

CASE 3419: Application of B. M.
JACKSON for a waterflood project,
Lea County, New Mexico.

Case Number

3419

Application
Transcripts.

Small Exhibits

ETC.

CLASS OF SERVICE
This is a fast message
unless its deferred char-
acter is indicated by the
proper symbol.

WESTERN UNION TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

SYMBOLS
DL=Day Letter
NL=Night Letter
LT=International
Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of

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1966 JUN 27 PM 1 (037)

D FWA198 PD 4 EXTRA=FAX FORT WORTH TEX 27 144P CST=
NEW MEXICO OIL CONSERVATION COMM=
PO BOX 871 SANTA FE NMEX=

ATTN: MR DAN NUTTER

ANADARKO PRODUCTION COMPANY AS OPERATOR OF THE
PEARSALL QUEEN SAND UNIT, LEA COUNTY, NEW MEXICO
APPROVES OF THE APPLICATION OF B. M. JACKSON TO ENTER
INTO A COOPERATIVE WATERFLOOD WITH ANADARKO AS SET
OUT IN CASE NO. 3419=

M. E. SHAW ASST TO THE SUPT SECONDARY RECOVERY
DIVISION=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

July 15, 1966

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Dear Sir:

Reference is made to Commission Order No. R-3090, recently entered in Case No. 3419, approving the Pearsall-Jackson waterflood Project.

Injection is to be through the one authorized injection well which shall be equipped with plastic-coated tubing and a packer set at approximately 3630 feet.

As to allowable, our calculations indicate that when the authorized injection well has been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 34 barrels per day, based on an allowable factor of 42.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

-2-

Mr. Jason Kellahin
Santa Fe, New Mexico
July 15, 1966

both of the aforementioned commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/ir

cc: Mr. Frank Irby
State Engineer Office
Santa Fe, New Mexico

Oil Conservation Commission
Box 1980
Hobbs, New Mexico

B. M. JACKSON
2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

OFFICE: RIVERSIDE 8-1607

July 12, 1966

7:05 JUL 13 PM 1 13

RESIDENCE: EM 3-3215

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

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

The calculated top of the cement is 3246' in my Federal #2 well,
which is the proposed injection well.

We set 3822' of 4 1/2" with 100 sacks of Pozmix with 2% gel plus
30 sacks of Latex. Assuming an 80% fill-up factor, the calculated
fill-up is 576 feet.

Yours very truly,

B. M. Jackson

B. M. Jackson

BMJ:afm

**BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:**

**CASE No. 3419
Order No. R-3090**

**APPLICATION OF B. M. JACKSON
FOR A WATERFLOOD PROJECT, LEA
COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 29, 1966,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 11th day of July, 1966, 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, B. M. Jackson, seeks permission to
institute a waterflood project in the Pearsall-Queen Pool by the
injection of water into the Queen formation through her Federal
Well No. 2, located in Unit H of Section 4, Township 18 South,
Range 32 East, NMPM, Lea County, New Mexico.

(3) That the producing well in the project area is not in an
advanced state of depletion and cannot properly be classified as a
"stripper" well.

(4) That the applicant's acreage is offset by an active
waterflood project on the north and west, and in order to protect
applicant's correlative rights, applicant should be permitted to
institute the proposed waterflood project to "back-up" the water
injection to the north and west.

-2-

CASE No. 3419

Order No. R-3090

(5) That the proposed 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.

IT IS THEREFORE ORDERED:

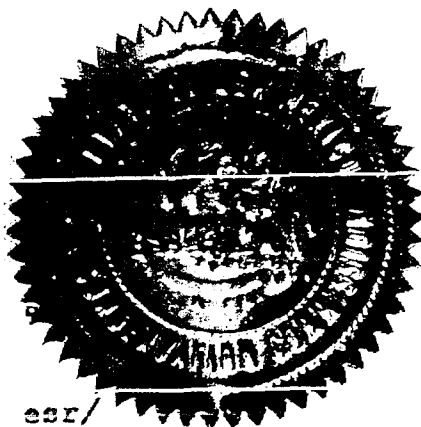
(1) That the applicant, B. M. Jackson, is hereby authorized to institute a waterflood project in the Pearsall-Queen Pool by the injection of water into the Queen formation through her Federal Well No. 2, located in Unit H of Section 4, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico.

(2) That the subject waterflood project is hereby designated the Pearsall-Jackson Waterflood Project and 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 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.



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
GUYTON B. HAYS
MEMBER



P. O. BOX 2088
SANTA FE

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

July 11, 1966

Re: Case No. 3419

Order No. R-3090

Applicant:

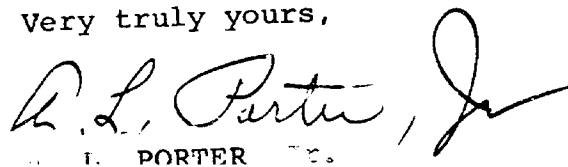
B. M. JACKSON

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Dear Sir:

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

Very truly yours,


A. L. PORTER, JR.
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC

Aztec OCC

Other Mr. Frank Irby

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

CASE 3419

Date 7/6/66

Hearing Date 9 AM 6/29/66

My recommendations for an order in the above numbered cases are as follows:
DSN @ SF

Enter an order authorizing B.M. Jackson to institute a water flood project in the Pearall Queen Pool, Lea Co, by the injection of water into her Federal Well No 2 located 1650' FNL & 990' FEL of Sec 4 Twp 18S Rge 32E. Although applicant's one producing well on the subject lease is not what might commonly be regarded as a "stripper" well this acreage affords an active water flood project which is to the north and west, and in order to protect correlative rights, applicant should be permitted to commence flooding operations at this time. will not cause waste

Jackson



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, NEW MEXICO 87501

June 20, 1966

66 JUN 21 AM 7 2

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

Dear Mr. Porter:

Reference is made to the application of B. M. Jackson which seeks authority from the Commission to expand the Pearsall Pool Waterflood Project to include the S $\frac{1}{2}$ of the NE $\frac{1}{4}$ of Sec. 4, T. 18 S., R. 32 E., and to convert B. M. Jackson No. 2 well located in the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ to water injection. It appears, from the statements in the application and the schematic diagram of the proposed injection well, that no threat of contamination to the fresh waters which may exist in the area should occur. Therefore, this office offers no objection to the granting of the application, provided the well is completed and operated in the manner indicated by the application and schematic diagram.

FEI/ma
cc-B. M. Jackson
F. H. Hennighausen

Yours truly,

S. E. Reynolds
State Engineer

By: *Frank E. Isby*
Frank E. Isby
Chief
Water Rights Div.

Docket No. 16-66

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 29, 1966

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or
Elvis A. Utz, Alternate Examiner:

- CASE 3418: Application of Ashmun & Hilliard for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the approval of the dual completion (conventional) of its J. E. Stokes Well No. 1, located in Unit G of Section 26, Township 16 South, Range 35 East, Lea County, New Mexico, to produce oil from the Wolfcamp and Pennsylvanian formations, Shoe Bar Field, through parallel strings of tubing.
- CASE 3419: Application of B. M. Jackson for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation through one well located in Unit H of Section 4, Township 18 South, Range 32 East, Pearsall Queen Pool, Lea County, New Mexico.
- CASE 3420: Application of Standard Oil Company of Texas for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well at an unorthodox location 1650 feet from the North line and 990 feet from the East line of Section 15, Township 18 South, Range 26 East, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico.
- CASE 3421: Application of Hanson Oil Company for an exception to Commission Order No. R-111-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the potash-oil area casing and cementing rules as set forth in Commission Order No. R-111-A. Applicant proposes to drill and complete a well in Unit G of Section 21, Township 20 South, Range 34 East, Middle Lynch Yates Pool, Lea County, New Mexico, and to drill, case, and cement said well as follows:
- Drill to 65 feet and circulate cement on 13 3/8-inch casing; deepen to 800 feet and mud-in 10 3/4-inch casing; deepen to 1600 feet and mud-in 8 5/8-inch casing; drill into the Seven Rivers formation and back 5 1/2-inch casing with at least 25 sacks of cement; drill into and test the Seven Rivers pay. If production is obtained, pull the 10 3/4-inch and 8 5/8-inch casing and cement 5 1/2-inch casing to surface. (Note: All depths are approximate.) The well would be plugged and abandoned in accordance with Commission Order No. R-111-A.
- CASE 3422: Application of Pan American Petroleum Corporation for creation of a new pool, special pool rules and four non-standard proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Gallup production discovered by its Gallegos Canyon Unit Well No. 250 located in Unit N of Section 14, Township 28 North,

- 2 -

June 29, 1966, Examiner Hearing

CASE 3422 Continued:

Range 12 West, San Juan County, New Mexico, and for the promulgation of special pool rules therefor, including a provision for 160-acre proration units and specified well locations. Applicant further seeks the approval of four non-standard proration units as follows in Township 28 North, Range 12 West:

A 164.44-acre unit comprising lots 2, 3, and 4 and the S/2 SW/4 of Section 9;

A 176.14-acre unit comprising lot 1 and the S/2 SE/4 of Section 9 and lot 4 and the SW/4 SW/4 of Section 10;

A 163.29-acre unit comprising lots 1, 2, and 3 and the SW/4 SE/4 and SE/4 SW/4 of Section 10;

A 175.14-acre unit comprising the SE/4 SE/4 of Section 10 and the S/2 SW/4 and lots 3 and 4 of Section 11.

CASE 3423: Application of Pan American Petroleum Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Seven Rivers Reef formation, Scarborough Yates-Seven Rivers Pool through the open hole interval from 3029 to 3080 feet in its C. M. Farnsworth "B" Well No. 9, located in Unit N of Section 7, Township 26 South, Range 37 East, Lea County, New Mexico.

Office: RIVERSIDE 8-1607

MAILED
JUL 5 4 17 PM '66

B. M. JACKSON
2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS
May 20, 1966

RESIDENCE: EM 3-3215

Class 3419

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

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

We have no objection to B. M. Jackson converting her Federal #2 well located in the SW/4 NE/4 Section 4, Township 18 South, Range 32 East, Lea County, New Mexico, to a water injection well in an extension of the subject unit.


Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:afm

APPROVED:

Reading & Bates, Inc.
1101 Philtower Building
Tulsa, Oklahoma

By 
Date July, 1, 1966

B. M. JACKSON
2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

May 20, 1966

Office: RIVERSIDE 8-1607

RESIDENCE: EM 3-8215

MAILED
OFFICE

61 AM 8 19
66 MAY 31

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

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

In accordance with Rules 701 (B) and 701 (E) of the New Mexico Rules and Regulations, enclosed is the following information in support of my request to convert a well on my Federal Lease to water injection status:

- (1) Application for Order Authorizing Waterflood.
- (2) Plat showing proposed injection well and location of all other wells within a two-mile radius.
- (3) Log on the proposed injection well.
- (4) Plat showing lease boundaries.
- (5) Diagrammatic sketch of the proposed injection well casing program.
- (6) Waterflood application data sheet showing all pertinent information.
- (7) Copy of a letter to the State Engineer transmitting a copy of the application requesting his approval.
- (8) Copy of letters to offset operators requesting waivers of no objection and indicating that a copy of the application was transmitted to them.
- (9) Lease Production Record.

The proposed injection well is my Federal Well #2.

DOCKET MAILED

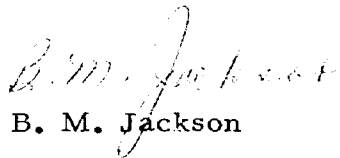
Date: _____

May 20, 1966

The proposed injection well will be completed for injection purposes with injection downhole through tubing and packer set immediately above the pay zone in the production casing. Fresh water purchased from the Pearsall Queen Sand Unit and produced water will be injected.

Five copies of the information set out above are being sent to you. Will you please forward two copies to the United States Geological Survey at Roswell, New Mexico.

Yours very truly,


B. M. Jackson

BMJ:afm

BEFORE THE OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

31 AH 8 16
15 May

IN THE MATTER OF THE APPLICATION OF)
B. M. JACKSON FOR AN ORDER AUTHORIZING)
THE EXPANSION OF THE PEARSALL POOL)
WATERFLOOD PROJECT TO INCLUDE THE)
S/2 NE/4 SECTION 4, TOWNSHIP 18 SOUTH,)
RANGE 32 EAST, LEA COUNTY, NEW)
MEXICO, AND PROVIDING FOR PROCEDURES)
FOR SUCH EXPANSION)

NO. 1000

APPLICATION

COMES NOW Applicant, B. M. Jackson, and states:

(1) That she is the owner and operator of the leasehold rights under the S/2 NE/4 of Section 4, Township 18 South, Range 32 East, located in the Pearsall Pool, and that said tract is immediately adjacent to and offsets the Anadarko Production Company Pearsall Queen Sand Unit Waterflood Project in the Pearsall Pool heretofore authorized by this commission.

(2) The presently developed area of the Anadarko Production Company's Pearsall Queen Sand Unit Waterflood Project has established the feasibility of waterflooding the Queen formation in said pool and has further established that such flooding will result in increased ultimate recovery of oil and will, therefore, prevent waste.

(3) That the Applicant has entered into a cooperative waterflood agreement with Anadarko Production Company whereby the waterflood project area will be expanded to include the S/2 NE/4 of Section 4, Township 18 South, Range 32 East. That Applicant's No. 2 well located in the SW/4 NE/4 will be an injection well, and Applicant proposes to produce from its No. 1 well located in the SW/4 NE/4.


(4) That the entire area now located in the Anadarko Pearsall Queen Sand Unit Waterflood Project by Orders Nos. R-2672, and WFX 225 is controlled by the provisions of Rule 701-E, and this application involves an expansion of an existing waterflood project and should be authorized to operate under Rule 701-E in a likewise manner.

WHEREFORE, Applicant requests the Commission to set this matter down for hearing before an examiner at an early date, publish notices required by law and, after hearing, to issue its Order:

- (1) Expanding the limits of the Pearsall Pool Waterflood Project to include the S/2 NE/4 of Section 4, Township 18 South, Range 32 East, Lea County, New Mexico.
- (2) Establish rules for the expansion of the flood within said area.
- (3) Providing for allowables for the area in a like manner as such allowables are now permitted in the remaining portion of the Pearsall Pool Waterflood Project.

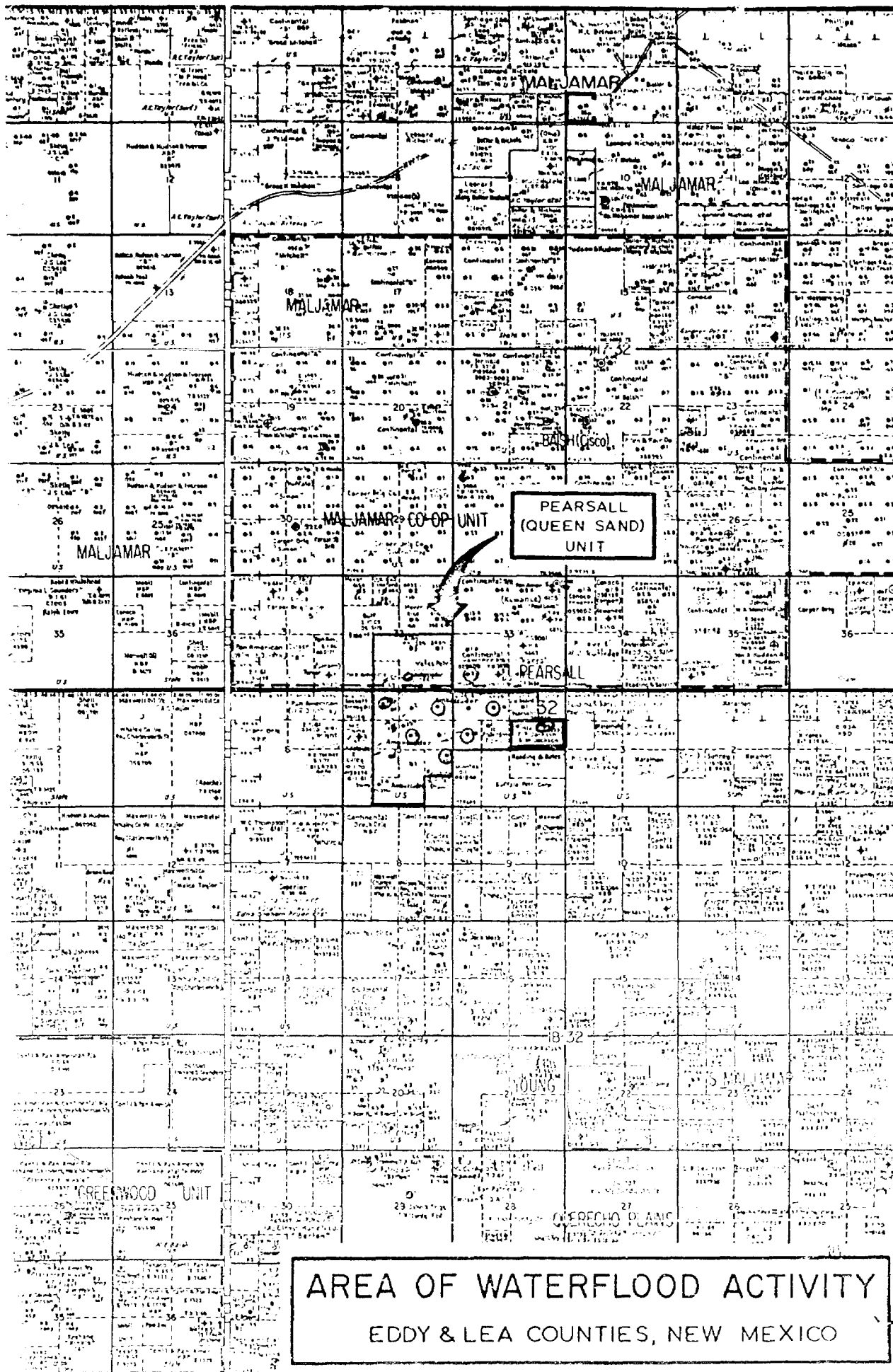
Respectfully submitted,

B. M. JACKSON



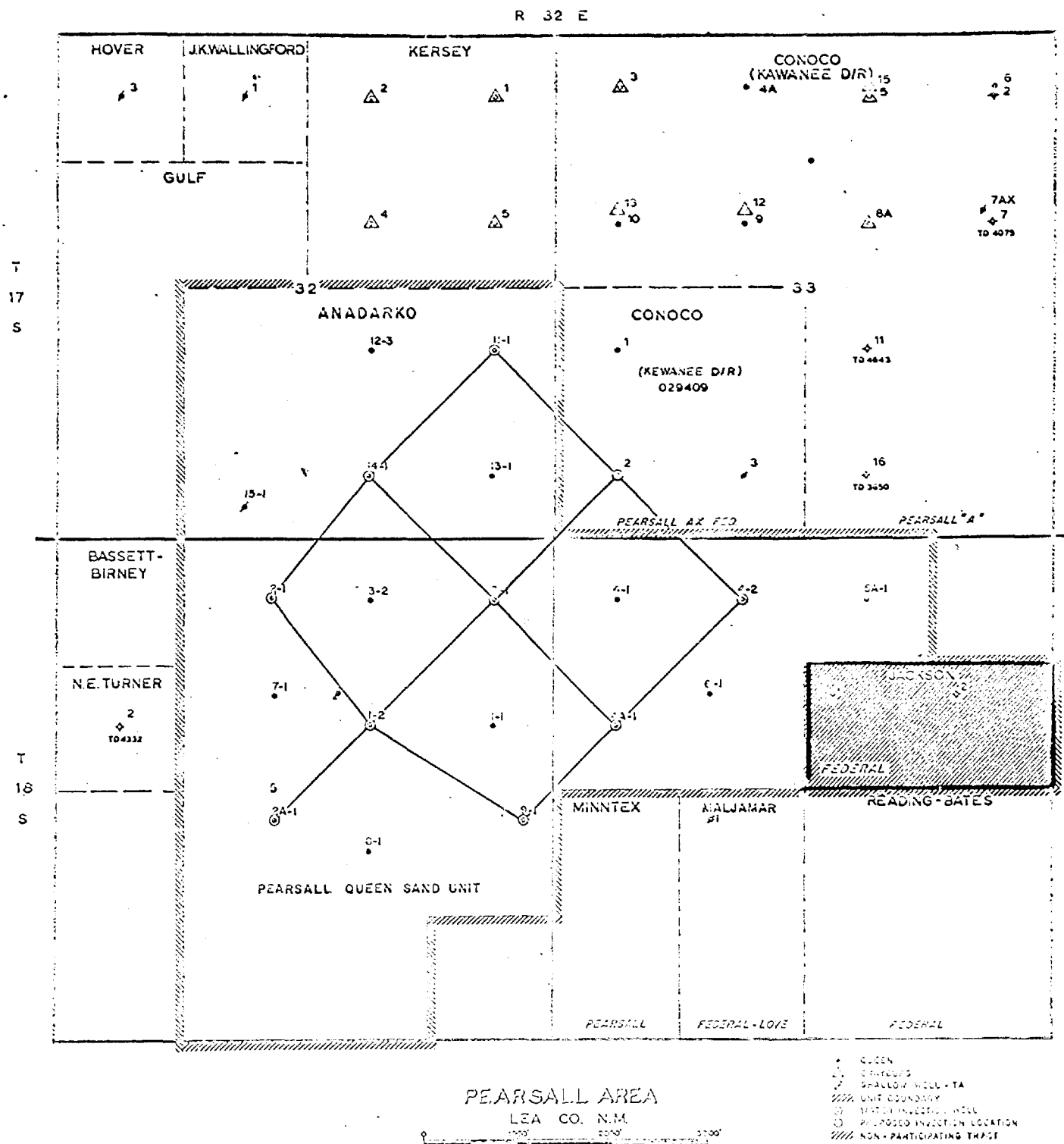
B. M. Jackson
2035 Republic National Bank Building
Dallas, Texas 75201

Plat showing Injection Well and all other wells within a two-mile radius.



B. M. JACKSON

B. M. JACKSON



Plat Showing Lease Boundaries.

NEW MEXICO OIL AND GAS COMMISSION
WATERFLOOD APPLICATION DATA

FIELD PEARSALL COUNTY Lea
OPERATOR B. M. Jackson Date 5-20-66
LEASE Federal
RESERVOIR Queen Discovery Date January 1940

I. RESERVOIR AND FLUID CHARACTERISTICS

A. Information on Entire Reservoir

- (1) Name of Formation Queen Sand.
- (2) Estimated Productive Area of Entire Reservoir 80 acres.
- (3) Composition (Sand, Limestone, Dolomite, etc.) Sand.
- (4) Type of Structure Stratigraphic.
(Include cross-section and structure maps)
- (5) Type Drive During Primary Production Solution Gas.
- (6) Original Reservoir Pressure Estimated 850 PSI.
- (7) Was Gas Cap Present Originally? No . At Present No .

B. Information on Proposed Project Area

(Include Plat of Lease (s) to be Flooded, Showing Producing Wells, Proposed Injection Wells, and Offset Wells).

- (1) Number of Productive Acres in Lease (s) to be Flooded 60.
- (2) Average Depth to Top of Pay (Feet) 3,650.
- (3) Average Effective Pay Thickness (Feet) 12.
- (4) Average Porosity (%) 11.
- (5) Average Horizontal Permeability (Mds.) 15 Range 10-60.
- (6) Connate Water Content (% of Pore Space) 32.
- (7) Gravity of Oil (API) 36 Viscosity Unknown.

II. PRIMARY PRODUCTION HISTORY

- (1) Date First Well Completed on Lease (s) February 8, 1961.
- (2) Oil, Gas, Water Production by Months since Discovery. (Graphically as Well as in Tabular Form)
- (3) State of Depletion of Project Area Stripper.
- (4) Number of Producing Wells on each Lease in Project Area 1.
- (5) Average Daily Oil Production per Well at Present Time 44.
- (6) Cumulative Oil Production to Date from Lease (s) 66,778.

III. RESULTS - EXPECTED

- (1) Estimated Original Oil in Place (Bbls.) 420,000.
- (2) Estimated Saturation at Present Time (% of Pore Space) 60.
- (3) Estimated Residual Oil Saturation at Abandonment 33.
- (4) Estimated Ultimate Additional Oil that will be recovered as a direct Result of Injection (Bbls.) 60,000.

IV. INJECTION

- (1) Source of Injected Water (Formation, Depths) Commercial Water Company.
- (2) Fresh or Salt Water Fresh.
- (3) Flood Pattern and Spacing Pattern.
- (4) Initial Injection Pressure to be Used (PSI) 700.
- (5) Estimated Initial Per Well Rate of Injection (Bbls.) 250.
- (6) List Complete Injection Well Data on reverse side of this sheet.

INJECTION WELL DATA

Well #2

Surface Casing:

Size: 8 5/8"
Length: 245'
Sxs. Cement 200

Production Casing:

Size: 4 1/2"
Length: 3822'
Sxs. Cement 130

Tubing:

Length: 3,650
Packer Depth: 3,630

Injection:

Depth: 3,700
Thru casing or
tubing Tubing

B. M. JACKSON
2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

OFFICE: RIVERSIDE 8-1607

May 20, 1966

RESIDENCE: EM 3-3215

State Engineer
P. O. Box 1079
Santa Fe, New Mexico

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Dear Sir:

Enclosed is an application to expand the subject waterflood.

As stated in the application, the water to be injected will be a combination of fresh water purchased from a commercial water supplier and produced water. This water will be injected through the tubing and packer which will be set immediately above the pay zone in the production casing.

If you have no objection to this application, please notify the Commission at your earliest convenience.

Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:afm

B. M. JACKSON

2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

May 20, 1966

OFFICE: RIVERIDE 8-1007

RESIDENCE: EM 3-3215

Beard Oil Company
Classen Building
2000 Classen Boulevard
Oklahoma City, Oklahoma

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

Enclosed is a copy of an application to expand the subject water-flood project as indicated on the attached exhibits.

It is required by the New Mexico Commission that waivers of objection be obtained from all offset operators; therefore, if you have no objection to my converting my Federal #2 well to injection, please approve three copies of the enclosed waiver letter. Send two copies to the Commission at Santa Fe and return one copy to me.

Thank you.

Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:afm

B. M. JACKSON
2635 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

May 20, 1966

OFFICE: RIVERSIDE 8-1607

RESIDENCE: EM 3-3215

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

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

We have no objection to B. M. Jackson converting her Federal #2 well located in the SW/4 NE/4 Section 4, Township 18 South, Range 32 East, Lea County, New Mexico, to a water injection well in an extension of the subject unit.

Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:aim

APPROVED:

Beard Oil Company
Classen Building
2000 Classen Boulevard
Oklahoma City, Oklahoma

By _____

Date _____

B. M. JACKSON
2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

OFFICE: RIVERSIDE 8-1007

May 20, 1966

RESIDENCE: EM 3-3215

Maljamar Petroleum Products, Inc.
Shell Building
Tulsa, Oklahoma

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

Enclosed is a copy of an application to expand the subject water-flood project as indicated on the attached exhibits.

It is required by the New Mexico Commission that waivers of objection be obtained from all offset operators; therefore, if you have no objection to my converting my Federal #2 well to injection, please approve three copies of the enclosed waiver letter. Send two copies to the Commission at Santa Fe and return one copy to me.

Thank you.

Yours very truly,



B. M. Jackson

BMJ:afm

B. M. JACKSON
2635 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

Office: RIVERSIDE S-1607

May 20, 1966

Residence: EM 3-3215

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

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

We have no objection to B. M. Jackson converting her Federal #2 well located in the SW/4 NE/4 Section 4, Township 18 South, Range 32 East, Lea County, New Mexico, to a water injection well in an extension of the subject unit.

Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:afm

APPROVED:

Maljamar Petroleum Products, Inc.
Shell Building
Tulsa, Oklahoma

By _____

Date _____

B. M. JACKSON

2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

OFFICE: RIVERSIDE 8-1607

May 20, 1966

RESIDENCE: EM 3-3215

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

Enclosed is a copy of an application to expand the subject water-flood project as indicated on the attached exhibits.

It is required by the New Mexico Commission that waivers of objection be obtained from all offset operators; therefore, if you have no objection to my converting my Federal #2 well to injection, please approve three copies of the enclosed waiver letter. Send two copies to the Commission at Santa Fe and return one copy to me.

Thank you.

Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:afm

B. M. JACKSON
2032 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

OFFICE MEMORANDUM 3-1007

May 20, 1966

REFERENCE: DM 3-3215

New Mexico Oil Conservation Commission
P. O. Box 571
Santa Fe, New Mexico

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

We have no objection to B. M. Jackson converting her Federal #2 well located in the SW/4 NE/4 Section 4, Township 18 South, Range 32 East, Lea County, New Mexico to a water injection well in an extension of the subject unit.

Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:afm

APPROVED:

Waco Production Company
P. O. Box 9317
Fort Worth, Texas 76107

By _____

Date _____

B. M. JACKSON
2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

Office: Riverside 8-1607

May 20, 1966

Residence: EM 3-3213

Reading & Bates, Inc.
1101 Philtower Building
Tulsa, Oklahoma

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

Enclosed is a copy of an application to expand the subject waterflood project as indicated on the attached exhibits.

It is required by the New Mexico Commission that waivers of objection be obtained from all offset operators; therefore, if you have no objection to my converting my Federal #2 well to injection, please approve three copies of the enclosed waiver letter. Send two copies to the Commission at Santa Fe and return one copy to me.

Thank you.

Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:afm

D. M. JACKSON
2025 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

Office: RIVERSIDE 8-1607

May 20, 1966

REFERENCE: EM 3-3215

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

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

We have no objection to D. M. Jackson converting her Federal #2 well located in the SW/4 NE/4 Section 4, Township 18 South, Range 32 East, Lea County, New Mexico, to a water injection well in an extension of the subject unit.

Yours very truly,

B. M. Jackson

B. M. Jackson

BMS:afm

APPROVED:

Reading & Bates, Inc.
1101 Philtower Building
Tulsa, Oklahoma

By _____

Date _____

B. M. JACKSON
FEDERAL LEASE

Production

<u>Month</u>	<u>Barrels</u>
1961	1,000
February	694
March	1,121
April	1,138
May	989
June	1,147
July	950
August	945
September	1,231
October	1,033
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1962	1,040
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October	601
November	1,116
December	
1963	1,278
January	1,076
February	1,206
March	1,079
April	1,170
May	956
June	943
July	1,255
August	1,172
September	1,252
October	1,059
November	1,213
December	

B. M. JACKSON

FEDERAL LEASE

Production (Continued)

<u>Month</u>	<u>Barrels</u>
1964	
January	1,218
February	1,136
March	944
April	1,160
May	1,171
June	1,098
July	1,047
August	1,058
September	881
October	1,363
November	1,148
December	1,076
1965	
January	1,244
February	1,088
March	1,244
April	967
May	1,129
June	1,122
July	1,074
August	1,184
September	1,218
October	1,180
November	1,177
December	1,192
1966	
January	1,311
February	1,114
March	1,241
<hr/>	
TOTAL	66,778

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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PAGE 1

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 29, 1966

EXAMINER HEARING

IN THE MATTER OF:

Application of B. M. Jackson for a
waterflood project, Lea County,
New Mexico.

Case No. 3419

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 3419.

MR. HATCH: Application of B. M. Jackson for a waterflood project, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin appearing for the applicant. I have one witness.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 through 7 were marked for identification.)

F. B. JACKSON, JR.

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A F. B. Jackson, Junior. I live in Dallas County.

Q What business are you engaged in?

A Oil and gas producing.

Q Do you have any connection with B. M. Jackson in this case?

A Yes, I'm the manager for the owner and operator.

Q Are you familiar with the application of B. M. Jackson in Case 3419?

A Yes, I am.

Q Would you state briefly what's proposed -- Before

we get to that, have you ever testified before this Oil Conservation Commission?

A No, I have not.

Q Mr. Jackson, for the benefit of the Examiner, would you outline your background and experience in the oil business?

A Well, I have been engaged in the producing of oil and gas and the casinghead gasoline business and refining business my entire lifetime.

Q Where have you worked during that period of time?

A In Oklahoma and Texas.

Q Have you had some experience in New Mexico, too?

A Just slightly in producing, Lea County.

Q Have you had any experience in the operation of waterflood projects?

A I have two projects, one in Washington County, Oklahoma and one in Navarro County, Texas in operation.

Q Are they under your direct supervision?

A They are.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. NUTTER: They are.

Q (By Mr. Kellahin) Mr. Jackson, what is proposed by B. M. Jackson in Case 3419?



A Well, to extend the project now being conducted and the waterflood operation now being conducted by Anadarko Production Company in the Pearsall-Queen Field.

Q In other words, there is a waterflood in the vicinity of the proposed waterflood project?

A There is an offset.

Q Would you refer to Exhibit No. 1 and state what is shown on there?

A It shows the area of what they call the Pearsall Sand Unit, which is in the old Pearsall Field located in Section 3 and Section 4, particularly this lease of B. M. Jackson's located in Section 4.

Q That's in the Northwest Quarter of the section, is that right?

A In the South Half of the Northwest Quarter of Section 4, 18, 32.

Q Does the map show the, you say the Pearsall Sand Queen Unit, is that the Anadarko project?

A Of the Anadarko project, yes.

Q Referring to what has been marked as Exhibit 2, does that show it in a little more detail as to the immediate area?

A It does, and gives the location of the proposed project asked for by B. M. Jackson.

Q On the B. M. Jackson properties, the plat shows two wells, is that correct?

A It is correct.

Q What is the status of those wells at the present time?

A The No. 1 well is producing out of the Queen Sand and the No. 2 well is a dry hole.

Q Now, is it drilled to the Queen formation?

A It is drilled to and perforated in the Queen Sand.

Q It has not been plugged and abandoned?

A No, it has not.

Q Is that the well that you propose to inject water into?

A It is.

Q Does the plat also show the present injection wells being used by Anadarko?

A It does in this Exhibit 2 here.

Q Have you checked on the status of the Anadarko waterflood project?

A I have.

Q Has Anadarko received a response from its water injection?

A It has, it has been under way for about a year.

Q What wells have received a response, would you

state?

A Well, all of the wells including the two that offset this lease of B. M. Jackson.

Q Has the B. M. Jackson well closest to the Anadarko project received a response?

A It has not, no.

Q Is it your purpose to inject water in order to protect yourself from the effects of the waterflood project being carried on by Anadarko?

A It is our purpose to merely protect ourselves.

Q In other words, this would be in the nature of a line agreement to cooperate with the Anadarko flood, is that correct?

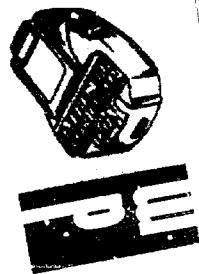
A To cooperate with them, that's correct.

Q Are they in agreement with your proposed program?

A They are, and we have an approval of theirs.

Q Referring to what has been marked Exhibit No. 3, state what that exhibit shows.

A Well, this diagram is of the injection wells. It shows where the casing is set and where we propose to set the packer with two-inch tubing and inject the water below this packer, setting in the casing which will in turn go in through the perforation into the formation, which will be the Queen.



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Q You will inject through perforations and you'll inject down tubing and under a packer, is this correct?

A That is correct.

Q What is the condition of your casing in this well?

A Well, it's cemented and perforated.

Q Did B. M. Jackson drill the well?

A Yes, it was drilled by B. M. Jackson.

Q Is it new casing?

A New, yes.

Q Is that the normal type of completion for injection well's utilized in this area?

A It is. It's through the tubing and packer.

Q Would you use a plastic-lined tubing or not?

A It's possible that we will. Either cement-lined or plastic-lined.

Q Do you contemplate using it or do you think it's necessary to use the plastic-coated or cement-lined?

A Well, it wouldn't be at the present time with the fresh water, but eventually we will probably have to get into it.

Q Referring to what has been marked as Exhibit No. 4, would you identify that exhibit?

A Well, this gives you the fluid characteristics of the reservoir of this particular area.

Q Does it also show your source of water to be utilized in this project?

A Yes. The water is coming from the Commercial Water Company, but, of course, our agreement will be through Anadarko. We'll buy water from Anadarko.

Q You are getting it from the same source as Anadarko?

A Same source.

Q Is it a fresh water?

A It is.

Q Would you recircle water once you start producing water?

A Well, as soon as we start producing.

Q At that time what will you do to take care of corrosion if you do not use a line?

A It will have to be filtered and treated.

Q What volume of water do you expect to inject?

A Approximately 250 barrels a day.

Q Do you have enough water for that from your source?

A We have an assurance of it.

Q Referring to what is marked as Exhibit No. 5, will you testify as to that exhibit? I think you can discuss 6 along with it.

A It's cumulative production on this particular well,



this No. 1 well. It shows the production of the well by months from the inception.

Q Exhibit No. 6 is a graphic representation?

A Just a graphic representation.

Q On the basis of Exhibits 5 and 6, would you say that your lease is at a substantial stage of depletion or is it stripper stage?

A Well, no, it hasn't gotten to that point yet.

Q You are familiar, are you not, Mr. Jackson, with the provisions of Rule No. 701 of this Commission which defines a waterflood project as one at a stripper stage?

A Yes, I am, but I feel that we need to go into this for our protection at this time; of course, I would rather it would be two or three years later or when we get into the stripper.

Q You really don't have a choice at this time, is that right?

A That's right.

Q Because of the condition of the pool as a whole, the production of the pool?

A As a whole it is a stripper pool.

Q So it would qualify as a stripper flood?

A Yes.

Q But as to your own individual lease, you have not

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PAGE 10

reached that yet?

A That is correct.

Q Referring to Exhibit No. 7, would you identify that exhibit?

A That's a laterlog with a gamma ray of the No. 2 well that we propose to put the water in.

Q Mr. Jackson, did you say you had a letter from Anadarko?

A Yes, I do.

Q Would you produce that, please?

A One from Anadarko and also one from Beard. They both have offset wells.

(Whereupon, Applicant's Exhibits Nos. 8 and 9 were marked for identification.)

Q I'll hand you what have been marked as Exhibits 8 and 9. Will you identify those?

A 8 is a letter written to the Oil Conservation Commission and B. M. Jackson with reference to the expansion of the Pearsall Pool waterflood project, Lea County. It says here, "Gentlemen: We have no objection to B. M. Jackson converting her Federal No. 2 well located in 4, Township 18, Range 32 East to a water injection well and extension of subject unit. Signed by Beard Oil Company, W. M. Beard". This was dated May 31, 1966.

The other letter is the same only it's signed by Anadarko Production Company, Fort Worth, E. A. Riley, May 31, 1966.

Q Was the State Engineer of the State of New Mexico notified of your application and furnished with copies of your exhibits?

A He was, and furnished with all the copies.

Q Were Exhibits 1 through 7 prepared by you or under your supervision?

A Under my supervision.

Q And Exhibits 8 and 9 were the letters as you identified them?

A Yes, sir.

MR. KELLAHIN: At this time I will offer in evidence Exhibits 1 through 9 inclusive.

MR. NUTTER: Applicant's Exhibits 1 through 9 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 9 were offered and admitted in evidence.)

MR. KELLAHIN: That's all I have on direct examination, Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Jackson, I note that your 4-1/2-inch production



casing is set at 3822. Is this an open hole completion or is this a perforated interval?

A No, it's through the Queen and perforated at the Queen Sand.

Q What are the perforated intervals there, please?

A It's about 3787 to 94.

Q 3787 to 3894?

A Yes.

Q That string of pipe was set with 130 sacks of cement, do you have the top of the cement on that?

A I do not have it available here with me.

Q Could you furnish us with the top of the cement?

A Yes.

Q Do you know what size hole was drilled?

A It was 7-7/8ths hole.

Q Now, these letters from Anadarko and from Beard say they have no objection to conversion of the well to a water injection well and an extension of the subject unit. Now, actually this is not an extension of the unit, this acreage is not committed to the unit?

A No, that's true.

Q It's an extension of the flooding operations?

A Of the operation.

Q That are going on on the unit?



A Yes.

Q But this lease continues to stand on its own?

A Yes.

Q And is completely separate from the unitized operation?

A Absolutely, right.

Q Mr. Jackson, it is my understanding that it had been Anadarko's intention to drill and place on water injection a well which was located in the extreme southeast corner of the Northwest Quarter of the Northeast Quarter of Section 4. I think they proposed a well some 25 feet out of that corner.

A That's true.

Q Now that you are proposing to put your No. 2 well on water injection they're withdrawing their application for the other well?

A That's true.

Q But the line agreement that you have with them continues to call for a well to be drilled almost in the direct center of the section, 25 feet out of the center?

A That is true, unless they are successful in making arrangements with Maljamar down to the south. There's a well there and if they can get that they won't have to drill it. If they can't, they feel they would have to drill a well



right in the center of the section.

Q Which would offset your least by 25 feet, but it would flood your well from the south-southwest?

A That's right.

MR. NUTTER: Are there any other questions of Mr. Jackson? He may be excused.

(Witness excused.)

MR. NUTTER: If you can give us the top of that cement as soon as possible.

MR. JACKSON: I will have it sent in.

MR. NUTTER: Do you have anything further in this case, Mr. Kellahin?

MR. KELLAHIN: That's all I have.

MR. NUTTER: Is there anything further?

MR. HATCH: I have a letter from the State of New Mexico, State Engineer's Office dated June 20, 1966. "Dear Mr. Porter; Reference is made to the application of B. M. Jackson which seeks authority from the Commission to extend Pearsall Pool waterflood project to include the South one-half of the Northeast one-quarter of Section 4, Township 18 South, Range 32 East and to convert the B. M. Jackson No. 2 well located on the Southwest one-quarter to the Northeast one-quarter to water injection. It appears from the statements and application and schematic diagram that no threat of

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PAGE 15

contamination to fresh waters should occur. Therefore, this office offers no objection to the granting of the application provided the well is completed in the manner indicated in the application and schematic diagram. Signed S. E. Reynolds by Frank E. Irby."

Also a telegram dated June 27, 1966 from Anadarko, "Attention Mr. Dan Nutter. Anadarko Production Company has operated the Pearsall-Queen Sand Unit, Lea County, New Mexico, approves the application of B. M. Jackson to enter into a cooperative waterflood with Anadarko as set out in Case 3419. M. E. Schall, Assistant to the Superintendent, Secondary Recovery Division."

MR. NUTTER: Then we also have the copies of the letters from Beard and from Anadarko. Is there anything further in Case 3419? If there's nothing further, we'll take the case under advisement and call a fifteen-minute recess.

I N D E X

<u>WITNESS</u>		<u>PAGE</u>
F. B. JACKSON, JR.		
Direct Examination by Mr. Kellahin		2
Cross Examination by Mr. Nutter		11
 <u>EXHIBIT</u>	 <u>MARKED</u>	 <u>OFFERED AND ADMITTED</u>
Applicant's 1 through 7	2	11
Applicant's 8 and 9	10	11

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PAGE 17

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) SS

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 6th day of July, 1966.

Ada Dearnley
NOTARY PUBLIC

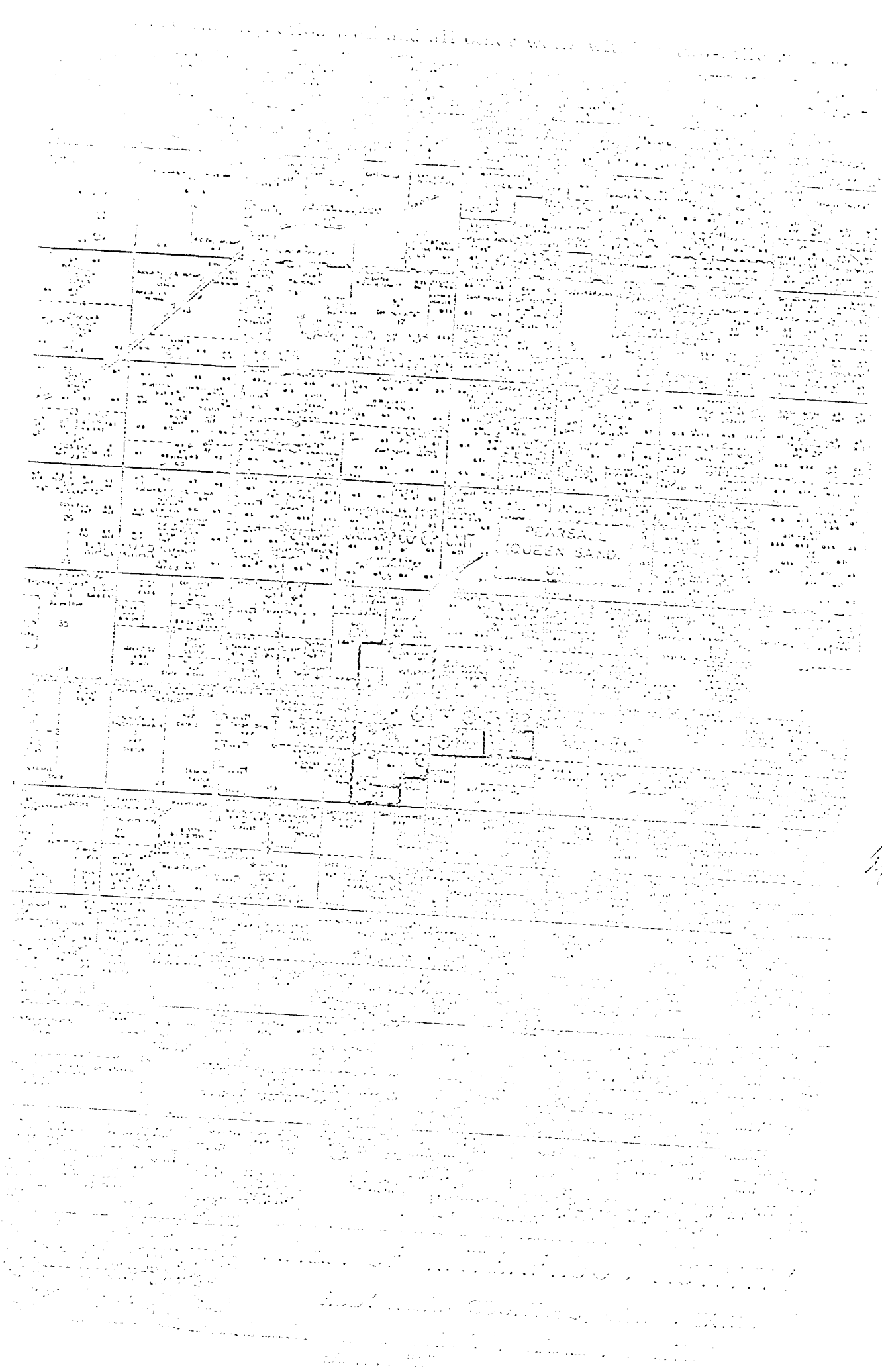
My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is a correct record of the proceedings in the hearing held on July 24, 1966.
6/29 24/9

Ada Dearnley

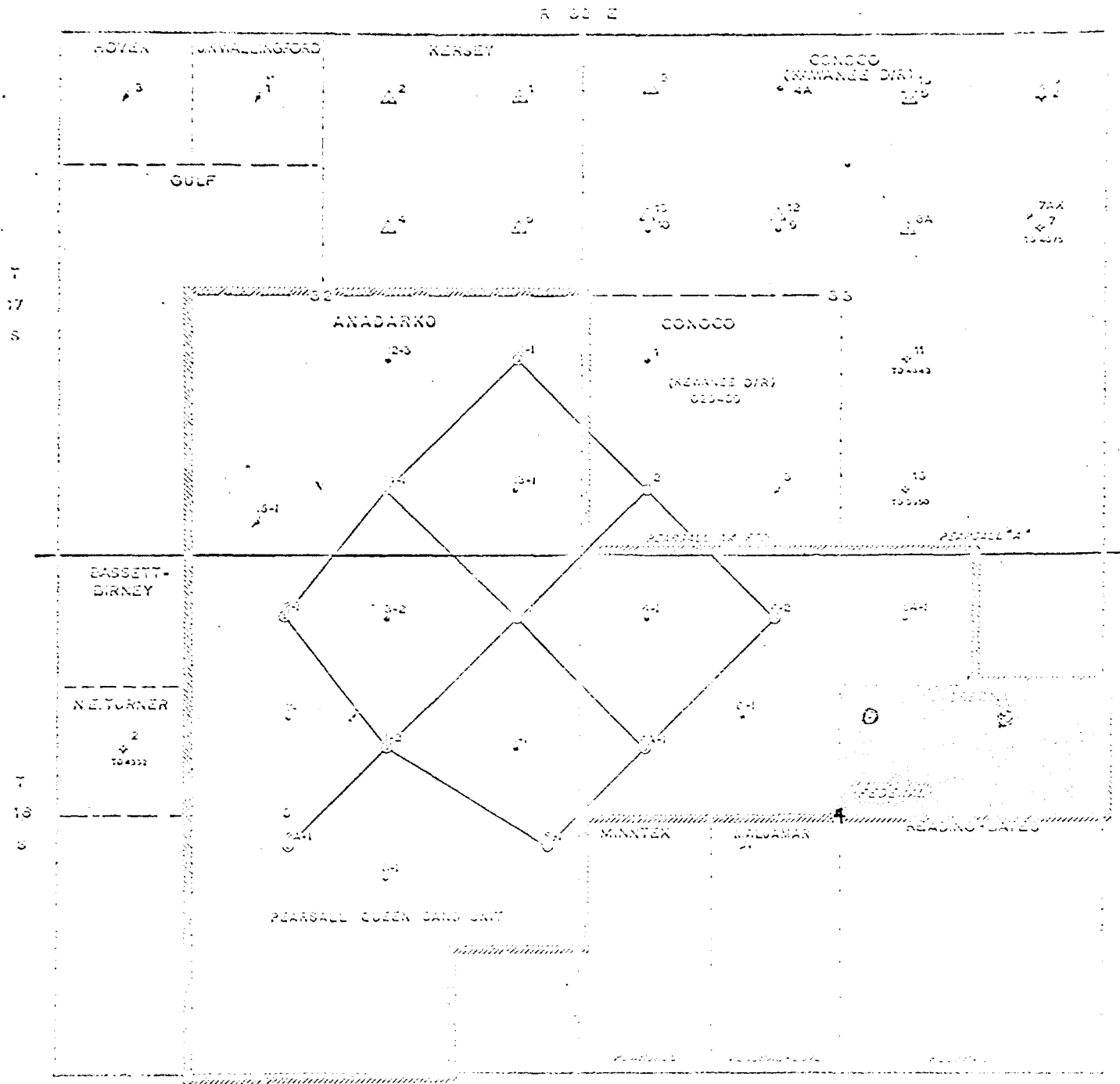
Notary Public for the State of New Mexico



B. M. JACKSON

4/1/11

B. M. JACKSON



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Case EXHIBIT NO. 2
CASE NO. 347

PEARSBALL AREA

SEE CO. 104

SEE CO. 104

SEE CO. 104

SEE CO. 104

SEE CO. 104

SEE CO. 104

SEE CO. 104

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See Showing Lease Boundaries.

L. M. JACKSON

General Notes:
201-2

Surface Csg.
Size: 8 5/8"
Amt.: 245'
Sxs cement:
200

1st Csg.
Amt.: 1300'

Packer Depth:
3630'

Prod. Csg.:
Size: 4 1/2"
Amt.: 3522'
Sxs cement:
200

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION

EXHIBIT NO. 3
DATE 9-4-41

Schematic Diagram of Injection Well

NEW MEXICO OIL AND GAS COMMISSION
WATER FLOOD APPLICATION DATA

FIELD PEARSALE COUNTY Lea
OPERATOR B. M. Jackson Date 5-20-66
LEASE Federal
RESERVOIR Queen Discovery Date January 1940

I. RESERVOIR AND FLUID CHARACTERISTICS

A. Information on Entire Reservoir

- (1) Name of Formation Queen Sand
- (2) Estimated Productive Area of Entire Reservoir 80 acres
- (3) Composition (Sand, Limestone, Dolomite, etc.) Sand
- (4) Type of Structure Stratigraphic
(Include cross-section and structure maps)
- (5) Type Drive During Primary Production Solution Gas
- (6) Original Reservoir Pressure Estimated 850 PSI
- (7) Was Gas Cap Present Originally? No At Present No

B. Information on Proposed Project Area

(Include Plat of Lease (s) to be Flooded, Showing Producing Wells, Proposed Injection Wells, and Offset Wells).

- (1) Number of Productive Acres in Lease (s) to be Flooded 60
- (2) Average Depth to Top of Pay (Feet) 3,650
- (3) Average Effective Pay Thickness (Feet) 12
- (4) Average Porosity (%) 11
- (5) Average Horizontal Permeability (Mds.) 15 Range 10-60
- (6) Connate Water Content (% of Pore Space) 32
- (7) Gravity of Oil (API) 36 Viscosity Unknown

II. PRIMARY PRODUCTION HISTORY

- (1) Date First Well Completed on Lease (s) February 8, 1961
- (2) Oil, Gas, Water Production by Months since Discovery. (Include quantity of Well as in Tabular Form)
- (3) State of Depletion of Project Area Stripper
- (4) Number of Producing Wells on each Lease in Project Area 1
- (5) Average Daily Oil Production per Well at Present Time 11
- (6) Cumulative Oil Production to Date from Lease (s) 66,716

III. RESULTS - EXPECTED

- (1) Estimated Original Oil in Place (Bbls.) 420,000
- (2) Estimated Saturation at Present Time (% of Pore Space) 10
- (3) Estimated Residual Oil Saturation at Abandonment 50
- (4) Estimated Ultimate Additional Oil that will be recovered as a direct Result of Injection (Bbls.) 60,000

17. INJECTION

- (1) Source of Injected Water (formation, Depth) Commercial water 3,000 ft.
- (2) Fresh or Salt Water Fresh
- (3) Flood Pattern and Spacing Pattern
- (4) Initial Injection Pressure to be Used (PSI) 700
- (5) Estimated Initial Per Well Rate of Injection (Bbls.) 250
- (6) List Complete Injection Well Data on reverse side of this sheet.

INJECTION WELL DATA

Well #2

Surface Casing:

Size: 8 5/8"
 Length: 245'
 Sxs. Cement 200

Production Casing:

Size: 4 1/2"
 Length: 3822'
 Sxs. Cement 130

Tubing:

Length: 3,650
 Packer Depth: 3,650

Injection:

Depth: 3,700
 Thru casing or
 tubing tubing

W. H. JACKSON

FEDERAL LEASE

Production

<u>Month</u>	<u>Barrels</u>
1961	
February	1,000
March	654
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BEFORE EXAMINER NUTTE
OIL CONSERVATION COMMISSION
April EXHIBIT NO. 5
CASE NO. 3419

D. M. JACKSON

FEDERAL LEASE

Production (Continued)

<u>Month</u>	<u>Barrels</u>
1964	
January	1,218
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1966	
January	1,111
February	1,114
March	1,241
<hr/>	
TOTAL	36,773

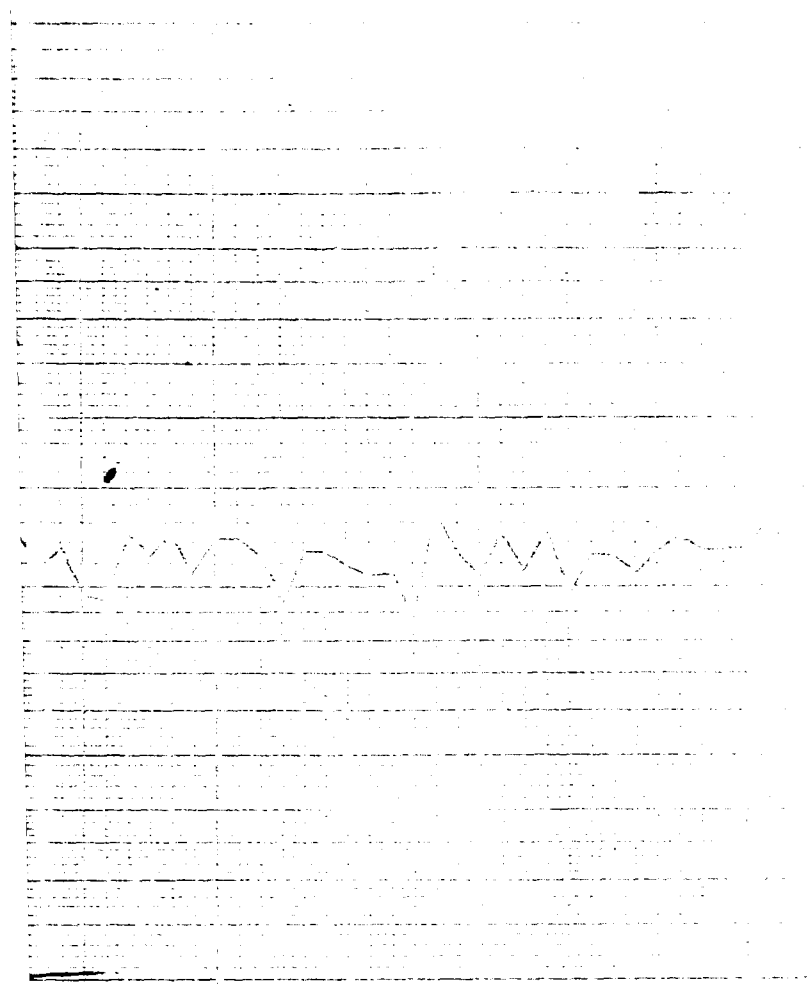
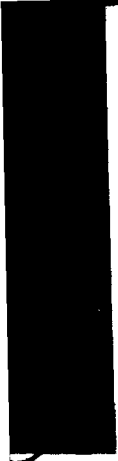
RECORDS PRODUCTION - 1019

BEFORE EXAMINER NUTTE

INTERVIEW COMMISSION

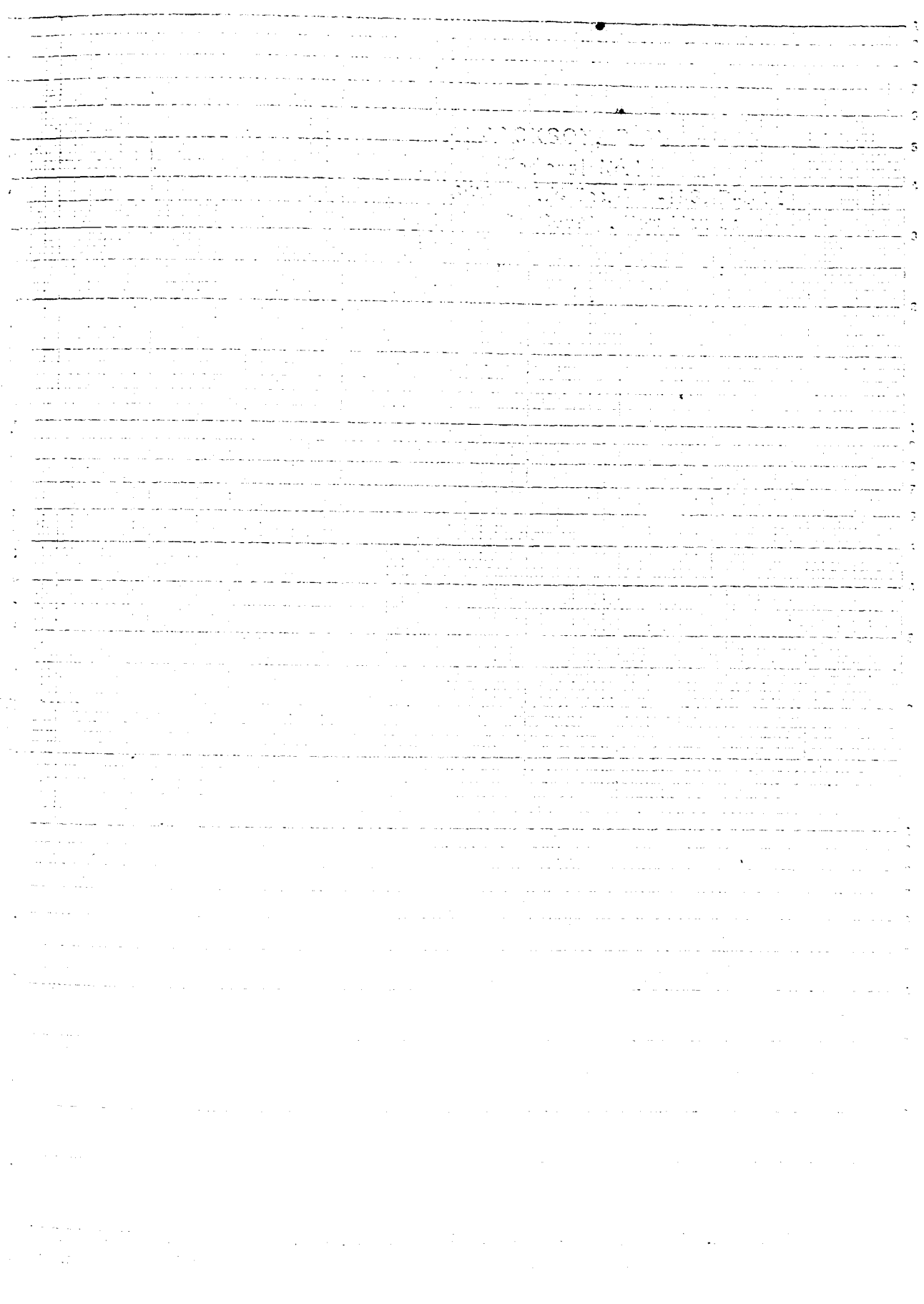
EXHIBIT NO. 6

CASE NO. 3419



ITE

5101



B. M. JACKSON
2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

May 20, 1966

OFFICE: RIVERDALE 8-1007

RESIDENCE: EM 3-3215

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

RE: Expansion of Pearsall Pool Waterflood Project
Lea County, New Mexico

Gentlemen:

We have no objection to B. M. Jackson converting her Federal #2 well located in the SW/4 NE/4 Section 4, Township 18 South, Range 32 East, Lea County, New Mexico, to a water injection well in an extension of the subject unit.

Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:afm

APPROVED:

Beard Oil Company
Classen Building
2000 Classen Boulevard
Oklahoma City, Oklahoma

By *W. M. Beard*

Date *5-31-66*

BEFORE EXAMINER MUTTER	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	<u>8</u>
CASE NO.	<u>34-1-1</u>

Office Revision 8-1007

B. M. JACKSON
2035 REPUBLIC NATIONAL BANK BUILDING
DALLAS, TEXAS

May 20, 1966

Residence: EM 3-3215

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

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Yours very truly,

B. M. Jackson
B. M. Jackson

BMJ:amr

APPROVED:

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

BEFORE EXAMINED MUTTER	
CHL CONSERVATION COMMISSION	EXPIRATION NO. <i>9</i>
CASE NO.	<i>3479</i>

By *[Signature]*
Date *5/24/66*