

State of New Mexico
ENERGY; MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505



May 22, 1995

Kellahin and Kellahin
P.O. Box 2265
Santa Fe, New Mexico 87505

Attn: W. Thomas Kellahin

Re: Status of Certification, Southland Royalty Company's State "DR" EOR Waterflood Project

Dear Mr. Kellahin:

This is to confirm that the certification of the above referenced EOR project, issued in January, 1994, is still in full force and effect.

Very truly yours,

A handwritten signature in black ink, appearing to read "William J. LeMay".

William J. LeMay
Director

WJL/BES

cc: file

VILLAGRA BUILDING - 408 Galisteo

Forestry and Resources Conservation Division
P.O. Box 1948 87504-1948
827-5830

Park and Recreation Division
P.O. Box 1147 87504-1147
827-7465

2040 South Pacheco

Office of the Secretary
827-5950

Administrative Services
827-5925

Energy Conservation & Management
827-5900

Mining and Minerals
827-5970

Oil Conservation
827-7131

COR N/R

KELLAHIN AND KELLAHIN
ATTORNEYS AT LAW
EL PATIO BUILDING
117 NORTH GUADALUPE
POST OFFICE BOX 2265
SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

JASON KELLAHIN (RETIRED 1991)

April 4, 1995

HAND DELIVERED

Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Attn: Ben Stone

Re: Southland Royalty Company
Request for Reinstatement of
Certification of Qualification
for an enhanced oil recovery project

RECEIVED

APR 4 1995

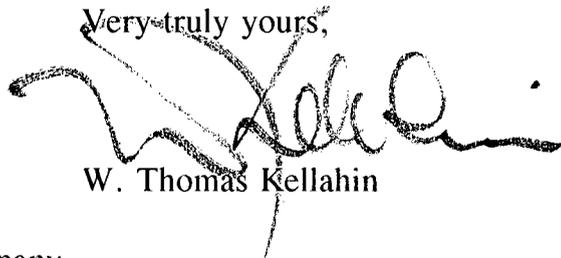
Oil Conservation Division

Dear Mr. Stone:

On behalf of Southland Royalty Company, I obtained the enclosed Division Order R-10054-A which re-instates Order R-10054 which had previously approved a one well leasehold waterflood project for the Southland Royalty Company's State "DS" Waterflood Project. I have enclosed copies of both orders.

I wish you to confirm for me that this project is still properly eligible for the EOR credit and continues to be qualified under the Division's Certificate of Qualification issued by the Division dated January 31, 1994 (copy enclosed).

Very truly yours,



W. Thomas Kellahin

cc: Southland Royalty Company
attn: Chet Babin

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

January 31, 1994

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ANITA LOCKWOOD
CABINET SECRETARY

Southland Royalty Company
c/o Kellahin & Kellahin
P.O. Box 2265
Santa Fe, NM 87504-2265

Attention: W. Thomas Kellahin

**CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT
FOR RECOVERED OIL TAX RATE**

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary project, pursuant to the provisions of the *New Mexico Enhanced Oil Recovery Act* (Laws of 1992, Chapter 38). In order to qualify for the *Recovered Oil Tax Rate*, you must apply for certification of positive production response within five years from the date of this certification. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of the Taxation and Revenue Department not later than the thirtieth day after termination.

NAME OF PROJECT: State "DS" Leasehold Waterflood Project

OCD ORDER NO. R-10054

OPERATOR: Southland Royalty Company

ADDRESS: 21 Desta Drive
Midland, TX 79701

CERTIFICATION DATE: January 26, 1994

PROJECT AREA:

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM
Section 24: SW/4, W/2 SE/4 and SE/4 SE/4

Project Injection Well

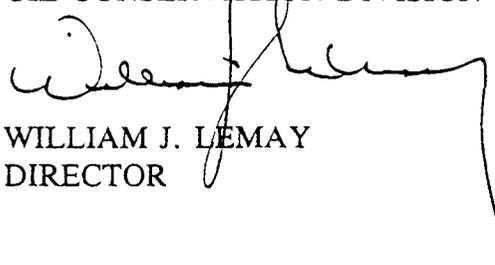
State "DS" Well No. 4 Unit L-24-17S-36E

Project Wells Eligible for Credit

State "DS" Well No. 1 Unit N-24-17S-36E
State "DS" Well No. 2 Unit K-24-17S-36E
State "DS" Well No. 3 Unit J-24-17S-36E
State "DS" Well No. 5 Unit M-24-17S-36E
State "DS" Well No. 6 Unit O-24-17S-36E
State "DS" Well No. 7 Unit P-24-17S-36E

APPROVED BY:

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
DIRECTOR

S E A L

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:

CASE NO. 11217
ORDER NO. R-10054-A

**APPLICATION OF SOUTHLAND ROYALTY COMPANY TO REINSTATE
DIVISION ORDER NO. R-10054, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 16, 1995, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 31st day of March, 1995, the Division Director, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) By Division Order No. R-10054, issued in Case No. 10891 and dated January 26, 1994, Southland Royalty Company ("Southland"), was granted authorization to institute a one well waterflood pilot project on its State "DS" leasehold, underlying the following described lands, by the re-injection of produced San Andres formation water into the Spencer-San Andres Pool through the perforated interval from approximately 4694 feet to 4994 feet in its existing State "DS" Well No. 4 (API No. 30-025-23303), located 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 24, Township 17 South, Range 36 East, NMPM, Lea County, New Mexico:

STATE "DS" LEASE WATERFLOOD PROJECT AREA

LEA COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM

Section 24: SW/4, W/2 SE/4 and SE/4 SE/4.

(3) Said Order No. R-10054 also approved the subject waterflood project as an "Enhanced Oil Recovery Project" pursuant to the "New Mexico Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(4) **Decretory Paragraph No. (13)** on page 6 of said Order No. R-10054 included a provision which terminated said order if the operator had not commenced injection operations into the subject project by January 26, 1995 or if a time extension had not been requested by the operator for good cause shown.

(5) Due to the reassignment of internal budgeting priorities, Southland did not commence injection prior to the January 26, 1995 deadline, and further, as a result of internal personnel changes, failed to apply for an extension of the order prior to its termination.

(6) At this time Southland seeks to have the expired order reinstated and a new one year commencement period adopted for this project.

(7) Southland has reviewed all of the past information filed with the Division upon which previous approval was obtained and stated that there has been no material changes of facts which would now adversely affect approving this project or which would alter any of the basis for the Division's approval. Further, Southland has caused notification of this case to be sent to all parties notified in the original proceedings.

(8) No offsetting operators or other interested parties appeared at the March 16, 1995 hearing in objection to the continuation of this project.

(9) The injection authority granted herein for the proposed injection well should terminate one year after the date of this order (Order No. R-10054-A) if the operator has not commenced injection operation into the subject well by that date, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

(1) **Decretory Paragraph No. (13)** on page 6 of Division Order No. R-10054, issued in Case No. 10891 and dated January 26, 1994, being one and the same, is hereby amended to read in its entirety as follows:

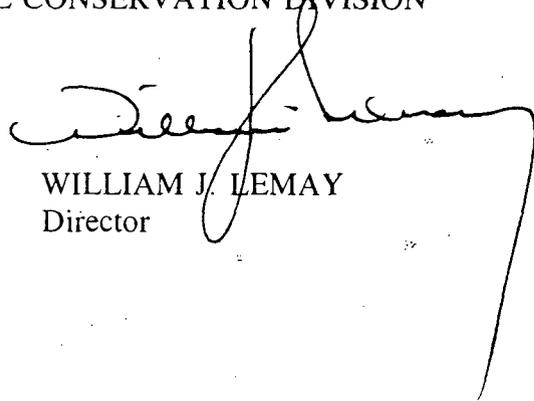
"(13) The injection authority granted herein for the proposed injection well shall terminate on March 31, 1996, if the operator has not commenced injection operation into the subject well by that date, provided

however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown."

(2) 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



WILLIAM J. LEMAY
Director

SEAL

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:

CASE NO. 10891
ORDER NO. R-10054

APPLICATION OF SOUTHLAND ROYALTY COMPANY FOR A WATERFLOOD
PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX CREDIT
PURSUANT TO THE NEW MEXICO OIL RECOVERY ACT, LEA COUNTY, NEW
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 6, 1994, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 26th day of January, 1994 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises.

FINDS THAT:

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

(2) The applicant, Southland Royalty Company ("Southland"), seeks authority to institute a pilot waterflood project on its State "DS" leasehold comprising the SW/4, W/2 SE/4 and SE/4 SE/4 of Section 24, Township 17 South, Range 36 East, NMPM, Lea County, New Mexico, by the re-injection of produced water into the Spencer-San Andres Pool through the perforated interval from approximately 4694 feet to 4994 feet in its existing State "DS" Well No. 4 located 1980 feet from the South line and 660 feet from the West line (Unit L) of said Section 24.

(3) The evidence presented indicates that only one well, the State "DS" Well No. 2 located in Unit "K", is presently producing from the Spencer-San Andres Pool within the State "DS" Lease. Monthly production from this well currently averages between 20 to 25 barrels of oil per day. Under the definition in Division General Rule 701.G(1) for a waterflood project, producing wells in the surrounding area shall have

reached an advanced state of depletion and are considered to be classified as "stripper wells" or wells with an average rate of production of 10 barrels of oil per day or less. While this one well is not considered to be a "stripper well" it can be considered a well that has reached an advanced state of depletion. Division records and data submitted by Southland subsequent to the hearing show only five other wells to have produced from the Spencer-San Andres Pool within Southland's State "DS" Lease. Said records on these five wells demonstrates that prior to abandonment production declined on each well to the point to be considered a "stripper well".

(4) The applicant testified that cumulative primary oil recovery from the six State "DS" Lease wells has been 778,718 barrels and that under the present mode of operations only 36,000 barrels remain as primary recoverable reserves.

(5) Southland is proposing to initiate a peripheral injection pattern utilizing this one injection well and four producing wells, with the projected total cost for the project expected to be approximately \$510,000.00.

(6) At the hearing, the applicant demonstrated that an estimated 500,000 barrels of oil from the Spencer-San Andres Pool could be obtained by institution of the proposed pilot waterflood project, resulting in the recovery of additional oil which would not otherwise be recovered.

(7) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

(8) Injection should be accomplished through 2 3/8-inch internally plastic-coated tubing installed in a packer set approximately 100 feet above the uppermost perforated interval; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(9) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(10) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 990 psi.

(11) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the San Andres formation.

(12) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(13) No offset operator or interested party appeared at the hearing in opposition to this application.

(14) The proposed waterflood project is in the best interest of conservation and will serve to prevent waste and protect correlative rights, therefore this application should be approved and the project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.

(15) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(16) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.

(17) The approved "project area", to be designated the State "DS" Lease Waterflood Project, should initially comprise that area described in Finding Paragraph No. (2), above.

(18) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(19) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(20) The injection authority granted herein for the proposed injection well should terminate one year after the date of this order if the operator has not commenced injection operation into the subject well by that date, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Southland Royalty Company ("Southland"), is hereby authorized to institute a one well waterflood pilot project on its State "DS" leasehold, underlying the following described lands, by the re-injection of produced San Andres formation water into the Spencer-San Andres Pool through the perforated interval from approximately 4694 feet to 4994 feet in its existing State "DS" Well No. 4 located 1980 feet from the South line and 660 feet from the West line (Unit L) of said Section 24, Township 17 South, Range 36 East, NMPM, Lea County, New Mexico:

STATE "DS" LEASE WATERFLOOD PROJECT AREA

LEA COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM,

Section 24: SW/4, W/2 SE/4 and SE/4 SE/4

(2) Injection into said well shall be accomplished through 2 3/8-inch internally plastic-lined tubing installed in a packer set at approximately 100 feet above the uppermost perforated interval.

PROVIDED HOWEVER THAT, the casing-tubing annulus in said well shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District Office.

(3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 990 psi.

(4) 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 San Andres formation.

(5) The operator shall notify the supervisor of the Hobbs District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(6) 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 well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(7) The subject waterflood project is hereby designated the State "DS" Lease Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

FURTHERMORE:

(9) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(10) The approved "project area" shall initially comprise that area described in Decretory Paragraph No. (1) above.

(11) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(12) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells

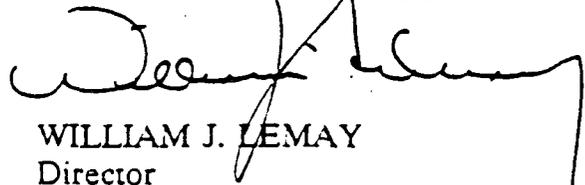
which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(13) The injection authority granted herein for the proposed injection well shall terminate one year after the date of this order if the operator has not commenced injection operation into the subject well by that date, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

(14) Jurisdiction of this cause is 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



WILLIAM J. LEMAY
Director

SEAL



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



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

February 2, 1994

Department of Taxation and Revenue
P.O. Box 630
Santa Fe, NM 87509-0630

Attention: Dick Minzner, Secretary

**RE: Certification of EOR Project
Southland Royalty Company
State "DS" Leasehold Waterflood Project**

Dear Secretary Minzner:

Enclosed is a copy of the certification issued to Southland Royalty Company for its State "DS" Leasehold Waterflood FOR project, certified by this Division on January 26, 1994, to be a qualified Enhanced Oil Recovery Project. If the operator applies for certification of positive production response within five years from that date, this project will be eligible for the *Recovered Oil Tax Rate* as provided in Laws of 1992, Chapter 38.

Only oil production from that portion of the lands identified in the certification which is actually developed for enhanced recovery will be eligible for the reduced tax rate. At the time positive production response is certified, we will identify for you the specific lands and wells within the project which qualify for the *Recovered Oil Tax Rate*.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay".

William J. LeMay
Director

WJL/amg

Enclosures



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

January 31, 1994

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ANITA LOCKWOOD
CABINET SECRETARY

Southland Royalty Company
c/o Kellahin & Kellahin
P.O. Box 2265
Santa Fe, NM 87504-2265

Attention: W. Thomas Kellahin

**CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT
FOR RECOVERED OIL TAX RATE**

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary project, pursuant to the provisions of the *New Mexico Enhanced Oil Recovery Act* (Laws of 1992, Chapter 38). In order to qualify for the *Recovered Oil Tax Rate*, you must apply for certification of positive production response within five years from the date of this certification. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of the Taxation and Revenue Department not later than the thirtieth day after termination.

NAME OF PROJECT: State "DS" Leasehold Waterflood Project

OCD ORDER NO. R-10054

OPERATOR: Southland Royalty Company
ADDRESS: 21 Desta Drive
Midland, TX 79701

CERTIFICATION DATE: January 26, 1994

PROJECT AREA:

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM
Section 24: SW/4, W/2 SE/4 and SE/4 SE/4

Project Injection Well

State "DS" Well No. 4 Unit L-24-17S-36E

Project Wells Eligible for Credit

State "DS" Well No. 1 Unit N-24-17S-36E

State "DS" Well No. 2 Unit K-24-17S-36E

State "DS" Well No. 3 Unit J-24-17S-36E

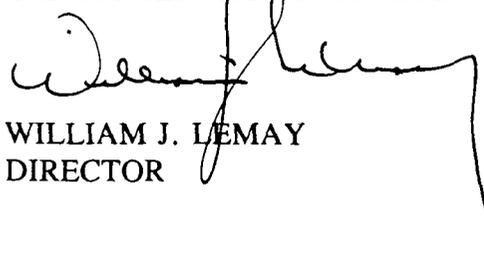
State "DS" Well No. 5 Unit M-24-17S-36E

State "DS" Well No. 6 Unit O-24-17S-36E

State "DS" Well No. 7 Unit P-24-17S-36E

APPROVED BY:

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
DIRECTOR

S E A L

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

January 27, 1994

HAND DELIVERED

RECEIVED
JAN 28 1994

Oil Conservation Division
310 Old Santa Fe, Trail
Santa Fe, New Mexico 87501

Attn: Robert G. Stovall, Esq.

Re: Southland Royalty Company
Request for Certification of Qualification
for an enhanced oil recovery project

Dear Mr. Stovall:

On behalf of Southland Royalty Company and in accordance with Division Order R-10054 (copy enclosed, I hereby request from the Division a Certificate of Qualification for the following described project;

Project Name:

State "DS" Leasehold Waterflood Project

Project Operator:

Southland Royalty Company

Midland, Texas 79704

Project Area:

The San Andres formation of the Spencer-San Andres Pool with the SW/4, W/2SE/4 and SE/4SE/4 of Section 24, T17S, R36E, NMPM, Lea County, New Mexico.

Oil Conservation Division
January 27, 1994
Page 2.

Project wells eligible for credit:

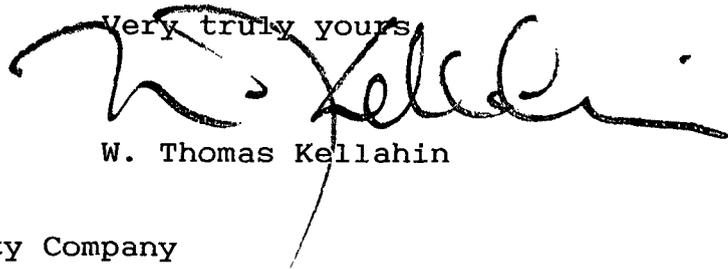
1. State "DS" Well No. 1, Unit N-24-17S-36E
2. State "DS" Well No. 2, Unit K-24-17S-36E
3. State "DS" Well No. 3, Unit J-24-17S-36E
4. State "DS" Well No. 5, Unit M-24-17S-36E
5. State "DS" Well No. 6, Unit O-24-17S-36E
6. State "DS" Well No. 7, Unit P-24-17S-36E

Project injection well:

1. State "DS" Well No. 4, Unit L-24-17S-36E

Please let me know if you require anything further.

Very truly yours,

A handwritten signature in black ink, appearing to read 'W. Thomas Kellahin', written over the typed name below.

W. Thomas Kellahin

cc: Southland Royalty Company
Midland, Texas

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:

CASE NO. 10891
ORDER NO. R-10054

APPLICATION OF SOUTHLAND ROYALTY COMPANY FOR A WATERFLOOD
PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX CREDIT
PURSUANT TO THE NEW MEXICO OIL RECOVERY ACT, LEA COUNTY, NEW
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 6, 1994, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 26th day of January, 1994 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Southland Royalty Company ("Southland"), seeks authority to institute a pilot waterflood project on its State "DS" leasehold comprising the SW/4, W/2 SE/4 and SE/4 SE/4 of Section 24, Township 17 South, Range 36 East, NMPM, Lea County, New Mexico, by the re-injection of produced water into the Spencer-San Andres Pool through the perforated interval from approximately 4694 feet to 4994 feet in its existing State "DS" Well No. 4 located 1980 feet from the South line and 660 feet from the West line (Unit L) of said Section 24.
- (3) The evidence presented indicates that only one well, the State "DS" Well No. 2 located in Unit "K", is presently producing from the Spencer-San Andres Pool within the State "DS" Lease. Monthly production from this well currently averages between 20 to 25 barrels of oil per day. Under the definition in Division General Rule 701.G(1) for a waterflood project, producing wells in the surrounding area shall have

reached an advanced state of depletion and are considered to be classified as "stripper wells" or wells with an average rate of production of 10 barrels of oil per day or less. While this one well is not considered to be a "stripper well" it can be considered a well that has reached an advanced state of depletion. Division records and data submitted by Southland subsequent to the hearing show only five other wells to have produced from the Spencer-San Andres Pool within Southland's State "DS" Lease. Said records on these five wells demonstrates that prior to abandonment production declined on each well to the point to be considered a "stripper well".

(4) The applicant testified that cumulative primary oil recovery from the six State "DS" Lease wells has been 778,718 barrels and that under the present mode of operations only 36,000 barrels remain as primary recoverable reserves.

(5) Southland is proposing to initiate a peripheral injection pattern utilizing this one injection well and four producing wells, with the projected total cost for the project expected to be approximately \$510,000.00.

(6) At the hearing, the applicant demonstrated that an estimated 500,000 barrels of oil from the Spencer-San Andres Pool could be obtained by institution of the proposed pilot waterflood project, resulting in the recovery of additional oil which would not otherwise be recovered.

(7) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

(8) Injection should be accomplished through 2 3/8-inch internally plastic-coated tubing installed in a packer set approximately 100 feet above the uppermost perforated interval; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(9) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(10) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 990 psi.

(11) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the San Andres formation.

(12) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(13) No offset operator or interested party appeared at the hearing in opposition to this application.

(14) The proposed waterflood project is in the best interest of conservation and will serve to prevent waste and protect correlative rights, therefore this application should be approved and the project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.

(15) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(16) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.

(17) The approved "project area", to be designated the State "DS" Lease Waterflood Project, should initially comprise that area described in Finding Paragraph No. (2), above.

(18) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(19) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(20) The injection authority granted herein for the proposed injection well should terminate one year after the date of this order if the operator has not commenced injection operation into the subject well by that date, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Southland Royalty Company ("Southland"), is hereby authorized to institute a one well waterflood pilot project on its State "DS" leasehold, underlying the following described lands, by the re-injection of produced San Andres formation water into the Spencer-San Andres Pool through the perforated interval from approximately 4694 feet to 4994 feet in its existing State "DS" Well No. 4 located 1980 feet from the South line and 660 feet from the West line (Unit L) of said Section 24, Township 17 South, Range 36 East, NMPM, Lea County, New Mexico:

STATE "DS" LEASE WATERFLOOD PROJECT AREA

LEA COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM,

Section 24: SW/4, W/2 SE/4 and SE/4 SE/4

(2) Injection into said well shall be accomplished through 2 3/8-inch internally plastic-lined tubing installed in a packer set at approximately 100 feet above the uppermost perforated interval.

PROVIDED HOWEVER THAT, the casing-tubing annulus in said well shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District Office.

(3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 990 psi.

(4) 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 San Andres formation.

(5) The operator shall notify the supervisor of the Hobbs District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(6) 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 well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(7) The subject waterflood project is hereby designated the State "DS" Lease Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

FURTHERMORE:

(9) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(10) The approved "project area" shall initially comprise that area described in Decretory Paragraph No. (1) above.

(11) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(12) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells

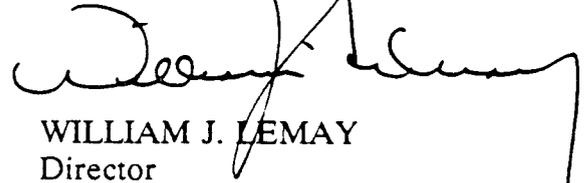
which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(13) The injection authority granted herein for the proposed injection well shall terminate one year after the date of this order if the operator has not commenced injection operation into the subject well by that date, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

(14) Jurisdiction of this cause is 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



WILLIAM J. LEMAY
Director

S E A L

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

January 27, 1994

HAND DELIVERED

Oil Conservation Division
310 Old Santa Fe, Trail
Santa Fe, New Mexico 87501

Attn: Robert G. Stovall, Esq.

Re: Southland Royalty Company
Request for Certification of Qualification
for an enhanced oil recovery project

Dear Mr. Stovall:

On behalf of Southland Royalty Company and in accordance with Division Order R-10054 (copy enclosed, I hereby request from the Division a Certificate of Qualification for the following described project;

Project Name:

State "DS" Leasehold Waterflood Project

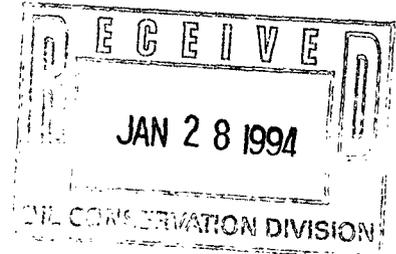
Project Operator:

Southland Royalty Company

Midland, Texas 79704

Project Area:

The San Andres formation of the Spencer-San Andres Pool with the SW/4, W/2SE/4 and SE/4SE/4 of Section 24, T17S, R36E, NMPM, Lea County, New Mexico.



Oil Conservation Division
January 27, 1994
Page 2.

Project wells eligible for credit:

1. State "DS" Well No. 1, Unit N-24-17S-36E
2. State "DS" Well No. 2, Unit K-24-17S-36E
3. State "DS" Well No. 3, Unit J-24-17S-36E
4. State "DS" Well No. 5, Unit M-24-17S-36E
5. State "DS" Well No. 6, Unit O-24-17S-36E
6. State "DS" Well No. 7, Unit P-24-17S-36E

Project injection well:

1. State "DS" Well No. 4, Unit L-24-17S-36E

Please let me know if you require anything further.

Very truly yours,



W. Thomas Kellahin

cc: Southland Royalty Company
Midland, Texas

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:

CASE NO. 10891
ORDER NO. R-10054

APPLICATION OF SOUTHLAND ROYALTY COMPANY FOR A WATERFLOOD
PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX CREDIT
PURSUANT TO THE NEW MEXICO OIL RECOVERY ACT, LEA COUNTY, NEW
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 6, 1994, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 26th day of January, 1994 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Southland Royalty Company ("Southland"), seeks authority to institute a pilot waterflood project on its State "DS" leasehold comprising the SW/4, W/2 SE/4 and SE/4 SE/4 of Section 24, Township 17 South, Range 36 East, NMPM, Lea County, New Mexico, by the re-injection of produced water into the Spencer-San Andres Pool through the perforated interval from approximately 4694 feet to 4994 feet in its existing State "DS" Well No. 4 located 1980 feet from the South line and 660 feet from the West line (Unit L) of said Section 24.
- (3) The evidence presented indicates that only one well, the State "DS" Well No. 2 located in Unit "K", is presently producing from the Spencer-San Andres Pool within the State "DS" Lease. Monthly production from this well currently averages between 20 to 25 barrels of oil per day. Under the definition in Division General Rule 701.G(1) for a waterflood project, producing wells in the surrounding area shall have

reached an advanced state of depletion and are considered to be classified as "stripper wells" or wells with an average rate of production of 10 barrels of oil per day or less. While this one well is not considered to be a "stripper well" it can be considered a well that has reached an advanced state of depletion. Division records and data submitted by Southland subsequent to the hearing show only five other wells to have produced from the Spencer-San Andres Pool within Southland's State "DS" Lease. Said records on these five wells demonstrates that prior to abandonment production declined on each well to the point to be considered a "stripper well".

(4) The applicant testified that cumulative primary oil recovery from the six State "DS" Lease wells has been 778,718 barrels and that under the present mode of operations only 36,000 barrels remain as primary recoverable reserves.

(5) Southland is proposing to initiate a peripheral injection pattern utilizing this one injection well and four producing wells, with the projected total cost for the project expected to be approximately \$510,000.00.

(6) At the hearing, the applicant demonstrated that an estimated 500,000 barrels of oil from the Spencer-San Andres Pool could be obtained by institution of the proposed pilot waterflood project, resulting in the recovery of additional oil which would not otherwise be recovered.

(7) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

(8) Injection should be accomplished through 2 3/8-inch internally plastic-coated tubing installed in a packer set approximately 100 feet above the uppermost perforated interval; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(9) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(10) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 990 psi.

(11) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the San Andres formation.

(12) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(13) No offset operator or interested party appeared at the hearing in opposition to this application.

(14) The proposed waterflood project is in the best interest of conservation and will serve to prevent waste and protect correlative rights, therefore this application should be approved and the project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.

(15) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(16) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.

(17) The approved "project area", to be designated the State "DS" Lease Waterflood Project, should initially comprise that area described in Finding Paragraph No. (2), above.

(18) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(19) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(20) The injection authority granted herein for the proposed injection well should terminate one year after the date of this order if the operator has not commenced injection operation into the subject well by that date, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Southland Royalty Company ("Southland"), is hereby authorized to institute a one well waterflood pilot project on its State "DS" leasehold, underlying the following described lands, by the re-injection of produced San Andres formation water into the Spencer-San Andres Pool through the perforated interval from approximately 4694 feet to 4994 feet in its existing State "DS" Well No. 4 located 1980 feet from the South line and 660 feet from the West line (Unit L) of said Section 24, Township 17 South, Range 36 East, NMPM, Lea County, New Mexico:

STATE "DS" LEASE WATERFLOOD PROJECT AREA

LEA COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM,

Section 24: SW/4, W/2 SE/4 and SE/4 SE/4

(2) Injection into said well shall be accomplished through 2 3/8-inch internally plastic-lined tubing installed in a packer set at approximately 100 feet above the uppermost perforated interval.

PROVIDED HOWEVER THAT, the casing-tubing annulus in said well shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District Office.

(3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 990 psi.

(4) 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 San Andres formation.

(5) The operator shall notify the supervisor of the Hobbs District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(6) 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 well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(7) The subject waterflood project is hereby designated the State "DS" Lease Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

FURTHERMORE:

(9) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(10) The approved "project area" shall initially comprise that area described in Decretory Paragraph No. (1) above.

(11) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

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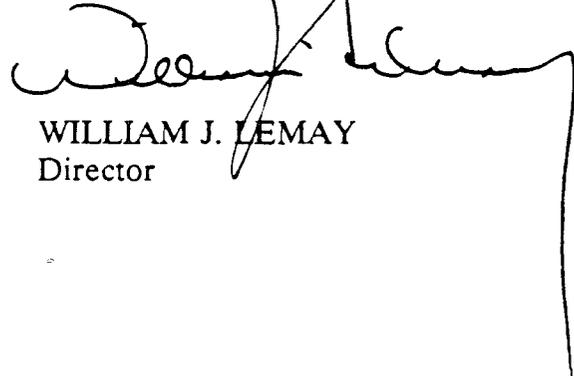
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(13) The injection authority granted herein for the proposed injection well shall terminate one year after the date of this order if the operator has not commenced injection operation into the subject well by that date, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

(14) Jurisdiction of this cause is 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



WILLIAM J. LEMAY
Director

SEAL