

DRAFT



New Mexico Petroleum Recovery Research Center

A Division of
New Mexico Institute of Mining and Technology
Telephone (505) 835-5142

Socorro, NM 87801
Facsimile (505) 835-6031
Verify (505) 835-5406

October 6, 1989

Mr. Bill LeMay, Director
Oil Conservation Division
P.O. Box 2088
310 Old Santa Fe Trail
Santa Fe, NM 87501-2088

RE: NMIORP, Sulimar Queen Field Regulations

Dear Bill:

As you know, the operating rights of the Sulimar Queen Field, which we will be using as a field laboratory, have been transferred to the New Mexico Institute of Mining and Technology. Since our objective in obtaining this field lab is to develop techniques to improve the recovery of oil from known reservoirs by transferring our research to an actual reservoir, one of our first tasks is to obtain more knowledge of the Sulimar Queen by drilling and coring one new well. Currently, wells in the unit are subject to the standard State regulation which calls for siting wells no closer than 330 ft to a 40-acre proration unit boundary. The location for the well that we wish to drill is nonstandard. However, we believe that this location is necessary for the following reasons:

1. We need an area with maximum reservoir thickness to obtain core material.
2. The core should be good quality rock with porosity and permeability suitable for laboratory flow experiments.
3. Based on cumulative water injected into Wells 1-3 and 8-1, the proposed location is at the point of maximum injection interference, hence there may be an accumulation of trapped oil.
4. The location is 460 ft from Well 1-3 which facilitates multiwell pressure transient testing, interwell tracer work, and cross-borehole seismic research.

Because of the above reasons, we wish to request that the OCD formulate special rules which would permit us to drill anywhere in the unit on the authority of the Artesia OCD office.

Sincerely,

F. David Martin
Director

FDM:jeg
enc.

RECEIVED

OCT 10 1989

OIL CONSERVATION DIV.
SANTA FE

Well 1-16 legal description is:

585 ft FNL & 2570 ft FWL

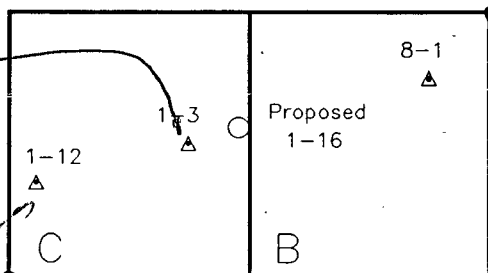
Sec:24 T:15S R:29E

NE1/4 - NW1/4 Unit C

Chaves County, NM

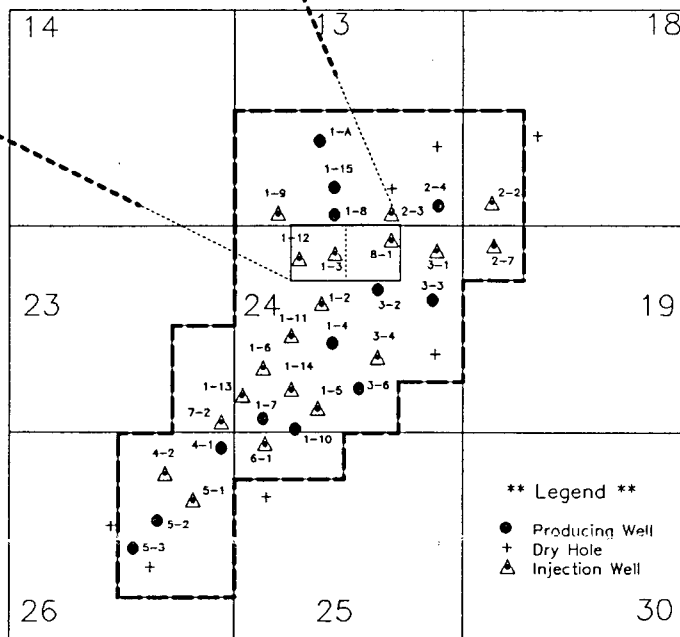
New Mexico Improved Oil Recovery Project

McCluhan Oil Corp.
Sulimar Queen Unit
Tract 1 Well No. 3
660' FNL - 2310' FWL
May 2, 1969 Spud
Sulimar Queen
Completion



Sulimar Queen
Field

McCluhan Oil Corp.
Sulimar Queen Unit
Tract 1 Well No. 12
810' FNL - 1490' FWL
Spud: 6/17/76
Completed as an injection well



SULMAR-QUEEN POOL
(Waterflood Project)
Chaves County, New Mexico

Order No. R-4214, Authorizing Jack L. McClellan to Institute Two Waterflood Projects in the Sulmar-Queen Pool, Chaves County, New Mexico, October 21, 1971.

Application of Jack L. McClellan for a Waterflood Project, Chaves County, New Mexico.

CASE NO. 4610
Order No. R-4214

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on October 13, 1971, at Roswell, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of October, 1971, 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 the public notice having been given as required by the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Jack L. McClellan, seeks authority to institute two waterflood projects in the Sulmar-Queen Pool, by the injection of water into the Queen formation through injection wells in Sections 13, 24, and 26, Township 13 South, Range 30 East, NMPM, Chaves County, New Mexico.

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

(4) That the proposed waterflood projects should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the projects should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Jack L. McClellan, is hereby authorized to institute two waterflood projects in the Sulmar-Queen Pool, by the injection of water into the Queen formation through the following-described wells in Eddy County, New Mexico:

McClellan Lisa Sulmar Waterflood Project: Unit Sec. Two, Range 30 East, NMPM, Chaves County, New Mexico.

Well Name: Well No. Unit Sec. Two, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. A. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. B. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. C. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. D. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. E. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. F. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. G. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. H. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. I. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. J. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. K. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. L. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. M. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. N. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. O. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. P. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. Q. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. R. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. S. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. T. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. U. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. V. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. W. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. X. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. Y. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

McClellan Lisa Fed. Z. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

(2) That the subject waterflood projects 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 projects 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.

DOUBLE L-QUEEN ASSOCIATED POOL
(Gracie Dodge Pressure Maintenance Project)
Chaves County, New Mexico

Order No. R-4276, Authorizing Corinne Grace to Institute a Pressure Maintenance Project in the Double L-Queen Associated Pool, Chaves County, New Mexico, as Amended by Order No. R-4276-A, March 15, 1972.

Application of Corinne Grace for Special Gas Oil Ratio Limitation and Pressure Maintenance Project, Chaves County, New Mexico.

CASE NO. 4553
Order No. R-4276

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on March 1, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stametz.

NOW, on this 15th day of March, 1972, 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,

(1) That the applicant, Corinne Grace, is hereby authorized to institute a pressure maintenance project in the Double L-Queen Associated Pool, by the injection of gas into the Queen formation through the following-described wells in Eddy County, New Mexico:

Grace Corinne Double L-Queen Associated Pool: Unit Sec. Two, Range 30 East, NMPM, Chaves County, New Mexico.

Well Name: Well No. Unit Sec. Two, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. A. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. B. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. C. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. D. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. E. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. F. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. G. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. H. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. I. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. J. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. K. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. L. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. M. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. N. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. O. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. P. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. Q. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. R. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. S. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. T. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. U. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. V. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. W. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. X. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. Y. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

Grace Corinne Double L-Queen Associated Pool Fed. Z. Unit 2, Sec. 24, Range 30 East, NMPM, Chaves County, New Mexico.

LUSK-SEVEN RIVERS (WATERFLOOD PROJECT)
POOL - (Cont'd.)

(2) That the subject waterflood projects hereby designated be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the above-described area of said project, if necessary to complete an efficient water injection pattern, and the applicant shall be required to obtain administrative approval for the conversion of additional wells to water injection.

(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.

SULMAR-QUEEN POOL
(Waterflood Expansion)
Chaves County, New Mexico

Order No. R-4290, Authorizing Jack L. McClellan to Expand his Waterflood Project in the Sulmar-Queen Pool, Chaves County, New Mexico, April 21, 1972.

Application of Jack L. McClellan for a Waterflood Expansion, Chaves County, New Mexico.

CASE NO. 4686
Order No. R-4290

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on April 5, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of April, 1972, 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,

(1) That the 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, Jack L. McClellan, seeks permission to expand his waterflood project in the Sulmar-Queen Pool, by the injection of water into the Queen formation through three additional injection wells located in Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico, as follows:

Smartford Federal No. 1 - Unit B - Section 24
Cartmel Federal No. 2 - Unit D - Section 25
La Rue Federal No. 1 - Unit D - Section 25

(3) That the applicant further seeks an administrative procedure whereby said project could be expanded to include additional lands and injection wells in the area of the said project as may be necessary in order to complete an efficient water injection pattern, and the applicant shall be required to obtain administrative approval for conversion to water injection in exception to the well response requirements of Rule 701 E-5 of the Commission Rules and Regulations.

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

(5) That the proposed expansion of the waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) 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, and that the applicant shall be required to obtain administrative approval for conversion to water injection.

IT IS THEREFORE ORDERED: That the applicant, Jack L. McClellan, is hereby authorized to expand his waterflood project in the Sulmar-Queen Pool, by the injection of water into the Queen formation through the following-described wells in Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico:

Smartford Federal No. 1 - Unit B - Section 24
Cartmel Federal No. 2 - Unit D - Section 25
La Rue Federal No. 1 - Unit D - Section 25

(2) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the Sulmar-Queen Unit in the area of the project as may be necessary to complete an efficient water injection pattern, and the applicant shall be required to obtain administrative approval for the conversion of additional wells to water injection.

(1) That the applicant, Jack L. McClellan, is hereby authorized to expand his waterflood project in the Sulmar-Queen Pool, by the injection of water into the Queen formation through the following-described wells in Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico, as follows:

Smartford Federal No. 1 - Unit B - Section 24
Cartmel Federal No. 2 - Unit D - Section 25
La Rue Federal No. 1 - Unit D - Section 25

(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.

SULIMAR-QUEEN POOL
(Waterflood Projects)
Chaves County, New Mexico

Order No. R-4214, Authorizing Jack L. McClellan to Institute Two Waterflood Projects in the Sulimar-Queen Pool, Chaves County, New Mexico, October 21, 1971.

Application of Jack L. McClellan for a Waterflood Project, Chaves County, New Mexico.

CASE NO. 4610
Order No. R-4214

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on October 13, 1971, at Roswell, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of October, 1971, 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, Jack L. McClellan, seeks authority to institute two waterflood projects in the Sulimar-Queen Pool, by the injection of water into the Queen formation through 7 injection wells in Sections 13, 24, and 26, Township 15 South, Range 29 East and Section 18 of Township 15 South, Range 30 East, NMPM, Chaves County, New Mexico.

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

(4) That the proposed waterflood projects should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the projects should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Jack L. McClellan, is hereby authorized to institute two waterflood projects in the Sulimar-Queen Pool, by the injection of water into the Queen formation through the following-described wells in Eddy County, New Mexico:

McClellan Lisa Sulimar Waterflood Project

Well Name	Well No.	Unit	Sec.	Twn	Rge
McClellan Lisa Fed. A	9	M	13	15S	29E
McClellan Lisa Fed. A	2	F	24	15S	29E
McClellan Lisa Fed. A	6	L	24	15S	29E
McClellan Lisa Fed. C	4	J	24	15S	29E
McClellan Lisa Fed. A	5	N	24	15S	29E
McClellan Lisa Fed. B	2	M	18	15S	30E

Cities Snyder Sulimar Waterflood Project

Well Name	Well No.	Unit	Sec.	Twn	Rge
Cities Service Snyder Federal	2	G	26	15S	29E

(2) That the subject waterflood projects 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 projects 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.

DOUBLE L-QUEEN ASSOCIATED POOL
(Grace Double L-Pressure Maintenance Project)
Chaves County, New Mexico

Order No. R-4276, Authorizing Corinne Grace to Institute a Pressure Maintenance Project in the Double L-Queen Associated Pool, Chaves County, New Mexico, as Amended by Order No. R-4276-A, March 15, 1972.

Application of Corinne Grace for Special Gas-Oil Ratio Limitation and Pressure Maintenance Project, Chaves County, New Mexico.

CASE NO. 4563
Order No. R-4276

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on March 1, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of March, 1972, 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, Corinne Grace, is the owner and operator of the Grace State Wells Nos. 1 and 2 located in Units A and B, respectively, of Section 1, Township 15 South, Range 29 East, NMPM, Double L-Queen Associated Pool, Chaves County, New Mexico.

(3) That the Special Rules and Regulations for the Double L-Queen Associated Pool provide that a well shall be classified as a gas well if it has a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons and shall be classified as an oil well if it has a gas-liquid ratio of less than 30,000 cubic feet of gas per barrel of liquid hydrocarbons.

**(LUSK-SEVEN RIVERS (WATERFLOOD PROJECT)
POOL - Cont'd.)**

(2) That the subject waterflood project is hereby designated the Tenneco Lusk Seven Rivers Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the above-described waterflood project to include such additional injection wells in the area of said project as may be necessary to complete an efficient water injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(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.

SULIMAR-QUEEN POOL
(Waterflood Expansion)
Chaves County, New Mexico

Order No. R-4290, Authorizing Jack L. McClellan to Expand his Waterflood Project in the Sulimar-Queen Pool, Chaves County, New Mexico, April 21, 1972.

Application of Jack L. McClellan for a Waterflood Expansion, Chaves County, New Mexico.

CASE NO. 4686
Order No. R-4290

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on April 5, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of April, 1972, 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, Jack L. McClellan, seeks permission to expand his waterflood project in his Sulimar-Queen Unit Area, Sulimar-Queen Pool, by the injection of water into the Queen formation through three additional injection wells located in Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico, as follows:

Smernoff Federal No. 1 - Unit B - Section 24
Carthel Federal No. 2 - Unit P - Section 23
La Rue Federal No. 1 - Unit D - Section 25

(3) That the applicant further seeks an administrative procedure whereby said project could be expanded to include additional lands and injection wells in the area of the said project as may be necessary in order to complete an efficient injection pattern; that said administrative procedure should provide for administrative approval for conversion to water injection in exception to the well response requirements of Rule 701 E-5 of the Commission Rules and Regulations.

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

(5) That the proposed expansion of the waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) 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; provided however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

(1) That the applicant, Jack L. McClellan, is hereby authorized to expand his waterflood project in his Sulimar-Queen Unit Area, Sulimar-Queen Pool, by the injection of water into the Queen formation through the following-described wells in Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico:

Smernoff Federal No. 1 - Unit B - Section 24
Carthel Federal No. 2 - Unit P - Section 23
La Rue Federal No. 1 - Unit D - Section 25

(2) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the Sulimar-Queen Unit Waterflood Project to include such additional lands and injection wells in the area of the project as may be necessary to complete an efficient water injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(3) That monthly progress reports of the expanded 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.



New Mexico Petroleum Recovery Research Center

A Division of
New Mexico Institute of Mining and Technology
Telephone (505) 835-5142

Socorro, NM 87801
Facsimile (505) 835-6031
Verify (505) 835-5406

October 17, 1989

Mr. Michael E. Stogner
Oil Conservation Division
P.O. Box 2088
310 Old Santa Fe Trail
Santa Fe, NM 87501-2088

RE: NMIORP, Sulimar Queen Field Regulations

Dear Mike:

As you know, the operating rights of the Sulimar Queen Field, which we will be using as a field laboratory, have been transferred to the New Mexico Institute of Mining and Technology. Since our objective in obtaining this field lab is to develop techniques to improve the recovery of oil from known reservoirs by transferring our research to an actual reservoir, one of our first tasks is to obtain more knowledge of the Sulimar Queen by drilling and coring one new well. Currently, wells in the unit are subject to the standard State regulation which calls for situating wells no closer than 330 ft to a 40-acre proration unit boundary. The location for the well that we wish to drill is nonstandard. However, we believe that this location is necessary for the following reasons:

1. We need an area with maximum reservoir thickness to obtain core material.
2. The core should be good quality rock with porosity and permeability suitable for laboratory flow experiments.
3. Based on cumulative water injected into Wells 1-3 and 8-1, the proposed location is at the point of maximum injection interference, hence there maybe an accumulation of trapped oil.
4. The location is 460 ft from Well 1-3 which facilitates multiwell pressure transient testing, interwell tracer work, and cross-borehole seismic research.

Please let me know if you need further information.

Sincerely,

A handwritten signature in cursive script that reads "F. David Martin".

F. David Martin
Director

FDM:jeg
enc.

Well 1-16 legal description is:

585 ft FNL & 2570 ft FWL

Sec:24 T:15S R:29E

NE1/4 - NW1/4 Unit C

Chaves County, NM

New Mexico Improved Oil Recovery Project

