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BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 3531 Order No. R-3200

APPLICATION OF TEXAS PACIFIC OIL COMPANY FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 8, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 14th day of March, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Texas Pacific Oil Company, seeks permission to institute a waterflood project in the South Eunice Pool by the injection of water into the Seven Rivers-Queen formations through six injection wells in Sections 5, 8, and 9, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 13891 Exhibit No. 2
Submitted by:
PETROHAWK ENERGY CORPORATION
Hearing Date: March 15, 2007

-2-CASE No. 3531 Order No. R-3200

IT IS THEREFORE ORDERED:

(1) That the applicant, Texas Pacific Oil Company, is hereby authorized to institute a waterflood project in the South Eunice Pool by the injection of water into the Seven Rivers-Queen formations through the following-described wells in Township 22 South, Range 36 East, NMPM, Lea County, New Mexico:

| Lease | Well No. | Unit | Section |
|--------------------------|------------|------|---------|
| Texas Pacific Oil Compan | п у | | |
| State "A" A/c-2 | 33 | 0 | 5 |
| State "A" A/c-2 | 49 | С | 8 |
| State "A" A/c-2 | 25 | Α | 8 |
| State "A" A/c-2 | 3 | G | 8 |
| State "A" A/c-2 | 24 | I | 8 |
| State "A" A/c-2 | 30 | E | 9 |

- (2) That the subject waterflood project is hereby designated the Texas Pacific South Eunice State Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.
- (3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (4) 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.

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

DAVID F. CARGO, Charman

GUYTON B. HAYS Member

SEAL

L. PORTER, Jr., Member & Secretary

esr/

Entered Heftenker 15, 870

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 4418 Order No. R-3200-A

APPLICATION OF TEXAS PACIFIC OIL COMPANY FOR AMENDMENT OF ORDER NO. R-3200, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 2, 1970, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 15th day of September, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 by Order No. R-3200, dated March 14, 1967, the Commission authorized the institution of the Texas Pacific South Eunice State Waterflood Project in the South Eunice Pool by the injection of water into the Seven Rivers-Queen formations through the following-described wells in Township 22 South, Range 36 East, NMPM, Lea County, New Mexico:

| | Lease | Well No. | Unit | Section |
|------|-----------------------|----------|------|---------|
| Texa | s Pacific Oil Company | | | |
| Stat | e "A" A/c-2 | 33 | 0 | 5 |
| Stat | e "A" A/c-2 | 49 | Ċ | 8 |
| | e "A" A/c-2 | 25 | A | 8 |
| | e "A" A/c-2 | 3 | G | 8 |
| Stat | e "A" A/c-2 | 24 | I | 8 |
| Stat | e "A" A/c-2 | 30 | E | 9 |

(3) That the applicant, Texas Pacific Oil Company, now seeks amendment of said Order No. R-3200 to substitute its State "A" A/c-2

-2-CASE No. 4418 Order No. R-3200-A

Wells Nos. 26, 51, 61, 55, 23, and 32Y located in Sections 8 and 9, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico, for the six injection wells presently authorized by said Order No. R-3200.

(4) That approval of the subject application will not violate correlative rights and will better promote the recovery of oil, thereby preventing waste.

IT IS THEREFORE ORDERED:

(1) That Order No. R-3200, dated March 14, 1967, is hereby amended to authorize, in lieu of the six water injection wells presently authorized therein, the following-described water injection wells in Township 22 South, Range 36 East, NMPM, South Eunice Pool, Lea County, New Mexico:

| Lease | Well No. | Unit | Section |
|---------------------------|------------|------|---------|
| Texas Pacific Oil Company | | | |
| State "A" A/c-2 | 26 | В | 8 |
| State "A" A/c-2 | 51 | F | 8 |
| State "A" A/c-2 | 61 | J | 8 |
| State "A" A/c-2 | 5 5 | P | 8 |
| State "A" A/c-2 | 23 | H | 8 |
| State "A" A/c-2 | 32Y | L | 9 |

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

 ${\tt DONE}$ at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

SEAL

A. L. PORTER, Jr., Member & Secretary

esr/



STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

TONEY ANAYA GOVERNOR POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-5800

APPLICATION OF SUN EXPLORATION AND PRODUCTION COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE SOUTH EUNICE SEVEN RIVERS-QUEEN POOL IN LEA COUNTY, NEW MEXICO.

ORDER No. WFX-518

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Order No. R-3200, Sun Exploration and Production Company has made application to the Division on August 19, 1983, for permission to expand its Sun State "A" Account 2 Waterflood Project in the South Eunice Seven Rivers-Queen Pool in Lea County, New Mexico.

NOW, on this 6th day of September, 1983, the Division Director finds:

- 1. That application has been filed in due form.
- 2. That satisfactory information has been provided that all offset operators have been duly notified of the application.
- 3. That no objection has been received within the waiting period as prescribed by Rule 701B.
- 4. That the proposed injection well is eligible for conversion to water injection under the terms of Rule 701.
- 5. That the proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.
 - 6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Sun Exploration and Production Company, be and the same is hereby authorized to inject water into the Queen formation through plastic-lined tubing set in a packer at approximately 3600 feet in the following described well for purposes of secondary recovery to wit:

State "A" Account 2 Well No. 65, Unit E, Sec. 9, T-22-S, R-36-E, Lea County, New Mexico

State "A" Account 2 Well No. 67, Unit K, Sec. 9, T-22-S, R-36-E, Lea County, New Mexico

State "A" Account 2 Well No. 69, Unit I, Sec. 8, T-22-S, R-36-E, Lea County, New Mexico

State "A" Account 2 Well No. 71, Unit M, Sec. 9, T-22-S, R-36-E, Lea County, New Mexico

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus in each well shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

That the injection wells or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 750 psi.

That the Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Queen formation. That such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said wells.

That the operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing, or packer in said wells or the leakage of water from or around said wells and shall take such steps as may be timely or necessary to correct such failure or leakage.

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That the subject wells shall be governed by all provisions of Division Order No. R-3200 and Rules 702, 703, 704, 705, and 706 not inconsistent herewith.

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

STATE OF NEW MEXICO OLL CONSERVATION DIVISION

JOE D. RAMEY,

Division Director

SEAL



ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

TONEY ANAYA

September 11, 1984

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDIN SANTA FE, NEW MEXICO 8750 (505) 827-5800

APPLICATION OF SUN EXPLORATION AND PRODUCTION COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE SOUTH EUNICE SEVEN RIVERS QUEEN POOL IN LEA COUNTY, NEW MEXICO.

ORDER No. WFX-530

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Order No. R-3200, Sun Exploration and Production Company has made application to the Division on July 14, 1984, for permission to expand its South Eunice Seven Rivers Queen Waterflood Project in the South Eunice Seven Rivers Queen Pool in Lea County, New Mexico.

NOW, on this 11th day of September, 1984, the Division Director finds:

- 1. That application has been filed in due form.
- 2. That satisfactory information has been provided that all offset operators have been duly notified of the application.
- 3. That no objection has been received within the waiting period as prescribed by Rule 701B.
- 4. That the proposed injection well is eligible for conversion to water injection under the terms of Rule 701.
- 5. That the proposed expansion of the above referenced Waterflood project will not cause waste nor impair correlative rights.
 - 6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Sun Exploration and Production Company, be and the same is hereby authorized to inject water into the Seven Rivers and Queen formations through plastic-lined tubing set in a packer at approximately 100 feet above the uppermost injection interval in the following described wells for purposes of waterflooding to wit:

State "A" A/C 2 Well No. 64 1250' FNL and 1250' FEL, Sec. 8, T-22-S, R-36-E,

State "A" A/C 2 Well No. 66 1345' FNL and 1345' FWL, Sec. 9, T-22-S, R-36-E,

State "A" A/C 2 Well No. 68 2570' FNL and 70' FWL, Sec. 9, T-22-S, R-36-E,

State "A" A/C 2 Well No. 70 1295' FSL and 1295' FEL, Sec. 8, T-22-S, R-36-E,

State "A" A/C 2 Well No. 72 1410' FSL and 1440' FWL, Sec. 9, T-22-S, R-36-E,

all in Lea County, New Mexico.

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus (in each well) shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

That the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 750 psi.

That the Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the Seven Rivers and Queen formations. That such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said wells.

That the operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing, or packer in said wells or the leakage of water

from or around said wells and shall take such steps as may be timely or necessary to correct such failure or leakage.

That the subject wells shall be governed by all provisions of Division Order No. R-3200 and Rules 702, 703, 704, 705, and 706 not inconsistent herewith.

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

STATE OF NEW MEXICO

QIL CONSERVATION DIVISION

JOE D. RAMEY,

Division Diréctor

SEAL