

CASE 3859: Application of WILSON
OIL CO. FOR AN EXCEPTION TO ORDER
NO. R-3221, as amended.

Case Number

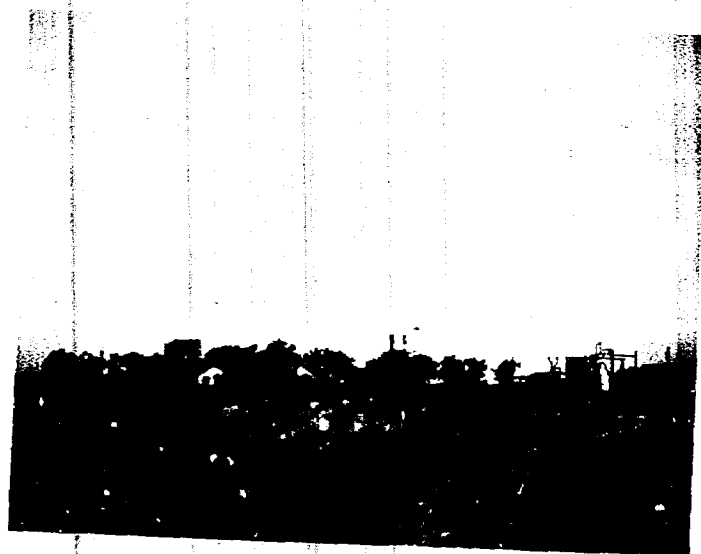
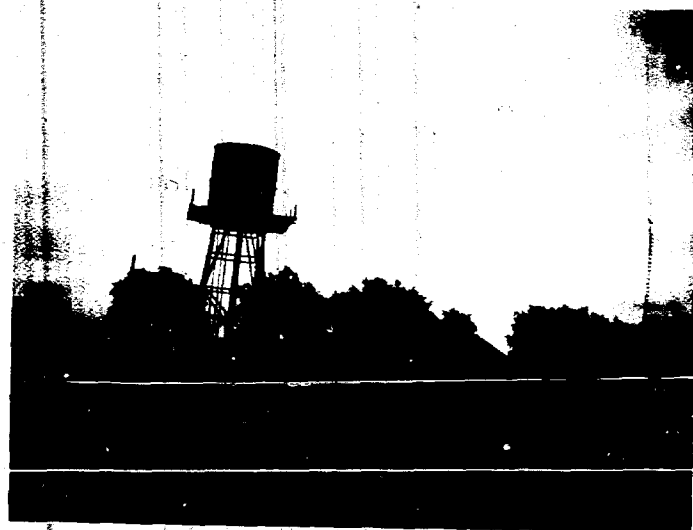
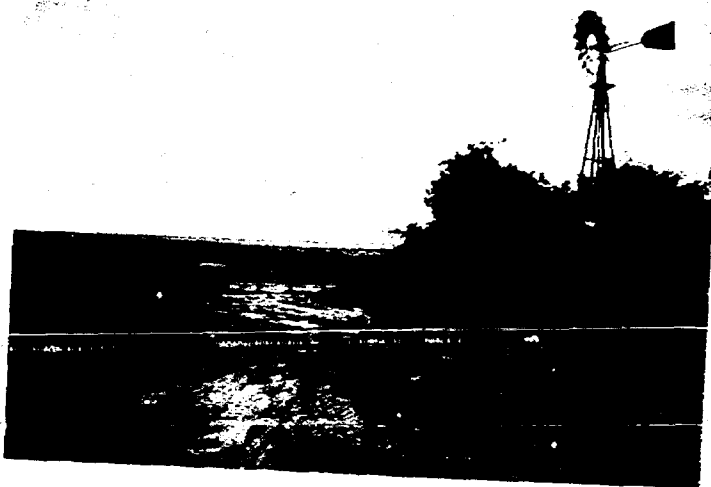
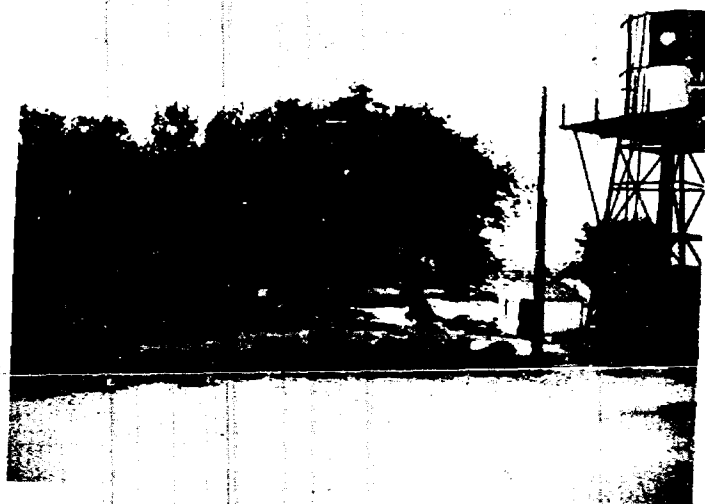
3859

Application

Transcripts.

Small Exhibits

ETC.



September 13, 1968

Wilson Oil Company camp, viewed from the east with Wilson G battery in the right of the view. This photograph looks across pit #7.

September 13, 1968

View of Wilson Oil Company camp looking to the southwest which shows pump house for Wilson water well #1

September 13, 1968

San Simon #1 North well Sec 30, T 21S, R 35E, this well is located South East of the Wilson Pool

September 13, 1968

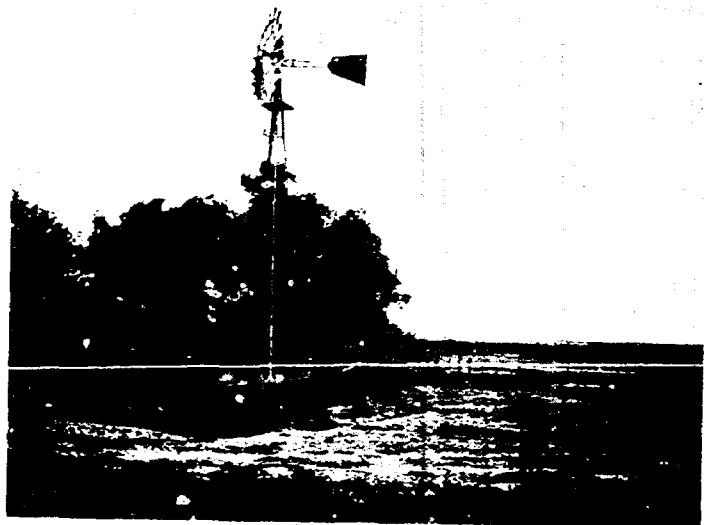
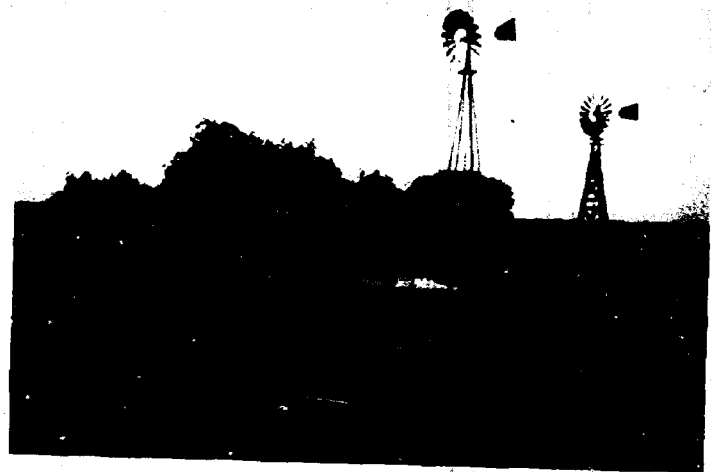
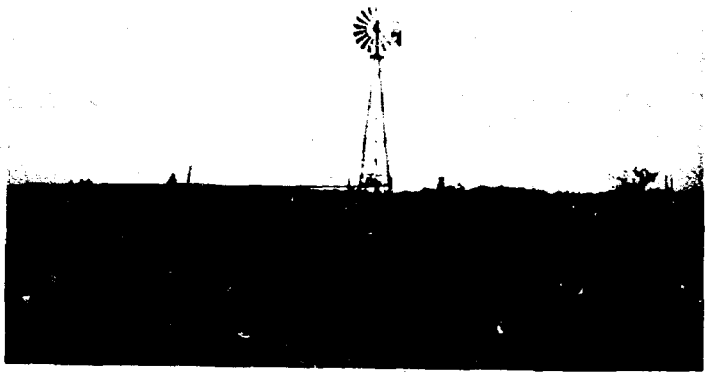
Wilson Oil Company Camp viewed from the west showing Water Well #2 in the foreground.

September 13, 1968

View of Wilson Oil Company property looking west across Sec 13, T 21S, R 34E. In the foreground to the right is pit #2, in the background in the center is pit #1. Water well #5 is shown by overhead water tank with abandoned pumper's house location on the extreme left.

September 13, 1968

Wilson Oil Company camp. The view is to the southeast which shows a mound of caliche at pit #5.



September 13, 1968

San Simon #1 Barron - Sec 8, T 21S,
R 34E. West of Wilson Pool.

September 13, 1968

Jeff Davis water well - Sec 1 T21S,
R 34E, North west of Wilson Pool

September 13, 1968

Wilson Oil Company camp. The view
is to the South east which shows
a mound of caliche at pit #5.

OIL CONSERVATION COMMISSION

San Antonio, New Mexico

Exhibit No. 9

Case No. 3859

September 13, 1968

San Simon #1 - North Well - Sec 30,
T 21S, R 35E, this well is located
South East of the Wilson Pool

September 13, 1968

San Simon #1 North Well - Sec 30, T21S
R 35E, this well is located South
East of the Wilson Pool

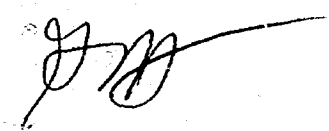
JOEL M. CARSON

LAW OFFICES
A. J. LOSEE
CARPER BUILDING - P. O. DRAWER 239
ARTESIA, NEW MEXICO 88210

15 February 1971

AREA CODE 505
746-3508

71 FEB 19 1971


Mr. George Hatch, Attorney
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 3859, Application of Wilson Oil
Company for an Exception to Order No. R-3221
as Amended, Lea County, New Mexico
Our File 23-037-005

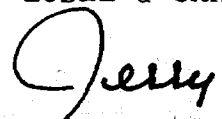
Dear George:

This letter will be your authority to dismiss the above
case with prejudice.

With kind personal regards, I remain

Very truly yours,

LOSEE & CARSON


A. J. Losee

AJL:jw

cc: Wilson Oil Company

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. 3859
Order No. R-4107

APPLICATION OF WILSON OIL COMPANY
FOR AN EXCEPTION TO ORDER NO. R-3221,
AS AMENDED, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for rehearing at 9 a.m. on December 18, 1968, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 23rd day of February, 1971, the Commission, a quorum being present, having considered the record, and otherwise 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, at the request of the applicant, Wilson Oil Company, Case No. 3859 was continued from time to time to April 14, 1971.

(3) That the applicant now requests that the subject case be dismissed.

(4) That the applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED:

That Case No. 3859 is hereby dismissed.

-2-

CASE No. 3859

Order No. R-4107

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Bruce King

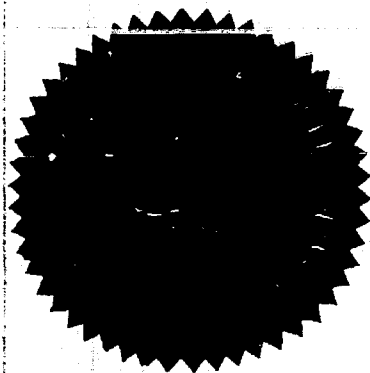
BRUCE KING, Chairman

Alex J. Armijo

ALEX J. ARMILLO, Member

A. L. Porter, Jr.

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



esr/



OIL CONSERVATION COMMISSION

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

**GOVERNOR
BRUCE KING
CHAIRMAN**

**LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER**

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

February 23, 1971

Mr. A. J. Losee
Attorney at Law
Carper Building
Post Office Drawer 239
Artesia, New Mexico 88210

Re: Case No. 3859
Order No. R-4107
Applicant:

Wilson Oil 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 *ls*

ALP/ir

Copy of order also sent to:

Hobbs OCC X

Artesia OCC

Aztec OCC

Other _____

JOEL M. CARSON

LAW OFFICES
A. J. LOSEE
CARPER BUILDING - P. O. DRAWER 239
ARTESIA, NEW MEXICO 88210

AREA CODE 505
746-3508

7 April 1970

70 APR 8 AM 8 23

SM

Mr. George Hatch, Attorney
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 3859, Application of Wilson Oil Company
for an Exception to Order No. R-3221 as Amended,
Lea County, New Mexico

Dear George:

The above request for a rehearing has been scheduled for Hobbs
on April 15, 1970.

The applicant is still having difficulty disposing of water and
we would like to have this case continued until the April, 1971,
regular hearing or such lesser period as the Commission may
determine.

If this request for a continuance is not acceptable to the Com-
mission, please call me telephone collect. With kind regards,
I remain

Very truly yours,

A. J. Losee
A. J. Losee

AJL:jw

cc: Mr. Raymond Lamb,
Wilson Oil Company

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. 3859
Order No. R-3517

APPLICATION OF WILSON OIL COMPANY
FOR AN EXCEPTION TO ORDER NO. R-3221,
AS AMENDED, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 18, 1968, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 4th day of October, 1968, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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, Wilson Oil Company, is the owner and operator of leases located in Sections 13, 23, and 24 of Township 21 South, Range 34 East, and Sections 7 and 18 of Township 21 South, Range 35 East, NMPM, Wilson Yates-Seven Rivers Pool, Lea County, New Mexico.

(3) That effective January 1, 1969, Order (3) of Commission Order No. R-3221, dated May 1, 1967, prohibits in that area encompassed by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the disposal, subject to minor exceptions, of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, or in any other place or in any manner which will constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.

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CASE No. 3859

Order No. R-3517

(4) That the applicant seeks an exception to the provisions of the aforesaid Order (3) to permit the continued disposal of produced water in seven unlined surface pits located in the center of the W/2 of said Section 13, center of the W/2 SE/4 of said Section 13, SW/4 NE/4 of said Section 23, center of the SW/4 of said Section 24, center of NE/4 of said Section 7, NE/4 SW/4 of said Section 7, and NW/4 of said Section 18. In the alternative, applicant seeks an extension of time in which to comply with the provisions of said Order (3) of Order No. R-3221.

(5) That said Order No. R-3221 found that the disposal of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, constitutes a hazard to existing fresh water supplies, as designated by the state engineer, in the vicinity of such disposal.

(6) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the state engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

(7) That fresh water supplies as designated by the state engineer exist in the immediate vicinity of the subject unlined disposal pits.

(8) That the quality of the fresh water in the immediate vicinity of the subject pits is markedly better than the quality of the produced water being disposed of in the subject pits.

(9) That the applicant has disposed of considerable volumes of produced water in said unlined pits over a period of approximately 30 years.

(10) That the evidence indicates that there has been some deterioration of the quality of the fresh water supplies in the immediate vicinity of the subject pits during said 30 years.

(11) That the evidence is inconclusive as to the additional amounts of produced water to be disposed of in the subject unlined pits during the remaining life of the pool.

(12) That continued disposal of water produced in conjunction with the production of oil or gas, or both, in the subject unlined surface pits would constitute an additional threat of contamination of fresh water supplies designated by the state engineer existing in the vicinity of said pits.

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CASE No. 3859
Order No. R-3517

(13) That the subject application should be denied.

IT IS THEREFORE ORDERED:

(1) That the subject application is hereby denied.

(2) 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


DAVID F. CARGO, Chairman

GUYTON E. HAYS, Member

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

esr/

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. 3859
Order No. R-3517-A

APPLICATION OF WILSON OIL COMPANY
FOR AN EXCEPTION TO ORDER NO. R-3221,
AS AMENDED, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION FOR REHEARING

BY THE COMMISSION:

This cause came on for reconsideration upon the application of Wilson Oil Company for a rehearing in Case No. 3859, Order No. R-3517, heretofore entered by the Oil Conservation Commission of New Mexico on October 4, 1968.

NOW, on this 31st day of October, 1968, the Oil Conservation Commission, a quorum being present, having considered the application for rehearing,

FINDS:

(1) That the application of Wilson Oil Company for a rehearing in Case No. 3859, Order No. R-3517, was received by the Commission within the time prescribed by law.

(2) That a rehearing in the subject case should be granted, and that the scope of such rehearing should be limited to:

- (a) A brief and/or argument on the legal propositions raised in the application for rehearing and their application to the facts heretofore presented in Case No. 3859.
- (b) New evidence relevant to the issues raised in Case No. 3859.

-2-

CASE No. 3859
Order No. R-3517-A

IT IS THEREFORE ORDERED:


- (1) That a rehearing in the subject case is hereby granted, and is set for the regular Commission hearing on December 18, 1968.
- (2) That the scope of such rehearing shall be limited to:
 - (a) A brief and/or argument on the legal propositions raised in the application for rehearing and their application to the facts heretofore presented in Case No. 3859.
 - (b) New evidence relevant to the issues raised in Case No. 3859.
- (3) 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


DAVID F. CARGO, Chairman


GUYTON B. HAYS, Member


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



esr/

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



P. O. BOX 2000
SANTA FE

LAND COMMISSIONER
GUYTON S. HAYS
MEMBER

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

October 4, 1968

Mr. A. J. Losee
Attorney at Law
Post Office Box 239
Artesia, New Mexico 88210

Re: Case No. 3859
Order No. R-3517
Applicant:
Wilson Oil 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

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

Other Mr. Finis Heidel, Mr. J. D. Merchant

JOEL M. CARSON

LAW OFFICES

A. J. LOSEE

CARPER BUILDING - P. O. DRAWER 239

ARTESIA, NEW MEXICO 86210

AREA CODE 505
746-3508

5 September 1968

Handwritten initials

file
Case 3859

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

Enclosed herewith please find triplicate copies of Application of Wilson Oil Company for an exception to Order No. R-3221 of the Commission.

We understand that this case has been set for hearing before the Commission on September 18, 1968.

Very truly yours,

Handwritten signature of A. J. Losee
A. J. Losee

Enclosures
AJL:rh

cc: Mr. Parker Wilson, President
Wilson Oil Company
w/ Enclosure

Mr. N. Raymond Lamb
w/ Enclosure

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
WILSON OIL COMPANY FOR AN EXCEPTION
TO ORDER NO. R-3221 OF THE OIL CON-
SERVATION COMMISSION

NO. 3859

APPLICATION

COMES WILSON OIL COMPANY, a New Mexico corporation,
by its attorney, A. J. Losee, and states:

1. Applicant is the operator of 35 wells producing
in the Wilson-Yates Seven Rivers Pool in Lea County, New
Mexico. The wells are all situated upon oil and gas leases
issued by the State of New Mexico and cover, among other lands,
the following lands in Lea County:

Township 21 South, Range 34 East, N.M.P.M.,

Section 13: All, except N/2 NW/4
Section 23: All, except SE/4 SE/4
Section 24: All

Township 21 South, Range 35 East, N.M.P.M.,

Section 7: N/2, SW/4
Section 18: W/2 NW/4

2. The operator is presently disposing of approxi-
mately 44,400 barrels of water per month produced in conjunc-
tion with the production of oil from said 35 wells, in seven
unlined pits located as follows:

Township 21 South, Range 34 East, N.M.P.M.,

1. Center W/2, Section 13
2. Center W/2 SE/4, Section 13
3. SW/4 NE/4, Section 23
4. Center SW/4, Section 24

Township 21 South, Range 35 East, N.M.P.M.,

5. Center NE/4, Section 7
6. NE/4 SW/4, Section 7
7. NW/4 NW/4, Section 18

3. There is attached hereto and by reference made a part hereof, a plat showing the location of the said 35 producing wells and the seven unlined pits, together with the location of adjoining domestic and stock watering wells.

4. The 35 producing wells of operator in the Wilson-Yates Seven Rivers Pool are in an advanced state of depletion and the granting of an exception to Order No. R-3221 of the Oil Conservation Commission (the "Commission") will prevent waste caused by the premature abandonment of the wells.

5. Despite the history of the disposal in unlined pits on these leases of water produced in conjunction with the production of oil over a period of many years, there has been no significant adverse changes to the fresh water supplies in the area.

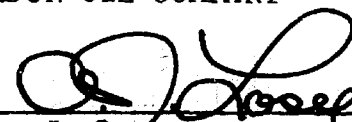
WHEREFORE, Applicant prays:

a) That an exception to Order No. R-3221 be granted to Applicant to permit the continuation, after January 1, 1969, of the disposal of water produced in conjunction with the production of oil from Applicant's 35 wells on the surface in Applicant's seven unlined pits or on such other pits located upon the above described lands which are deemed necessary by Applicant.

b) In the alternative, that Applicant be granted an extension of time, for such reasonable period as the Commission may deem desirable, within which to comply with the provisions of paragraph No. 3 of said Order R-3221 of the Commission.

c) And for such other relief as may be just in
the premises.

WILSON OIL COMPANY

By 

A. J. Losee
P. O. Drawer 239
Artesia, New Mexico

- CASE 4334: Application of Pan American Petroleum Corporation for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to recomplete its State Gas Com "BG" Well No. 1 at an unorthodox location 1450 feet from the North line and 1490 feet from the West line of Section 2, Township 29 North, Range 10 West, Blanco-Mesaverde Pool, San Juan County, New Mexico, the N/2 of said section to be dedicated to the well.
- CASE 4335: Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Vacuum (Grayburg-San Andres) Pool by the injection of water into the San Andres formation through its Lea "FE" State Wells Nos. 2 and 4, located in Units C and E, respectively, of Section 11, Township 17 South, Range 34 East, Lea County, New Mexico.
- CASE 4336: Application of Byron McKnight for an exception to Order No. R-3221, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil or gas on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties. Said exception would be for applicant's lease comprising all of Section 19, W/2 Section 20, NW/4 Section 29, and NW/4 Section 30, Township 19 South, Range 34 East, undesignated Yates-Seven Rivers gas pool, Lea County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said leases in unlined surface pits on the leases.
- CASE 3859: (Continued from the October 15, 1969, Regular Hearing)
Application of Wilson Oil Company for an exception to Order No. R-3221, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Commission Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's leases in Sections 13, 23, and 24 of Township 21 South, Range 34 East, and Sections 7 and 18 of Township 21 South, Range 35 East, Wilson Yates-Seven Rivers Pool, Lea County, New Mexico. Applicant, seeks authority to continue to dispose of produced water in seven unlined surface pits located in the center of the W/2 of said Section 13, center of the W/2 SE/4 of said Section 13, SW/4 NE/4 of said Section 23, center of SW/4 of said Section 24, center of the NE/4 of said Section 7, NE/4 SW/4 of said Section 7, NW/4 NW/4 of said Section 18.

(Case 3859 continued)

In the alternative, applicant seeks an extension of time in which to comply with the provisions of said order.

CASE 4337: Application of Petroleum Corporation of Texas for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Dexter Hanagan Graridge Federal Well No. 1 located in Unit J, Section 22, Township 17 South, Range 30 East, Jackson-Abo Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in an unlined surface pit in the vicinity of said well.

CASE 4338: Application of Skelly Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project on its Lea "D" Lease by selective injection of water into various zones of the Grayburg-Jackson Pool through three wells located in Units B, H, and J of Section 26, Township 17 South, Range 31 East, Eddy County, New Mexico. Applicant further seeks a procedure whereby said project may be expanded administratively without a showing of well response.

CASE 4339: Southeastern nomenclature case calling for an order for the creation of certain new pools and the assignment of oil discovery allowables and the contraction and extension of certain other pools in Lea, Chaves and Eddy Counties, New Mexico.

(a) Create a new pool in Chaves County, New Mexico, classified as an oil pool for San Andres production and designated as the Tower-San Andres Pool comprising the following:

TOWNSHIP 11 SOUTH, RANGE 31 EAST, NMPM
SECTION 3: SE/4

(Case 4339 continued)

(f) Extend the East Caprock-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 12 SOUTH, RANGE 32 EAST, NMPM
SECTION 23: NE/4

(g) Extend the Eagle Creek-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM
SECTION 23: NW/4 NW/4

(h) Extend the South Eunice-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
SECTION 11: NE/4

(i) Extend the Maljamar Grayburg-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM
SECTION 9: NE/4
SECTION 10: NW/4

(j) Extend the Quail Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM
SECTION 20: All

(k) Extend the Round Tank-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM
SECTION 30: W/2 NW/4 and NW/4 SW/4

(l) Extend the Shugart Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM
SECTION 25: W/2 NW/4

(m) Contract the Bough Permo- Pennsylvanian Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM
SECTION 14: S/2

(n) Extend the Vada-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM
SECTION 13: S/2

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM
SECTION 18: S/2

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM
SECTION 10: SE/4
SECTION 14: S/2
SECTION 15: NE/4
SECTION 23: NW/4

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

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

P. O. BOX 2000
SANTA FE

October 31, 1968

DOCKET MAILED

Mr. A. J. Losee
Attorney at Law
Post Office Drawer 239
Artesia, New Mexico 88210

Re: Case No. 3859
Order No. R-3517-A
Applicant: Wilson Oil Company

DOCKET MAILED DOCKET MAILED

Dear Sir, Date 1-2-69 Date 12-4-68

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

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC X

Aztec OCC

Other

DOCKET MAILED

Mr. Finis Heidel Date 10-2-69

DOCKET: REGULAR HEARING - WEDNESDAY - OCTOBER 15, 1969

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

ALLOWABLE: (1) Consideration of the oil allowable for November, 1969.

(2) Consideration of the allowable production of gas for November, 1969, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for November, 1969.

CASE 3859: (Continued from the July 16, 1969, Regular Hearing)

Application of Wilson Oil Company for an exception to Order No. R-3221, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Commission Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's leases in Sections 13, 23, and 24 of Township 21 South, Range 34 East, and Sections 7 and 18 of Township 21 South, Range 35 East, Wilson Yates-Seven Rivers Pool, Lea County, New Mexico. Applicant, seeks authority to continue to dispose of produced water in seven unlined surface pits located in the center of the W/2 of said Section 13, center of the W/2 SE/4 of said Section 13, SW/4 NE/4 of said Section 23, center of SW/4 of said Section 24, center of the NE/4 of said Section 7, NE/4 SW/4 of said Section 7, NW/4 NW/4 of said Section 18. In the alternative, applicant seeks an extension of time in which to comply with the provisions of said order.

CASE 4228: Southeastern nomenclature case calling for an order for the creation, extension and contraction of certain pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

(a) Create a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the Arena Roja-Pennsylvanian Gas Pool. The discovery well is Skelly Oil Company's Mexico "P" Federal Well No. 1 located in Unit F of Section 21, Township 26 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 26 SOUTH, RANGE 35 EAST, NMPM
SECTION 21: W/2

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

December 11, 1968

Mr. A. J. Losee
Attorney at Law
P. O. Drawer 239
Artesia, New Mexico 88210

Re: Application of Wilson Oil Company
Case No. 3859 (Rehearing)

Dear Mr. Losee:

Your request that the rehearing of Case No. 3859 be continued until the regular Commission hearing to be held in July of 1969 has been favorably received by the Commission. It will not be necessary for you to appear at the December 18th hearing.

Very truly yours,

GEORGE M. HATCH
Attorney

GME/esr

JOEL M. CARSON

LAW OFFICES
A. J. LOSEE
CARPER BUILDING - P. O. DRAWER 239
ARTESIA, NEW MEXICO 88210

AREA CODE 505
746-3508

10 December 1968

Dec 17 11 33 AM '68

Mr. George Hatch, Attorney
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Re: Application of Wilson Oil Company
Case No. 3859

Dear Mr. Hatch:

The application for a rehearing of the above case has been set for December 18, 1968.

In accordance with our telephone conversation of this date and on behalf of Wilson Oil Company, you are hereby requested to continue this rehearing until the regular Commission hearing, which will be held in July of 1969. If this continuance is agreeable to the Commission, please let me have a letter confirming such matter so that the record and my files will be complete. If there is some objection to this request for continuance, please let me know sufficiently in advance so that I may attend the December 18th hearing.

Very truly yours,


A. J. Losee

AJL:rh

cc: Mr. Parker Wilson
Mr. N. Raymond Lamb

HASH T KNIFE

THE MERCHANT LIVESTOCK COMPANY

SAN SIMON RANCH — LEA COUNTY

STOCK RAISERS

CARLSBAD, NEW MEXICO

September 12, 1968

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

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

Gentlemen:

This letter refers to the application of Wilson Oil Company for an exception to the no-pit Order No. R-3221 of the Oil Conservation Commission. In this application we understand that Wilson Oil Company seeks authority to continue to dispose of produced water in its seven unlined surface pits located in Sections 13, 23 and 24, Township 21 South, Range 34 East, and Sections 7 and 8, Township 21 South, Range 35 East, Lea County, New Mexico. We understand that this case has been docketed as No. 3859 and set for hearing on September 18, 1968, before the Oil Conservation Commission.

We are the owners of the San Simon Ranch, comprising approximately ~~266~~¹⁸² sections of land in Lea County, New Mexico. The above mentioned seven unlined surface pits are all located within the boundaries of our ranch.

We know that Wilson Oil Company has been disposing of its produced water in these pits for the past 15 or 20 years. We do not believe that the disposal of water produced by Wilson Oil Company, in conjunction with the production of oil from its wells in the Wilson-Yates Seven Rivers Pool, Lea County, New Mexico, constitutes a hazard to the fresh water wells in the area and all located on our ranch. Accordingly, you are advised that we have no objection to the proposed application of Wilson Oil Company for permission to continue to dispose of its produced water in the above mentioned seven unlined pits.

Respectfully submitted,

THE MERCHANT LIVESTOCK COMPANY

By J. D. Merchant Pres

JOEL M. CARSON

LAW OFFICES
A. J. LOSEE
CARPER BUILDING - P. O. DRAWER 239
ARTESIA, NEW MEXICO 88210

AREA CODE 505
746-3508

22 October 1968

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

Enclosed herewith you will please find three copies of
Application for Rehearing with respect to Order No. R-3517
issued on October 4, 1968, in Case No. 3859.

Very truly yours,


A. J. Losee

Enclosures
AJL:rh

cc: Mr. Parker Wilson
Mr. N. Raymond Lamb

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
WILSON OIL COMPANY FOR AN EXCEPTION
TO ORDER NO. R-3221, AS AMENDED,
LEA COUNTY, NEW MEXICO

CASE No. 3859

APPLICATION FOR REHEARING

COMES WILSON OIL COMPANY, a New Mexico corporation, by its attorney, A. J. Losee, and requests a rehearing with respect to Order No. R-3517, issued on October 4, 1968, by the Oil Conservation Commission (the "Commission"), and as grounds therefor, states:

1. Finding No. 5 is vague and indefinite, but if it was intended to find as a fact that the disposal of water produced in conjunction with the production of oil in the unlined pits described in the Application constitutes a hazard to fresh water supplies in the vicinity of such pits, then such finding is not supported by substantial evidence in the record of either Case No. 3551, out of which Commission Order No. 3221 was issued, or in Case No. 3859, out of which Commission Order No. R-3517 was issued.

2. Findings Nos. 7, 10, 11, 12 and 13 are not supported by substantial evidence in the record.

3. Conclusion No. 1 or Order No. 1, denying the application, is not supported by substantial evidence in the record.

4. Commission Order No. R-3517 is arbitrary, capricious or an abuse of discretion or contrary to law in that the Commission has already granted similar relief by its Order

Nos. R-3221-B and R-3424 to operators in areas where the fresh water supplies are limited to erratic reservoirs of meager supply similar to those supplies existing in the vicinity of the Wilson pool.

5. The issuance of Commission Order No. R-3517 was arbitrary, capricious or an abuse of discretion and contrary to law in that, upon information and belief, Applicant alleges that the Commission considered the evidence in Case No. 3551 (Commission Order No. R-3221) without each Commission member having reviewed the transcript in said Case No. 3551 and without there being any substantial evidence in the record of Case No. 3551 to support Commission Order No. R-3517.

6. That Commission Orders R-3517 and R-3221, upon which it is based, are not within the scope of the authority of the Commission in that (a) the regulation of the subject matter of these Orders is vested by law in the State Engineer or, (b) the regulation of the subject matter of these Orders is vested by law in the Water Quality Control Commission or, (c) the subject matters have no relation to the prevention of waste and the protection of correlative rights.

7. The denial of the application is contrary to the guaranties of liberty secured by Section 18 of Article 2 of the Constitution of New Mexico and the guaranties of liberty secured by the 14th Amendment to the United States Constitution.

8. The issuance of Commission Order R-3517 was arbitrary, capricious or an abuse of discretion, or contrary to law.

WHEREFORE, Applicant prays:

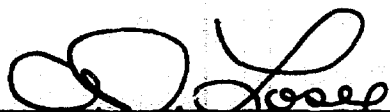
A) That the Commission grant a rehearing in respect of the above matters, and

B) That an exception to Order No. R-3221 be granted to Applicant to permit the continuation after January 1, 1969, of the disposal of water produced in conjunction with the production of oil from Applicant's 35 wells on the surface in Applicant's 7 unlined pits, or on such other pits located upon the lands covered by the application which are deemed necessary by Applicant, or

C) In the alternative, that Applicant be granted an extension of time, for such reasonable period as the Commission may deem desirable, within which to comply with the provisions of Order No. R-3221 of the Commission, and

D) For such other relief as may be just in the premises.

WILSON OIL COMPANY

By 
A. J. Losee
P. O. Drawer 230
Artesia, New Mexico
Its Attorney

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
WILSON OIL COMPANY FOR AN EXCEPTION
TO ORDER NO. R-3221 OF THE OIL CON-
SERVATION COMMISSION

NO. 3859

APPLICATION

COMES WILSON OIL COMPANY, a New Mexico corporation,
by its attorney, A. J. Losee, and states:

1. Applicant is the operator of 35 wells producing
in the Wilson-Yates Seven Rivers Pool in Lea County, New
Mexico. The wells are all situated upon oil and gas leases
issued by the State of New Mexico and cover, among other lands,
the following lands in Lea County:

Township 21 South, Range 34 East, N.M.P.M.,

Section 13: All, except N/2 NW/4
Section 23: All, except SE/4 SE/4
Section 24: All

Township 21 South, Range 35 East, N.M.P.M.,

Section 7: N/2, SW/4
Section 18: W/2 NW/4

2. The operator is presently disposing of approxi-
mately 44,400 barrels of water per month produced in conjunc-
tion with the production of oil from said 35 wells, in seven
unlined pits located as follows:

Township 21 South, Range 34 East, N.M.P.M.,

1. Center W/2, Section 13
2. Center W/2 SE/4, Section 13
3. SW/4 NE/4, Section 23
4. Center .../4, Section 24

Township 21 South, Range 35 East, N.M.P.M.,

5. Center NE/4, Section 7
6. NE/4 SW/4, Section 7
7. NW/4 NW/4, Section 18

3. There is attached hereto and by reference made a part hereof, a plat showing the location of the said 35 producing wells and the seven unlined pits, together with the location of adjoining domestic and stock watering wells.

4. The 35 producing wells of operator in the Wilson-Yates Seven Rivers Pool are in an advanced state of depletion and the granting of an exception to Order No. R-3221 of the Oil Conservation Commission (the "Commission") will prevent waste caused by the premature abandonment of the wells.

5. Despite the history of the disposal in unlined pits on these leases of water produced in conjunction with the production of oil over a period of many years, there has been no significant adverse changes to the fresh water supplies in the area.

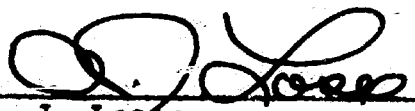
WHEREFORE, Applicant prays:

a) That an exception to Order No. R-3221 be granted to Applicant to permit the continuation, after January 1, 1969, of the disposal of water produced in conjunction with the production of oil from Applicant's 35 wells on the surface in Applicant's seven unlined pits or on such other pits located upon the above described lands which are deemed necessary by Applicant.

b) In the alternative, that Applicant be granted an extension of time, for such reasonable period as the Commission may deem desirable, within which to comply with the provisions of paragraph No. 3 of said Order R-3221 of the Commission.

c) And for such other relief as may be just in
the premises.

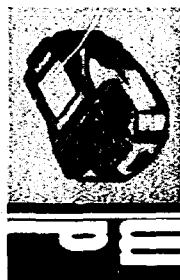
WILSON OIL COMPANY

By: 
A. J. Losee
P. O. Drawer 239
Artesia, New Mexico

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

December 18, 1968

REGULAR HEARING

IN THE MATTER OF:

A rehearing requested by
Wilson Oil Company for
reconsideration by the
Commission of Case No.
3859, Order No. R-3517,
which was an applica-
tion seeking permission
to continue to dispose
of produced salt water
in seven unlined pits,
Lea County, New Mexico.

Case No. 3859

BEFORE: A. L. Porter, Jr., Secretary Director
Guyton Hays, Land Commissioner
Governor David F. Cargo, Chairman
George Hatch, Counsel

TRANSCRIPT OF HEARING

MR. PORTER: Case 3859.

MR. HATCH: Case 3859, the matter of rehearing requested by Wilson Oil Company for reconsideration by the Commission of Case No. 3859, Order No. R-3517.

If the Commission please, we have received a request from the applicant in this case that the matter be continued until a July hearing.

MR. PORTER: The motion, as I understand it, Mr. Hatch, is a continuance to the July Regular Hearing?

MR. HATCH: The July Regular Hearing, and that would be July 16th.

MR. PORTER: Of 1969?

MR. HATCH: Of 1969.

MR. PORTER: Case 3859 will be continued to the Regular July Hearing, July 1969.

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter 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.

Samuel Mortelette
COURT REPORTER

dearnley-meier reporting service, inc.

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

1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-4491 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 18, 1968

REGULAR HEARING

IN THE MATTER OF:

Application of Wilson Oil Company for
an exception to Order No. R-3221, as
amended, Lea County, New Mexico.

Case 3859

BEFORE: A. L. PORTER, JR.
Examiner

TRANSCRIPT OF HEARING

MR. PORTER: The hearing will come to order. The next case on the docket is Case 3859.

MR. HATCH: Case 3859. Application of Wilson Oil Company for an exception to Order No. R-3221, as amended, Lea County, New Mexico.

(Whereupon, Applicant's Exhibits Numbers 1 through 11, inclusive, were marked for identification.)

MR. PORTER: Mr. Losee.

MR. LOSEE: Mr. Chairman, A. J. Losee, Artesia, New Mexico, appearing on behalf of the Applicant Wilson Oil Company.

MR. PORTER: Do we have any other appearances in this case? Mr. Heidel.

MR. HEIDEL: Mr. Porter, F. L. Heidel of Lovington, New Mexico, appearing for Southeastern Feeland Owners Association of Lea County and the Lea County Farm Bureau.

MR. PORTER: Mr. Heidel, do you propose to put on any testimony or are you just making an appearance here?

MR. HEIDEL: Possibly for the record, to implement the testimony that was the basis for Order Number 3221, I will, myself, appear as a witness for about three minutes of testimony.

MR. PORTER: Anyone else? Mr. Losee.

MR. LOSEE: I have one witness: Mr. Lamb.

MR. PORTER: Will the witness stand and be sworn, please?

(Witness sworn.)

MR. LOSEE: With the Chairman's permission, in the absence of a roster, can I stay seated while I examine the witness?

MR. PORTER: That will be perfectly all right.

RAYMOND LAMB

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

DIRECT EXAMINATION

BY MR. LOSEE:

Q Would you state your name, please?

A Raymond Lamb.

Q Where do you live, Mr. Lamb?

A Artesia, New Mexico.

Q What is your occupation?

A I'm a Petroleum Geologist for the Wilson Oil Company.

Q How long have you been so engaged?

A More than twenty years.

Q During that period, during that entire period, have you operated or overseen the operation of the producing wells in the Wilson Pool that are the subject of this application?

A I have.

Q Have you previously testified before the Oil Conservation Commission?

A I have.

MR. LOSEE: Are Mr. Lamb's qualifications acceptable?

MR. PORTER: They are.

Q Would you state to the Commission, Mr. Lamb, the purpose of this application?

A The purpose of the application is for an exception to Rule R-3221 for the production of the remainder of the life of this field, exception to the disposal of water in underground wells and be permitted to dispose of the water in pits as we have done for the last thirty years.

Q Do you have an opinion as to how long it will take to deplete the oil in this reservoir?

A My estimate is about three years.

Q Now, previous to this time, on November 1, 1958, the Oil Commission, pursuant to its Order R-1224A, appointed some committees to analyze pollution of fresh water supplies in southeastern New Mexico.

A That's right.

Q Was Wilson Oil Company a member of any of those committees?

A We were a member of the original committee.

Q And with respect to the committee in charge of analyzing pollution in the Wilson Oil Pool?

A We were Chairman of that subject committee, handling

and obtaining of information. There was, at that time, one other producer in the field other than the Wilson Oil Company.

Q What was one of the directives of the Commission in connection with the appointment of Wilson Oil Company as Chairman of the committee?

A To obtain information, periodically, and to keep strict surveillance over the fresh water conditions in the area as possible, pollution from the water disposed from the Yates-Seven Rivers Pool.

Q Pursuant to that directive, did you gather water analyses from the various fresh water wells in the area of the Wilson Pool?

A The first means of obtaining information was in 1958. We have previous records prior to that, but we have continued with the obtaining of the information, periodically, down through this date.

Q Please refer to what has been marked Applicant's Exhibit 1 being the large area map of the oil and gas fields in southeast New Mexico and explain what is portrayed by this exhibit.

A This is a regional map of southeast New Mexico giving the relative location of the Wilson-Yates-Seven Rivers Pool with respect to the other production in the area. You will note that it is a small isolated pool, not associated directly with the Eunice Monument platform, but as a Capitan Reef trend to

the west.

Q When was the pool discovered?

A The pool was discovered in 1938 and has continued production down to this date.

Q What is the nature of the producing reservoir?

A The main reservoir is classified as the Yates-Seven Rivers Reef. Some consider it as a reef of the Yates, and others, the reef of the Seven Rivers, but it is at the contact between the Yates and Seven Rivers and is continuous porous zone extending some 1100 feet below.

Q How many was the maximum number of wells that were producing in this field at the height of its producing status?

A About fifty-two wells.

Q How many of those wells were operated by Wilson Oil Company?

A About forty-six of them.

Q Now, is anyone other than Wilson Oil Company operating any wells in this pool at this time?

A No other production except Wilson Oil Company.

Q And how many wells do you presently produce in the pool?

A We are now producing twenty-three. We plugged out eight wells last year. We have some under consideration at this time. We have, remaining, twenty-three producing wells.

Q Please refer to what has been marked Applicant's Exhibit 2 and explain what is shown by this structural contour map?

A The Yates contour map was prepared by myself for the New Mexico Symposium. It is contoured on top of the Yates Formation to give the structural position of the entire pool, and you will note that there are three distinct, what we refer to as lobes. The north lobe was the one of first production and then the development extended to the southwest. A typical log, electric log, is on the right-hand side of the column with the Yates about 3500 feet and the top of the Seven Rivers or the top of pay at about 3780. The yellow area is the area filed with the application for this hearing and contains in excess of 2,000 acres.

Q What are the green dots?

A The green dots are locations of fresh water wells, the major part of those are shallow water. Two are Santa Rosa water wells.

Q Are some of those domestic water wells; that is to say, used for human consumption?

A Yes. The well in the northeast of Section 7 is used for our camp supply.

Q How many people live at that camp?

A Well, there are two at the present time; two families,

and there would be eight people.

Q Please refer to what has been marked Applicant's Exhibit 3 and it's on the board behind the Commissioners, being a map of the entire Wilson area, and explain what is portrayed by this map.

A This is a map enlarged of the one that you have in your packet. The area outlined in black is the same identical area marked in yellow on your regional map.

The green circles are the locations of fresh water wells in the area. There's a well here, a Simms well here, what we refer to as the Jeff Davis well, here, Barren well, the Christmas well, Brian Cochran had a well here at one time. Pan American had a water well at this location at one time.

MR. PORTER: By "this location", would you identify the location, Mr. Lamb.

THE WITNESS: By quarter sections?

MR. PORTER: Yes. No, that one in particular, "this location."

A This would be in the Northeast of the Northeast of Section 24, Township 21, Range 34.

MR. PORTER: That's within your producing area?

THE WITNESS: This was the domestic well and used for Pan American's camp. The reason I used this well, it is the one that we have the earliest record that goes back to 1950. It is

not now in use.

The brown circles are the locations of our disposal pits where we have disposed of all produced water from the Wilson Yates-Seven Rivers Pool for the last thirty years.

Q How many pits are there, Mr. Lamb?

A There are seven pits.

Q Looking at the north edge of the black outlined area, I notice two water wells and one pit in close proximity to each other. Would you tell us, approximately, how many feet Pit Number 5 is from your Water Well Number 1?

A This is our domestic water well. Actually, Number 1 and Number 2 are at the immediate location. It's about 200 feet from here to here, from this battery to this one over here. This well is a deep Santa Rosa Well.

Q Now, that Well Number 1 is the well that is used in your camp for drinking water for these families?

A That's right.

MR. PORTER: And it's how close to the pit?

THE WITNESS: It's about 200 feet.

Q Now, referring down to the Section 12 in the middle of the area outlined in black, and I note there's another water well in close proximity to two other brown circles, being Pits 1 and 2. Would you explain how far the water well is away from those two?

A Well, this would be around 1,000 feet across here, probably 1500 feet across there. This well was also used as a domestic well at the time we had a pumper's camphouse here. We have since abandoned that house. This well is now used for water supply for drilling rigs and so forth in the area.

Q Are all of the lands in the proposed exempt area owned by the State of New Mexico?

A They are all owned by the State.

Q And the State is the lessor on all of your leases?

A That's right.

Q You can sit down now, Mr. Lamb. Please refer to what has been marked as Exhibit Number 4, which is a tabulation of oil and water production in the Wilson Oil Pool from 1939 to date by years and explain what is reflected by this tabulation.

A This is the tabulation obtained from the records of the Lea County operators and showing the annual production for all years except 1968, which includes only seven months of records so far, and it also includes the yearly production of all water in the Wilson Yates-Seven Rivers Pool. It gives the company total of 14,253,252 barrels of water; 8,029,567 barrels of oil. The Pool total production of water is 15,949,579 barrels of water, and the oil production is 8,738,595 barrels. That's to August the 8th of 1968.

Q So actually, during the life of this field, from looking

at this exhibit, you draw a conclusion that Wilson Oil Company has produced substantially all of the oil and substantially all of the water in this pool.

A That's right.

Q Based on your twenty years of experience with this pool, Mr. Lamb, do you have an opinion as to how much additional produced water will be produced in conjunction with the remaining primary oil?

A I have estimated about 850,000 barrels of additional water and 122,500 barrels of oil if the operation is continued as it now is established.

Q And that's during the remaining primary life of this pool?

A That's right, and I might add that with the water drive in the Yates-Seven Rivers Pool, no consideration can be given to a secondary recovery project.

Q So that the reservoir will at that time be depleted from all known producing methods?

A That's right.

Q Please refer to what has been marked Exhibit 5, being the production analysis of your existing pits, and explain what is shown by this exhibit.

A This is a seven months' summary of the water and oil production giving the percent of water and the total solids

contained in the water by an analysis taken this year.

In Pits Number 1 and Number 2 which are in this immediate area here --

Q That's in the center of your pool?

A That's right. In here (indicating). We have two batteries on this lease that handles the production from all wells in this area. Those are combined for about 2,066 barrels per month of oil; 16,667 barrels of water with a percentage of 89% and the total solids contained in the recent analysis on these waters is 7,625 parts per million. At this location, which is our --

Q Wait a minute. You may go ahead.

A -- which is our Pit Number 3, we have now seven wells going into that battery. Production is 1180 barrels per month, water production is 12,803; 92% water, total solids: 8,180 parts per million.

Pit Number 4. We have four wells. Actually, two of them are not contributing much production, so basically, there are two wells going into this battery. 162 barrels a month of oil, 1,000 barrels of water; 86% of that is water, and total solids is 7,415 parts per million.

Pit Number 5, which is in the original producing area of the Wilson Pool and is adjacent to the domestic water wells which we use for our camp, we have two wells going into that pit.

305 barrels a month of oil, 4,883 barrels of water; 94% water, and total solids in this water is 3,990 parts per million.

In Number 6, we have four wells going into that battery at the present time. 709 barrels per month, 5,812 barrels of water; 89% water, and the total solids is 5,660 parts per million.

In Pit Number 7, we have four wells into this pit. Actually, two of them are being considered for plugging and abandoning. Total production is 320 barrels per month. Average water production is 3,455; 92% water, total solids, 6,845 parts per million, which will give a monthly average of 4,742 barrels per month total, and 44,621 barrels of water, about 90.4%.

Q Mr. Lamb, on this sheet, I do not notice any analysis of chloride in the water. Do you have an opinion, based upon experience, as to the amount of chlorides in this produced water?

A The amount of chlorides are even more radical than the total solids that we find. We have not a continuous water bed. We have a series of water-producing zones, and the chloride content will vary anywhere from 4500 parts per million to 5,000 parts per million.

As a matter of fact, from one experience we had in deepening a well 100 feet, we encountered four distinct and

different waters, one of which was fresh enough to drink, and the other was black as the chair. So to say exactly what the total solids, the chloride content, it's pretty well impossible because of the variation in the characteristic of the water.

Q Well, in your summary shown here, the highest total solids around your Pit Number 3 is slightly over 8,000 parts per million, is that correct?

A That's right.

Q And your highest chloride average would be 5,000?

A About 5,000, yes.

Q Mr. Lamb, are you familiar with the pamphlet entitled, "The Affect of Saline and Alkaline Waters on Domestic Animals"?

A I know of it.

Q Are you familiar with the standards set forth in this pamphlet for animal consumption of water?

A It has been stated that the tolerance for cattle is about 15,000 parts per million, and for sheep, it's slightly higher. It should be understood that an animal drinking extremely fresh water could not immediately consume this water because of the -- there should be time to develop a tolerance for this number of solids.

Q But as far as the standards set forth in 15,000 parts per million, that is nearly twice as many solids as you find in your produced water in your pits at this time?

A That's right. To my knowledge, in the twenty years that I have been with the Wilson Oil Company, we have not paid damages for one animal for drinking salt water. Now, we have a few from drinking oil, but not salt water.

Q Without getting out of your chair, Mr. Lamb, could you tell me how far to the west of this Wilson Pool is the area that was recently exempted by the Commission from the effect of Paragraph 3 of its Order 3221; how far is the easterly boundary of that exempt area from the Wilson Pool?

A Well, I haven't measured it, but I think it's in the vicinity of twelve miles.

Q Are you familiar with the testimony in that Case Number 3806 as to the volume of water placed on the ground by the potash companies in that exempt area?

A Yes. I have read the transcript, the amount of water being placed on the ground by the potash mines in that exempt area is about 300,000 barrels per day of 200,000 parts per million or more.

Q Now, referring in effect to your testimony that in the remaining life of the Wilson Pool you would produce about 850,000 barrels of water and with a total solids calculation of six or 7,000 parts per million being the average, have you made a computation as to the amount of solids that will be placed on the ground by Wilson Oil Company in its remaining

operation in comparison to the solids placed on the ground by the potash companies in the exempt area?

A I have. Taking into consideration those figures which I have now presented and using a figure of not in excess of 10,000 parts per million, the amount of total solids that we will place on the ground in the remaining life will be equal to that amount put on by the potash mines in about four hours.

I might also add that the water we're talking about is less than 10,000 parts per million. The time rated average of the water in the Pecos River at Red Bluff is 10,300 parts per million total solids.

Q Mr. Lamb, please refer to what has been marked as Exhibit 6, being a tabulation on the first page of the water wells that you have in the area and that are shown with green circles on Exhibit 3 and explain what is shown by this tabulation.

A Some of the wells on this tabulation are not covered by this map, so I will cover only those that can be identified by this map.

The Jeff Davis Well, which is the third well on the tabulation 6, is this well. It's 79 feet deep. The water level is 70.7 feet from the surface. There are two producing wells at that site.

In Section 8, referred to as the Barren Well, is 120

feet deep. The water level is 105.5 feet. The Wilson Well in Section 13 which is our Number 3 is 234 feet deep. We haven't had to pull the pump yet, so we don't know what the fluid level is.

Well Number 4, which is the lower well, to the shallow well, is 197 feet deep. It's 104.4 feet to the water level. This well is a Santa Rosa Well and is somewhere around 1,000 feet deep.

The next well, which has been abandoned, is a Tidewater Well, which is 115 feet deep; 82.1 feet to the fluid level. The next well is the Christmas Well which is 84 feet deep; 64.4 feet to the water level.

Now, in Section 7, 21-35 which is our camp Well Number 2, is 431 feet deep.

In Section 15, the Scarbrough Well is 184 feet deep, 174 feet to the fluid level.

The Shell Well in 24 is off the map. The well in 28 which is known as the Nose Well is 27 feet deep and 24.5 feet to the fluid level. And lastly, the North Well is 50 feet deep and is 36.3 feet to the fluid level.

These wells will supply enough water for some domestic use, a little commercial use and for ranching use.

Q Now, Mr. Lamb, just generally, without detail, what does the second page of this Exhibit 6 reflect?

A The second page is a list showing the stratigraphic unit of the sedimentary beds and the surface beds, and their thickness, the character of the rocks which make up this system and the description as to the water-bearing properties of these particular zones.

In support of this tabulation, you will find a series of drillers' logs taken from the drilling of cable to the wells in the Wilson area by the Wilson Oil Company, and they will give you an idea as to the conditions of the water in the area.

You will note the first shallow water is a meager supply of potable water for stocks and domestic wells. The second is about the same, if you have enough thickness of the formation. The third, in cases, will yield up to 30 to 40 gallons per minute with everything being at its best. Then in the Santa Rosa water, it's capable of yielding up to 60 gallons per minute in a properly constructed well, but you have a list of about 600 feet, and from there on down, the water to the top of the Rustler Formation is pretty well insignificant.

Q Mr. Lamb, using this exhibit as a basis -- Strike the question. Have you reviewed the water-bearing character of the shallow formations in the exempted potash area?

A I have.

Q And using that review and this exhibit as a comparison, is there any way to compare the water-bearing formations in the

exempted potash area to the water-bearing formations in the area of the Wilson Pool?

A They are very comparable. They are erratic. There's no uniform water sands contained over the entire area. I think you can see that from the depths of the wells on the first tabulation.

Possibly, if you wanted to get down to the point, maybe the water in this area is slightly better, but that would be the best classification that you could bring.

Q Mr. Lamb, is there any irrigation carried out in the area of the Wilson Pool?

A Well, none of any significance. One of my roustabouts has three tomato plants.

Q The water in the area is used entirely for stock and for domestic purposes?

A A little is used for drilling purposes, to drill oil wells in the area.

Q Please refer to what has been marked Exhibit 7, being the analysis you have gathered over the years in response to -- the analysis of the fresh water in the area pursuant to the directive of the Commission made to Wilson Oil Company in 1958.

A This is the summary of the complete data. It shows only the chloride content and the total solids. Our Wilson Well Number 5, which is here, in 1958 carried 92% chlorides and

500 -- Excuse me. 92 parts per million and 500 parts per million total solids.

Ten years later, the total chloride content was 35 parts per million with a total solids at 317.

Q Now, where is that well located?

A That's this well (indicating).

Q In Section 23?

A That's right.

Q Now, how far away is that well from the brown pit in Section 23?

A Well, this would be about 1800 feet in that direction, but you also see there are pits to the northeast and to the east and all around.

Q Do you have a conclusion as to the change in potability of any in that fresh water over the ten-year period?

A Well, after making a complete observation of all of these, including the ranch wells and so forth, we occasionally run into seasonal variations, and that's about the major significance that could be put to it. Sometimes, we're up a little and sometimes, we're down, but it can be classified, I think and in my opinion, as seasonal.

Q Let's go to your second well which is your Santa Rosa well in Section 23 and the analysis you have on it.

A This Santa Rosa Water Well is our original Well

Number 17 which was converted to a Santa Rosa Water Well.

The analysis of that water in 1967 was 300 parts per million of chloride and 680 parts per million total solids.

Now, also, these two waters, mixed, gave a composite analysis of 250 parts per million with a total solids of 637. That 250 is the chloride content.

Q Refer to the north well which is the Merchant Well in Section 30.

A You will recall that this well is 50 feet deep. In 1956, the chloride content was 93, no total solids calculation. In 1958, the total chlorides was 52 with 614 total solids and in 1967, it was 150 chlorides and 428 total solids which is a seasonal variation that you see occasionally in observing these figures.

Q Before you turn to the next one, Mr. Lamb, that well is located southeast of the Wilson Pool, is it not?

A That's right.

Q And is that the area in which the surface falls away to the southeast?

A The drainage is to the southeast.

Q Refer on your exhibit to Wells 1 and 2, the Wilson wells.

A Our camp wells, which are Number 1 and Number 2, and these are composite analyses in that all the water goes into the same tank. In 1956, the chloride was 24.8 with a total

solids of 26.4.

In 1958, the chloride was 23 with 654 total solids.

In 1967, it was 100 chloride with 473 total solids, and this year's analysis was 40 chloride and 370 total solids. This is the well that's being used in our camp for domestic use.

Q Refer to Pan American's well.

A The reason for this well, as I stated earlier, is one of the earliest wells in the entire area that we had an analysis on and it goes back to 1950. And reading from 1950, '51, '52, '55 and '56, the total chloride read this way: 89, 85, 82, 78 and 78.

The total solids was 551, 507, 543, 547 and the last one we have is 517.

MR. PORTER: My exhibit shows 457, Mr. Lamb.

THE WITNESS: In 1955?

MR. PORTER: In 1955. I believe you read that as 547.

THE WITNESS: Right.

A You will notice also that this well is to the southeast of the main production area.

Q It's in Section 24?

A That's right.

Q Mr. Lamb, you earlier mentioned that well was plugged. Did the potability of the water have anything to do with the

plugging of the well?

A Well, the oil was depleted and the camp was moved away and the house was moved away and the well was no longer in use, but it was not for a reason of poor water.

Q Mr. Lamp, on the analysis on these five wells, and using the accepted standard for human consumption, were any of these wells not potable for human consumption?

A All are potable for human consumption and are being used from day to day.

Q Now, does it not also show from these analyses of these various fresh water wells that there has not been any substantial change in the quality of the water from 1950 when the first analysis was made down to today?

A That's correct.

Q Now, in the hearing before the Oil Commission which was in April or May, April of last year in Hobbs, New Mexico, which resulted in the promulgation of Order R-3221, did Mr. Lawrence Merchant make a statement to the Commission as president or chairman of the Cattlemen's Association with respect to operations in your area?

A He did, and I might point out that all of the operations which we have are on the Merchant livestock ranch or the San Simon Ranch.

Q And Mr. Merchant was, at that time, the operator of the

San Simon Ranch?

A He was a partner in the operation.

Q All right. Now, subsequent to that hearing, Mr. Lamb, did Mr. Merchant write you a letter with respect to the water wells in the area of the Wilson Pool?

A He wrote me a letter dated May 2nd, 1967.

Q Has that been marked Exhibit 8?

A 8. It has been. He outlined the depths and the fluid level and the location of the various wells that we have previously discussed.

Q Would you read the portions of the letter which state when these various water wells that we've been talking about were first drilled.

A After the tabulation, the paragraph reads this way: Jeff Davis, the north wells, are two of the original watering establishments established in about 1900. The Christmas Well was established in 1912; the Nose Well in 1912. The Barren Well in 1914, and the Shell Well in 1935. And his final paragraph reads, "No increase in hardness evidenced in any well to date. All potable. Lawrence Merchant. May 2nd, 1967."

Q Now, Mr. Lamb, the north well as he referred to as having been established in 1900, is that the well that you earlier referred to in Section 30 located to the Southeast in the drainage area of the Wilson Pool?

A That's correct.

Q And referring back to your prior exhibit, the last analysis of the water on this well shows 150 parts per million chloride and 428 parts per million in total solids.

A Yes, and you will note that that was in the year 1967 and due to the seasonal situation, most all of the wells were slightly up during that year.

Q And that's the 68 year old water well after 39 years of oil production in the adjoining area?

A 30 years of oil production.

Q 30 years. Now, Mr. Lamb, have you recently gone to the scene of the Wilson Pool with a camera and taken some pictures of the pits and the water wells?

A I have.

Q With respect to the vegetation. Will you, by groups and by use of the maps, point out the area in which those pictures were taken and then hand them to the Commissioners, if you will.

A The first group of pictures was taken at or near our camp, to give you the relationship of the water wells and the pits and, of course, an observation as to the vegetation in the area.

This picture is taken in the direction of Southeast. It shows the corner of our camp. You can see this little

mound here is the disposal pit from our Pit Number 5.

Q Now, those pictures are of campsite up in Section 7?

A That's right. Here is a picture of an additional part of the camp, Water Well Number 1, and the overhead water tower. I guess there's no reason to apologize for the color on the pictures because it was an overcast day and besides that, it was Friday the 13th.

Here's a picture of our Water Well Number 2 looking east. These two pictures were taken on the east side of Pit Number 5 with the battery in the right-hand corner, the right-hand side of the water tank immediately forward, and the pit is between myself and the water tank.

You can see there how close the pit is to the water supply well. That has to do with our wells in Section 7, 21-34.

Here's another series of pictures taken from the north well in Section 30. Here's this location. Their random shop, showing the vegetation of the trees in the pit in the dirt tanks and the windmills and a cow or two on there.

Q Mr. Lamb, that's the 68 year old well that Mr. Merchant --

A That's right. The Barren Well, at this location (indicating). I have one view of it.

Q Would you give the section and township and range of that?

A It's 8, 21-34. And the Jeff Davis Well is at this location in Section 1, 21-34. There are two wells at that location. The last picture was taken from about this location with Pit Number 2 in the right-hand part of the picture. This pit is about the center of the picture and the water tower a little to the side to give you the relationship between the two pits and the camp water well.

Q Now, that's the water well in the center of your pool in Section 13?

A 13, 21-34.

Q Mr. Lamb, please refer to the estimated realization schedule which has been marked as Exhibit 10 and explain what is shown by this schedule.

A Exhibit 10 is a realization schedule which I prepared showing the estimated production for the year 1968 at 65,000 barrels of oil and 400,000 barrels of water. The estimate is extended through the next year period, the next period which we believe will be the life of the pool. 1969, there will be 16 wells at 55,000 barrels of oil and 350,000 barrels of water.

Q Mr. Lamb, excuse me just a second. Starting on January 1 of '69, this schedule has been prepared, am I not correct, as if the pool were to be continued to be operated in the same way as it is now?

A That's correct.

Q And as an exception to 3221?

A That's right.

Q Go ahead.

A 1970, we should have about 11 wells producing, 42,500 barrels of oil, and 300,000 barrels of water. In 1971, we'll be down to six wells with an annual production of about 25,000 barrels with 200,000 barrels of water which gives a future recovery, with the exception of 122,500 barrels of oil, 850,000 barrels of water; net income to Wilson Oil Company after taxes and royalty, \$257,250.00; state's royalty, \$43,750.00. The direct operating expense which is an actual figure based on our four men that we have operating the field and, by the way, we do our own pulling of the wells, we do all our own work and we have very little outside contract work--that total for the three years would be \$188,375.00.

The administrative and indirect cost, and as I see this figure of \$35.00 per well per month is an absolute minimum without question, and that total is \$13,860.00 or a profit of \$55,015.00 over a three-year period. I have also estimated the royalty to the state and the taxes to the state for a total of \$58,250.00.

Q Now, Mr. Lamb, actually, this column on state's royalty, royalty to the state in dollars, would be deducted before the column of Wilson Income, would it not?

A Well, yes. The figure that we have for Wilson Income is after taxes and royalty.

Q Now, how did you get this direct charge per barrel shown at \$1.45 for the year 1968?

A Well, this isn't difficult because this is the only operating property which we have.

Q And this is actual expense from experience during the first seven months of this year?

A That's right. That's right.

Q Please refer to the estimate realization schedule shown as Exhibit 11 and point out the distinction between this schedule and the preceding schedule.

A This is a similar estimate of the realization schedule, but with the disposal of water, and I might add in the beginning, the situation, if you'll refer back to -- I believe it's Number 5, Exhibit Number 5 -- you will note that this area of Pit Number 1 and Number 2 with 2,066 barrels per month could be maintained, but we would abandon the Number 2 Pit and go in this direction and have a single installation there. The other operation would be Pit Number 3. We would maintain it with a disposal well in that it carries 1180 barrels per month and 12,803 barrels of water.

Q You would abandon the wells up in Section 7 and in Section 18?

A No question about it, and also, these in 24. They would be abandoned immediately as of January the 1st, 1969.

Q Now, in your preparation of this realization schedule, you have assumed the installation of what equipment to dispose of the water?

A We would use two of the present wells which we now have if we can find one which will take the water at a reasonable pressure, and we have some doubts about this because we have attempted to inject water in Section 7, 21-34, and the pressure reached an unreasonable amount, but conditioned upon us finding a well which would take 1,000 barrels of water at 1,000 pounds pressure, the installation cost with two tri-plex pumps, gas engines, would run \$12,000.00; two storage tanks, one at each location for the accumulation of water pumped into the ground would be \$6,000.00. The acidizing and re-working of the wells -- I'm afraid of this figure of \$9,000.00 because there maybe additional costs in making the water enter the zone at which we prefer that it go because you must realize that these wells are several years old and you cannot be absolutely sure about the pipe conditions so we may have to take remedies to take care of that. Lines and equipment, we planned on or figured on plastic lined that would stand this pressure and carry this fluid. That would be a total of about \$35,000.00 installation cost.

Q Where did you obtain your figures for this estimate of installation cost?

A I obtained these figures from suppliers in Artesia.

Q Before you start to explain further what this portrays, there is a typographical error in the exhibit in that the \$35.00 per well per month; in the heading, it's shown under New Equipment Cost and it should be over there in the charge for Administrative and Direct Overhead.

A That is correct.

Q Would you give us the total on this realization schedule, assuming compliance with Order 3221?

A Would you want them by years or just the total?

Q I think just the total, January 1.

A I should note that in '69, we would have eight wells; '70, probably seven wells, and '71, down to four wells. This gives us a total of 65,500 barrels of oil, 450,000 barrels of water. Income to Wilson: \$141,750.00. Operating expense, direct: \$105,750.00. The Administrative Overhead at \$7,980.00. New Equipment Costs and the operation of that equipment for a period of three years at \$50,000.00.

The first year, our loss would be \$25,360.00. We would show a profit of \$3,310.00 for 1970, and a \$70.00 profit for 1971, or a total loss of \$21,980.00.

Q Now, Mr. Lamb, based on the preparation of these two

realization schedules, have you made a recommendation to the management?

A I have.

Q With respect to operation after January 1, if compliance with Order R-3221 is deemed necessary by the Commission?

A Well, there is no question in that I have used conservative figures throughout on the cost and so forth. There would be this loss of \$21,980.00 and there is no just reason to lose it. The well should be plugged out and abandoned as of January 1st, 1969.

Q Is that true of all the wells in the Wilson Pool?

A Basically, yes.

Q Does that mean that this 122,500 barrels of oil that you have estimated would be recovered or be lost?

A That's correct, because the amount estimated with the disposal of the water cannot be justified for expenditure to recover, so the total loss would be 122,500 barrels of oil.

Q Now, what royalties to the state would be lost?

A I've estimated \$58,250.00.

Q Do you have an opinion as to whether or not oil will be lost that would otherwise be recovered unless the application of Wilson Oil Company for an exception to Order R-3221 is granted?

A Without a doubt.

MR. LOSEE: I have no further testimony from this witness at this time.

MR. PORTER: Does anyone have any questions of the witness? Mr. Nutter.

MR. NUTTER: Go ahead, Mr. Heidel.

MR. PORTER: Excuse me, Mr. Heidel.

CROSS EXAMINATION

BY MR. HEIDEL:

Q I'd like to inquire, a couple of questions for clarification. In the north water well in the pool where the pit is about 200 feet, I believe you said, from the water well, that water well, I believe you said, was the Santa Rosa well?

A No. No. These two domestic wells used at our camp are here (indicating). The Santa Rosa Water Well is right here.

Q In that general area of the pool, how deep is the Red Bed from the surface?

A I think we have the Well Number 4, which is in that same section, the top of the Red Beds would be about 121 feet.

Q So the wells in the pool and in the area that are more shallow would be above the Red Bed and the other wells would be below the Red Bed?

A That's right. Some are above the Red Bed and some are below and some are in the Santa Rosa. As a matter of fact, this well was drilled with cable tools and no water was found in

the shallow beds at all. This is in the Northeast Northeast of 19, 21-35. So it's erratic. Usually, you start out with a drill to locate shallow water and you stop when you find it.

Q Are all of these wells pumping wells?

A Yes. I have the tabulation of the level to the water?

Q I mean, all of the oil wells now, are they pumping?

A Oh, yes.

Q And it's your testimony that you could not inject into any of those, to the best of your knowledge, without using pressure?

A Oh, I don't think there's any doubt about that. I think we have to pressure, because we have experimented with this well and we couldn't put the water away with 1,000 pounds. We're hoping to find a better one, by the way.

REDIRECT EXAMINATION

BY MR. LOSEE:

Q Mr. Lamb, I just have one other question. With the exception of the photographs which you've previously testified to, were Exhibits 1 through 11 prepared by you or under your supervision?

A That's correct.

MR. LOSEE: We move to have these exhibits, 1 through 11, admitted.

MR. PORTER: If there are no objections, the exhibits will be admitted.

(Whereupon, Applicant's Exhibits Numbers 1 through 11, inclusive, were admitted in evidence.)

MR. PORTER: Mr. Heidel, does that conclude your questioning at this point?

MR. HEIDEL: Yes, sir.

MR. PORTER: Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lamb, at the present time, do you have 23 wells producing?

A Yes.

Q What is the range on productivity of those wells, as far as barrels per day is concerned

A Well, they will run from one to top allowable. We have one top allowable 40-acre unit.

Q That will make a top allowable of 58 barrels a day?

A Yes, one proration unit.

MR. PORTER: That has two wells on it?

THE WITNESS: Two wells on it.

Q And you're sitting there, Mr. Lamb, telling us that if the salt water disposal order affecting this area should go into effect on January the 1st, as it is required to do by the order,

that all wells in this area would be plugged, including that top allowable well?

A Well, Mr. Nutter, I realize that there is a top allowable well, but what are you going to do with the water that that 40 acres produces?

Q I asked you and you said that you'd plug all the wells.

A That's right, because you really have nothing to do with the well, water that produces from the 40 acres --

Q How much water is that well actually making?

A Well, there are two wells on there. One of them will make about 100 barrels a day, and the other will make about fifteen or twenty.

Q Now, this estimate that you've got here for new equipment for \$35,000.00, is this that pit you stated you have one disposal well or --

A Two.

Q Two disposal wells. Actually, every one of these leases that you got here has an abandoned well on it, hasn't it?

A That's right.

Q Currently abandoned?

A That's right. That's the one we planned on using.

Q Now, wouldn't it be possible to find a well on each of the leases and put the water in it?

A Well, you're still going to have to go to the equipment.

Q Well, I'm going to get to this in a minute.

A Okay.

Q But wouldn't there be an abandoned well on each of the leases so that the water wouldn't have to be transported two or three miles to a disposal well?

A Well, that wasn't the problem of selecting the two locations. The problem of selecting these two locations is the topography. These two areas here, these two pits are in low areas with a higher range in between. If you could gravity it over, it would be one thing; but you don't. You have to set a pump installation or lay your line here and pump it there. Why not try to put the water from this pit, this pit into that well, and the water from this pit into that well? I think the cost is less when you put --

Q How about the water in the wells up farther to the north?

A Well, they don't make enough oil to justify the expenditure to buy the equipment to put the water away.

Q You wouldn't even bother to --

A No, I really wouldn't.

Q -- try to take care of them at all?

A I think if you look at this schedule which is Exhibit Number 5 which is Pit Number 3, Pit Number 4, these wells that are producing here produce 162 barrels a month.

Q You said you had two on that one that you were getting ready to plug, didn't you?

A Well, two are not producing. Two are in the semi-production stage now, but you got 162 barrels a month. You can't even get a well ready to put water in the ground, if this leaves up here on the north end, which is Pit Number 5, even 305 barrels; but you've got 4,883 barrels of water to put away.

Q What is the bottom hole pressure in these wells, Mr. Lamb?

A The figure that I gave or the statement that I gave you awhile ago that we are under an active water drive; the fluid level has not declined over the entire history of the field. Our fluid level of water will vary from 800 feet to the surface to 1200 feet from the surface. So when you go to put water away on a gravity basis, it gives you 800 feet of hydrostatic head or 1200 feet of hydrostatic head which, in our experience, has not been enough in most cases to dispose of any volume of water.

Q No attempt has been made to dispose of water into the Seven Rivers in this pool, however, has there?

A Well, except this Shell Well Number 2 that we tried to dispose of water in in 1958 on an experimental basis, and we used our rig pump, which is a thousand-pound pump, and in

about thirty days, the pressure in this well, the surface, was in excess of our pump capacity.

Q Has that well been cleaned off for disposal purposes?

A Yes. It has been cleaned out. It has now been plugged.

Q But the formation has been washed or acidized?

A Oh, yes. Well, you don't ever acidize the Seven Rivers reef. You have it or you don't have it.

Q That is, if you take the water on a thousand-pounds pressure?

A That's right, after about a thirty-day period.

Q What was the problem? The formation was full or do you think that there was a build-up of some mineral or --

A We didn't find any build-up of mineral. It just seemed to us that the formation pretty well filled up.

Q Mr. Lamb, when the wells were completed, an attempt was made, was it not, to keep the pits up above the main aquifer of water in the wells? I mean, you didn't want to penetrate down into the main body of water that is in the Seven Rivers reef?

A Well, that question really doesn't have an answer, Dan.

Q Well, isn't it possible that --

A Let me tell you why.

Q -- some of these wells may be opened up, maybe another ten feet, might get down into the aquifer and would just suck

that water up without having any \$12,000.00 tri-plex pump on them?

A Well, we have two pumps.

Q So two of them are tri-plex?

A Yes.

MR. PORTER: Mr. Nutter, let the witness explain his first answer.

A When you drill into the top of the Seven Rivers Reef, you do not have access to the entire reef. You have access in that particular penetration to only a few feet below the total depth of the hole.

Now, we have deepened wells, as many as five times, four times. The well that we're talking about is on this 40-acre unit that's top allowable now. The well was originally completed at 3691 feet. It was deepened 32 feet and separated the water from the upper zone from the oil in the new zone.

Then the well was deepened again and the same thing happened, and it has been deepened a third time, and you get a different zone each time. Now, to say that when you enter the top of the Seven Rivers Reef, you have access to all of it, is not the case. Each zone is its own and, actually, as a matter of fact, some of the zones in the Seven Rivers Reef have been pumped completely dry of fluid.

Q Then there's no water encroachment into those zones?

A That's right.

Q There is a main aquifer in there that's loaded with water, is there not?

A Well, when you enter the top of the reef, in time, you will have water in all of it. Just like in that Wilson Number 5 of ours at 3691, we originally had oil. It went to water. You have a flank encroachment, not a bottom water encroachment. You have a flank encroachment of the water.

Q Does the Seven Rivers Reef appear any different than the Seven Rivers over in the Jalmat Pool?

A Probably not. I've drilled both places. I wouldn't think so.

Q It was my understanding they're not having much difficulty putting water into the Seven Rivers over in the Jalmat area. I wondered if there was a difference here.

MR. NUTTER: I believe that's all, Mr. Lamb.

Mr. Porter, I would like to make a couple of motions here. Inasmuch as reference has been made to comments by Mr. Merchant in Case Number 3551 and also because of various data that was presented to the Commission with respect to this particular area by both Commission personnel and by Mr. Lamb and also with respect to general evidence concerning the general problem of salt water disposal in southeast New Mexico, I'd like to move that the record in Case Number 3551 be incorporated

by reference in the record in this case. Now, that was the case in which Order R-3221 was issued.

Also, since certain reference has been made to the area exempt from the pit prohibition order due to its proximity to the potash tailings ponds in the Nash Draw and Clayton Basin, I'd like to move that the record in Case Number 3806 be incorporated by reference into the record in this case.

MR. PORTER: Any objection to the motion?

MR. LOSEE: One brief statement, if the Commission please, with respect to the motion on the order and the testimony that serves as the basis of the Order 3221, we don't have any objection to it. We realize the testimony in that case was the basis for the hearing which resulted as the basis for the order which we are here asking an exception on the grounds that the area in question in this application is different from the entire testimony in 3221, so we recognize that we have the burden of showing we're entitled to an exception and if, in order to do so, we have to look at the testimony in that earlier case, that's very fine.

MR. NUTTER: How about 3806? Any objection?

MR. LOSEE: I have no objection.

MR. NUTTER: You have no objection to the entry, by reference, to either of the records?

MR. LOSEE: No.

MR. PORTER: The cases referred to will be incorporated by reference in this record of proceedings.

Now, does anyone else have a question of Mr. Lamb? He may be excused.

MR. LAMB: Thank you.

MR. PORTER: This concludes your testimony?

MR. LOSEE: Yes, sir, this concludes our testimony.

MR. PORTER: Mr. Heidel, would you like to make a statement?

MR. HEIDEL: If it please the Commission, to expedite the matter, I would like to, by way of testimony, make a statement concerning primarily implementing the general information concerning contamination. You might say, implementing primarily the matter of Case 3551 which resulted in Order 3221.

MR. PORTER: All right. Would you raise your hand, please, and be sworn.

(Witness sworn.)

F. L. HEIDEL

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

DIRECT EXAMINATION

BY MR. HATCH:

Q Would you state your name, please?

A My name is F. L. Heidel of Lovington, New Mexico, and

the purpose of my testimony is to bring to the Commission's attention some of the problems in Winkler County, Texas; Winkler County, Texas joining Lea County directly to the south. Studies have been made there through the years and one of the first studies was made starting in 1950 and, recently, there has been completed a further study by R. D. Reeves, U. S. Geological Survey. That study has not yet been published. It's been submitted to the higher authorities in the Geological Survey for their approval and, apparently, for subsequent release; but there are one or two items that I would like to read from the unpublished report that I just secured yesterday.

MR. LOSEE: Mr. Porter, if it please, I would at this time object to the reading of this unpublished report about Winkler County, Texas, until the witness can testify that the conditions, the fresh water conditions and the disposal practices in Winkler County, Texas upon which this report was based, are similar to those carried on, existing in the Wilson Pool. I think they have no relationship to the case unless and until the witness shows a similarity of conditions.

MR. PORTER: Mr. Losee, the Commission will hear the testimony on this point, and will assign to it whatever weight it deems. It might have a bearing on this case.

MR. LOSEE: Well, maybe I don't make my point clear. I think it's hearsay, but I grant you there are many times the Commission in the past has admitted hearsay. But what if the

report were on the water conditions that existed in Egypt or the Nile Basin? Under this theory, they'd be just as admissible and, yet, they surely would have no bearing in that instance. I feel like until, if the statement shows that the conditions are the same, that might be something else. But until we're talking about the same conditions --

MR. PORTER: Well, suppose we go ahead and see what the statement does state.

A The introduction states: In the late 1950s, the U. S. Geological Survey in cooperation with the Texas Water Development Board and the Commissioners Court of Winkler County made a study of the ground water resources of Winkler County and refers to the Garzo and Wesselman Report, that Garzo, Sergio and Wesselman Report published in 1959. It's the Texas Board of Water Engineers Bulletin 59-16, two hundred pages and fifteen figures.

Since that time, the apparent increase in the contamination of ground water supplies from the disposal of oilfield wastes caused great concern to the water users, particular the City of Kermit. Consequently, the City of Kermit and the Commissioners Court of Winkler County requested the Geological Survey to reappraise the ground water resources with particular emphasis on the extent of contamination in areas most favorable for future development.

And then it goes into the study it consisted of and I will not burden the record with that and go directly to the matter of contamination of the ground water.

In their report, Garzo and Wesselman indicated that as of 1956, the ground water in the Cenozoic alluvium and the Santa Rosa Sandstone, the principal sources of water for municipal, industrial and irrigation needs apparently has been contaminated in several areas in Winkler County and that most of the contamination had been caused presumably by leakage of salt water from unlined earthen pits.

Contamination left there, also, by salt water entering the aquifer from poorly cased or poorly plugged oil wells, from salt water disposal wells, from injection wells or from allowing salt water to flow back into a well that supplies fresh water for waterflooding.

Although the areas of ground water contamination were small in extent, contamination had reached within two and a half miles of the wellfield supplying water to the City of Kermit.

And skipping on through, contamination of the ground water supplies is not necessarily restricted to those wells of areas as shown in Figure 2, but undoubtedly, has occurred in other parts of the County where unlined disposal pits are or were used. Because of the slow movement of the ground water or

because wells are not available for sampling, contamination has not been detected elsewhere. And skipping on through, even if disposal of brines to open, unlined pits is stopped, the total quantity of contaminants accumulated below the land surface would not be diminished, and for many years, these contaminants will be dispersed even more widely in the aquifer.

The findings are that between 19 -- the studies, the '50s and the studies of this report was that this contamination had moved from two and a half miles of the Kermit City water wells to within one mile of the City water wells, and we wish to generally add that information to the entire subject of water contamination.

MR. PORTER: Mr. Losee.

CROSS EXAMINATION

BY MR. LOSEE:

Q Mr. Heidel, you're a lawyer by profession, are you not?

A That's correct.

Q How far away is Winkler County from the area in question, do you know?

A Well, as I mentioned awhile ago, Winkler County joins Lea County, New Mexico, directly to the south and this area in question, we're talking about Township 21 South, and I believe the extreme bottom of Lea County is about Township 25 South, 26 South.

Q How many miles is that?

A That would be about five townships, about thirty miles.

Q Do you know what waterbearing formations were shown in that report to have been contaminated?

A All zones. The abstract of water wells as shown run from shallow wells with water levels of 64 feet and on down to several hundred feet.

Q Do you know if the same waterbearing zones that exist in Winkler County or at least in the area which was the subject of that report are present in this Wilson Oil Company area?

A This report so shows.

Q Now, does the report show that present in the Wilson Oil Company area?

A No, the report does not refer to the Wilson, but from the testimony here by Mr. Lamb as to the general water formation in the Wilson area, why, this report would match up.

Q Well, what water formations were contaminated in that report, by name?

A As I mentioned, they have the shallow wells, less than 100 feet going down to the Santa Rosa Sandstone that I'd have to check the report here as to the exact depth of the Santa Rosa Sandstone wells.

Q Well, do you know what shallow zones they're referring to?

A The more shallow ones, I'm not sure whether the ones in the Wilson area referred to are as Ogalalla or one of the lower zones.

Q Do you know if the Ogalalla is present in the Wilson Oil Company area?

A It's debatable.

Q Well, is it there or is it not there, do you know?

A I do not know. I've heard experts testify, "Yes", and some experts say, "No."

Q Do you know whether the contamination in the Winkler area came from produced water going down the well bore?

A I do not know.

Q Do you know whether or not most of the wells, the old wells in Winkler County were completed without the use of any cement around the surface pipe?

A I personally do not know.

Q Could that have been the basis upon which that conclusion was reached that the contamination occurred, that the produced water was going around the well bore on uncemented surface pipe?

A I have no personal knowledge of that. I was just taking it from what this report stated by the U. S. Geological representative as he has studies on.

Q Have you read the whole report?

A Hastily.

Q Well, do you know whether it says that's the way the contamination occurred in Winkler County?

A It refers back to the original report for most of that information.

Q Do you know whether or not any or all of the wells in the Wilson Pool have the surface pipe cemented solid?

A I do not know.

Q The period of time covered by that report is 1956 down to date. How many years is that, Mr. Heidel?

A Well, the first studies commenced in 1950, so down to date, that would cover 28 years.

Q Do you know how long these studies of the Wilson Pool have covered from the testimony of Mr. Lamb?

A Well, I assume the first real studies were made by Mr. Lamb, I imagine starting about 1958.

Q Well, I believe some of the analyses were made as early as 1950, and the pool was actually discovered in 1939 based on his testimony. Was it not?

A I don't recall that precise.

Q Do you recall his statement that he has been actively engaged in operating this property since 1948?

A Right. Let me answer the question regarding the depth of these wells and so forth. Here, in this report, it

does show that since 1956, that there's been 58 large Basque wells drilled. It shows what uses: industrial, irrigation and so forth. Of these wells, nine were in the Santa Rosa Sandstone and two were in the Rustler Formation, and the rest were in the alluvium in the site on Table 1.

MR. LOSEE: Mr. Porter, I would again renew my objection to the portions of the report which we, of course, have not reviewed. But that's not the basis of my objection.

We understand that the burden is on us to show that the area of the Wilson Oil Company, the Wilson Pool, is entitled to an exception under Order R-3221 and contamination, generally, was shown to support the order, but we surely don't think we have to fight contamination thirty-five miles away in an area of which, based on my understanding, the old wells were actually drilled without surface pipe cemented and that, frankly, most of the studies reveal that contamination occurred around the well bore, which is surely not present here, that the Ogallala is the aquifer in Winkler County, and based on the exhibit we've introduced, is not present in the Wilson Oil Company area.

We just don't think that any of the conclusions reached in that report are applicable to this case.

MR. PORTER: Mr. Losee, the Commission will accept the statements of Mr. Heidel as pointing out the danger, the possibility of contamination of fresh water in a general way

from salt water disposal. Certainly, the testimony that he has given here has no direct bearing, no direct relationship to the question before the Commission here today in this specific area.

MR. LOSEE: Well, if the Commission please, I want to call Mr. Lamb to show the differences if the Commission is going to consider any more than your first statement, to-wit: that the report shows the disposal of produced water does, in some areas, causes contamination.

MR. PORTER: No, there is no direct relationship between the testimony that he has given here and the contamination in the area of the Wilson Pool.

Does anyone else have any questions of Mr. Heidel?

MR. HATCH: Mr. Heidel, the Secretary down here wondered who you were representing. Will you repeat that, please?

MR. HEIDEL: The Southeastern Feeland Owners Association of Lea County, New Mexico, and the Lea County Farm Bureau Association.

MR. PORTER: You may be excused. Does anybody else have any testimony to offer in the case? Any statements? Mr. Heidel, do you have a statement to make? Mr. Losee, do you have another statement?

MR. LOSEE: Yes, but I think Mr. Hatch has a letter I'd like to get into the record.

MR. PORTER: Do you have any communication, Mr. Hatch?

MR. HATCH: Mr. Losee delivered to the Commission a letter addressed to the Oil Conservation Commission from the Merchant Livestock Company dated September the 12th, 1968; Attention: Mr. A. L. Porter, Jr., Secretary-Director.

"This letter refers to the application of Wilson Oil Company for an exception to the no-pit order number R-3221 of the Oil Conservation Commission.

"In this application, we understand that Wilson Oil Company seeks authority to continue to dispose of produced waters in seven unlined surface pits located in Sections 13, 23 and 24, Township 21 South, Range 34 East; Sections 7 and 8 in Township 21 South, Range 35 East, Lea County, New Mexico.

"We understand that this case has been docketed as Number 3859, set for hearing on September the 18th, 1968 before the Oil Conservation Commission.

"We are the owners of the San Simon Ranch comprising approximately 180 sections of land in Lea County, New Mexico. The above named seven unlined surface pits are all located within the boundaries of our ranch. We know that Wilson Oil Company has been disposing of its produced water into these pits for the past fifteen to twenty years. We do not believe that the disposal of water produced from Wilson Oil Company, in conjunction with production of oil from this well, Wilson Yates-Seven Rivers Pool, Lea County, New Mexico, constitutes a

hazard to the fresh water wells in the area and all located on our ranch.

"Accordingly, you are advised that we have no objection to the proposed application of Wilson Oil Company for permission to continue to dispose of produced water in the above-mentioned seven unlined pits.

"Respectfully submitted, Merchant Livestock Company."
I believe it's J. D. Merchant, President.

MR. PORTER: Do you have any other letters, Mr. Hatch?

MR. HATCH: No.

MR. PORTER: Mr. Losee.

MR. LOSEE: In summary, Mr. Porter and Mr. Hays, really, of our evidence here, I think it shows that there have been thirteen stock and domestic fresh water wells in this area, some drilled as early as 1900 by the ranchers and still in use.

Pursuant to the '58 direction of the Commission, Mr. Lamb gathered water analyses of these fresh water wells. And those analyses, starting from 1950 down to date, show conclusively as five stock and domestic wells, that they are still potable for human use. Those wells are located within the exact area of the Wilson Pool. They are also located to the southeast in the area of drainage and they're still sufficient for human consumption.

Mr. Merchant says that's true of all the thirteen wells

that he has access to in this area. The foregoing water analysis occurred after approximately 16,000,000 barrels of water, produced water, had put in these seven unlined pits in the Wilson Pool over the past 29 years.

If the estimate now is correct, there will needed to be put on the ground only an additional 150,000 barrels over three years or approximately 5% of the total.

Now, we submit that if sixteen thousand barrels did not affect the fresh water supply in the area, I don't see how anyone can say 850,000 or 5% of that total will constitute a hazard to the fresh water in the area. To the contrary, I believe that the history and the evidence of the fresh water supplies in the Wilson Pool will support a statement of fact, and that is, that an additional 850,000 of produced water in the unlined surface pits will not and cannot constitute a hazard to the fresh water supplies in the area.

All of this acreage of Wilson Oil Company is on lands owned by the State of New Mexico. The three remaining years life of the pool will result in a recovery of 122,500 barrels of oil, \$43,750.00 in royalties to the state of New Mexico, and \$14,500.00 in taxes with a \$55,000.00 profit to the operator; that is, if he is permitted to operate the pool in the same manner in which it has been operated for the last 29 years. Otherwise, if Wilson Oil Company is required to

dispose of its water and does so in the two disposal wells and purchases equipment of \$35,000.00, it will result in a \$22,000.00 loss for the operator; and if the management follows Mr. Lamb's recommendations, they will plug the wells. The employees at the camp, the camp will be terminated, 122,500 barrels of oil will not be recovered, the State will lose royalty of \$43,750.00, the taxes will not be paid of \$14,500.00.

In summary, I would submit that if an exception is made to Order R-3221 to permit Wilson Oil Company to continue for the remaining life of the pool, estimated to be three years, one: no harm will come to any of the fresh water supplies in the area, and two, oil will be recovered, 122,500 barrels, that would not otherwise be recovered.

Based on this evidence, we respectfully ask that the Commission consider this as a proper case for an exception to Order R-3221.

MR. PORTER: Does anyone else have anything else to offer?

MR. UTZ: Mr. Losee, you referred to sixteen thousand barrels, didn't you?

MR. LOSEE: Yes.

MR. PORTER: Did you get that question?

MR. LOSEE: Our estimate was 16,000,000 barrels.

MR. PORTER: If there's nothing further to be offered in this case, we'll take it under advisement and take a very short recess before taking up Case Number 3860.

I N D E X

<u>WITNESSES</u>	<u>PAGE</u>
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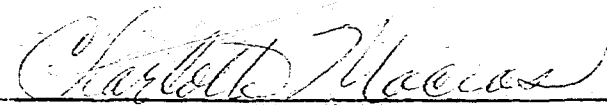
E X H I B I T S

<u>Number</u>	<u>Marked for Identification</u>	<u>Received in Evidence</u>
Applicant's Exhibits 1 through 11	2	35

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, CHARLOTTE MACIAS, 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 1st day of November, 1968.


Notary Public

My Commission Expires:

February 10, 1971.

I do hereby certify that the foregoing is
a true and correct copy of the transcript of
the hearing held before the
New Mexico Oil Conservation Commission
on the 1st day of November, 1968.

Notary Public

dearnley-meier reporting services, inc.



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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 16, 1969

REGULAR HEARING

IN THE MATTER OF:

REHEARING:

Application of Wilson Oil Company
for an exception to Order No. R-3221,
as amended, Lea County, New Mexico.

CASE
NO. 3859

BEFORE: A. L. Porter, Secretary-Director

TRANSCRIPT OF HEARING

MR. PORTER: Case No. 3859.

MR. HATCH: Case 3859; Rehearing. Application of Wilson Oil Company for an exception to Order No. R-3221, as amended, Lea County, New Mexico.

The Commission has received a request from the applicant that this case be continued to the regular hearing in October of '69.

MR. PORTER: With no objections, the Case 3859 will be continued to the October regular hearing, October, 1969.

- - - - -

STATE OF NEW MEXICO)
)
COUNTY OF BERNALILLO)

I, CA FENLEY, Court Reporter 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.



CA FENLEY - COURT REPORTER

dearnley-meier reporting service, inc.

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

1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 15, 1969

REGULAR HEARING

IN THE MATTER OF:

Application of Wilson Oil Company)
for an exception to Order No.)
R-3221, as amended, Lea County,)
New Mexico.)

Case No. 3859
(Continued)

BEFORE: Honorable David Cargo, Governor
Mr. A. L. "Pete" Porter, Secretary-Director
Mr. Alex J. Armijo, Land Commissioner

TRANSCRIPT OF HEARING

MR. PORTER: Case Number 3859.

MR. HATCH: Application of Wilson Oil Company for an exception to Order No. R-3221, as amended, Lea County, New Mexico.

The Commission has received a request from the applicant in this case that it be continued to April, 1970.

MR. PORTER: The request came from the applicant?

MR. HATCH: Well, from the attorney for the applicant.

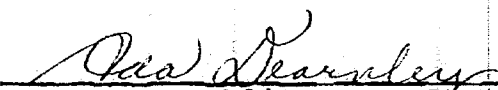
MR. PORTER: If no objections, the Case 3859 will be continued as requested by the attorney for the applicant.

At this point we will adjourn the Regular Hearing and Cases Number 4228 and 4229 will be referred to A. L. Porter, as an Examiner.

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 20th day of October, 1969.


Notary Public-Court Reporter

My Commission Expires:

June 19, 1971.

dearnley-meier reporting service, inc.

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

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Hobbs, New Mexico
April 15, 1970

REGULAR HEARING

IN THE MATTER OF:

Application of Wilson Oil Company for
an exception to Order No. R-3221, as
amended, Lea County, New Mexico.

Case No. 3859

BEFORE: ~~A. L. Porter, Secretary-Treasurer~~
~~David F. Cargo, Governor~~
George Hatch, General Counsel

Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. MUTTER: He will call next Case, 3859.

MR. HATCH: Case 3859. Continued from the October 15, 1969 Regular Hearing. Application of Wilson Oil Company for an exception to Order No. P-3221, as amended, Lea County, New Mexico.

If the Examiner please, this is really a rehearing before the Commission that had been granted and then continued, so it would have to be heard by the Commission. There has been a written request that this case be continued for another year.

MR. MUTTER: Case Number 3859 will be continued to the April, 1971 hearing.

STATE OF NEW MEXICO)
)
 COUNTY OF BERNALILLO)

I, BRENDA BURKS, Court Reporter 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.

Brenda Burks
 Court Reporter

I do hereby certify that the foregoing is
 a complete report of the proceedings in
 the Exclusion Hearing of Case No. _____
 heard by me on _____, 19____.

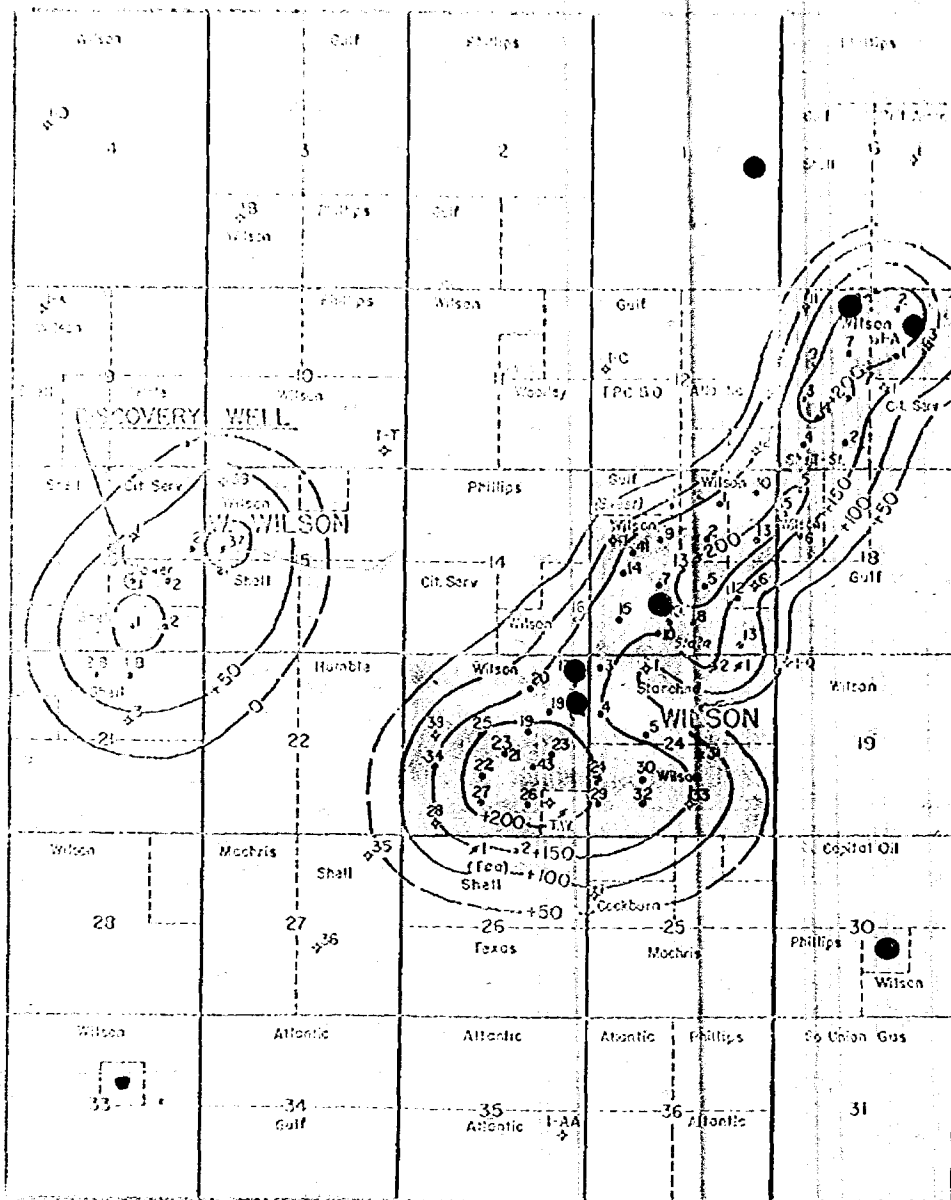
_____, Secretary
 New Mexico Oil Conservation Commission

EX H-2

R 34 E

R 35 E

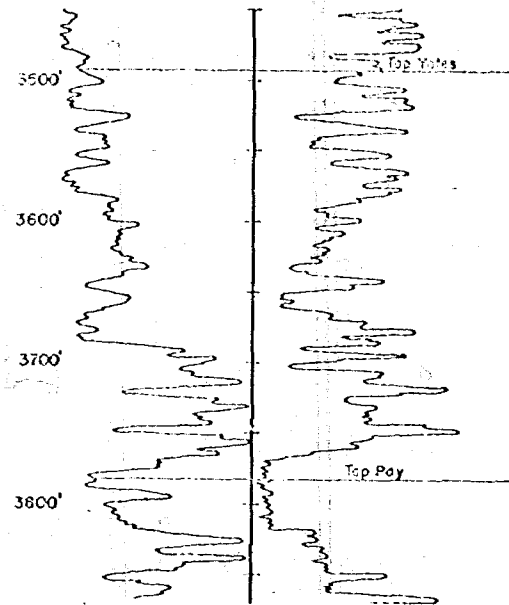
BEFORE THE
 OIL CONSERVATION COMMISSION
 Santa Fe, New Mexico
 Exhibit No. 2
 Case No. 3659



DISCOVERY WELL

City Service

TYPE LOG



W. WILSON & WILSON FIELDS
 LEA COUNTY, NEW MEXICO
 STRUCTURAL CONTOURS ON
 TOP OF YATES
 SCALE IN MILES
 0 1
 N. R. LANG NOVEMBER 1956

Exh - 4

WILSON OIL COMPANY

WILSON POOL-YATES-SEVEN RIVERS, LEA CO. N. M.

Company Annual Oil and Water Production

<u>YEAR</u>	<u>WATER Bbls.</u>	<u>OIL Bbls.</u>
1939	-0-	41,660
1940	12,609	91,802
1941	45,961	165,287
1942	54,490	156,876
1943	139,768	312,906
1944	162,938	356,996
1945	183,419	360,634
1946	121,529	344,122
1947	109,984	379,791
1948	100,696	459,213
1949	80,898	500,027
1950	59,179	462,928
1951	119,952	450,110
1952	786,102	434,770
1953	1,666,746	517,808
1954	881,161	503,302
1955	1,037,115	414,628
1956	928,101	374,802
1957	884,321	323,325
1958	1,173,840	235,145
1959	795,781	202,534
1960	550,577	154,273
1961	528,419	143,584
1962	502,513	130,028
1963	615,361	122,055
1964	548,111	107,083
1965	438,600	94,435
1966	480,116	107,589
1967	466,309	80,923
1968 (7 months)	312,347	33,194
Company Total (to 8-1-68)	14,253,252	8,029,567
Pool Totals (to 8-1-68)	15,949,579	8,738,695

RECEIVED
 OIL CONSERVATION COMMISSION
 Santa Fe, New Mexico
 Exhibit No. 4
 Date No. 3859

Ex h. - 5

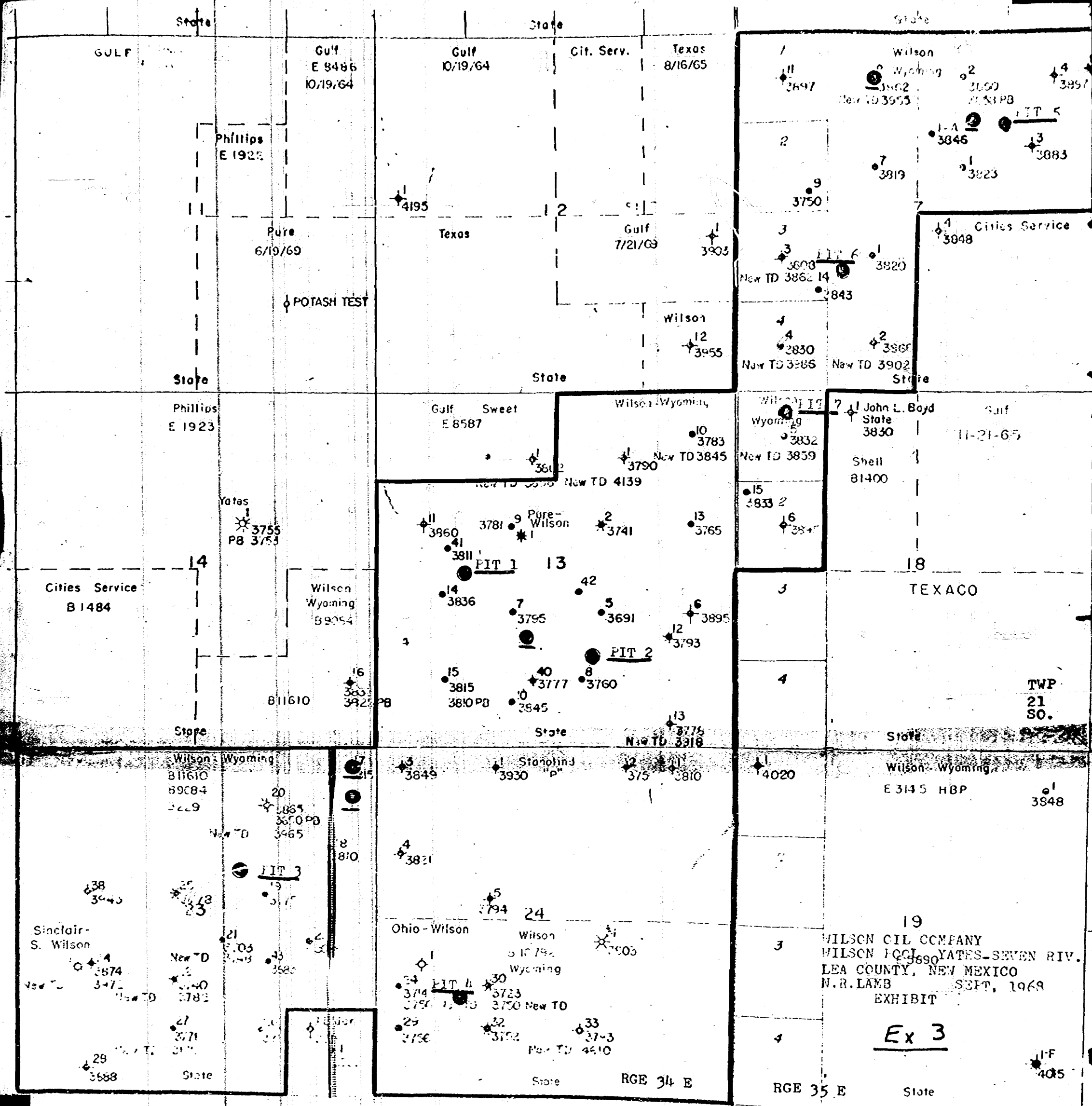
WILSON OIL COMPANY

WILSON - YATES - SEVEN RIVERS POOL

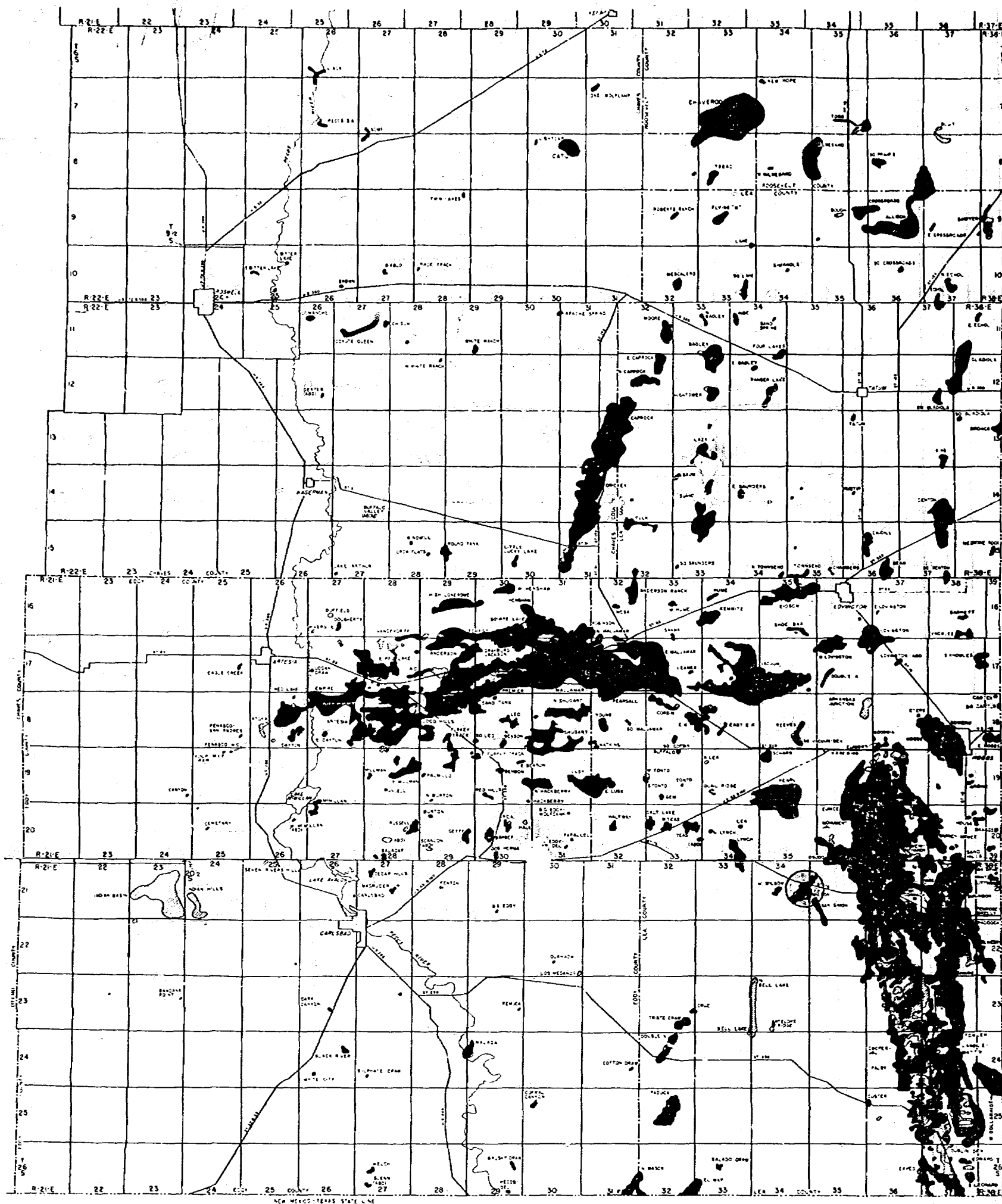
Production 7 Months of 1968

Pits	Average Oil Bbls.	Average Water Bbls.	Water Percent	Water Total Solids (1968) ppm
#1 & 2 10 Wells	2066	16,667	89%	7625
#3 7 Wells	1180	12,803	92%	8180
#4 4 Wells	162	1,001	86%	7415
#5 2 Wells	305	4,883	94%	3990
#6 4 Wells	709	5,812	89%	5660
#7 4 Wells	320	3,455	92%	6845
7 Month average	4,742 bbls	44,621 bbls	90.4%	

RECORDED
INDEXED
APPROVED
DATE
BY
FILE NO. 3859



EXH-1



LEGEND
● OIL FIELD
▨ GAS FIELD

SCALE - MILES

DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY
CONSERVATION DIVISION - BRANCH OF OIL & GAS OPERATIONS
MAP OF
OIL AND GAS FIELDS IN SOUTHEAST NEW MEXICO
DRAWN BY J. M. BROWN
MARCH 1936
ROOSEVELT, NEW MEXICO
MAP NO. ROOSEVELT 36

Exhibit No. 2859
File No. 2859

Exh 6

AREA OF WILSON POOL OIL PROD.
Records of ranch and oil field supply wells,
Lea County, New Mexico

Well Name	Location	Depth, ft.	Static Water Level		Remarks
			Below Land Surface, ft.	Date Measured	
West	T. 21S., R. 33E. NE 1/4 SE 1/4 Sec. 25	65	37.3	6-29-60	Will pump out - Has 200 foot tunnel
Standard	NE 1/4 NW 1/4 Sec. 28	223	178.6	6-29-60	Two producing wells at this site will pump dry
Jeff Davis	T. 21S., R. 34E. SE 1/4 NE 1/4 Sec. 1	79	70.7	6-29-60	Two producing wells at this site
Barron	SE 1/4 NE 1/4 Sec. 8	120	105.5	6-30-60	Reported yield about 20 gpm
Wilson No. 3	NE 1/4 SW 1/4 Sec. 13	234	-	-	Reported strong supply
Wilson No. 4	NE 1/4 NE 1/4 Sec. 23	197	104.4	6-27-60	Yield 22 gpm on bailing test
Tidewater	SE 1/4 SE 1/4 Sec. 23	115	82.1	6-27-60	Supplied oil field drilling operations
Christmas	SW 1/4 NE 1/4 Sec. 33	84	64.5	6-29-60	Reported yield 20-30 gpm. Well sanded in at bottom
Wilson Camp No. 2	T. 21S., R. 35E. Cen. NE 1/4 Sec. 7	431	-	-	
Scarborough	NE 1/4 NE 1/4 Sec. 15	184	174.2	6-27-60	Water corrosive - Weak supply
Shell	SE 1/4 NE 1/4 Sec. 24	214	205.2	6-29-60	Weak supply for stock use
Knolls	NE 1/4 SE 1/4 Sec. 28	27	24.5	6-29-60	Strong supply for stock use
North	NW 1/4 SW 1/4 Sec. 30	50	36.3	6-27-60	Strong supply for stock use

WILSON OIL COMPANY
WILSON POOL YATES SEVEN RIVERS
STRATIGRAPHIC UNITS ABOVE RUSTLER ANHYDRITE

Ceologic Era	System	Rock Unit	Approximate Thickness	Character of Rocks	Water-Bearing Properties
Cenozoic	Quaternary	Bolson deposits dune sand, and locally beds of volcanic ash	0-120	Bolson deposits, dune sand and other surficial deposits; slumped at San Simon sink	Yields meager supplies of potable water to stock and domestic wells
	Tertiary		0-160	Irregularly bedded sand, grit and clay; occasional gravel con- glomerate; interstitial and bedded lime caliche	Yields meager supplies of water to stock wells where formation is thickest
Mesozoic	Triassic	Chinle formation	200-820 +	Red and green clay and silty clay with development of red and gray angular fine to medium grained sand and sandstone beds in upper part	Sand and sandstone beds capable of yields of 30 to 40 gpm to properly con- structed wells.
		Santa Rosa sandstone	350 +	Angular to subrounded fine to medium grained gray and brown sand and sandstone interbedded with red and green clay and red siltstone.	Capable of yields up to 60 gpm to properly con- structed wells - pumping lift ranges up to 600 ft.
		Tecovas formation	180 ±	Red shale, siltstone and fine grained sandstone	Not a potential aquifer
Paleozoic	Permian	Dewey Lake red beds	375+	Red shale and siltstone veined and interbedded with gypsum	Not a potential aquifer
		Rustler formation	Not determined	Gypsum, anhydrite and dolomite with some interbedded red shale and siltstone	May contain mineralized water in sufficient quan- tities for water flood operations

Wilson Oil Co. B Lease - State No. 4
 NE 1/4 NE 1/4 Sec. 7, T.21S., R.35E.
 Elevation 3,700'

Description	Thickness, feet	Depth, feet
Sand, yellow, soft	121	121
Permo-Triassic red beds		
Red beds, shaly	294	415
Sand, gray (12 bailers water per hour)	60	475
Red beds, shaly	415	890
Red beds, sandy	85	975
Red beds, shaly	92	1,067
<u>Top of Santa Rosa water zone</u>		
Sand, red, medium (water)	27	1,094
Red beds, shaly	41	1,135
Sand, gray, medium (water)	60	1,195
<u>Base of Santa Rosa water zone</u>		
Red beds, sandy	20	1,215
Red beds, shaly	25	1,240
Red beds, sandy	51	1,291
Red beds, shaly	448	1,739
<u>Top anhydrite of Rustler formation</u>		1,739

Wilson Oil Co. - Shell State No. 2
 S21/4 SW 1/4 Sec. 7, T.21S., R.35E.
 Elevation 3,680'

Description	Thickness, feet	Depth, feet
Caliche, white, hard	50	50
Quicksand, yellow	55	105
Permo-Traissic red beds		
Red beds, soft	225	330
Sand, gray (water)	16	346
Shale, blue	3	349
Sand, gray (water)	53	402
Red beds	608	1,010
<u>Top of Santa Rosa water zone</u>		
Sand, red (water)	30	1,040
Red beds, sandy	25	1,065
Sand, gray (water)	50	1,115
Red beds, shaly	25	1,140
Sand, gray (water)	15	1,155
Red beds, shaly	10	1,165
Sand, gray (water)	35	1,200
<u>Base of Santa Rosa water zone</u>		
Red beds	478	1,678
<u>Top of anhydrite of Rustler formation</u>		1,678

Wilson Oil Co. - State No. 17
 NE 1/4 NE 1/4 Sec. 23, T.21S., R.34E.
 Elevation 3678'

Description	Thickness, feet	Depth, feet
Caliche and sand	25	25
Sand	105	130
Permo-Triassic red beds		
Red beds	35	165
Sand and blue shale	7	172
Shale, gray sandy	14	186
Sand (water)	16	202
Red beds	78	280
Shale, brown	55	345
Shale, brown and red beds	65	410
Red beds	200	610
No record	20	630
Red beds	18	648
Sand, hard	7	655
Red beds	25	680
Shale, brown sandy	20	700
Shale, sandy	70	770
<u>Top of Santa Rosa water zone</u>		
Sand	10	780
Shale, sandy	30	810
Red beds	55	865
Shale, sandy	35	900
Sand (water)	50	950
<u>Base of Santa Rosa water zone</u>		
Shale, blue	10	960
Shale, blue and red beds	12	972
Sand, hard	8	980
Red beds and blue shale	20	1,000
Red beds, shaly	50	1,050
Shale, red sandy	40	1,090
Red beds	110	1,200
Sand, hard	14	1,214
Red beds	31	1,245
No record	353	1,598
<u>Top of Rustler formation</u>		1,598

Wilson Oil Co. - State "E" 229, No. 28
 SW 1/4 SW 1/4 Sec. 23, T.21S., R.34E.
 Elevation 3702'

Caliche	20	20
Sand	130	150
<u>Permo-Triassic red beds</u>		
Red beds, sandy, shaly	5	155
Shale, pink, sticky	7	162
Shale, blue, sticky	3	165
Shale, brown, sticky	7	172
Shale, yellow	23	195
Sand and gravel (water)	11	206
Red beds, shaly	24	230
Shale, brown	50	280
Shale, yellow	55	335
Shale, yellow	15	350
Red beds, shaly	425	775
Shale, gray, sandy	30	805
Shale, blue	10	815
Red beds, shaly	15	830
Shale, gray, sandy	15	845
Red beds, sandy, shaly	40	885
Shale, blue, sandy	10	895
Red beds, sandy, shaly	10	905
<u>Top of Santa Rosa water zone</u>		
Sand, hard (2 bailers water per hour)	20	925
Sand, broken	30	955
Sand, (hole full of water)	25	980
Sand, hard	35	1,015
Sand	5	1,020
Red beds, shaly	45	1,065
(cont'd)		

Exh - 7

Fresh Water Laboratory Analysis

WILSON OIL COMPANY

Wilson Well #5

Sec. 23 - 21 - 34

<u>Year</u>	<u>Specific Gravity</u>	<u>Chlorides PPM</u>	<u>Total Solids PPM</u>
1958	1.0015	92	500
1968	1.000	35	317

Wilson Well #17 - Santa Rosa

Sec. 23 - 21 - 34

1967	1.000	300	680
1967*	1.000	250	637

* Composite Fresh & Santa Rosa

Fresh Water Laboratory Analysis

WILSON OIL COMPANY

Merchant Well #1 (North)

Sec. 30 - 21 - 35

<u>Year</u>	<u>Specific Gravity</u>	<u>Chlorides PPM</u>	<u>Total Solids PPM</u>
1956		93.	
1958	1.0014	52	614
1967	1.000	150	428

APPLIED WILSON
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FBI No. 3859

Fresh Water Laboratory Analysis

WILSON OIL COMPANY

Company Water Wells #1 & 2

Sec. 7 - 21 - 35

<u>Year</u>	<u>Specific Gravity</u>	<u>Chlorides PPM</u>	<u>Total Solids PPM</u>
1956	1.000	24.8	626.4
1958	1.0015	23.0	654.0
1967	1.000	100.0	473.
1968	1.000	40.0	370.

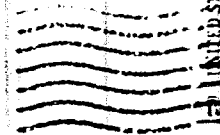
Fresh Water Laboratory Analysis

WILSON OIL COMPANY

Pan American #1. Wtr. Well

Sec. 24 - 21 - 34

<u>year</u>	<u>Specific Gravity</u>	<u>Chlorides PPM</u>	<u>Total Solids PPM</u>
1950	1.000	89	551
1951	1.000	85	507
1952	1.000	82	543
1955	1.000	78	457
1956	1.000	78	517



Exh-8

Wilson Oil Company
P.O. Box 457
Cortesia, New Mexico 88210

Water Wells in Wilson Pool

		TD	Water Level
Jeff Davis	Sec 1-21S-34E	79ft	70.7ft
Barron	Sec 8-21S-34E	120	105.5
Christmas	Sec 33-21S-34E	84	64.5
Shell	Sec 24-21S-35E	214	205.2
Knowles	Sec 28-21S-35E	27	24.5
North Well	Sec 30-21S-35E	50	36.3

Jeff Davis & North Well are two of the original waterings established about 1900.

Christmas was established about 1912
Knowles " " " " in 1912
Barron " " " " 1914
Shell " " " " 1935

No increase in hardness evident in any well to date - All potable.
Lawrence Mundt
May 2, 1967.

Ekh-10

WILSON OIL COMPANY

ESTIMATED REALIZATION SCHEDULE

Estimated recoverable Oil & Water Production as Now Operated (after 1/1/69 as an exception to R 3221)

Wilson Pool - Yates - Seven Rivers

YEAR	NC. WELLS	PRODUCTION OIL, bbls	WATER, bbls	WILSON INCOME AFTER TAXES & ROYALTY (\$2.10 Bbl)	STATE ROYALTY	DIRECT OPERATING EXPENSE Per bbl	ADMINISTRATIVE INDIRECT OVERHEAD \$35/Well/Month	PROFIT - LOSS
1968	23	65,000	400,000	\$136,500.	\$22,750.	\$1.45	\$94,250.	\$32,590
1969	16	55,000	350,000	\$115,500.	\$19,250.	\$1.50	\$82,500.	\$26,280
1970	11	42,500	300,000	\$119,250.	\$15,750	\$1.55	\$65,875.	\$18,755
1971	6	25,000	200,000	\$ 52,500	\$ 8,750	\$1.60	\$40,000.	\$ 9,980
Total After 1-1-69		122,500	850,000	\$257,250	\$43,750	Ave. \$1.55	\$188,375.	\$55,015
								profit over 3 year period

Royalty to State \$43,750.
Taxes to State \$14,500.

Total \$58,250.

MISSION
10
Applied 3859

Exh-11

WILSON OIL COMPANY

ESTIMATED REALIZATION SCHEDULE

Estimated Production Oil & Water With Water Disposal

Wilson Pool - Yates - Seven Rivers

YEAR	NO. WELLS	PRODUCTION OIL, bbls	WATER, bbls	WILSON INCOME AFTER TAXES & ROYALTY (\$2.10 per bbl)	DIRECT OPERATING EXPENSE Per bbl	Total	ADMINISTRATIVE INDIRECT OVERHEAD	NEW EQUIPMENT COST OPERATING COST (\$25/well/mo)	PROFIT - LOSS
1968	23	65,000	400,000	\$136,500	\$1.45	\$94,250	\$9,660.		\$32,590.
1969	8	30,000	200,000	\$63,000.	\$1.55	\$45,000	\$3,360.	\$35,000 \$ 5,000	\$25,360
1970	7	22,500	150,000	\$47,250.	\$1.60	\$36,000	\$2,940.	\$5,000	\$3,310.
1971	4	15,000	100,000	\$31,500.	\$1.65	\$24,750	\$1,680.	\$5,000	\$ 70.
Total After 1-1-69		67,500	450,000	\$141,750.	Ave. \$1.60	\$105,750	\$7,980.	\$50,000	\$21,980 Loss over 3 years

The above is condition on obtaining suitable well which will take volume of water at reasonable pressure.

Copy of Exhibit No. 11
 3859
 WILSON OIL COMPANY

NEW EQUIPMENT
 2 Triplex pumps with gas engine
 to deliver 1000 bbl water per day
 @1000 psi. \$12,000.
 2-1000 bbl Storage Tanks \$6,000.
 Acidize & rework well &
 Equipment \$9,000.
 Lines & Misc. inst. \$8,000.
 Total \$35,000