

DATE IN, 2/11/00	SUSPENSE 3/2/00	ENGINEER MS	LOGGED BY KV	TYPE NSL
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

State 25-A (Well No. 3)

ADMINISTRATIVE APPLICATION COVERSHEET SW/4 25-T205-R37E

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
 [DD-Directional Drilling] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling

☒ NSL ☐ NSP ☐ DD ☐ SD

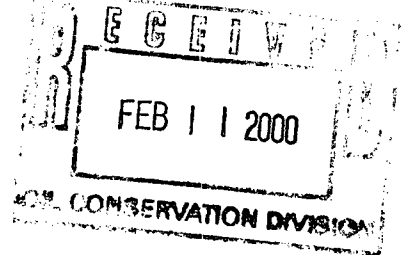
Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO

U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Kay Maddox
Print or Type Name

Signature

Regulatory Agent
Title

2/7/2000
Date



Mid-Continent Region
Exploration/Production

Conoco Inc.
10 Desta Drive, Suite 100W
Midland, TX 79705-4500
(915) 686-5400

February 4, 2000

Mr. Michael Stogner
New Mexico Oil Conservation Division
2040 Pacheco
Santa Fe, NM 87504

RE: Application For Unorthodox Location
North Hardy Strawn Pool (96893)

D.M. Warren #137 New Drill
Section 30, T-20-S, R-38-E, M
400 FSL & 990 FWL
API # Not Available
Lea County, NM

SEMU # 139 New Drill
Section 25, T-20-S, R-37-E, A
990' FNL & 330' FEL
API # Not Available
Lea County, NM

State 25-A #3 New Drill
Section 25, T-20-S, R-37-E, N
1980' FWL & 510' FSL
API # Not available
Lea County, NM

Dear Mr. Stogner,

Conoco, Inc respectfully requests your approval of this administrative application for a non-standard location order for the above listed wells.

The North Hardy Strawn pool rules state that a standard location is 660' from the outer boundary of the 160 acre proration unit. The D.M. Warren #137 is located only 400' FSL and the SEMU # 139 is only 330' FEL, & the State 25-A #3 is only 510' FSL. All three wells are staked at an unorthodox location. Please reference attached C-102 plats.

The Strawn play in this area is based on a 3-D seismic interpretation that has meticulously defined the thickest porosity zones. As evidenced by drilling and completing the Hardy State 36 #26, #21, #1, SEMU # 134 and the unsuccessful Strawn completion of the #135 it is evident that proximity to thick porosity zones is imperative to the location of new drilling prospects. Based on log correlations, stratigraphy is also a major component of porosity development. The stratigraphy coordinated with the structural trend defines a very small area in which to locate the well. Movement as little as 200' could result in a net loss of porosity resulting in a ten fold reduction in production. Conoco, Inc feels that the placement of the above listed unorthodox wells will not compromise the validity of the scientific data that resulted in the proposal to drill the wells. Scientific data i.e. seismic line and structural map encompassing this area was submitted to the New Mexico Oil Conservation, May 1999 during the hearing to establish the North Hardy

Strawn pool. The data submitted substantiates Conoco's belief that a standard location for these three wells would result in an unsuccessful Strawn well completion. Conoco, Inc believes that the three proposed unorthodox locations are strategically staked where the good porosity development of the Strawn reservoir lies on trend with structure.

D. M. Warren #137 – See Exhibit 1

This well location was chosen to move slightly updip of the SEMU #134 and remain in the same porosity interval. The seismic line (Exhibit 1) is located in a north-south orientation and passes through the SEMU #134 well and the proposed location. The line illustrates the reservoir interval as the zone between the yellow and blue seismic picks at approximately 1060 milliseconds. The porosity development is not very extensive and this location will place the well in an optimum position with the highest amplitude within this seismic anomaly.

SEMU #139 – See Exhibit 2

This location was chosen as a northern extension of the productive zone within the Strawn in the Hardy 36 #26 well. The seismic line (Exhibit 2) is located through the Hardy 36 #26 well and the proposed location. The reservoir interval is located between the yellow and blue seismic picks at approximately 1060 milliseconds. The interpreted porosity zone is discontinuous north of the Hardy 36 #26 well toward the proposed location with several zones of low or absent porosity (the blue seismic peak is thin or missing). This well will evaluate an undrilled and structurally lower portion of the seismic anomaly at its thickest position.

State '25-A' #3 – See Exhibit 3

This location was chosen as a northwest down dip extension of the Hardy 36 #26 well. The seismic line (Exhibit 3) is located through the Hardy 36 #26 well and the proposed location. The reservoir interval is located between the yellow and blue seismic picks at approximately 1060 milliseconds. The interpreted porosity zone is very discontinuous as illustrated by the abrupt termination of the peak being mapped. Moving this location further north would place it beyond the porosity zone which correlates to the productive zone in the Hardy 36 #26. This location is also at the position of highest amplitude within the porosity zone.

Please note that Conoco Inc. will only be encroaching interior to their lease. There is no notification required to an offset operator.

Conoco, Inc. respectfully requests that a non-standard location order be granted for the D.M. Warren #137, SEMU # 139 and the State A-25 #3. If any additional information is required please call me at (915) 686-5798.

Sincerely,



Kay Maddox – Conoco, Inc.
Regulatory Agent

Cc: OCD- Hobbs
BLM - Roswell

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd. Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Revised February 21, 1994
instructions on back

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number N/A	2 Pool Code 96893	3 Pool Name Hardy-Strawn, North
4 Property Code	5 Property Name State 25 A	6 Well Number #3
7 OGRID No. 005073	8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500	9 Elevation

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	25	20S	37E		510'	South	1980	West	Lea

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres 160	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16			
STATE LEASE B-230	State Lease E-1402		
1980'			

17 OPERATOR CERTIFICATION

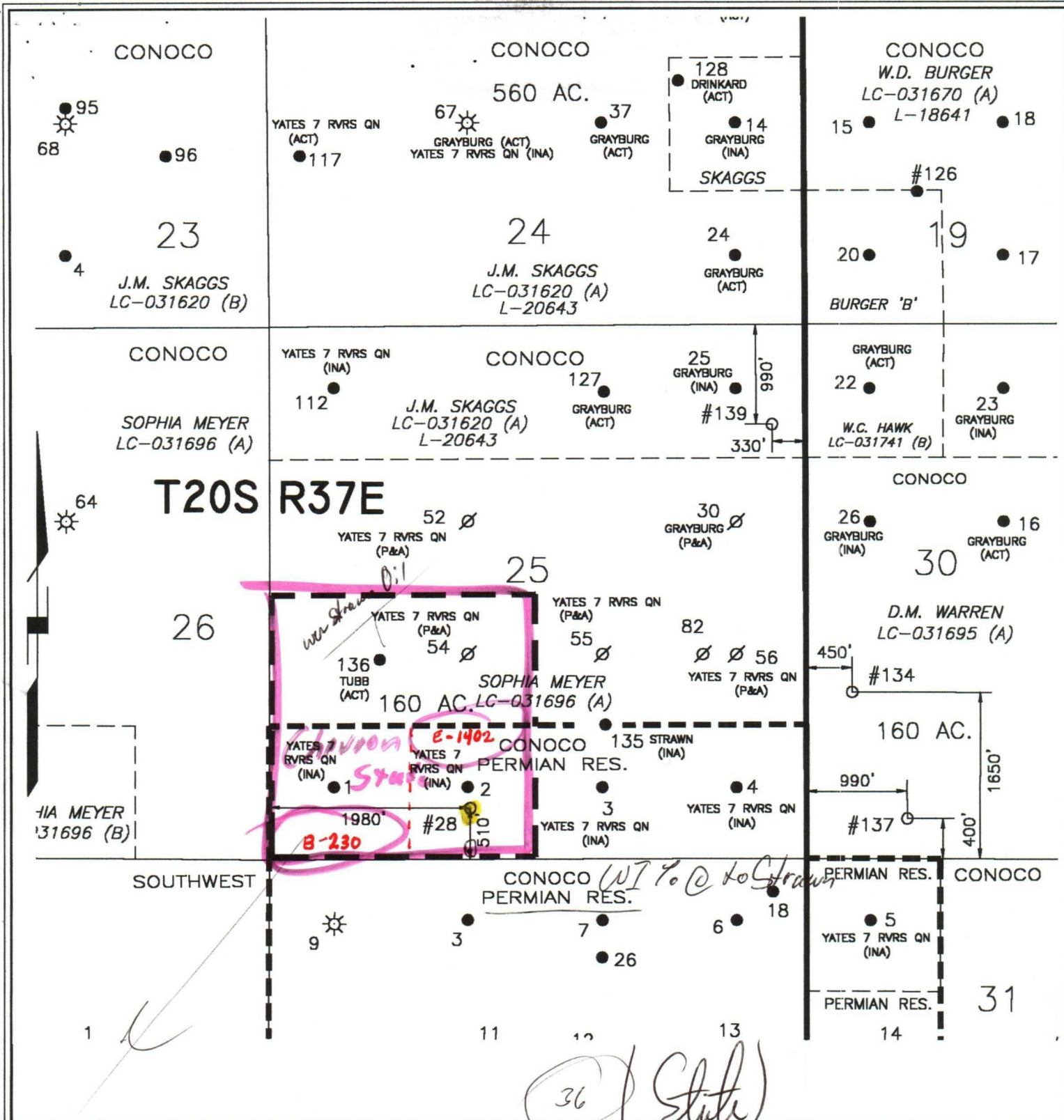
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

<i>Kay Maddox</i>
Signature
Kay Maddox
Printed Name
Regulatory Agent
Title
February 5, 2000
Date

18 SURVEYOR CERTIFICATION

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 is true and correct to the best of my belief.

Date of Survey
Signature and Seal of Professional Surveyor:
<i>Paul Boundary</i>
Certificate Number



NOTES

Pool - HARDY STRAWN, NORTH
~~HARDY 36 STATE #28~~
 Non-standard Location
 Proration Unit - 160 Ac.

DATE: 2/8/00

DRAWN BY: glg

CHECKED BY:

APPROVED BY:

SCALE: 1" = 1320'

STATE PLANE COORDINATES REFERRED TO
 NAD27 - N.M. EAST
 STATE PLANE COORDINATES
 ZONE - 3001

CONOCO EXPLORATION PRODUCTION
 AMERICAS

CONOCO HARDY 36 "STATE #28"
 Sec. 25, T20S, R37E
 Lea County, New Mexico
 Non-Standard Location

STATE	API COUNTY	WELL	DRAWING
30	025	--	HARDY28

CONOCO INC. OFFICE
 10 DESTA DRIVE WEST
 MIDLAND, TEXAS 79705

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**Nomenclature
Case No. 12182
Order No. R-11221**

**APPLICATION OF CONOCO INC. FOR POOL CREATION, SPECIAL POOL
RULES, AND THE ASSIGNMENT OF A SPECIAL DEPTH BRACKET
ALLOWABLE, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on May 13, 1999, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 12th day of July, 1999, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Conoco Inc., seeks the creation of a new pool for the production of oil from the Strawn formation comprising the NE/4 of Section 36, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) The applicant further seeks the adoption of special pool rules therefor, including provisions for 160-acre spacing and proration units and designated well location requirements such that wells can be located no closer than 660 feet from the outer boundary of the spacing unit nor closer than 10 feet from any quarter-quarter section line or subdivision inner boundary. The applicant further seeks the assignment of a special depth bracket allowable of 600 barrels of oil per day.
- (4) At the hearing, the applicant requested that its Hardy "36" State Well No. 26 (API No. 30-025-34311), located 870 feet from the North line and 1650 feet from the East line (Unit B) of Section 36, be assigned a bonus discovery allowable pursuant to Division Rule No. 509 in the amount of 37,825 barrels of oil.
- (5) Division records indicate that by Order No. R-11183 issued in Case No. 12184 on May 19, 1999, the Division:

- a) created the South Hardy-Strawn Pool comprising the NE/4 of Section 36, Township 20 South, Range 37 East, NMPM; and
- b) assigned the Conoco Inc. Hardy "36" State Well No. 26 a bonus discovery allowable in the amount of 37,825 barrels of oil to be produced over a two-year period.

(6) Division records further indicate that by Order No. R-11204 issued in Case No. 12200 on June 14, 1999, the Division corrected its previous nomenclature by redesignating the South Hardy-Strawn Pool as the **North Hardy-Strawn Pool**.

(7) That portion of the application seeking the creation of a new pool for production of oil from the Strawn formation and for the assignment of a bonus discovery allowable to its Hardy "36" State Well No. 26 should be dismissed.

(8) In support of its proposed 160-acre spacing and special depth bracket allowable of 600 barrels of oil per day for the North Hardy-Strawn Pool, the applicant presented engineering evidence and testimony indicating that:

- a) the Hardy "36" State Well No. 26 was drilled during March, 1998 and completed in the Strawn formation during April, 1998;
- b) the Hardy "36" State Well No. 26 initially produced at a rate of 722 BOPD, 0 BWPD and 778 MCF gas per day. Peak production from the well, which occurred on April 29, 1998, was 1,570 BOPD, 0 BWPD and 1,331 MCF gas per day;
- c) the Hardy "36" State Well No. 26 is currently capable of production in excess of 600 barrels of oil per day;
- d) the North Hardy-Strawn Pool appears to be a solution gas drive reservoir;
- e) extensive production testing demonstrates that producing the Hardy "36" State Well No. 26 at a rate of 600 barrels of oil per day has little or no effect on the producing GOR, which is consistently at or below 1,000 cubic feet of gas per barrel of oil; and

- f) preliminary production and drainage data demonstrate that the Hardy "36" State Well No. 26 is capable of draining an area of approximately 190 acres.

(9) The applicant requested that the proposed 160-acre well spacing and special depth bracket allowable for the North Hardy-Strawn Pool be adopted for a temporary period of eighteen months in order to provide the applicant and other operators in the pool the opportunity to gather additional engineering data to support continuation of the special pool rules on a permanent basis.

(10) No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(11) Approval of this application will provide the applicant the opportunity to efficiently develop the Strawn reservoir underlying the NE/4 of Section 36, thereby preventing waste, will prevent the drilling of unnecessary wells, and will otherwise protect correlative rights.

(12) Special pool rules, including provisions for 160-acre spacing and proration units, designated well location requirements, and a special depth bracket allowable of 600 barrels of oil per day for the North Hardy-Strawn Pool should be established for a temporary period of eighteen months.

(13) The applicant did not present sufficient evidence to justify the establishment of 10-foot interior quarter-quarter section setback requirements; therefore, standard 330-foot interior quarter-quarter section setback requirements should be adopted.

(14) This case should be re-opened at an examiner hearing in December, 2000, at which time the operators in the North Hardy-Strawn Pool should be prepared to appear and present evidence and testimony to support the continuation of the special pool rules on a permanent basis.

IT IS THEREFORE ORDERED THAT:

(1) The application of Conoco Inc. for the creation of a new pool for the production of oil from the Strawn formation comprising the NE/4 of Section 36, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby dismissed.

(2) The application of Conoco Inc. for the assignment of a bonus discovery allowable for its Hardy "36" State Well No. 26 (API No. 30-025-34311), located 870 feet from the North line and 1650 feet from the East line (Unit B) of Section 36, in the amount of 37,825 barrels of oil is hereby dismissed.

(3) Pursuant to the application of Conoco Inc., special pool rules for the North Hardy-Strawn Pool are hereby adopted as follows:

**TEMPORARY SPECIAL POOL RULES FOR THE
NORTH HARDY-STRAWN POOL**

Rule 1. Each well completed in or recompleted in the North Hardy-Strawn Pool or in the Strawn formation within one mile thereof, and not nearer to or within the limits of another designated Strawn pool, shall be spaced, drilled, operated, and produced in accordance with these Rules.

Rule 2. Each well completed in or recompleted in the North Hardy-Strawn Pool shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square which is a governmental quarter section and a legal subdivision of the United States Public Lands Survey.

Rule 3. The Director may grant an exception to the requirements of Rule 2 without hearing when an application has been duly filed under the provisions of **Division Rule 104.D.(2)**.

Rule 4. Each well shall be located no closer than 660 feet to the outer boundary of the spacing unit nor closer than 330 feet to any quarter-quarter section line or subdivision inner boundary.

Rule 5. The Director may grant an exception to the requirements of Rule 4 without hearing when an application has been duly filed under the provisions of **Division Rule No. 104.F**.

Rule 6. The allowable for a standard proration unit (158 through 162 acres) shall be based on a special depth bracket allowable of 600 barrels of oil per day, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

Note: These rules will expire in December 2000, unless evidence is presented at a hearing at that time supporting their continuation on a permanent basis.

IT IS FURTHER ORDERED THAT:

(1) The location of any well presently drilling to or completed in the North Hardy-Strawn Pool or in the Strawn formation within one mile thereof is hereby approved. The operator of any well having an unorthodox location shall notify the Division's Hobbs District Office in writing of the name and location of the well within 20 days from the date of this order.

(2) Existing oil wells in the North Hardy-Strawn Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules, or may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 160 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable.

(3) This case shall be re-opened at an examiner hearing in December, 2000, at which time the operators in the North Hardy-Strawn Pool should be prepared to appear and present evidence to support the continuation of the special pool rules on a permanent basis.

(4) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY
Director



S E A L

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

02/18/00 16:27:25
OGOMES -TPX4
PAGE NO: 1

Sec : 25 Twp : 20S Rng : 37E Section Type : NORMAL

D 40.00	C 40.00	B 40.00	A 40.00
Federal owned	Federal owned	Federal owned	Fee owned
A		A	A
E 40.00	F 40.00	G 40.00	H 40.00
Federal owned	Federal owned	Federal owned	Federal owned

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

02/18/00 16:28:30
OGOMES -TPX4
PAGE NO: 2

Sec : 25 Twp : 20S Rng : 37E Section Type : NORMAL

L 40.00 Federal owned A	K 40.00 Federal owned A	J 40.00 Federal owned A	I 40.00 Federal owned A
M 40.00 CS B00230 0001 CHEVRON U S A INC U 02/28/38 A	N 40.00 CS E01402 0000 CONOCO INC U 07/10/57 A	O 40.00 CS B11349 0000 CONOCO INC U 07/10/54 A	P 40.00 CS B11349 0000 CONOCO INC U 07/10/54 A

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

North
County Lea Pool South Hardy-Strawn

TOWNSHIP 20 South Range 37 East NMPM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description: $\frac{NE}{4}$ Sec. 36 (R-11183, 5-19-99)

Redesignate as North Hardy-Strawn Pool (R-11203, 6-14-99)

County Lea Pool North Hardy-Strawn

TOWNSHIP

20 South

RANGE

38 East

NMPM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Ext. ^{SW}/₄ Sec. 30, ^{NW}/₄ Sec. 31 (R-11304, 1-12-CG)