

# Case No.

416

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Application, Transcript,  
Small Exhibits, Etc.

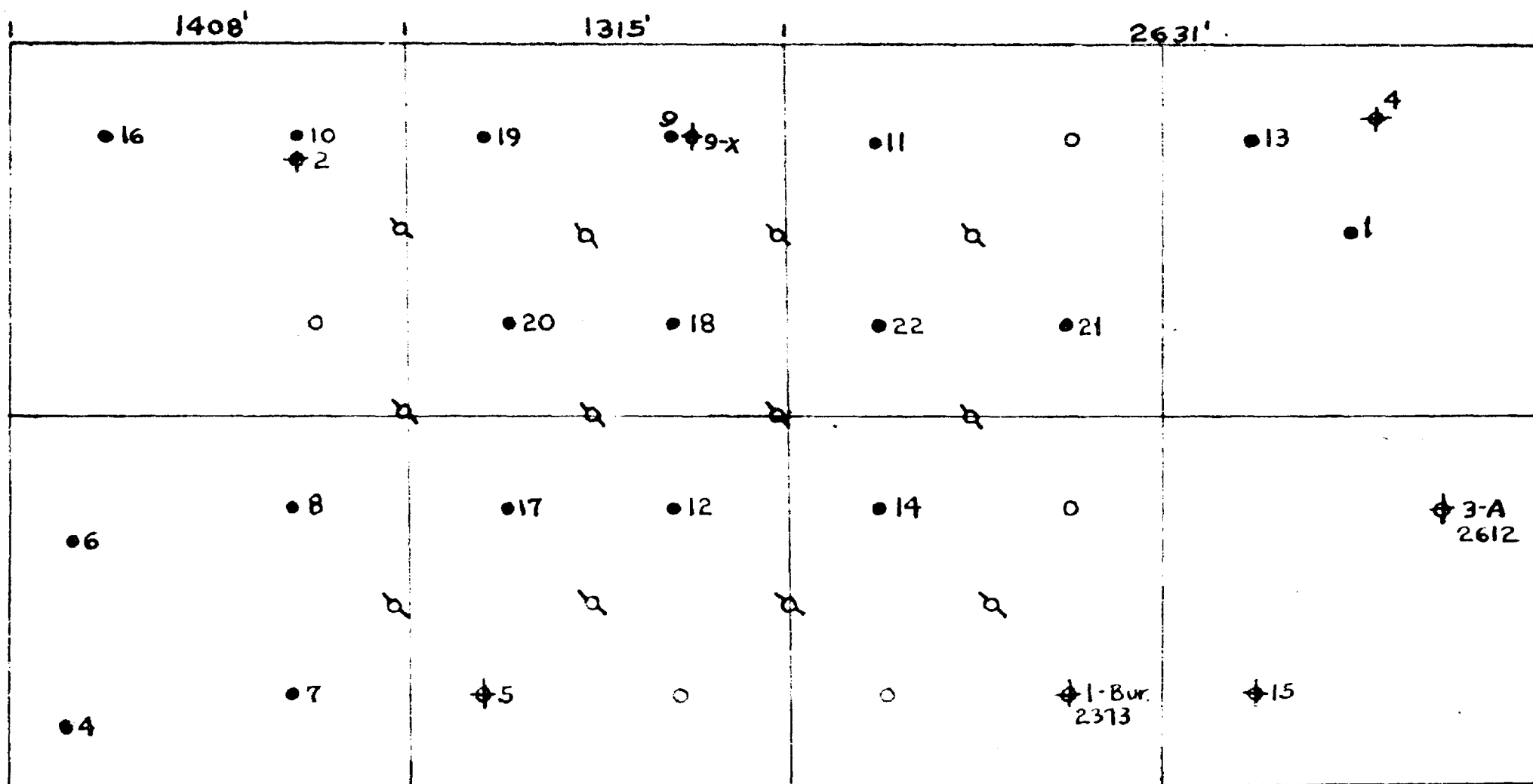
# Memo

From  
WILLIAM B. MACEY  
Chief Engineer

To RRS.

I believe we  
ought to talk to  
Kersey about this. He  
will take a hearing  
but he is not a  
vague subject.

I agree  
W.B.M.



Proposed Water Flooding Project of Olen F. Featherstone  
in the  $N\frac{1}{2}$  of Sec. 19 T17S R28E, Eddy County, N. Mex.

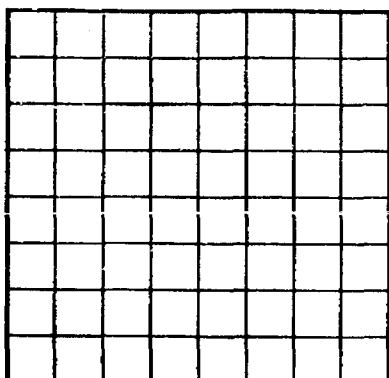
- ✦ Water Input Location
- ✦ Plugged and Abandoned
- Producing Well
- Proposed Oil Well Location

Scale 1" equals 50'

Artesia, N. Mex.  
Sept. 2, 1952

Form 9-550

U. S. LAND OFFICE Las Cruces  
SERIAL NUMBER 050342-A  
LEASE OR PERMIT TO PROSPECT .....



LOCATE WELL CORRECTLY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Beddingfield-Featherstone Address Box 563, Artesia, N. M.  
Lessor or Tract Lacie Brooks Field Empire State New Mexico  
Well No. 17 Sec. 19 T. 17 R. 28 Meridian N.M.P.M. County Eddy  
Location 1650 ft. {N.} of S. Line and 1754 ft. {E.} of W. Line of 19-17-28 Elevation 3520  
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed .....

Date December 4, 1950 Title .....

The summary on this page is for the condition of the well at above date.

Commenced drilling 10-17-50, 19..... Finished drilling 11-25-50, 19.....

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 552' to 555' No. 4, from ..... to .....  
No. 2, from 561' to 565' No. 5, from ..... to .....  
No. 3, from 574' to 579' No. 6, from ..... to .....

IMPORTANT WATER SANDS

No. 1, from 295 to 305 No. 3, from ..... to .....  
No. 2, from ..... to ..... No. 4, from ..... to .....

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
8 1/2"	28.5	4	Lucas	500	Ball	552'	555'	555'	Water string
7"	21.5	4	Lucas	500	Ball	561'	565'	565'	Water string
7"	21.5	4	Lucas	500	Ball	574'	579'	579'	Water string
HISTORY OF OIL OR GAS WELL									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7"	552'	55 sacks	Denton		2 sacks acquegel

PLUGS AND ADAPTERS

MARK

FOIL

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
 Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

ACIDIZING AND

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
Acidized with 2000 gallons						
5"	5"	Nitro	100 lbs.	11-28-50	551-577	587'

TOOLS USED

Rotary tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
 Cable tools were used from top (0) feet to 587' feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

DATES

\_\_\_\_\_, 19\_\_\_\_ Put to producing 12-2-50, 19\_\_\_\_  
 The production for the first 24 hours was 25 barrels of fluid of which 100 % was oil; \_\_\_\_\_ %  
 emulsion; \_\_\_\_\_ % water; and \_\_\_\_\_ % sediment. Gravity, °Bé. \_\_\_\_\_  
 If gas well, cu. ft. per 24 hours \_\_\_\_\_ Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_  
 Rock pressure, lbs. per sq. in. \_\_\_\_\_

EMPLOYEES

J. J. Beck, Driller \_\_\_\_\_, Driller  
 \_\_\_\_\_, Driller \_\_\_\_\_, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	30		red bad
35	100		shale, any
150	217		broken any.
255	297		brown shale
290	310		red rock
310 <del>xxx</del>	any. 380		any.
350	400		brown shale, any. shells
400	420		any.
420	430		brown lime
430	436		any. & shale breaks
536	448		sandy lime
<u>546</u>	<u>555</u>		brown lime, show of oil
<u>555</u> 561	broken any.		
<u>561</u>	<u>566</u>		brown lime, increase in oil
<u>566</u>	<u>574</u>		any.
<u>574</u>	<u>579</u>		brown lime <u>&lt; to be water flooded</u>
<u>579</u>	<u>587</u>		any.
1300'	10'	RODENT ASSE	1000'

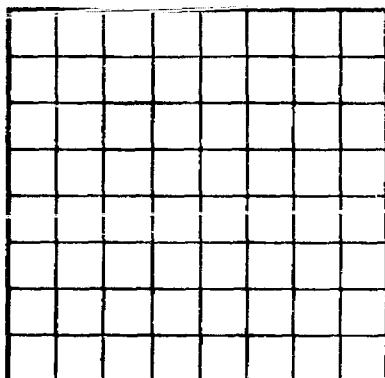
HOUSTON & SONS—CORP.

16-43004-1

Form 9-330

Budget Bureau No. 42-R355.  
Approval expires 11-30-46.

U. S. LAND OFFICE Las Cruces  
SERIAL NUMBER 050349-A  
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Bedingfield-Featherstone Address Box 563, Artesia, N. M.  
Lessor or Tract Lacie Brooks Field Empire State New Mexico  
Well No. 17 Sec. 19 T. 17 R. 28 Meridian N.M.P.M. County El Paso  
Location 1650 N. of S Line and 1734 ft. E. of N. Line of 19-17-28 Elevation 5520  
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed

Date December 4, 1950 Title

The summary on this page is for the condition of the well at above date.

Commenced drilling 10-17-50, 19 Finished drilling 11-25-50, 19

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

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No. 2, from 561 to 565 No. 5, from to  
No. 3, from 574 to 579 No. 6, from to

IMPORTANT WATER SANDS

No. 1, from 295 to 305 No. 3, from to  
No. 2, from to No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From	To	
8 1/2"	26.0	8	Waco	500	puller shoe	552			water string
7"	21.0	8	Waco	500	puller shoe	552			oil string

HISTORY OF OIL OR GAS WELL

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7"	552	55 sacks	Denton		2 sacks aqueogel

PLUGS AND ADAPTERS

MARK

FOLE

Heaving plug--Material ..... Length ..... Depth set .....  
Adapters--Material ..... Size .....

### SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
Acidized with 2000 gallons						
5"	5"	Nitro	100 qts.	11-28-50	551-577	587'

### TOOLS USED

Rotary tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet  
Cable tools were used from top (0) feet to 587' feet, and from ..... feet to ..... feet

### DATES

....., 19..... Put to producing 12-2-50....., 19.....  
The production for the first 24 hours was 25 barrels of fluid of which 100 % was oil; ..... %  
emulsion; ..... % water; and ..... % sediment. Gravity, °Bé. ....

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. ....

### EMPLOYEES

J. J. Beck....., Driller ..... , Driller  
....., Driller ..... , Driller

### FORMATION RECORD

FROM--	TO--	TOTAL FEET	FORMATION
0	35		red bed
35	100		shells, gyp
150	285		broken anhy.
255	290		brown shale
290	310		red rock
310 <del>320</del>	310 <del>320</del>		anhy.
350	400		brown shale, anhy. shells
400	420		anhy.
420	450		brown lime
450	536		anhy. & shell breaks
536	555		sandy lime
555	561		brown lime, show of oil
561	566		brown lime, increase in oil
566	574		anhy.
574	579		brown lime < to be water flooded
579	587		anhy.
1307'	10	1017' 1321'	1017' 1321'

(OVER)  
HUSWALION RECORD CONTINUED

16-43064-1

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

# WESTERN UNION

1201

W. P. MARSHALL, PRESIDENT

SYMBOLS

DL=Day Letter  
NL=Night Letter  
LT=Int'l Letter Telegram  
VLT=Int'l Victory Ltr.

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

LA24 SSE219

SEP 22 PM 1 44

L.ARA047 PD=ARTESIA NMEX 22 131P=

W B MACEY, ENGR=

NMEX OIL CONSERVATION COMMISSION SANTA FE NMEX=

AIR MAILED REQUEST TO YOU FOR HEARING YESTERDAY=

HAROLD KERSEY=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE



Doc 416.  
Ex.

Artesia, N. Mex. - Oct. 14, 1952

New Mexico Oil Conservation Commission  
Santa Fe, N. Mex.

Gentlemen:

The undersigned, Olen F. Featherstone, hereby makes application to the New Mexico Oil Conservation Commission for authority to establish a water flooding project in the N $\frac{1}{2}$  of Sec. 19, T17S, R28E, Eddy County, New Mexico.

Production on the property is from the Yates-Seven Rivers pay at an approximate depth of 575'. The thickness of the sand varies from 3' to 4', and it is a fine grained uniform sand that is consistent over the whole lease. The wells come in with a good flush production but decline very rapidly. The bottom hole pressure is very low and there is not sufficient reservoir energy to produce oil in paying quantities. For this reason some form of secondary recovery is necessary to obtain the oil in place. We have chosen to try water flooding and a report is attached showing that this lease has a good chance of being water flooded with success. The report was made by Buckles & Hostetler, Oil Production Consultants, of Monahans, Texas.

A map is attached showing the existing oil wells on the property and also the proposed additional production wells and the proposed water input wells.

There is water on this property available for water flooding and a water well has been drilled on the property which will produce all the water needed for the project.

This operator desires establishment of a blanket allowable for the 320 acres involved of 8 times the current allowable.

Written statements giving consent to this project are attached which came from a majority of the operators within one-half mile of the property.

While no property line input water wells are shown on the map it is the plan of this operator, if the project is successful, to either farmout or join with the offset operators in the developing of the adjoining acreage so that line wells will be necessary.

The locations of the 21 proposed water input wells to be drilled on this property which is the N $\frac{1}{2}$  of Sec. 19, T17S, R28E, Eddy County are as follows:

IP #1	620'	from North line and 650'	from West line.
IP #2	660'	" " " "	1340' " " "
IP #3	640'	" " " "	2070' " " "
IP #4	660'	" " " "	2670' " " "
IP #5	660'	" " " "	1975' " East "
IP #6	660'	" " " "	1275' " " "
IP #7	650'	" " " "	650' " " "
IP #8	1335'	" " " "	660' " " "
IP #9	1340'	" " " "	1275' " " "
IP #10	1340'	" " " "	1980' " " "
IP #11	1340'	" " " "	2670' " " "
IP #12	1340'	" " " "	2030' " West "
IP #13	1340'	" " " "	1360' " " "
IP #14	1340'	" " " "	670' " " "
IP #15	2060'	" " " "	600' " " "

IP #16	2015'	from North line	and 1340'	from West line.
IP #17	1970'	"	"	"
IP #18	1980'	"	"	"
IP #19	1960'	"	"	"
IP #20	1975'	"	"	"
IP #21	1970'	"	"	"

The locations of the additional oil wells to be drilled are as shown on the plat. These are all on orthodox locations.

We respectfully submit this application for your approval and we will appreciate your consideration of this project.

Yours very truly,

  
Olen F. Featherstone

Ex 416

Artesia, New Mexico  
October 9, 1952

Mr. Glen F. Featherstone  
212 Becker Building  
Artesia, New Mexico

Dear Mr. Featherstone:

In reference to our conversation this is to confirm my advising you that I have no objections to your water flooding the NE 1/4, Section 19, T. 17S, R. 26E, Eddy County, New Mexico.

For your information I own SW 1/4 of Section 19, T. 17S, R. 26E.

Yours very truly

*Jerry Curtis*  
Jerry Curtis  
P. O. Box 605  
Artesia, New Mexico

JC/g

E. L. KLETT  
ROBT. H. BEAN  
WM. H. EVANS  
—  
WM. A. CLIFFORD

KLETT, BEAN & EVANS  
ATTORNEYS AT LAW  
2ND FLOOR MYRICK BLDG.  
LUBBOCK, TEXAS

October 7, 1952


Mr. Olan F. Featherstone  
212 Booker Building  
Artesia, New Mexico

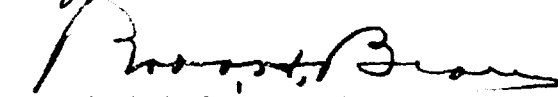
Dear Sir:


The undersigned, owners of the oil and gas leases on the lands lying immediately west of the Brooks lease on the North Half of Section 19, T-17-S, R-28-E, Eddy County, New Mexico, have no objections to your waterflooding the Brooks project upon the above lease, provided, however, that in the event we, our successors or assigns, decide to waterflood any part or all of the leases held by us lying west of the Brooks lease, we may do so without objection upon your part or upon the part of any other owner of the Brooks lease on the North Half of Section 19, T-17-S, R-28-E, Eddy County, New Mexico.


Yours very truly,

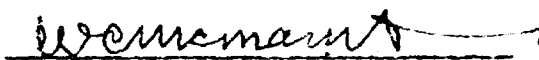
  
Cliff L. Dean


  
C. Alvin White

  
Robt. H. Bean

  
W. M. Ryan

  
Frank Bass

  
W. C. McManus

  
Leonard Latch

Gentlemen:

I agree that you may waterflood your lease should you choose to do so.

  
Olan F. Featherstone

3 October 1952

Mr. Olen F. Featherstone  
Artesia  
New Mexico

Dear Mr. Featherstone:

We, as the owners of Federal Oil and Gas Lease covering the SW $\frac{1}{4}$  of Section 10, Township 17 South, Range 28 East, known as the Hastie Lease, and Federal Lease covering the SE $\frac{1}{4}$  of Section 13, Township 17 South, Range 27 East, known as the Saunders Lease, hereby give our consent to the water flooding program which you are about to commence on your lease covering the N $\frac{1}{2}$  Section 19, Township 17 South, Range 28 East, N.M.P.M.

You are authorized to use this letter evidencing our consent at the hearing before the New Mexico Oil and Gas Conservation Commission which is to be held October 15, 1952.

Yours very truly,

SIMMS AND REESE OIL COMPANY

BY:

  
Partner

GLR:kcp

**DELHI OIL CORPORATION**  
CORRIGAN TOWER  
DALLAS 1, TEXAS

October 2, 1957

Mr. Glen F. Featherstone  
212 Booker Building  
Artesia, New Mexico

Dear Mr. Featherstone:

In reference to our telephone conversation of September 19th, this is to confirm my advising you that Delhi has no objections to your water flooding the NE $\frac{1}{4}$ , Section 19, T 17S, R 28E, Eddy County, New Mexico.

For your information, Delhi has the following leases immediately bordering the location you are planning to flood:

T 17S, R 28E  
Section 19  
SE $\frac{1}{4}$   
NE $\frac{1}{4}$  SW $\frac{1}{4}$   
Section 20  
NE $\frac{1}{4}$

We would appreciate receiving a copy of your preliminary report when available, and subsequent reports as to the progress you are making. If we can be of further assistance, please feel free to call on us.

Yours very truly,

DELHI OIL CORPORATION

  
W. J. Bowen

WJB/jj

YATES BROTHERS

Oil Producers

HARVEY E. YATES  
MARTIN YATES III

309 CARPER BLDG.

ARTESIA, NEW MEXICO

S. P. YATES  
JOHN A. YATES

P. O. BOX 397

TELEPHONE 552

October 2, 1952

Mr. Olen F. Featherstone  
Artesia, New Mexico

Dear Mr. Featherstone:

Complying with your request in reference to the plans of your company to create a water drive for the purpose of increasing oil production from your oil wells in the Empire field. We have no objection to your plans.

We are the owners of a Federal Oil and Gas Lease referred to as the Hastie Lease, L.C.-045818-B, in Section 18, Township 17 South, Range 28 East, Eddy County.

It is our understanding that you will comply with all Federal rules and regulations in regard to Federal Oil and Gas Leases and the operations thereunder.

Yours very truly,

*Estelle H. Yates*  
Louise D. Yates

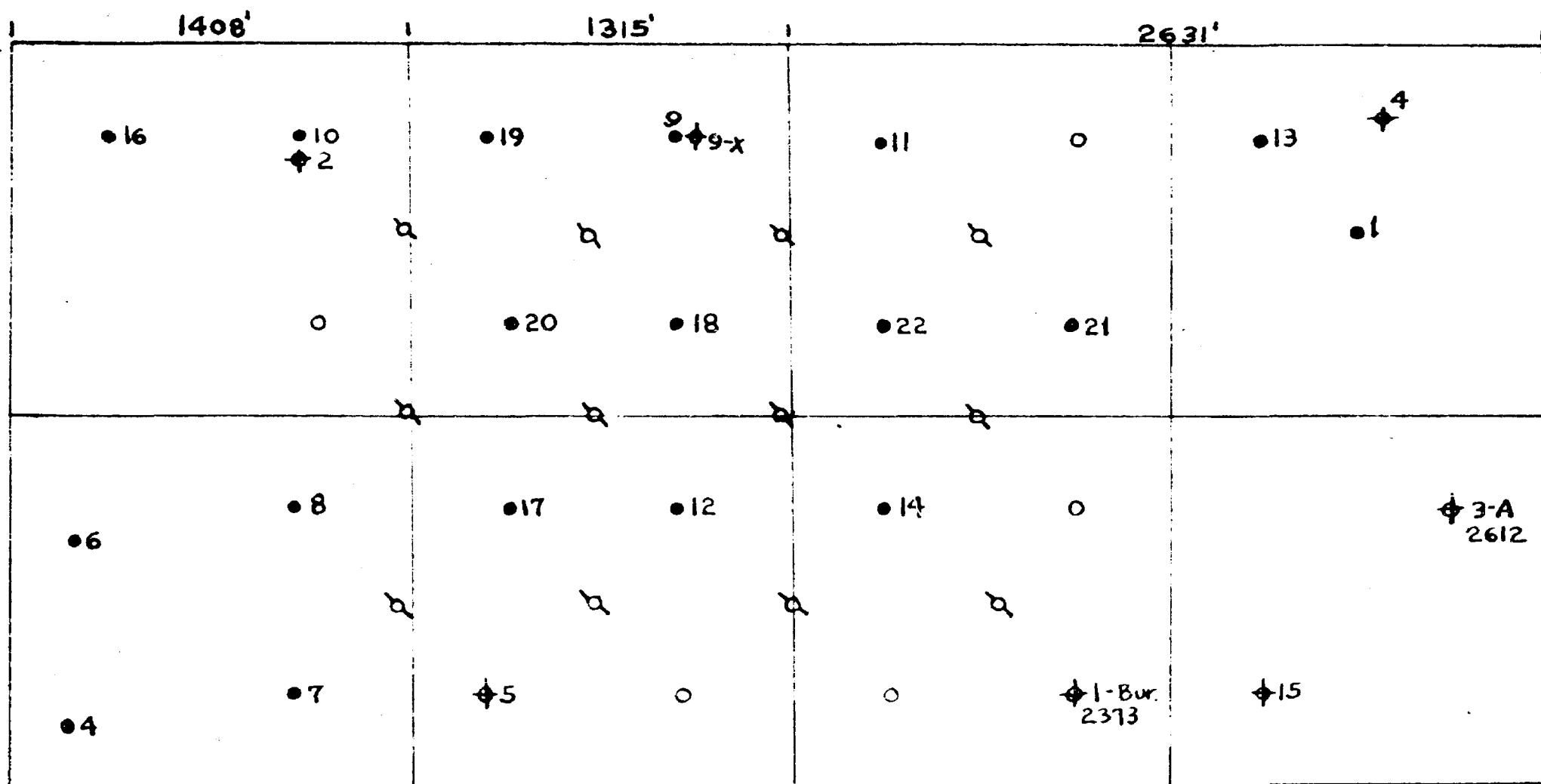
*Estelle H. Yates*  
Estelle H. Yates

*John A. Yates*  
John A. Yates

*Martin Yates III*  
Martin Yates, III

*Harvey E. Yates*  
Harvey E. Yates

*S. P. Yates*  
S. P. Yates



Proposed Water Flooding Project of Olen F. Featherstone  
in the  $N\frac{1}{2}$  of Sec. 19 T17S R28E, Eddy County, N. Mex.

- Water Input Location
- Plugged and Abandoned
- Producing Well
- Proposed Oil Well Location

Scale 1" equals 500'

Artesia, N. Mex.  
Sept. 2, 1952

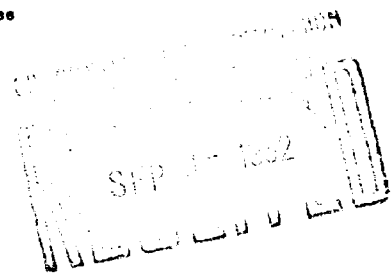


OMER KERSEY

HAROLD KERSEY

**KERSEY & COMPANY**  
OIL WELL DRILLING CONTRACTORS  
210 BOOKER BLDG. P. O. BOX 305 PHONE 386  
ARTESIA, NEW MEXICO

Sept. 2, 1952



Oil Conservation Commission  
Santa Fe, N. Mex.

Gentlemen:

Attached hereto is a plat showing a proposed water flooding project in Sec. 19 T17S R28E, Eddy County, N. Mex. The plat shown is tentative and the number of new wells indicated will only be drilled when it is proven by a test well that the area under consideration will water flood successfully.

The names of operators holding leases within one-half mile of the proposed project are: Dean & White Oil Co., Delhi Oil Co., and A. H. Hover et al.

A core analysis has been made on the producing horizon and it is the opinion of our consultants that this formation (Yates-Seven Rivers) can be water flooded profitably.

The water for flooding will be obtained from around 250' to 300' and a water well will be drilled for this purpose.

On the water input wells it is proposed to follow this program: (1) Set 7" casing to shut off water around 300'. (2) Drill into pay and lightly shoot pay. (3) Clean out and set 2" tubing with perforation in pay section. (4) Place gravel around perforation in pay section and 1' of sand on top of gravel and then 10 sacks of cement on top of sand. (5) Mud the hole back to surface around the 2" tubing and pull the surface casing.

It is proposed to inject a maximum of 25 bbls of water per day into each input well. This will be injected into the Yates-Seven Rivers pay which is around 600'. A representative log of existing wells on the lease is enclosed.

The name of the operator for the proposed work is Olen F. Featherstone whose address is 210 Booker Bldg., Artesia, N. Mex.

We would appreciate your study and consideration of this project. If there is any further information you may require please call on us.

Yours very truly,

*Harold Kersey*  
Harold Kersey

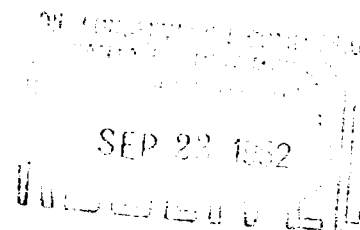
HK:ML  
2 - Encl.

OMER KERSEY

HAROLD KERSEY

**KERSEY & COMPANY**  
OIL WELL DRILLING CONTRACTORS  
210 BOOKER BLDG. -:- P. O. BOX 308 -:- PHONE 388  
ARTESIA, NEW MEXICO

Sept. 20, 1952



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

Gentlemen:

Olen F. Featherstone is the operator of a Federal Oil and Gas Lease covering the N $\frac{1}{2}$  of Sec. 19, T17S, R28E, Eddy County, New Mexico. There are 18 producing wells on this lease as per the enclosed plat.

Production is from the Yates-Seven Rivers at approximately 575'. The thickness of the sand varies from 3' to 4' and it is a fine grained uniform sand that is consistent over the lease. The wells drilled on the lease show up with good flush production but decline very rapidly. It is the general opinion that the bottom hole pressure is depleted and some form of secondary recovery is necessary. We have chosen to try a water flood project on this lease and have cored a well and had a core analysis run and in the opinion of our consultants this lease should water flood with success.

There is water available on the property at a depth of 250' to 300' and we plan to use this water for injection. We plan to inject 25 to 50 bbls of water per day in each injection well. We will drill what ever number of water wells required to get an adequate quantity for injecting.

We respectfully request that the Oil Conservation Commission consider all data submitted and set a hearing for our application at the earliest possible date.

If any additional information is needed, we will gladly supply it.

Yours very truly,

*Harold Kersey*  
Harold Kersey, representing  
Olen F. Featherstone

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

September 15, 1952

C  
O  
P  
Y

OLYN F. FEATHERSTONE  
210 Bocker Building  
Artesia, New Mexico

Attention: Mr. Harold Kersey

Gentlemen:

Enclosed please find a copy of Worth Drilling Company's application in Case 334 pertaining to their water-flooding project. I believe that if you follow this pattern and enclose with the application a plat of the area that it will suffice.

Submit the application in triplicate and bear in mind that it must be here in Santa Fe by September 22 in order to be heard at the regular October 15 hearing.

Yours very truly,

W. B. Macey  
Chief Engineer

WBM:nr

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

September 25, 1952

C  
O  
P  
Y

Mr. Harold Kersey  
Box 305  
Artesia, N. M.

Dear Sir:

With regard to your application on behalf of Olen F. Featherstone for permission to institute a secondary recovery program (by water flooding) on the Brooks Lease in 19-178-28E, this case has been set up as Case 416 and scheduled for hearing on October 15, 1952.

Very truly yours,

W. B. Macey  
Chief Engineer

WBM:mr

*Put in  
Case file  
under Featherstone*

Feb. 13, 1934

Re: Brooks Water Flood  
N<sup>o</sup> 19-17-28  
Hobby County, N. Mex.

Oil Conservation Commission  
Artesia, N. Mex.

Gentlemen:

On the above water flood it has been found that water from the input wells has channelled into the producing wells and the project has proven unsuccessful.

We have quit the injection of water into the input wells and the water flood is abandoned.

Yours very truly,

OLIVER F. FEATHERSTONE

*Harold Kersey*  
Harold Kersey

C

O

OIL CONSERVATION COMMISSION  
FEB 16 1934

*Mr. Featherstone*

OIL CONSERVATION COMMISSION

P. O. BOX 871  
SANTA FE, NEW MEXICO

October 28, 1952

C  
O  
P  
Y

OLEN F. FEATHERSTONE  
210 Booker Building  
Artesia, New Mexico

Attention: Mr. Harold Kersey

Gentlemen:

We enclose for your records two signed copies of Commission  
Order R-200 as issued in Case 416, heard on October 15, 1952.

Yours very truly,

W. B. Macey  
Chief Engineer

WBM:mr

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 416  
ORDER NO. R-200

IN THE MATTER OF THE APPLICATION  
OF OLEN F. FEATHERSTONE FOR APPROVAL  
OF A SECONDARY RECOVERY PROJECT, BY  
WATER-FLOODING, ON THE BROOKS-FEDERAL  
LEASE IN SECTION 19, TOWNSHIP 17 SOUTH,  
RANGE 28 EAST, NMPM, EDDY COUNTY, NEW  
MEXICO, IN THE EMPIRE POOL, BY INJECTION  
INTO 21 WELLS ON SAID LEASE.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on October 15, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission, herein-after referred to as the "Commission".

NOW, on this 20<sup>th</sup> day of October, 1952, the Commission, a quorum being present, having considered the records and the testimony adduced, and being fully advised in the premises,

FINDS:

(1) That due notice having been given as required by law, the Commission has jurisdiction of the cause and the persons and subject matter thereof.

(2) That the Petitioner's request to institute a secondary recovery program on the Brooks Lease, N/2 Section 19, Township 17 South, Range 28 East, NMPM, in the Empire Pool, by water injection into 21 proposed injection wells should be granted.

(3) That a secondary recovery program by water injection in the Empire Pool is of experimental nature and periodic reports should be submitted to the Commission by the Petitioner disclosing its acts and doings in the matter.

(4) That offset operators have not objected to the granting of this application.

IT IS THEREFORE ORDERED:

(1) That the application of Olen F. Featherstone for permission to institute a secondary recovery program on the Brooks Lease, N/2 Section 19, Township 17 South, Range 28 East, NMPM, in the Empire Pool, by injecting water into 21 proposed injection wells, be, and the same hereby is approved.

(2) That permission is hereby granted to drill and complete the following wells at the designated locations for the purpose of injecting water into the Yates-Seven Rivers producing zone of the Empire Pool.

Section 19, Township 17 South, Range 28 East, NMPM

IP # 1	620'	from north line and	650'	from west line.
IP # 2	660'	"	"	"
IP # 3	640'	"	"	"
IP # 4	660'	"	"	"
IP # 5	660'	"	"	"
IP # 6	660'	"	"	"
IP # 7	650'	"	"	"
IP # 8	1335'	"	"	"
IP # 9	1340'	"	"	"
IP #10	1340'	"	"	"
IP #11	1340'	"	"	"
IP #12	1340'	"	"	"
IP #13	1340'	"	"	"
IP #14	1340'	"	"	"
IP #15	2060'	"	"	"
IP #16	2015'	"	"	"
IP #17	1970'	"	"	"
IP #18	1980'	"	"	"
IP #19	1960'	"	"	"
IP #20	1975'	"	"	"
IP #21	1970'	"	"	"

(3) That the operator shall submit monthly reports to the Commission showing the monthly oil production and water production, and amount of water injected into the reservoir through each injection well bore.

(4) That the operator shall furnish the Commission with a copy of the Federal well log, complete with a core description and/or sample description, and completion information on each input well.

IT IS FURTHER ORDERED and applicant is hereby authorized to produce from this tract, being the N/2 Section 19, Township 17 South, Range 28 East, NMPM, the total allowable production, as fixed by the Commission, for the total number of developed 40-acre proration units comprising such tract and applicant is hereby authorized to produce the total allowable so fixed by the Commission for the tract from all the wells located upon or that may hereafter be drilled upon such tract, producing from the Yates-Sever Rivers zone in the Empire Pool.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
EDWIN L. MECHEM, Chairman

  
GUY SHEPARD, Member

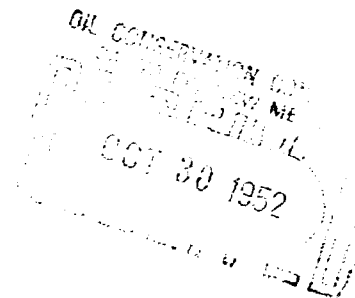
  
R. R. SPURRIER, Secretary



IN THE DISTRICT COURT OF THE  
COUNTY OF BERNALILLO, NEW MEXICO

THE STATE OF NEW MEXICO  
COUNTY OF BERNALILLO

Regular Hearing  
October 18, 1952



E. E. GREESON  
ADA DEARNLEY  
COURT REPORTERS  
BOX 1303  
PHONES 5-9422 AND 5-9546  
ALBUQUERQUE, NEW MEXICO

BEFORE THE  
OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO  
Santa Fe, New Mexico.

October 15, 1952.

In the Matter of:

Olen F. Featherstone's application for approval  
of a secondary recovery program (by water flooding)  
on Brooks (Federal) lease in 19-178-28W, Eddy  
County, Empire Pool, by injection into 12 inject-  
ion wells on said lease, there now being 18 pro-  
ducing wells on the lease.

Case No.  
416.

TRANSCRIPT OF HEARING

(Notice of publication read by Mr. Graham.)

HAROLD KERSAY

having been first duly sworn, testified as follows:

MR. KERSAY: This application is for Mr. Olen F. Featherstone to start a secondary recovery project in the Empire Field in the Yates Seven Rivers Pay. There has been 18 producing wells drilled on this lease, at a total depth of between 550 and 600 feet. The recovery from the 18 producing wells has been approximately 25,000 barrels. The bottom hole pressure is very low in the area and, in order to recover the oil in places, some form of secondary recovery has to be started.

We have chosen a water flood for this program and a core analysis has been made of the Pennsylvanian zones and we had

Consultants Buckles in Houston, Texas, made a report and study of the area. Also, it was their report to us that we could expect recovery of approximately 3,000 barrels per acre on the lease, 320 acres included in the property. There is water available on the property at the approximate depth of 250 feet. We had drilled a water well and have an adequate quantity of water available.

The consent of the majority of the adjoining operators has been obtained and with no objection to the proposed project. We have a plat showing the adjacent operators and also the proposed water input wells. We propose, at this time, to drill 21 input wells and approximately 11 oil wells. The oil wells will all be orthodox locations. None of the input water wells will be near a property line - 660 feet.

However, at some later date, if this project proves successful and we can deal with, or join with the adjacent operators, we propose to drill line wells in order to complete the recovery. We would like to have an allowable of eight times the current allowable on the 320 acres.

MR. MACEY: You mean by that the current top allowable?

A The current top allowable. That about covers the main points of our application.

MR. GRAHAM: What is the nature of that water?

A The water that we propose to put in --

MR. GRAHAM: (Interrupting) That is fresh water?

A It is fresh water and outside of the irrigation district

so there would be no objection from the Irrigation District on using it.

MR. GRAHAM: Of course, water is one of the problems in that area?

A This water is not portable, it has a high gyp content and we are possibly going to have to treat the water in order to inject it, before it can be injected.

MR. GRAHAM: What are the possibilities of securing salt water?

A Well, it is possible at approximately 900 feet in the red sand, and if this water supply should be inadequate, we will no doubt drill to the red sand to secure that water.

MR. WHITE: You say you have waivers from the adjacent operators. Do you have written waivers?

A Yes, we have written consent.

MR. SPURRIER: You wish to introduce that in evidence?

A I wish to introduce that as part of the evidence and also the plat showing the proposed input wells and also an application here, setting out the locations of the proposed input wells.

MR. SPURRIER: Without objection they will be received.

MR. MACEY: This is on Federal land. Have you discussed this with the Federal Government?

A Yes, we have discussed it with the United States Geological Service and they have given their consent to this project.

MR. WHITE: That will be filed as an exhibit too, the

written consent?

A It was verbal. However, we can get their consent.

MR. FEATHERSTONE: I think so.

A We will get that. You have a report of our consultants on this project.

MR. GRAHAM: You propose to make a declaration of the water rights to the State Engineer?

A Is that necessary? Is that a necessary procedure?

MR. GRAHAM: I am sorry, I can't tell you specifically, but I know that the water, New Mexico recovery was, and if you have rights there you should declare them, if you are taking more than domestic use.

A That is something we will have to look into.

MR. SPURRIER: Are there any questions of this witness? If not the witness may be excused.

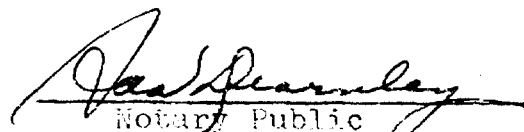
(Witness excused.)

MR. SPURRIER: Any comment in this case? If not the next cases on the Docket are Cases 417, 418, 419 and 420 which I assume that Phillips will want consolidated for the purposes of testifying.

STATE OF NEW MEXICO    )  
                                  :    SA.  
COUNTY OF BERNALILLO   )

I hereby certify that the above and foregoing transcript of proceedings in Case No. 416, taken before the Oil Conservation Commission on October 15, 1952, at Santa Fe, New Mexico, is a true and correct record.

Dated at Albuquerque, New Mexico, this 25th day of October, 1952.

  
Notary Public

My Commission Expires:  
June 19, 1955.

E. E. GREESON  
ADA DEARNLEY  
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ALBUQUERQUE, NEW MEXICO