Box 376
Artesia, New Mexico
August 9, 1963

New Mexico Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Re: Order #R-1538, Leonard Nichols
Water Flood

Gentlemen:

Order R-1538 authorized a water flood program in the Maljamar Pool, Lea County, New Mexico with certain wells authorized as injection wells as shown on the attached plat and in the order. The project is subject to Rule 701.

Application is made for administrative approval of an expansion of this project under Rule 701-E-5.

The attached plat shows in red the present injection wells. The application is for approval to convert the four wells shown in yellow from producers to injectors. The well names and locations are included in the well data.

These wells are all offset by producing wells which have experienced response from the water flood. Forms C-116 are enclosed showing well tests on these wells. Also attached are well data on the proposed injection wells. You will notice that these are all relatively new wells drilled within the past year. Surface casing is set through any shallow water which might be present and cemented to the surface. The production casing is 5 1/2" and is cemented with 350 sacks. The calculated top of the cement is shown. This casing was mill tested to 3000 psi and has been pressured to 4000 psi during sand-frac operations. It is planned to inject down the casing into the Grayburg formation independent of tubing and packers. The wells are not in a declared water basin.

Since all offset leases are owned by Leonard Nichols, no communication is made with other operators. A copy of this application is being sent to the State Engineer's office.

THE EXPANSION OF THIS PROJECT IS AN EXTENSION OF THE ORIGINAL PATTERN AND WILL RESULT IN AN EFFICIENT RECOVERY OF SECONDARY RESERVES AND WILL BE IN THE INTEREST OF CONSERVATION.

WE WOULD APPRECIATE YOUR PROMPT ATTENTION TO THIS APPLICATION.

VERY TRULY YOURS,

LEONARD NICHOLS

H. C. PORTER
AGENT

HCP:EL

CC: STATE ENGINEER

Form C- 116
Revised (12/1/55

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR LEONARD NICHOLS POOL MALJAMAR

ADDRESS BOX 376, ARTESIA, NEW MEXICO MONTH OF JUNE, 19 63

SCHEDULED TEST ..... COMPLETION TEST ..... SPECIAL TEST X (Check One)

(See Instructions on Reverse Side)

Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Daily Allowable Bbls.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
ILES	25	6/10	PUMP		24	150	110	50	TSTM	
ILES	28	6/15	PUMP		24	60	42	-0-	TSTM	
TAYLOR E	1	6/21	PUMP		24	120	62	60	TSTM	

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission. In accordance with Rule 301 and Appropriate Pool Rules.

(I certify that the information given is true and complete to the best of my knowledge.)

Date AUGUST 8, 1963

LEONARD NICHOLS
Company

By H. C. PORTER

AGENT
Title

LEONARD NICHOLS - WELL DATA

		Surface Casing	Casing	Elevation	Completion Date	Perforations	Total Depth	Calc. Top Cement	Top Salt
Iles #26	H-10-17-32	8 5/8" @ 337' 200 sx	5 1/2" @4190' 350 sx	4184'	9-11-62	3970-82 4083-87 4093-4105	4190'	1460'	1150'
Iles #28	J-10-17-32	8 5/8" @ 293' 200 sx	5 1/2" @ 4100' 350 sx	4130'	10-30-62	3908-20 4036-48	4100'	1370'	1150'
Taylor E #2	L-11-17-32	8 5/8" @ 321' 200 sx	5 1/2" @ 4125' 350 sx	4121'	8-29-62	3918-28 4028-32 4040-44 4047-57	4125'	1395'	1150'
Taylor E #3	N-11-17-32	8 5/8" @ 324' 200 sx	5 1/2" @ 4100' 350 sx	4101'	3-27-63	3934-44 4059-63 4067-79	4100'	1370'	1150'

LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE

Box 376
Artesia, New Mexico
August 9, 1963

State Engineer
Box 1079
Santa Fe, New Mexico

Attention: Mr. Frank Irby

Dear Mr. Irby:

I am enclosing a copy of our application to convert four wells to injection. Well names and locations are shown in the exhibits.

We plan to inject down the casing, if possible. We are doing so in all the other wells shown, with one exception which was a re-entry job.

Please give this your consideration and if you need further information, please call me.

Very truly yours,

Leonard Nichols

Original Signed by H. C. Porter

H. C. Porter
Agent

HCP:el

BOX 370
ARTESIA, NEW MEXICO
AUGUST 5, 1965

STATE ENGINEER
BOX 1079
SANTA FE, NEW MEXICO

ATTENTION: MR. FRANK IRBY

DEAR MR. IRBY:

I AM ENCLOSING A COPY OF OUR APPLICATION TO CONVERT FOUR WELLS TO INJECTION. WELL NAMES AND LOCATIONS ARE SHOWN IN THE EXHIBITS.

WE PLAN TO INJECT DOWN THE CASING, IF POSSIBLE. WE ARE DOING SO IN ALL THE OTHER WELLS SHOWN, WITH ONE EXCEPTION WHICH HAS A RE-ENTRY JOB.

PLEASE GIVE THIS YOUR CONSIDERATION AND IF YOU NEED FURTHER INFORMATION, PLEASE CALL ME.

VERY TRULY YOURS,

LEONARD NICHOLS

Orig. Signed By: R. C. Porter

R. C. PORTER
AGENT

NCP:ec

Box 376
Artesia, New Mexico
August 16, 1963

State Engineer
Box 1079
Santa Fe, New Mexico

Attention: Mr. Frank Irby, Chief
Water Rights Division

Dear Mr. Irby:

Pursuant to our conversation today I have revised our application to the Oil Conservation Commission to the effect that we are agreeable to injecting below packers in these wells in the event we inject any fluid other than fresh water.

I would appreciate your forwarding your recommendation to the Commission.

Very truly yours,

Leonard Nichols

Oiginal Signed by H. C. Porter

H. C. Porter
Agent

HCP;el

cc: Whitey McCutcheon
Curtis McBroom
Oil Conservation Commission

Box 376
Artesia, New Mexico
August 16, 1963

Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Gentlemen:

Reference is made to our application for administrative approval to convert four wells to water injection in the Maljamar Pool. These wells are:

Iles No. 26, H-10-17-32
Iles No. 28, J-10-17-32
Taylor E No. 2, L-11-17-32
Taylor E No. 3, N-11-17-32

I have discussed the problem of protecting any fresh water which might be present with Mr. Frank Irby. He has agreed verbally that he will recommend that we be given permission to inject down the casing in these wells as long as we are injecting only fresh water. In the event we inject produced water, we will run packers on tubing.

Please amend our application to this effect.

Very truly yours,

Leonard Nichols

H. C. Porter
Agent

HCP:el

cc: Whitey McCutcheon
Curtis McBroom
State Engineer

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

August 14, 1963

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

Mr. A. M. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the Leonard Nichols' application dated August 9, 1963 which seeks administrative approval to convert the following producing wells to injection wells:

WELL	LOCATION
Iles #26	H-10-17-32
Iles #28	J-10-17-32
Taylor E #2	L-11-17-32
Taylor E #3	N-11-17-32

I have considered the information in the application and the attachments thereto. I have also considered the geologic and hydrologic information that is available to me.

This office offers no objection to the granting of the application provided injection is down tubing with the packer set well below the top of the cement surrounding the $5\frac{1}{2}$ inch casing, in each well.

Very truly yours,

S. E. Reynolds
State Engineer

By: Frank E. Irby
Frank E. Irby
Chief
Water Rights Division

FEI/ma
cc-H. C. Porter
F. H. Hennighausen

NFX-150

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

August 19, 1963

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the Leonard Nichols' application dated August 9, 1963 which seeks administrative approval to convert certain producing wells to injection wells. Further reference is made to my letter of August 14, 1963 addressed to you and to Mr. H. C. Porter's letter addressed to me under date of August 16, 1963, all pertaining to the same application.

This office offers no objection to the granting of the application to inject water down the casing in the wells involved so long as the injected fluid is fresh, non-corrosive water and further provided that this office be notified 15 days in advance of any plan to inject produced water which must be injected through tubing under packers. Furthermore, this project shall be opened to inspection by State Engineer staff at all times.

Very truly yours,

S. E. Reynolds
State Engineer

By: Frank E. Irby
Frank E. Irby
Chief
Water Rights Division

FEI/ma
cc-H. C. Porter
F. H. Hennighausen