

STATE OF NEW MEXICO

# ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION ECENTRAL

BRUCE KING COVERNOR LARRY KEHOE SECRETARY

February 4, 1980

FEB 11 1980

O. C. D. ARTESIA, OFFICE '

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Hixon Development Company P. O. Box 2810 Farmington, New Mexico 87401

Attention: Aldrich L. Kuchera

Administrative Order NSP-1175

Gentlemen:

Reference is made to your application for a 40-acre proration unit consisting of the following acreage in the Bisti Lower Gallup Oil Pool:

> SAN JUAN COUNTY, NEW MEXICO TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM Section 23: SW/4 NW/4

It is my understanding that this unit is to be dedicated to your South Carson Federal 23 Well No. 5 to be located 1650 feet from the North line and 990 feet from the West line of said Section 23.

By authority granted me under the provisions of Rule 4 of Order No. R-1069-B, the above non-standard proration unit is hereby approved.

Sincerely,

JOE D. RAMEY, Director

JDR/RLS/dr

cc: Oil Conservation Division - Aztec Oil & Gas Engineering Committee - Hobbs U. S. Geological Survey - Farmington



P.O. BOX 2810

#### FARMINGTON, NEW MEXICO 87401

January 10, 1980

Mr. Joe D. Ramey, Director State of New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

Re: Application for Administrative Approval
For Unorthodox Proration Unit
South Carson Federal 23 Well No. 5
1650' FNL, 990' FWL, Section 23, T25N, R12W
San Juan County, New Mexico

Dear Mr. Ramey:

Hixon Development Company requests your Administrative Approval for an exception to the Bisti Lower Gallup Pool 80 acre proration unit spacing rule. Purpose of requesting this approval is to drill a 40 acre Lower Gallup oil test well. This is an attempt to hold federal acreage (NM 25450 comprising of 240 acres per the attached C-102 plat Exhibit I) from expiring on July 1, 1980.

If you find that you are unable to approve this, as an alternative, please consider approval for an 80 acre proration unit for the proposed well consisting of the SW/4 of NW/4 and NW/4 of SW/4 of Section 23 per the attached Exhibit II. This spacing configuration would deviate from the prescribed N/2 and S/2 of a standard quarter section rule.

Our request for one of the above exceptions is based on economic necessity and reservoir data per the attached detailed justification in Attachment I. Shell Oil Company as offset Carson Unit operator has been notified of our intentions by a Certified Mail copy of this letter.

In view of our expiring acreage deadline and the fact that we have contracted for a drilling rig during the first week in March 1980,



January 10, 1980 Page 2

please give this matter your earliest consideration.

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Very truly yours,

Hixon Development Company

Aldrich L. Kuchera

Vice President

ALK:cd

Attachments

cc: Shell Oil Company
One Shell Plaza
P.O. Box 2463
Houston, Texas 77001

Frank Chavez Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

United States Geological Survey P.O. Box 959 Farmington, New Mexico 87401

Ray Bridges Hixon Development Company 341 Milam Building San Antonio, Texas 78205

# ATTACHMENT I

APPLICATION BY HIXON DEVELOPMENT COMPANY FOR ADMINISTRATIVE APPROVAL FOR UNORTHODOX BISTI LOWER GALLUP PRORATION UNIT SOUTH CARSON FEDERAL 23 WELL NO. 5 1650' FNL, 990' FWL, SECTION 23, T25N, R12W SAN JUAN COUNTY, NEW MEXICO

### General

Per the attached Figure 1 map, Section 23 is comprised of the Hixon Development Company Federal Lease NM 25450 and the Shell Oil Company operated Carson Unit. The spacing of a Lower Gallup Sand oil well drilled in this section is regulated by State Bisti Lower Gallup Pool field rules. These rules prescribe an 80 acre proration unit comprising of the north half or the south half of a Standard Quarter Section.

Hixon Development Company desires to drill a Bisti Lower Gallup Pool stepout well in the SW/4 of the NW/4 with a 40 acre spaced proration unit per Exhibit I.

If this is unacceptable then Hixon Development Company as an alternative seeks to obtain Administrative Approval for an exception to the N/2, S/2 of a Quarter position rule for an 80 acre proration unit to be realigned and comprised of the SW/4 NW/4 and NW/4 SW/4 per Exhibit II.

#### Justification

1. Per the attached Exhibit I, the Section 23 south west Lower Gallup reservoir boundary has been defined by the plugged and abandoned Carson Unit wells 21, 32 and 43. Because no additional drilling has been instigated inside the Section 23 Carson Unit area west of the latter three wells we believe this area inside the Unit is depleted.

This is further substantiated by Northwestern New Mexico Secondary Recovery Project data which shows average cumulative oil recovery for the Carson Unit to be about 355 barrels/acre. The Carson Unit wells 21,32 and 43 have had a cumulative oil recovery of 103,783 BO. This recovery shows an average per well drainage of 97 acres.

Consequently, because of depletion, we are reluctant to drill the proposed South Carson Federal 23 Well No. 5 with a S/2 of the NW/4 80 acre spaced Proration Unit. This would require Communitization of the SW/4 NW/4 and SE/4 NW/4 40 acre tracts. We would be Communitizing the SW/4 NW/4 tract which in our engineering opinion is not depleted with a depleted SE/4 NW/4 tract. This Communitized 80 acre pattern would penalize the proposed South Carson Federal 23 Well No. 5 well by diluting its ownership by 1/2. Because we anticipate a 10 BOPD well or less, this condition would make it uneconomical to drill.

2. Our reservoir mapping does not show an economical alternative location for a Lower Gallup well on the Section 23 NM 25450 Lease.

# Form C-102 Supersedes C-128 Effective 1-1-65

# EXHIBIT I NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Overator		All distances must be from		the Section.	Lu.y.	
Hixon Development Company South Carson Fee					Well No. 5	
Unit Letter	Section 92	Township 25N	Range 1937	County San Juan	n	
E 23 25N 12W Actual Footage Location of Well:					11	
$990$ feet from the $West$ line and $1650^{\circ}$ feet from the $North$ line						
Ground Level Elev.	Producing For	Gallup Sand	Bisti Lower (	Gallun	Dedicated Acreage:	
					Actes	
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 interests of all owners been consolidated by communitization, unitization, force-pooling.etc?						
Yes No 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 necessary.)						
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 interests, has been approved by the Commis-						
sion.						
			1		CERTIFICATION	
SHELL OPERATED CARSON UNIT						
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	T	_		I i	rein is true and complete to the  v knowledge and belief.	
		31	41	best of my	knowledge and bellet.	
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<b>&gt;</b> •		,	<b>)</b>	Position Petro	oleum Engineer	
5		_		Company		
Dedicated			1	Hixon	Development Co.	
40 acres		32	42	Date 1-10-	-80	
Section 23						
	1	#	1	1	certify that the well location	
Unit Boundry				1 1	shown on this plat was plotted from field notes of actual surveys made by me or	
					supervision, and that the same	
					nd correct to the best of my	
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Hixon Development Company - 1.000 WI					ed .	
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#### L'YHIBLI II

# NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 1-1-65

All distances must be from the outer boundaries of the Section accustor Lease Well No. Hixon Development Company South Carson Federal 23 5 Unit Letter Section Township County 25N12W San Juan Actual Footage Location of Well: 990 feet from the West 1650 line and feet from the North Ground Level Elev. Producing Formation Dedicated Acreage: Lower Gallup Sand Bisti Lower Gallup 80 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 interests of all owners been consolidated by communitization, unitization, force-pooling. etc? 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 necessary.). 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 interests, has been approved by the Commission. CERTIFICATION SHELL CPERATED CARSON UNIT I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. 41 Kiralle Aldrich L. Kuchera Petroleum Engineer Hixon Development Co. Dedicated Section 23 1-10-80 <del>80 acres</del> Unit Boundry 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 supervision, and that the same 43 is true and correct to the best of my knowledge and belief. ╫╎┼┼┼┼┼┼┼ Date Surveyed Hixon Development Company | - 1.000 WI Registered Professional Engineer and/or Land Surveyor NM 25450 Certificate No.

500

660

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1980 2310

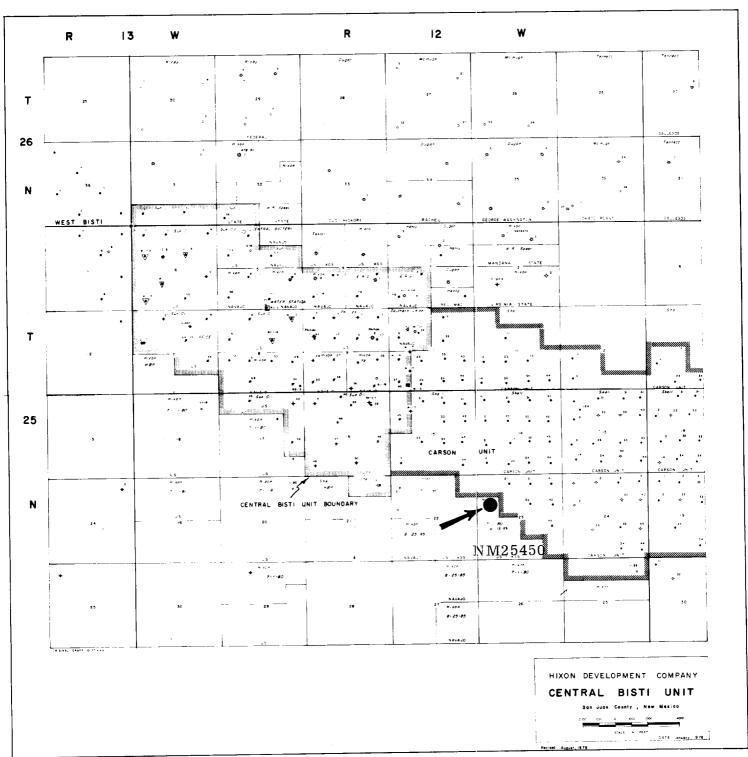


FIGURE 1