

WOOD & McSHANE

Petroleum Consultants
Engineering--Operation--Management

B. OLIVER WOOD
J. B. McSHANE, JR.

405 SOUTH ALLEN
MONAHANS, TEXAS

PHONE WI 3-3092
BOX 398

August 26, 1959

Case 1761

New Mexico Oil Conservation Commission
107 Mabry Hall
Capitol Building
Santa Fe, New Mexico

Attention: Mr. J. E. Kapteina

Dear Jim,

Oliver and I both are very pleased to hear you have located with the Commission there in Santa Fe. I am sure by now you are situated with your family and are pleased with your new work. After your call several days ago, the following information has been obtained to supplement the application for a water-flood submitted to the Conservation Commission in behalf of Stanton Oil Company, Ltd. on August 5, 1959.

Enclosed please find a Plat of the Stanton Oil Company, Ltd., Turkey Track Field, waterflood project area. Shown on the Plat are the locations of the four proposed water injection wells to be drilled and completed for the Pilot Flood operation. The cross-hatched area, drilling unit F, is the totally enclosed area in the Pilot Flood. The shaded area includes the producing wells possibly affected by the Pilot water injection. The totally enclosed area is approximately 40 acres, and contains two producing wells, Wilson 1 and 5. The shaded area containing producing wells possibly affected by water injection, is 161 acres. The total area of the full flood project being proposed in this application is colored on the Plat in yellow, and contains 720 acres.

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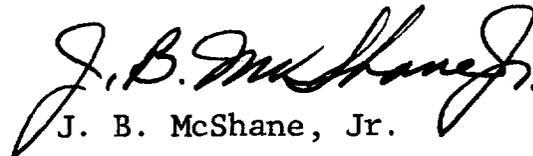
New Mexico Oil Conservation Commission
August 26, 1959
Page 2

It is understood that the location of the Pilot Flood, the injection wells in the Pilot Flood, and the total project area, are required by the Commission before an application is considered complete so that a hearing may be granted. If the enclosed Plat and data are not sufficient to meet Commission requirements for this application, please call us collect so that we may furnish all of the necessary data. It is anticipated that the hearing will probably be granted on or about September 23, 1959.

Thanking you very much for your attention, I am,

Yours truly,

WOOD & McSHANE


J. B. McShane, Jr.

JBM:pb

Enclosure

WOOD & McSHANE

Petroleum Consultants

Engineering--Operation--Management

B. OLIVER WOOD
J. B. McSHANE, JR.

405 SOUTH ALLEN
MONAHANS, TEXAS

PHONE WI-3-3092
BOX 398

21 October 1959

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Attention: Mr. D. S. Nutter, Chief Engineer

Dear Mr. Nutter:

The Stanton Oil Company, Ltd. application for a pilot flood, case No. 1761, was presented at a hearing on September 30, 1959 in Santa Fe, New Mexico. Testimony was presented at this hearing that two water supply wells had been drilled and tests of these wells indicated that an adequate supply of water was available on the leases to be flooded.

We have been advised recently that information with regard to the total amount of water required and the total amount of water available would be helpful to the Commission in reaching a decision on this application. It is expected that the expanded flood will include a total of 720 acres and will have 27 water injection wells. It is estimated that this total flood development will require the injection of approximately 17,000,000 barrels of water over a 8 to 10 year period. Since the water produced with the oil will be reinjected, it is estimated that only 5,500,000 barrels of water will have to be obtained from water supply wells. Assuming that the water productive zone is twenty feet in thickness and has a porosity of 25%, this amount of water could be produced from approximately 150 acres. If the two water supply wells already drilled will drain forty acres each, the drilling of two additional water supply wells should supply the required amount of water.

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The assumptions with regard to the thickness, porosity, and acreage drained are considered to be conservative. There are presently nineteen producing wells in the flood area and all of these wells were drilled with cable tools and encountered good water shows in the zone proposed to be used for water supply purposes.

A chemical analysis of the supply water was presented at the hearing and testimony was given that based on information taken from "Study and Interpretation of Natural Water", Geological Survey, Water Supply Paper 1473, U. S. Public Health Service (1946), this water is not suitable for human or stock consumption, nor is it suitable for irrigation purposes.

In the event the present water supply source should prove to be inadequate, injection water will be available and can be purchased from the Caprock Water Company, Artesia, New Mexico. Attached please find a copy of a letter from this company advising that it could and would supply this water if necessary.

Very truly yours,

WOOD & McSHANE

BOW
ch

B. Oliver Wood
B. Oliver Wood

WOOD & McSHANE
MAIN OFFICE OCC *Petroleum Consultants*
Engineering--Operation--Management

Case
1761

AUG 20 11 04 33
B. OLIVER WOOD
J. B. McSHANE, JR.
405 SOUTH ALLEN
MONAHANS, TEXAS

PHONE WI 3-3092
BOX 398

August 5, 1959

New Mexico Oil Conservation Commission
107 Mabry Hall
Capitol Building
Santa Fe, New Mexico

Gentlemen:

The Stanton Oil Company, Ltd., San Antonio, Texas, is negotiating an acquisition of the R. E. McKee Properties located in Section 3, T19S, R29E, and Section 34, T18S, R29E, Turkey Track Queen Sand Pool, Eddy County, New Mexico. This firm has been retained by the Stanton Oil Company to instigate and to operate a water flood project on this property for them.

As engineering consultants for the Stanton Oil Company, we hereby request that a hearing be granted in accordance with rule 701 (A) to consider an application to water flood the subject property.

Yours very truly,

WOOD & McSHANE

By: B. Oliver Wood

B. Oliver Wood

BOW:pb

cc to N. M. O. C. C.
Artesia, New Mexico

cc to Stanton Oil Company, Ltd.
San Antonio, Texas

Specializing In Secondary Recovery

Robert [unclear]
9-15-59
JN
10-8-59

what [unclear]
J. Wood
for [unclear]
Robert [unclear]



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

ADDRESS CORRESPONDENCE TO:
P. O. BOX 1079
SANTA FE, N. M.

October 22, 1959

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

File

Dear Mr. Porter:

Reference is made to your Case No. 1761 which came on for hearing before the Commission on September 30, 1959 and was continued to October 28, 1959 after considerable evidence had been given.

I have this date received from Messrs. Wood and McShane, Petroleum Consultants, Monohans, Texas, a letter dated October 21, 1959 enclosing diagram of proposed well casing and a plat showing the pilot water flood area which is the subject of this case. Although the correspondence to me does not indicate that copies of this letter and the exhibits were forwarded to you, it was my understanding from Mr. McShane that copies would be forwarded to you.

The proposed casing and cementing program for the injection wells as set forth in the letter and the diagram appear adequate for the protection of any waters which might be encountered between the land surface and the producing zone. Therefore, this office offers no objection to the granting of this application.

Yours truly,

FEI/ma
cc-Messrs. Wood & McShane
Stanton Oil Company, Ltd.
F. H. Hennighausen

S. E. Reynolds
State Engineer

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

File Case 1761

New Mexico State Oil Conservation Commission,
Santa Fe, New Mexico.

Gentlemen:

Case No. 1761

Stanton Oil Co., Ltd. is hereby designated as our agent for the development and operation of a water flood, as described in hearing before the Oil Conservation Commission on September 30, 1959.

Dated this 24th day of October, 1959.

Yours very truly,

ROBERT E. MCKEE GENERAL CONTRACTOR, INC.

by J. R. Brumand
vice President.

ATTEST:

Wm Maraman
Asst. Secretary.

SCHEDULE "A"

<u>Wells</u>	<u>Well No.</u>	<u>Lease No.</u>	<u>S T & R</u>	<u>Location</u>
State	3	B-8876-6	3-19S-29E	SW $\frac{1}{4}$ SE $\frac{1}{4}$
State	5	B-8875-6	3-19S-29E	NW $\frac{1}{4}$ SE $\frac{1}{4}$
State	15	B-8876-6	3-19S-29E	NW $\frac{1}{4}$ SE $\frac{1}{4}$
State	10	B-7950-23	3-19S-29E	NE $\frac{1}{4}$ SW $\frac{1}{4}$
State	16	B-8949-14	3-19S-29E	SE $\frac{1}{4}$ NW $\frac{1}{4}$
State	17	B-8949-13	3-19S-29E	SW $\frac{1}{4}$ NW $\frac{1}{4}$
Spencer	1	B-8949-17	3-19S-29E	NW $\frac{1}{4}$ NW $\frac{1}{4}$
Spencer	2	B-8949-17	3-19S-29E	NE $\frac{1}{4}$ NW $\frac{1}{4}$
Brainard	1	LC 062029	34-18S-29E	SE $\frac{1}{4}$ SW $\frac{1}{4}$
Brainard	2	LC 062029	34-18S-29E	NW $\frac{1}{4}$ SW $\frac{1}{4}$
Brainard	4	LC 062029	34-18S-29E	NE $\frac{1}{4}$ SW $\frac{1}{4}$
Brainard	5	LC 062029	34-18S-29E	SW $\frac{1}{4}$ SE $\frac{1}{4}$
Brainard	6	LC 062029	34-18S-29E	NW $\frac{1}{4}$ SE $\frac{1}{4}$
McKee-Featherstone	1	NM 010907-A	34-18S-29E	NW $\frac{1}{4}$ NE $\frac{1}{4}$
McKee-Featherstone	2	NM 010907-A	34-18S-29E	SW $\frac{1}{4}$ NE $\frac{1}{4}$
McKee-Wilson	1	NM 015068	34-18S-29E	SE $\frac{1}{4}$ NW $\frac{1}{4}$
McKee-Wilson	5	NM 015068	34-18S-29E	SE $\frac{1}{4}$ NW $\frac{1}{4}$
McKee-Wilson	2	NM 015068	34-18S-29E	NE $\frac{1}{4}$ NW $\frac{1}{4}$
McKee-Wilson	3	NM 015068	33-18S-29E	NE $\frac{1}{4}$ NE $\frac{1}{4}$

The above leases are all located in Eddy County, New Mexico.

PRELIMINARY DATA
STANTON OIL COMPANY, LTD.
TURKEY TRACK FIELD, EDDY COUNTY, NEW MEXICO
QUEEN SAND WATER FLOOD PROJECT

Case
1761

The attached Plat is submitted on behalf of the Stanton Oil Company, Ltd., as a portion of their application for a waterflood permit of the Queen Sand Formation on certain leases of the Turkey Track Field, Eddy County, New Mexico.

Proposed Flood Data:

Pilot Flood Area, Totally Enclosed	40 Acres
Pilot Flood Area, Partially Enclosed	151 Acres
Pilot Flood Injection Wells	1-W, 2-W, 3-W, and 4-W
Pilot Flood Producers, Totally Enclosed	Wilson 1 and 5
Pilot Flood Producers, Partially Enclosed	Wilson 2, Featherstone 1 and 2, Brainard 2,4, and 6
Full Flood Project Area	720 Acres

The total enclosed portion for the proposed Pilot Flood Water Injection is the SE/4 of the NW/4, Section 34, T-18-S, R-29-E, Eddy County, New Mexico.

The full flood project area includes the following:

E/2 of the NE/4, Section 33, T-18-S, R-29-E;

The E/2 of the NW/4, W/2 of the NE/4, the N/2 of the SW/4, the N/2 of the SE/4, and the SW/4 of the SE/4, Section 34, T-18-S, R-29-E;

the S/2 of the NW/4, the N/2 of the SW/4, the N/2 of the SE/4, and the SW/4 of the SE/4, Section 3, T-19-S, R-29-E;

Eddy County, New Mexico.

Submitted with plat on August 26, 1959, by Wood & McShane, Box 398, Monahans, Texas.

ROBERT E. MCKEE GENERAL CONTRACTOR INC.

EP-8245-E

Re: Contract Agreement with
Stanton Oil Co., Ltd.

El Paso, Texas

1918 Texas Street — P. O. Drawer 562

September 26, 1959

Wood and McShane, Consulting Engineers
c/o Mr. M. W. Hamilton
P. O. Box 775
Santa Fe, New Mexico

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
App'l	EXHIBIT NO. <u>4</u>
CASE NO.	<u>1761</u>

Attention: Mr. Oliver Wood

Gentlemen:

This is to advise that under Contract dated August 4, 1959, we entered into agreement with Stanton Oil Co., Ltd. whereby they were to undertake the installation of a water flood operation by injection of water into the Queen formation on the following described lands in the Turkey Track Pool in Eddy County, New Mexico:

NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 33, Township 18 South, Range 29 East;
NW $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$ Section 34, Township 18 South,
Range 29 East;
NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ Section 3, Township 19 South,
Range 29 East

The title to these leases is in the name of Robert E. McKee General Contractor, Inc.; however, it is agreed in the Contract that Stanton Oil Co., Ltd. is to make application to the Oil Conservation Commission of the State of New Mexico, for the water flood installation.

This is to certify that Stanton Oil Co., Ltd. has full authority under said Contract to make application to the Oil Conservation Commission of the State of New Mexico on the lands listed above covered by leases and operating agreements owned by Robert E. McKee General Contractor, Inc.

Very truly yours,

ROBERT E. MCKEE GENERAL CONTRACTOR, INC.

Oliver Wood

By

President

REM:mb

cc:Stanton Oil Co., Ltd.

cc:Mr. M. W. Hamilton

cc:A ^{LOS ANGELES, CALIFORNIA} : ^{DALLAS, TEXAS} : ^{SANTA FE, NEW MEXICO}