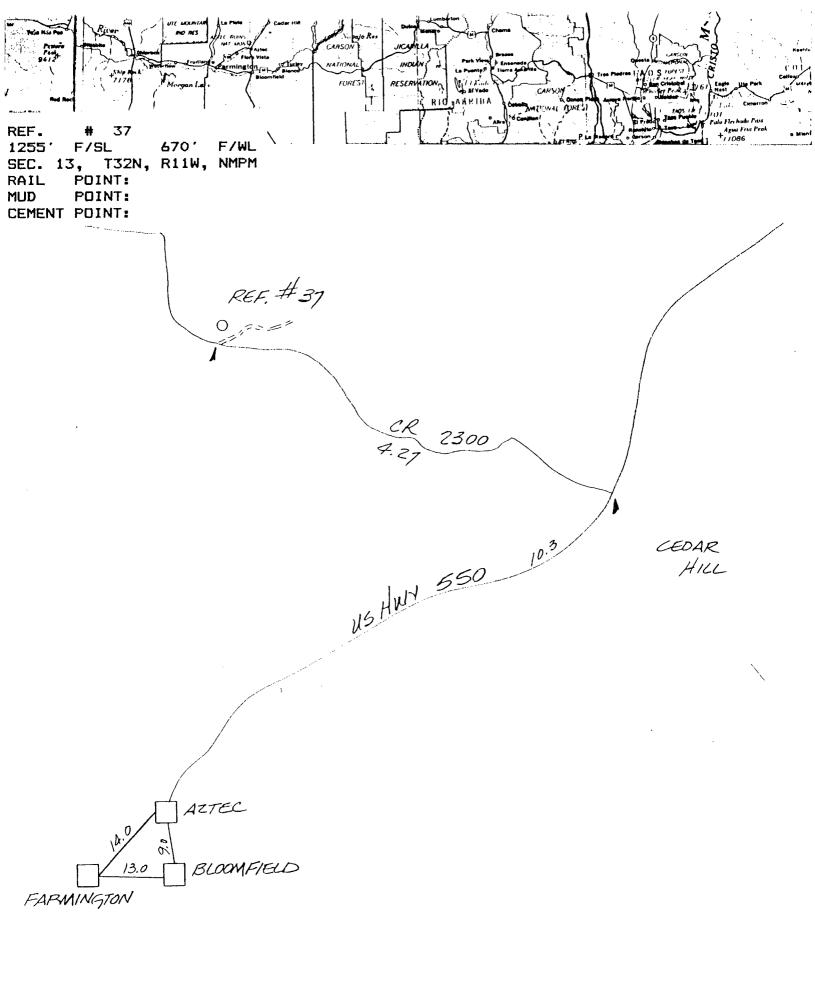


NOTE: Contractor should call 1-800-321-2537 for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least 2 days prior to construction.

EXHIBIT "D"

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







OIL CONSERVATION DIVISION RECEIVED

93 SEP 15 AM 8 45

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,

J. W. Hawkins

JWH/jmc

cc: Julie Acevedo

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

WAIVER

Decidion (): In hereby waives objection to Amoco's application for unorthodox well location for the Barnes B #9M Well in the Basin Dakota Pool and Blanco Mesayerde Pool as proposed above.

Rv:

Date:

10,1993



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	te: <u>9-7-53</u>	Th: Mike Stogace
P.0	l Conservation Division O. Box 2088 nta Fe, NM 87504-2088	
RE:	Proposed MC Proposed NSL Proposed WFX Proposed NSP	Proposed DHC Proposed SWD Proposed PMX Proposed DD
Gent	ntlemen:	
I ha	have examined the application	received on 9-7-93
for	r the Ambes OPERATOR	Harrie B # 914 LEASE & WELL NO.
UL-S	1-13-32N-1811 and m	y recommendations are as follows:
16	Laranove-	
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Your	urs truly,	
5	Q - 18 1	