

WATER FLOOD ASSOCIATES, INC.

301 BOOKER BLDG.
ARTESIA, NEW MEXICO

P. O. BOX 376

OCTOBER 5, 1961

PHONE SH 6-6032

NEW MEXICO OIL CONSERVATION COMMISSION
POST OFFICE BOX 871
SANTA FE, NEW MEXICO

ATTENTION: MR. JIM KAPTEINA

DEAR MR. KAPTEINA:

ORDER NO. R-1538 AUTHORIZED A WATER FLOOD PROJECT IN THE MALJAMAR FIELD (FORMERLY ROBERTS), LEA COUNTY, NEW MEXICO WITH CERTAIN WELLS DESIGNATED AS WATER INPUT WELLS AS SHOWN ON THE ATTACHED PLAT AND IN THE ORDER. THE PROJECT IS SUBJECT TO RULE 701.

LEONARD NICHOLS-LEXCO No. 2 SE $\frac{1}{4}$ SE $\frac{1}{4}$ SECTION 2, T17S, R32E WAS A PLUGGED AND ABANDONED WELL. THE 5 $\frac{1}{2}$ " CASING WAS KNOCKED OFF AT 2230 FEET WITH A COLLAR-BASTER. A CLEAN THREAD WAS RECOVERED WHEN THE WELL WAS PLUGGED. PERMISSION WAS GRANTED TO RE-ENTER THIS WELL. THE WELL WAS RE-ENTERED BY CABLE TOOLS AND CLEANED OUT DOWN INSIDE THE 5 $\frac{1}{2}$ " CASING. 5 $\frac{1}{2}$ " CASING WAS THEN RE-RUN AND THE COLLAR WAS SCREWED INTO. THE WELL WAS THEN CLEANED OUT TO BOTTOM.

APPLICATION IS HEREBY MADE TO COMPLETE THIS WELL AS A WATER INJECTION WELL. A SCHEMATIC DRAWING OF THE INTENDED COMPLETION OF THIS WELL IS ATTACHED. 8 5/8" SURFACE CASING IS SET AT 1303' AND CEMENTED BACK TO THE SURFACE, THUS PROVIDING AMPLE AND ADEQUATE PROTECTION OF ANY SHALLOW WATER ZONES. THE 5 $\frac{1}{2}$ " CASING IS SET AT 4098' AND CEMENTED BACK TO 2396'. IT IS PLANNED TO INJECT THROUGH A STRING OF 2" EUE TUBING WITH A TENSION-TYPE PACKER SET BELOW 2600'. ADMINISTRATIVE APPROVAL IS REQUESTED FOR THE CONVERSION OF THIS WELL TO WATER INPUT.

A COPY OF THIS APPLICATION IS BEING SENT TO PHILLIPS PETROLEUM COMPANY AND KENNEDY OIL COMPANY, THE OFFSET OPERATORS, AND TO MR. FRANK IRBY, THE CHIEF OF WATER RIGHTS DIVISION, STATE ENGINEERS OFFICE, SANTA FE.

WFX - 92
Water Flood
See Note at 24

OIL CONSERVATION COMMISSION

OCTOBER 5, 1961

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THE SUBJECT WELL IS LOCATED ON THE ESTABLISHED WATER FLOOD PATTERN AND CONVERSION OF THIS WELL TO WATER INJECTION IS NECESSARY TO AN EFFECTIVE SWEEP OF OIL IN THIS AREA. TWO OFFSET WELLS HAVE RESPONDED TO WATER FLOOD. FORM C-116 IS ATTACHED SHOWING WELL TESTS ON THESE OFFSET WELLS.

YOUR ATTENTION TO THIS APPLICATION AT YOUR EARLIEST CONVENIENCE WILL BE APPRECIATED.

VERY TRULY YOURS,

A handwritten signature in black ink, appearing to read "H. C. Porter", written in a cursive style.

H. C. PORTER,
ENGINEER

HCP/KH

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR..... LEONARD NICHOLS POOL..... MALJAMAR

ADDRESS..... P. O. Box 376, ARTESIA, NEW MEX. MONTH OF..... (SEE BELOW), 19.....

SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST..... XXX (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	
TRIMBLE	1	1/9/61	P		24		-0-	7	TSTM	TSTM
		3/5/61	P		"		-0-	23	"	"
		5/1/61	P		"		-0-	30	"	"
		8/6/61	P		"		-0-	43	"	"
		10/1/61	P		"		-0-	51	"	"

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

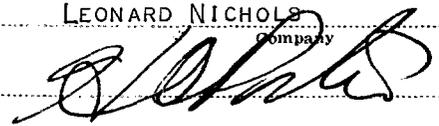
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized 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..... 4 Oct 61

By..... LEONARD NICHOLS
Company

 ENGINEER
Title

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR LEONARD NICHOLS POOL MALJAMAR
 ADDRESS P. O. Box 376, ARTESIA, NEW MEXICO MONTH OF (SEE BELOW), 19
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST XXX (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	
LEXCO	I	5/20/61	P		24		-0-	11	TSTM	TSTM
		7/9/61	P		24		-0-	21	"	"
		8/7/61	P		24		-0-	22	"	"
		10/1/61	P		24		-0-	26	"	"

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.

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

Date 4 Oct 61

By LEONARD NICHOLS
Company
ENGINEER
Title

WATER FLOOD ASSOCIATES, INC.

301 BOOKER BLDG.
ARTESIA, NEW MEXICO

P. O. BOX 376

PHONE SH 6-6032

OCTOBER 5, 1961

STATE ENGINEER
P. O. Box 1079
SANTA FE, NEW MEXICO

ILLEGIBLE

ATTENTION: MR. FRANK E. IRBY

DEAR MR. IRBY:

I AM ENCLOSED A COPY OF THE APPLICATION TO CONVERT LEONARD NICHOLS-
LEROO WELL No. 2 TO WATER INPUT. THE WELL IS LOCATED IN SE/4 SE/4,
SECTION 2, T17S, R32E, LEA COUNTY, NEW MEXICO, AS SHOWN ON THE PLAT.

DETAILS OF THE WELL COMPLETION ARE SHOWN ON THE ATTACHED SCHEMATIC
DRAWING AND IN MY LETTER TO MR. KAPTEINA. THE SHALLOW WATER IS PRO-
TECTED BY SURFACE CASING WHICH IS CEMENTED TO THE SURFACE. ALSO,
IN THIS WELL, WE INTEND TO INJECT BELOW A PACKER SET ON TUBING
DOWN INSIDE THE 5 1/2" CASING. THE WELL WAS DRILLED IN 1946 BY
PHILLIPS PETROLEUM COMPANY. THE SURFACE HOLE WAS 12 1/2" AND THE
REMAINDER OF THE HOLE WAS 7 7/8". ALL CASING WAS NEW.

I TRUST THAT ALL INFORMATION RECEIVED BY YOUR OFFICE IS CONTAINED
IN THE APPLICATION; HOWEVER, IF ADDITIONAL INFORMATION IS NECESSARY,
I WOULD APPRECIATE YOUR CALLING ME COLLECT AT SH 6-6032, ARTESIA,
IN ORDER TO EXPEDITE APPROVAL BY THE COMMISSION.

VERY TRULY YOURS,



H. C. PORTER,
ENGINEER

HCP/KH

WATER FLOOD ASSOCIATES, INC.

301 BOOKER BLDG.

ARTESIA, NEW MEXICO

OCTOBER 5, 1961

P. O. BOX 376

PHONE SH 6-6032

KENNEDY OIL COMPANY
1402 WASHINGTON AVE.
ARTESIA, NEW MEXICO

ILLEGIBLE

ATTENTION: ROBERT KENNEDY

DEAR MR. KENNEDY:

I AM ENCLOSED A COPY OF OUR APPLICATION TO THE NEW MEXICO OIL
CONSERVATION COMMISSION FOR APPROVAL TO CONVERT LEONARD NICHOLS -
LEXCO WELL NO. 2 TO WATER INJECTION. THIS WELL IS LOCATED IN
SE/4 SE/4 SECTION 2, T17S, R32E, HALJANAR FIELD, LEA COUNTY, NEW
MEXICO.

VERY TRULY YOURS,


H. C. PORTER,
ENGINEER

HCP/BN

CC: OIL CONSERVATION COMMISSION

WATER FLOOD ASSOCIATES, INC.

301 BOOKER BLDG.

ARTESIA, NEW MEXICO

P. O. BOX 376

OCTOBER 5, 1961

PHONE SH 6-6032

ILLEGIBLE

PHILLIPS PETROLEUM CO.
PRODUCTION DEPARTMENT
3RD FLOOR PERMIAN BLDG.
MIDLAND, TEXAS

ATTENTION: DIVISION ENGINEER

GENTLEMEN:

I AM ENCLOSED A COPY OF OUR APPLICATION TO THE NEW MEXICO OIL
CONSERVATION COMMISSION FOR APPROVAL TO CONVERT LEONARD NICHOLS-
LENGO WELL NO. 2 TO WATER INJECTION. THIS WELL IS LOCATED IN
SE/4 SE/4 SECTION 2, T17S, R32E, MALJAMAR FIELD, LEA COUNTY, NEW
MEXICO.

VERY TRULY YOURS,



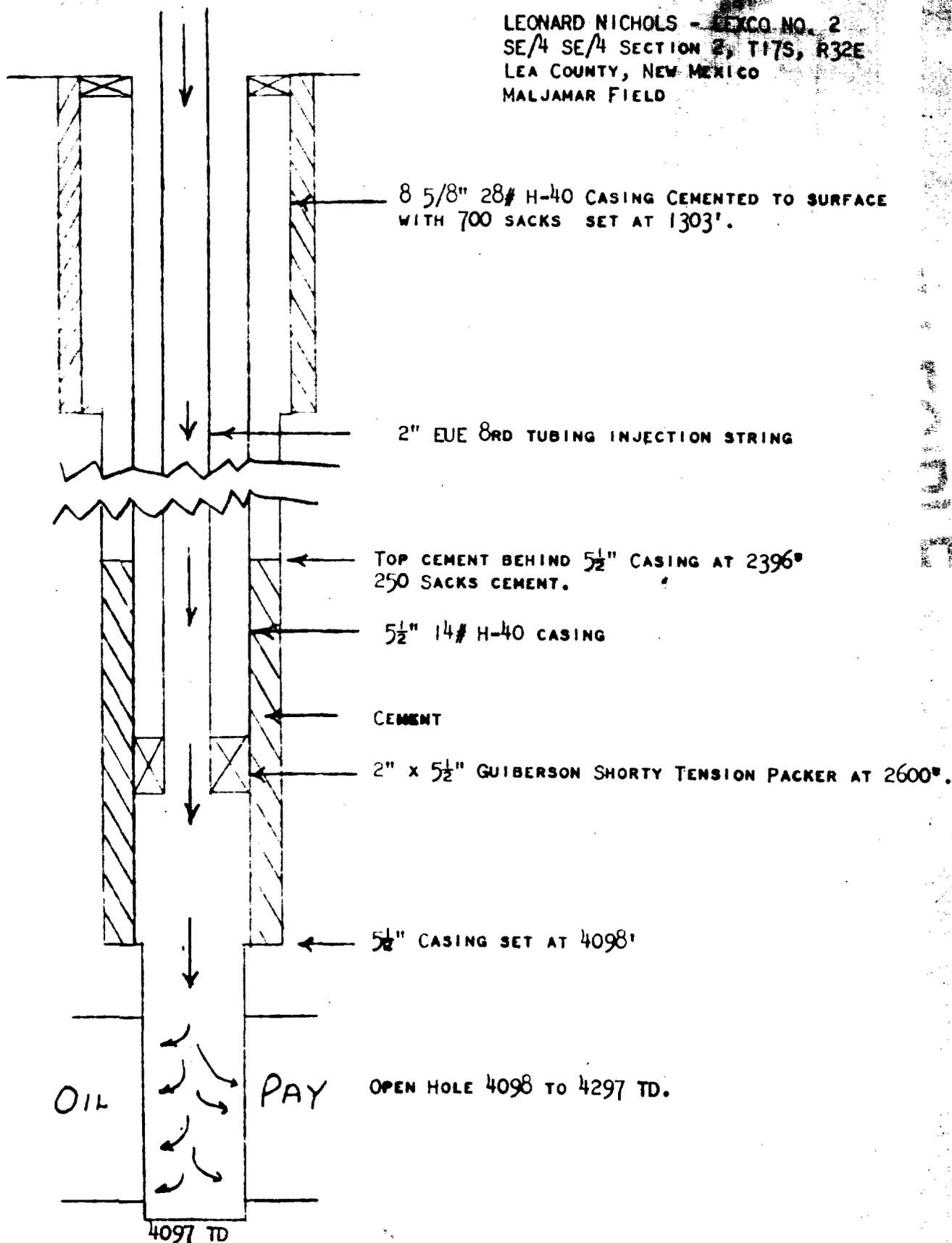
H. C. PORTER,
ENGINEER

HCP/NH

OO: OIL CONSERVATION COMMISSION

SCHMATIC DRAWING OF INJECTION WELL

LEONARD NICHOLS - EXCO. NO. 2
SE/4 SE/4 SECTION 8, T17S, R32E
LEA COUNTY, NEW MEXICO
MALJAMAR FIELD



WATER FLOOD ASSOCIATES, INC.

301 BOOKER BLDG.
ARTESIA, NEW MEXICO

P. O. BOX 376

OCTOBER 5, 1961

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H. C. PORTER,
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HCP/WH

CC: OIL CONSERVATION COMMISSION

WATER FLOOD ASSOCIATES, INC.

301 BOOKER BLDG.
ARTESIA, NEW MEXICO

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VERY TRULY YOURS,



H. C. PORTER,
ENGINEER

HCP/RH

CC: OIL CONSERVATION COMMISSION

WATER FLOOD ASSOCIATES, INC.

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ARTESIA, NEW MEXICO

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STATE ENGINEER
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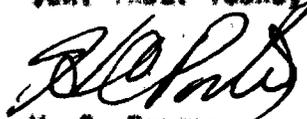
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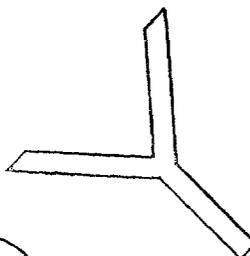
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VERY TRULY YOURS,


H. C. PORTER,
ENGINEER

October 9, 1961

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



Dear Mr. Porter:

Reference is made to the application of Water Flood Associates, Inc., dated October 5, 1961 which seeks administrative approval to convert the Leonard Nichols-Lexco Well No. 2 located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 2, Township 17 South, Range 32 East, Lea County, New Mexico to water injection.

The diagrammatic sketch accompanying the copy of the application received in this office which shows the casing and cementing program also shows that the well will be equipped with tubing and packer through which the water will be injected. It is planned that the packer will be set at 2600' which is well below the top of the cement outside the 5 $\frac{1}{2}$ " casing, and it appears that if this plan is followed, there will be no threat of contamination to the fresh waters which may exist in the area. Therefore, this office offers no objection to the granting of this application, provided the plan is followed.

Yours truly,

S. E. Reynolds
State Engineer

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

By:
Frank E. Irby
Chief
Water Rights Division

OIL CONSERVATION COMMISSION

BOX 2045

HOBBS, NEW MEXICO

DATE Oct. 20, 1961

OIL CONSERVATION COMMISSION
BOX 371
SANTA FE, NEW MEXICO

Re: Proposed NSP.....

Proposed NSL.....

Proposed NFC.....

Proposed DC.....

Gentlemen:

WFX 92

I have examined the application dated _____
for the Leonard Nichols Lexco #2 2-17-32
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

O.K.---E.F.E.

O.K.---J.W.R.

Yours very truly,

OIL CONSERVATION COMMISSION

