

CASE 5194: Application of Kersey  
& Company for a waterflood  
project, Eddy County, New Mexico.

CASE No.

5194

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Application,  
Transcripts,  
Small Exhibits

ETC.

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
March 27, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Kersey & Company for  
a waterflood project, Eddy County,  
New Mexico.

Case No.  
5194

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil  
Conservation Commission:

William Carr, Esq.  
Legal Counsel for the  
Commission  
State Land Office Bldg.  
Santa Fe, New Mexico

Applicant pro se.

CASE 5194

Page.....2

I N D E X

E X H I B I T S

Marked

Admitted

Applicant's Exhibits A, B  
and C

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8

MR. NUTTER: We'll call Case 5194.

MR. CARR: Case 5194. Application of Kersey & Company for a waterflood project, Eddy County, New Mexico.

(Whereupon, a discussion was held off the record.)

MR. NUTTER: Would you state your name, please?

MR. KERSEY: Harold Kersey.

MR. NUTTER: Mr. Kersey, are you the Operator of Kersey & Company, the Applicant in this Case?

MR. KERSEY: I am the Operator and Owner.

MR. NUTTER: And you propose to present your own case?

MR. KERSEY: Yes, I wish to present my own case, that's right.

MR. NUTTER: Be sworn, please.

(Witness sworn.)

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

MR. CARR: Would you state your name for the record, please?

MR. KERSEY: Harold Kersey.

MR. CARR: Your occupation?

MR. KERSEY: Oil Operator.

MR. CARR: Mr. Kersey, exactly what is it you seek by the Application filed in this Case?

MR. KERSEY: To inject water into a producing oil well in Section 23, 18-30. It's a one-well flood so that there's only three producing wells in the area and the production has declined to where the primary is of not sufficient importance to continue so we've had it under thought for several years to flood to see whether we could get some production out of the area.

I have three exhibits. The first is Exhibit A which shows the proposed injection well and wells surrounding it.

BY MR. NUTTER: Now, Mr. Kersey, the proposed injection well would be -- is that your Creek Lease?

MR. KERSEY: It's the Creek Lease, that's right.

MR. NUTTER: And that would be Well No. 1, is that correct?

MR. KERSEY: Well No. 1; it's 330 from the north line and it's 1650 from the west line in Section 23.

MR. NUTTER: 330 north and 1650 west, okay.

MR. KERSEY: It is in the upper section of the Grayburg comparable to the Loco Hills Morrow.

MR. NUTTER: Then there is another producing

well on that Lease?

MR. KERSEY: There is another producing well, the No. 2-X which would be 1320 feet south in the next 40.

MR. NUTTER: And then --

MR. KERSEY: (Interrupting) Then the other well in the area is Knox Well which is in Section 14 in the southeast of the southwest quarter.

MR. NUTTER: Then those three wells are the only wells in that immediate area that are producing?

MR. KERSEY: That is right, that's the only three wells in the area.

MR. NUTTER: And they are all producing from this upper section of the Grayburg?

MR. KERSEY: That is right, all from the upper section of the Grayburg. And they're old wells; we drilled the No. 1 in 1939, which is 35 years ago.

MR. NUTTER: Okay, would you proceed to your next exhibit?

MR. KERSEY: Okay, the next is Exhibit E which shows how we propose to complete the well. The well is presently cased with 7 inch casing to 3240 feet, and it was cemented with 100 sacks of cement and 100 sacks of

mud preceding it. Injection will be into an open-hole zone at 3265 to 3279. We propose to set a 7 inch tension packer at approximately 3200 feet injecting through 2-3/8ths cement line tubing and annulus between the tubing and casing will be filled with inhibited water.

MR. NUTTER: What volume of water do you expect to inject?

MR. KERSEY: Approximately 300 barrels per day.

(Continuing) Since this proposed flood is in a potash area and heretofore the potash has been produced by Duval Company and we held up this flood proposal until such time as Duval quit producing potash from the area so Exhibit C is a letter showing that we have the approval of the Duval Corporation to go ahead and proceed with the flood. Of course we will leave the annulus open on the injection so that if there will ever be a packer leak or anything the water would show immediately at the surface and we could take preventive means to correct it.

MR. NUTTER: What's the present production from these wells, Mr. Kersey?

MR. KERSEY: About a barrel and a half a day.

MR. NUTTER: From all three of them?

MR. KERSEY: Each well is making about a barrel



and a half. Now, I'm not exactly sure about the Knox Well because they don't produce it regularly, but we are producing our two wells continuously and they make about a barrel and a half each.

MR. NUTTER: Have any engineering studies been conducted to give an estimate of what you can expect from injection of water?

MR. KERSEY: Yes. We calculate, or our engineering studies, primary production is about 150,000 barrels and we calculated that we could expect to obtain about 75,000 barrels by the conducting of this flood, which would make it economic.

MR. NUTTER: I see. Do you have anything further?

MR. KERSEY: That's all I have. If there is anything else you would like to know I would be happy to try to fill you in.

MR. NUTTER: Now, that is Federal; you have contacted the GS?

MR. KERSEY: Yes, I have contacted the USGS and they told me they would have somebody up here today but apparently they didn't.

MR. NUTTER: I see.

MR. NUTTER: Does anyone have any questions they wish to inquire of Mr. Kersey?

I presume you are offering Exhibits A, B and C?

MR. KERSEY: That's right, A, B and C.

MR. NUTTER: Exhibits A, B and C will be admitted into evidence.

(Whereupon Applicant's Exhibits

A, B and C were admitted into evidence.)

MR. NUTTER: The Witness may be excused.

Does anyone have anything they wish to offer in Case 5194?

We will take the Case under advisement.

STATE OF NEW MEXICO )  
COUNTY OF SANTA FE ) SS.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Richard L. Nye  
RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5194 heard by me on 3/27, 19 74.

[Signature] Examiner  
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0386



## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501

April 16, 1974

I. R. TRUJILLO  
CHAIRMAN  
LAND COMMISSIONER  
ALEX J. ARMJO  
MEMBER  
STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

Mr. Harold Kersey  
Kersey & Company  
Attorneys at Law  
Post Office Box 316  
Artesia, New Mexico 88210

Re: CASE NO. 5194

ORDER NO. R-4761

Applicant:

Kersey & Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

*A. L. Porter, Jr.*

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC X  
Artesia OCC X  
Aztec OCC       

Other State Engineer Office

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. 5194  
Order No. R-4761

APPLICATION OF KERSEY & COMPANY  
FOR A WATERFLOOD PROJECT, EDDY  
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 27, 1974, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 16th day of April, 1974, 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, Kersey & Company, seeks authority to institute a waterflood project in the Leo Pool, by the injection of water into the Grayburg formation through one injection well in Section 23, Township 18 South, Range 30 East, NMPM, Eddy County, New Mexico.

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

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

(5) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(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.

-2-

Case No. 5194  
Order No. R-4761

IT IS THEREFORE ORDERED:

(1) That the applicant, Kersey & Company, is hereby authorized to institute a waterflood project in the Leo Pool, by the injection of water into the Grayburg formation through the following-described well in Section 23, Township 18 South, Range 30 East, NMPM, Eddy County, New Mexico:

<u>WELL NAME</u>	<u>WELL NO.</u>	<u>LOCATION</u>
Kersey & Company Creek	1	330' FNL & 1650' FWL

(2) That injection into said well shall be through plastic or cement-lined tubing, set in a packer which shall be located as near as possible to the casing-shoe and that the casing-tubing annulus shall be filled with an inert fluid and equipped with a pressure gauge or left open at the surface in order to determine leakage in the casing, tubing or packer.

(3) That the operator shall immediately notify the supervisor of the Commission's Artesia district office of the failure of the tubing or packer in said injection well, the leakage of any water or oil from around any producing well or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(4) That the subject waterflood project is hereby designated the Kersey & Company Creek-Leo Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(5) 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.

(6) 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

I. R. TRUJILLO, Chairman

ALEX. ARMIJO, Member

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

SEAL  
dr/

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 27, 1974

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

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The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 5188: (Continued from the March 13, 1974, Examiner Hearing)

Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Drinkard and Blinebry production in the wellbore of its Lockhart B-1 Well No. 8 located in Unit H of Section 1, Township 22 South, Range 36 East, Lea County, New Mexico.

CASE 5194: Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen-Grayburg formation through one well on its Creek Lease in Section 23, Township 18 South, Range 30 East, Leo Pool, Eddy County, New Mexico.

CASE 5195: Application of J. M. Huber Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests, including those of Harry V. Allen or his devisees, underlying the E/2 of the SE/4 of Section 21, Township 12 South, Range 37 East, Southwest Gladiola-Devonian Pool, Lea County, New Mexico. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5196: Application of Kimbell Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling in the wellbore of Blanco-Mesa-verde and Basin-Dakota gas production in its Warren Federal Well No. 3 located in Unit P of Section 26 and in its Salazar Federal Well No. 3 located in Unit H of Section 27, and Otero-Callup Oil and Basin-Dakota gas production in its Warren-Salazar Well No. 2 located in Unit M of Section 26, all in Township 25 North, Range 6 West, Rio Arriba County, New Mexico.

CASE 5197: Application of Skelly Oil Company for a waterflood project and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Seven Rivers-Queen formation in its J. C. Johnson Well No. 4 located in Unit D of Section 20, Township 23 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico. Applicant further seeks authority to dually complete said well for water injection and for the production of gas from the Jalmat Gas Pool. Applicant also seeks an administrative procedure for said project for approval of additional injective wells without notice and hearing.

- CASE 5198: Application of Texaco Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Grayburg formation in the perforated interval from 3815 feet to 4068 feet in its V. M. Henderson Well No. 3 located in Unit H of Section 30, Township 21 South, Range 37 East, Penrose Skelly Pool, Lea County, New Mexico.
- CASE 5199: Application of Wm. G. Ross for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the Atoka-Pennsylvanian Gas Pool Rules, authority to drill a gas well 1650 feet from the South line and 660 feet from the East line of Section 10, Township 18 South, Range 26 East, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico, the E/2 of said Section 10 to be dedicated to the well.
- CASE 5200: Application of Monsanto Company for a triple completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the triple completion (conventional) of its Wilderspin Well No. 1 located in Unit F of Section 11, Township 21 South, Range 27 East, Burton Flats Field, Eddy County, New Mexico, in such a manner as to produce gas from the Wolfcamp, Strawn, and Morrow formations through three parallel strings of tubing.

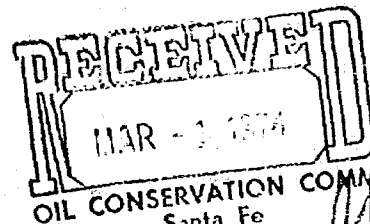


*Case 5194*

**KERSEY & COMPANY**

OIL PRODUCTION  
Phone 746-3671 • P. O. Box 316 • 808 W. Grand  
ARTESIA, NEW MEXICO 88210

February 14, 1974



Re: Water Flood Project,  
Creek Lease

*Water flooding?*

State of New Mexico  
Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Secretary Director, Mr. A. L. Porter, Jr.

Dear Sir:

It is respectfully requested in order to promote conservation and prevent waste that we be given approval for a water flood project for injection of water into one well namely:

Kersey & Company, Creek #1, located in the NE/4 NW/4 of Section 23, T18S, R30E, Eddy County, New Mexico.

Exhibit "A" shows the flood area and wells within a two mile radius.

Exhibit "B" shows how the injection well is to be completed.

Exhibit "C" is a copy of a letter showing that the Duval Company which has a Potash mine under the area, has no objection to this project since they are no longer active in this particular area.

The adjacent operator "Knox Estate" is joining us in this project on a participation basis.

Copies of this application will be sent to all offset operators as listed below and to the U.S.G.S. office.

This operator will upon approval of the flood and its installation notify the New Mexico Oil Conservation Commission of injection operation and abide by the rules and regulations as set out in the order and will also file and maintain accurate records as required by the New Mexico Oil Conservation Commission.

Yours very truly,

KERSEY & COMPANY

*Harold Kersey*  
Harold Kersey

HK:cg

CC: U.S.G.S.  
Knox Estate  
R. J. Jones  
Yates Petroleum Corporation

DOCKET MAILED

Date 3-14-74

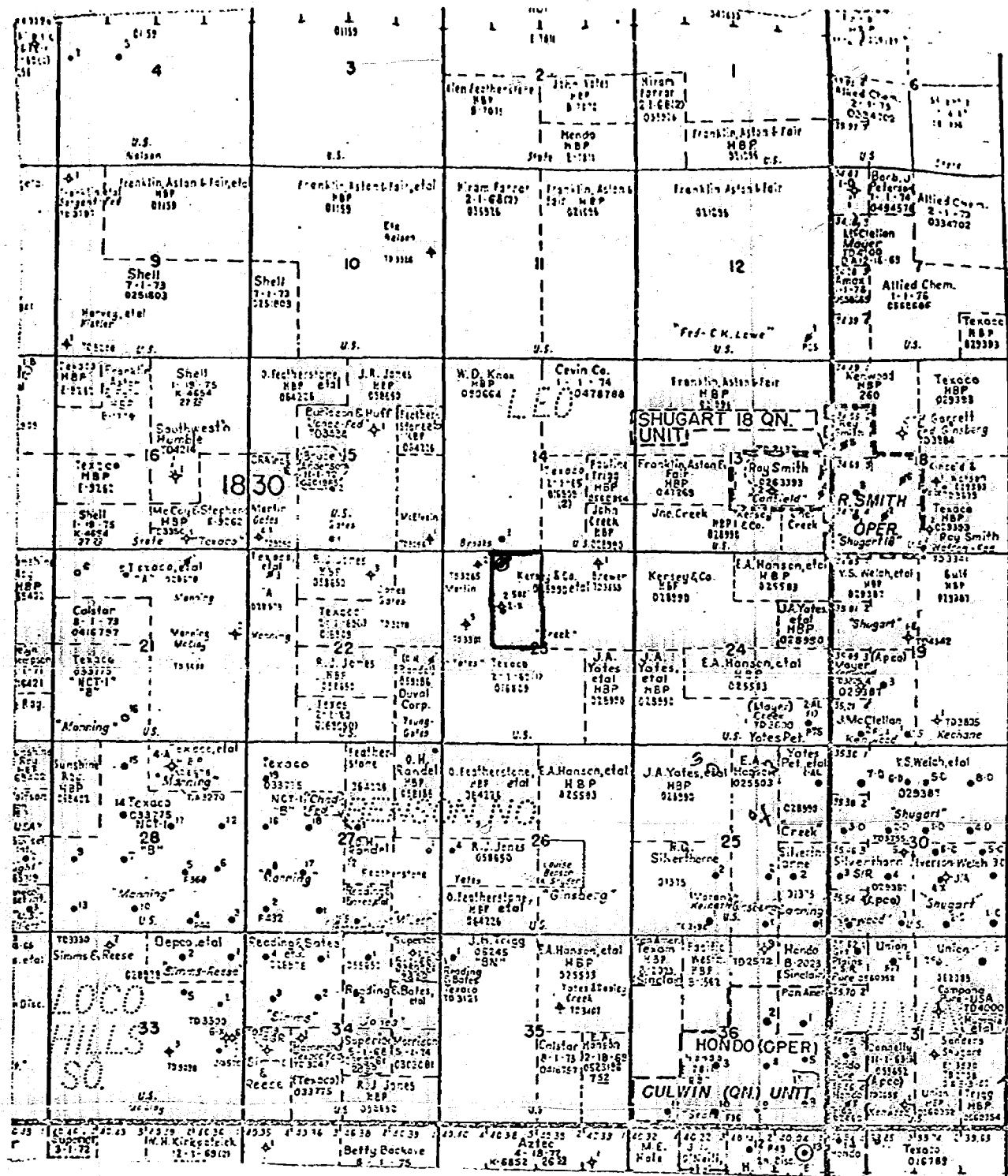


EXHIBIT "A"

Shows proposed Flood Area and other wells within  
2 mile radius.

Case 5794

CREEK NO. 1  
NE NW 23-18-30  
Eddy County, N. Mex.

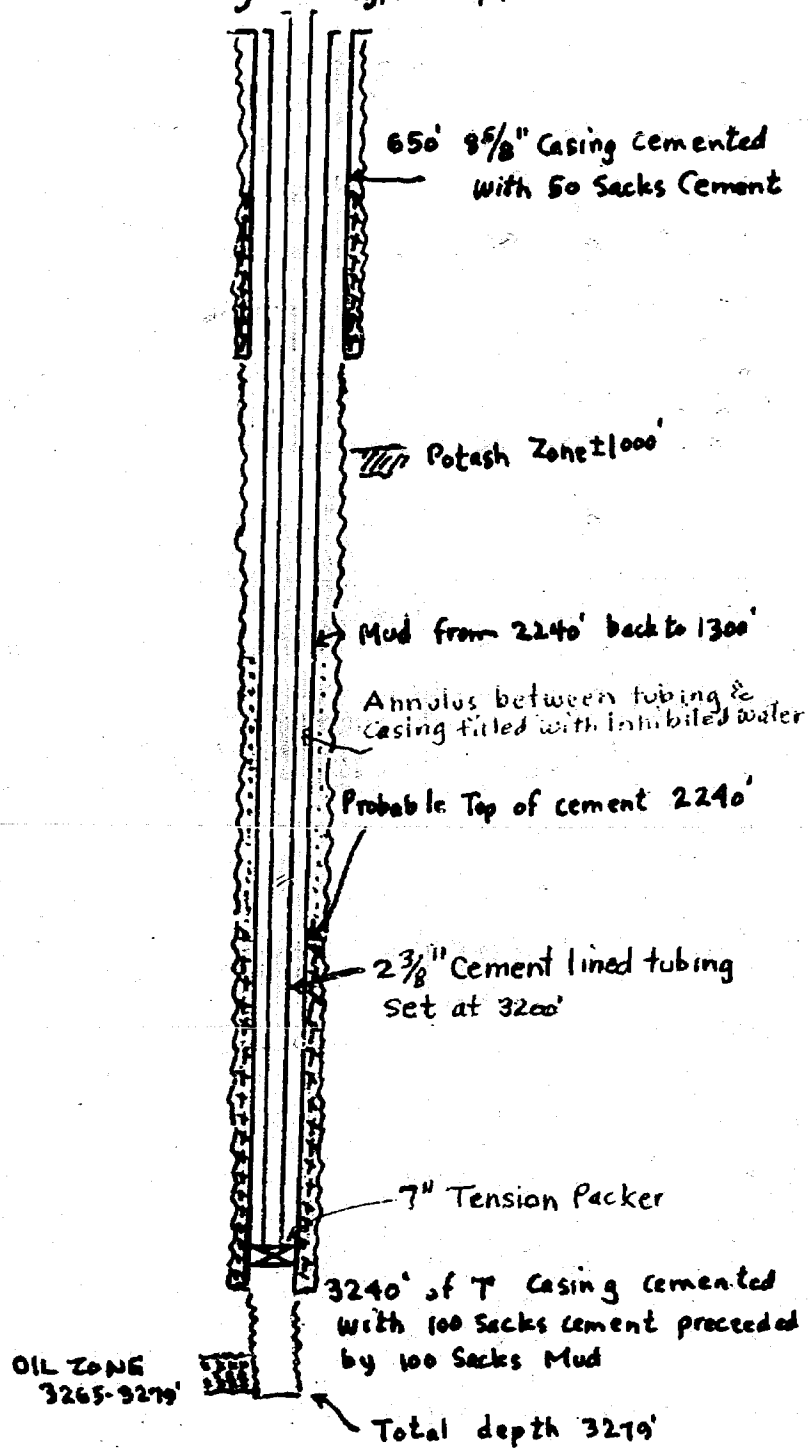


Exhibit "B"

Kersey & Co.  
1/15/74

Case 5194

**KERSEY & COMPANY**

OIL PRODUCTION  
Phone 746-3471 • P. O. Box 316 • 808 W. Grand  
ARTESIA, NEW MEXICO 88210

May 21, 1973

Duval Sulphur & Potash Company  
P. O. Box 816  
Carlsbad, New Mexico 88220

Attention: Mr. Karl Elers

Gentlemen:

With reference to telephone conversation with you today, the exact location of the well (Creek #1) proposed for water injection is 330' S. of N. Line and 1650' E. of County line of Section 23-18-30. This is a well drilled in 1939 and still producing. Only the one water injection well is contemplated.

We will appreciate your approving our proposal to inject water into this well.

This letter is in duplicate and we will appreciate your signing and returning one copy.

Yours very truly,

KERSEY & COMPANY

*Harold Kersey*  
Harold Kersey

Approved by Duval Sulphur & Potash Company  
*Corporation*

By: *K. Elers*

Dated: *6-15-73*

Exhibit "C"

*all*

DRAFT

jr/ *jr*

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. 5194

Order No. R- 4761

*all* *W* *W*

APPLICATION OF KERSEY & COMPANY  
FOR A WATERFLOOD PROJECT, EDDY COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 27, 1974,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this        day of April, 1974, 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, Kersey & Company,  
seeks authority to institute a waterflood project in the         
       Unit Area, Leo Pool,  
by the injection of water into the Queen Grayburg formation  
through one injection well in Section 23,  
Township 18 XXXXX, South, Range 30 XXXXX, East,  
NMPM, Eddy County, New Mexico.

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

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

(5) 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, Kersey & Company, is hereby authorized to institute a waterflood project in the Unit Area Leo Pool, by the injection of water into the Grayburg formation through the following-described well in Section 23, Township 18 NXXX, South, Range 30 WXXX, East, NMPM, Eddy County, New Mexico:

<u>WELL NAME</u>	<u>WELL NO.</u>	<u>LOCATION</u>
<u>KERSEY + COMPANY CREEK</u>	<u>1</u>	<u>330' FNL + 1650' FWL</u>

- (2) *Injection into said well shall be through plastic or cement-lined tubing, set in a packer which shall be located as near as possible to the casing shoe and that the casing-tubing annulus shall be filled with an inert fluid and equipped with a pressure gauge or left open at the surface in order to determine leakage in the casing, tubing or packer.*
- (3) *That the operator shall immediately notify the supervisor of the Commission's <sup>Artistic</sup> District Office of the failure of the tubing or packer in said injection well, the leakage of any water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.*
- (4) That the subject waterflood project is hereby designated the KERSEY + COMPANY CREEK - LEO 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.