



GREENHILL PETROLEUM CORPORATION

16010 BARKER'S POINT LANE, SUITE 325
HOUSTON, TEXAS 77079
TELEPHONE (713) 870-0606
FAX. (713) 870-1831

Incorporated in Delaware, U.S.A.

December 5, 1989

Oil Conservation Division
State of New Mexico
Energy, Minerals and Natural Resources Department
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Re: Unorthodox Location and Drilling Permit
Proposed Well No. 60
Lovington Grayburg San Andres Field
Lovington San Andres Unit
Lea County, New Mexico

Gentlemen:

Greenhill Petroleum Corporation respectfully requests the State of New Mexico Oil Conservation Division grant approval of the proposed unorthodox location and the attached permit to drill well No. 60 in the Lovington Grayburg San Andres Field, Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for well No. 60 is located in the interior of the unit and is not competitive with offset wells outside the unit. Information gathered as a result of drilling this infill well will be utilized in evaluating additional infill development potential in the unit and ultimately may be used to evaluate the feasibility of tertiary recovery.

Greenhill Petroleum Corporation wishes to commence drilling operations on the two proposed wells as soon as possible and would appreciate a response to this request at your earliest convenience.

Sincerely,

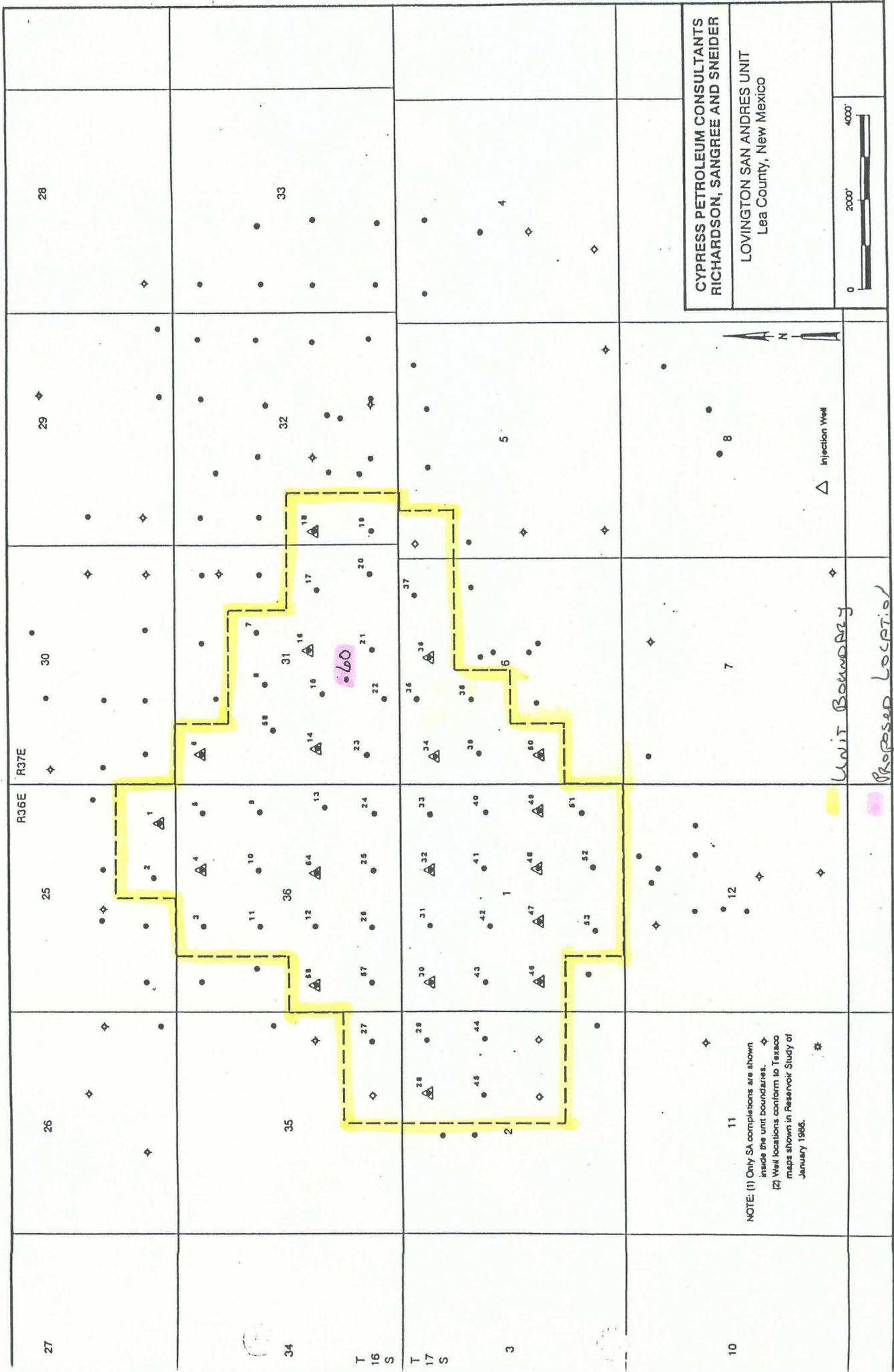
GREENHILL PETROLEUM CORPORATION


Gene Linton
Production Coordinator

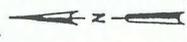
GL/tlc

Enclosures

RECEIVED
OIL CONSERVATION DIVISION
DEC 6 PM 12 45



CYPRESS PETROLEUM CONSULTANTS
 RICHARDSON, SANGREE AND SNEIDER
 LOVINGTON SAN ANDRES UNIT
 Lea County, New Mexico



NOTE: (1) Only SA completions are shown inside the unit boundaries.
 (2) Well locations conform to Texasco maps shown in Reservoir Study of January 1986.

△ Injection Well

Unit Boundary

Proposed Location

28

29

30

25

26

27

33

32

31

36

35

34

4

5

6

37

3

7

12

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11

Submit to Appropriate District Office
 State Lease - 6 copies
 Fee Lease - 5 copies

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-101
 Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
 Santa Fe, New Mexico 87504-2088

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

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

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

API NO. (assigned by OCD on New Wells)

5. Indicate Type of Lease
 STATE FEE

6. State Oil & Gas Lease No.
 B-1505

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:
 DRILL RE-ENTER DEEPEN PLUG BACK
 b. Type of Well:
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

7. Lease Name or Unit Agreement Name
 Lovington San Andres Unit

2. Name of Operator
 Greenhill Petroleum Corporation

8. Well No.
 60

3. Address of Operator
 16010 Barker's Point Lane, #325, Houston, TX 77079

9. Pool name or Wildcat
 Lovington Grayburg San Andres

4. Well Location
 Unit Letter N : 1283 Feet From The South Line and 2527 Feet From The West Line
 Section 31 Township 16S Range 37E NMPM Lea County



10. Proposed Depth
 5300'
 11. Formation
 San Andres
 12. Rotary or C.T.
 Rotary

13. Elevations (Show whether DF, RT, GR, etc.)
 3815.7' GL
 14. Kind & Status Plug. Bond
 Blanket on file
 15. Drilling Contractor
 TBD
 16. Approx. Date Work will start
 1-1-90

17. PROPOSED CASING AND CEMENT PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | SACKS OF CEMENT | EST. TOP |
|--------------|----------------|-----------------|---------------|-----------------|----------|
| 17-1/2" | 13-3/8" | 48# | 350' | 450 | Surface |
| 11" | 8-5/8" | 24# | 2050' | 700 | Surface |
| 7-7/8" | 5-1/2" | 15.5# | 5300' | 200 | 4150' |

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE Gene Linton TITLE Production Coord. DATE 12/5/89

TYPE OR PRINT NAME Gene Linton TELEPHONE NO. (713) 870-0606

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

GREENHILL PETROLEUM CORPORATION
BOP PROGRAM FOR
LOVINGTON SAN ANDRES UNIT #60

Casing Program

BOP Program

| Size | Depth | Wt | Grade | Configuration | Test Pressure |
|---------|-------|-----|----------|---------------|---------------|
| 13 3/8" | 350' | 48# | H40, STC | RA | 200 psi |
| 8 5/8" | 2050' | 24# | K55, STC | RR or RA | 250/1500 psi |
| 5 1/2" | 5300' | 15# | K55, STC | N/A | |

* RR - Ram Ram
RA - Ram Annular
Diverter - Hydrill may be substituted for a diverter.

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

Form C-102
Supersedes C-128
Effective 1-4-65

All distances must be from the outer boundaries of the Section.

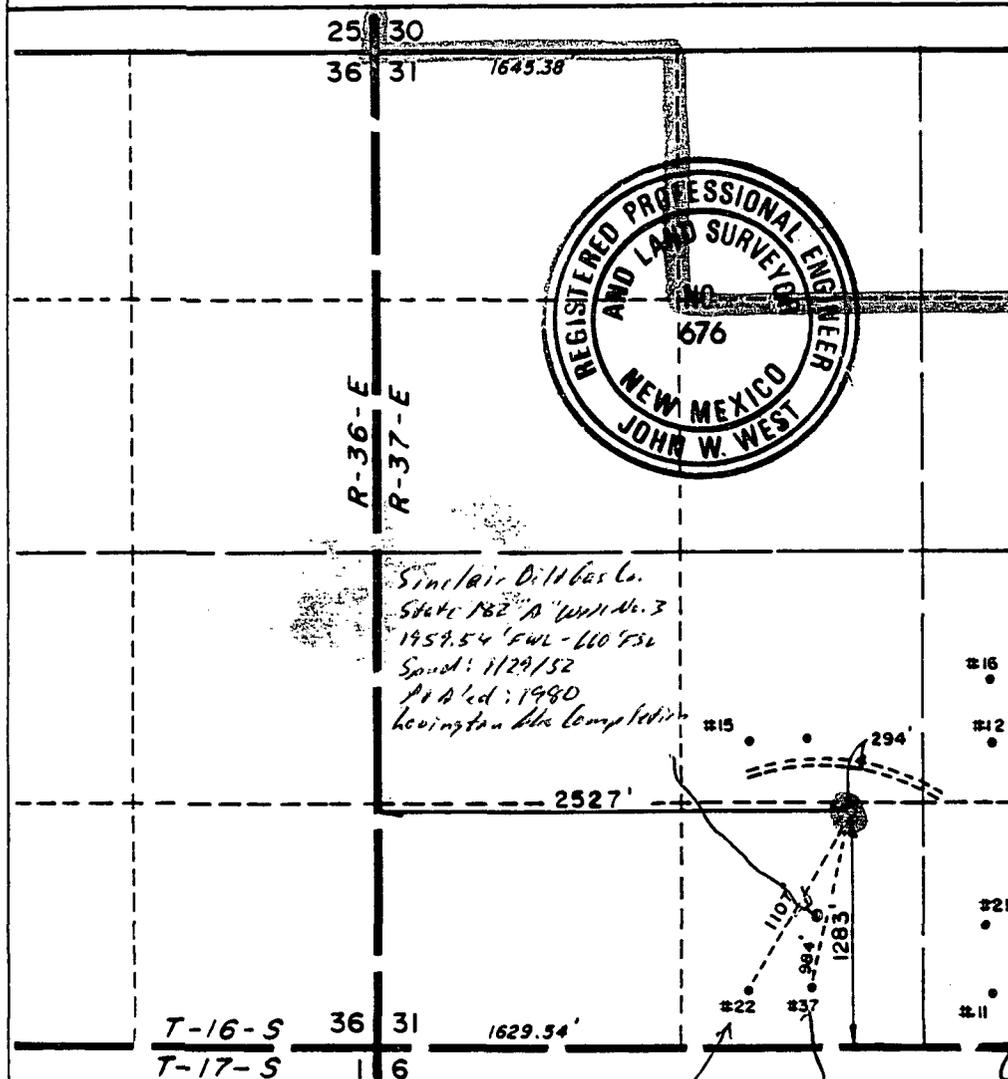
| | | | | | |
|--|--|-------------------------|--|----------------------|---------------------------------------|
| Operator GREENHILL PETROLEUM CORPORATION | | | Lease LOVINGTON SAN ANDRES UNIT | | Well No. 60 |
| Unit Letter N | Section 31 | Township 16-S | Range 37-E | County LEA | |
| Actual Footage Location of Well: 1283 feet from the SOUTH line and 2527 feet from the WEST line | | | | | |
| Ground Level Elev. 3815.7 | Producing Formation San Andres | | Pool Lovington Grayburg San Andres | | Dedicated Acreage: 20 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?

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 Commission.



CERTIFICATION

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

Gene Linton
Name
Gene Linton
Position
Production Coordinator
Company
Greenhill Petroleum Corp.
Date
12/5/89

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 knowledge and belief.

Date Surveyed
NOVEMBER 16, 1989
Registered Professional Engineer and/or Land Surveyor
Ronald J. Eldon
Certificate No. **JOHN W. WEST 676**
Ronald J. Eldon 3239

*Greenhill Petroleum Corp.
Lovington San Andres Unit Well No. 22
330' FSU - 1650' EWL
Spud: 12/19/38*

*Greenhill Petroleum Corp.
Lovington San Andres Unit Well No. 37
330' FSU - 2290' EWL
Spud: 8/1/53*

(PLAINS UNIT—Cont'd.)

event of subsequent joinder by any party, the unit operator shall file with the Commission within 30 days after such action counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission in writing of such termination.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

LOVINGTON SAN ANDRES UNIT
Lea County, New Mexico

Order No. R-2277, Approving the Lovington San Andres Unit Agreement, Lea County, New Mexico, July 12, 1962.

Application of Skelly Oil Company for the approval of a unit agreement, Lea County, New Mexico.

CASE NO. 2593
Order No. R-2277

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on June 28, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 12th day of July, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Skelly Oil Company, seeks approval of the Lovington San Andres Unit Agreement embracing 2,470 acres, more or less, in Township 16 and 17 South, Ranges 36 and 37 East, NMPM, Lea County, New Mexico.

(3) That the proposed unit plan will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Lovington San Andres Unit Agreement is hereby approved.

PROVIDED HOWEVER, That notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the New Mexico Oil Conservation Commission by law relative to the supervision and control of operations for exploration and development of any lands committed to said Lovington San Andres Unit Agreement, or relative to the production of oil and gas therefrom.

(2) That the unit area shall be:

LEA COUNTY, NEW MEXICO

TOWNSHIP 16 SOUTH, RANGE 36 EAST, NMPM

Section 25: S/2 SE/4

Section 35: S/2 SE/4

Section 36: E/2, E/2 NW/4, and SW/4

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM

Section 31: Lots 1, 2, 3, 4, SE/4 NW/4, E/2 SW/4, SW/4 NE/4, and SE/4

Section 32: W/2 SW/4

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM

Section 1: Lots 1, 2, 3, 4, S/2 N/2, SE/4, N/2 SW/4, and SE/4 SW/4

Section 2: Lots 1, 2, S/2 NE/4, N/2 SE/4

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NMPM

Section 5: Lot 4

Section 6: Lots 1, 2, 3, 4, 5, 6, and SE/4 NW/4 containing 2,470 acres, more or less.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any party, the unit operator shall file with the Commission within 30 days after such action counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission in writing of such termination.

(5) That in the event of subsequent joinder by any party owning an interest in Federal lands, said joinder shall become effective only upon the approval of said unit agreement by the Director of the United States Geological Survey.

(6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

SECTION IV

R. W. Byram & Co., - Feb., 1968

PROVIDED HOWEVER, That the Kennedy Johnson A Well No. 4 and the well to be drilled in Unit M shall not be placed on injection prior to September 1, 1962.

(2) That the waterflood project shall be governed by Rule 701, including the allowable provisions thereof.

PROVIDED HOWEVER, That unless otherwise agreed to by all parties and evidence thereof furnished the Commission, the transfer of allowables within the project area of this waterflood shall be authorized only insofar as the transfer is made between wells having common royalty ownership.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

LOVINGTON-SAN ANDRES POOL
(Skelly Unit Waterflood)
Lea County, New Mexico

Order No. R-2278, Authorizing Skelly Oil Company to Institute a Secondary Recovery Project in the Lovington San Andres Unit Area in the Lovington-San Andres Pool, Lea County, New Mexico, July 12, 1962.

Application of Skelly Oil Company for Approval of a Secondary Recovery Project, Lea County, New Mexico.

CASE NO. 2592
Order No. R-2278

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on June 28, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 12th day of July, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(LOVINGTON-SAN ANDRES (SKELLY UNIT WATERFLOOD) POOL—Cont'd.)

(2) That the applicant, Skelly Oil Company, seeks permission to institute a secondary recovery project in the Lovington-San Andres Pool in the Lovington San Andres Unit Area comprising portions of Townships 16 and 17 South, Ranges 36 and 37 East, NMPM, Lea County, New Mexico, by the injection of water into the San Andres formation through 17 wells located in said unit area.

(3) That the wells in the proposed project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the waterflood project should be approved and should be governed by the provisions of Rule 701.

IT IS THEREFORE ORDERED:

(1) That the applicant, Skelly Oil Company, is hereby authorized to institute a waterflood project in the Lovington-San Andres Pool in the Lovington San Andres Unit Area comprising portions of Townships 16 and 17 South, Ranges 36 and 37 East, NMPM, Lea County, New Mexico, by the injection of water into the San Andres formation through the following-described 17 wells:

| Well | Location |
|---|-------------------------|
| Late Oil Co. Graham #1 | Unit D, Sec. 31-16S-37E |
| Skelly - State "N" #1 | Unit B, Sec. 36-16S-36E |
| Rodman Noel State "AE" #2 (to be drilled) | Unit L, Sec. 36-16S-36E |
| Tidewater - State "M" #2 (to be drilled) | Unit J, Sec. 36-16S-36E |
| Skelly - State "O" #2 | Unit L, Sec. 31-16S-37E |
| Skelly - State "O" #4 | Unit J, Sec. 31-16S-37E |
| Tidewater - State "P" #2 | Unit L, Sec. 32-16S-37E |
| Moran Shipp - State "A" #1 | Unit D, Sec. 5-17S-37E |
| Skelly - Caylor #1 | Unit B, Sec. 6-17S-37E |
| Sunray DX - M. Caylor #1 | Unit D, Sec. 6-17S-37E |
| Amerada - State "LA" #6 | Unit B, Sec. 1-17S-36E |
| Pan American - State "E" #3 | Unit D, Sec. 1-17S-36E |
| Pan American - State "E" #10 | Unit B, Sec. 2-17S-36E |
| Mobil - State "R" #4 | Unit J, Sec. 2-17S-36E |
| Amerada - State "LA" #7 | Unit L, Sec. 1-17S-36E |
| Mobil - State "R" #1 | Unit J, Sec. 1-17S-36E |
| Pan American and Amerada - Caylor #1 | Unit L, Sec. 6-17S-37E |

(2) That the subject waterflood project shall be governed by the provisions of Rule 701, including the allowable provisions thereof and including the provisions with respect to expansion of the waterflood project.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

Order
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R-227

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