

Case No.

354

Application, Transcript,
Small Exhibits, Etc.

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

July 3, 1958

Mr. George Selinger
Skelly Oil Company
P.O. Box 1650
Tulsa 2, Oklahoma

Dear Mr. Selinger:

We enclose a copy of Order R-179-B issued July 3, 1958,
by the Oil Conservation Commission in Case 354, which was heard
on July 2nd before an Examiner at Santa Fe.

Very truly yours,

A. L. Porter, Jr.
Secretary - Director

bp
Encl.

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P
Y

CASE 354: Hearing 7/2/58 - Skelly Oil Co.
Application to amend Order R-179-A.

ROUGH
DRAFT
WJC/ir
July 2

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. 354
Order No. R-179-
B ?

APPLICATION OF SKELLY OIL COMPANY
TO AMEND ORDER NO. R-179-A TO ESTABLISH
LEASE ALLOWABLES FOR ITS H. O. SIMS
PILOT WATER FLOOD PROJECT IN THE PENROSE-
SKELLY POOL, IN LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 2, 1958, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this _____ day of July, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

(1) Usual

(2) That the applicant, Skelly Oil Company, is the owner and operator of the H. O. Sims Lease in the Penrose-Skelly Pool consisting of the following described acreage:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM

Section 33: SE/4

Section 34: SW/4

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM

Section 3: N/2 NW/4 and SW/4 NW/4

Section 4: NE/4

all in Lea County, New Mexico.

(3) That the applicant was authorized by Commission Order No. R-179-A to institute a pilot water flood project in the Penrose-Skelly Pool on the above-described H. O. Sims Lease.

(4) That the above-referenced pilot water flood project has caused an increase in the producing capacity of certain wells ^{said} on the H. O. Sims Lease to the extent that they are now capable of producing in excess of the top unit allowable for the Penrose-Skelly Pool.

(5) That the applicant proposes that the H. O. Sims Lease be assigned a lease allowable to be determined by multiplying the number of ^{developed} /40-acre proration units ⁽¹⁵⁾ contained in said lease ~~15~~ times the top unit allowable for the Penrose-Skelly Pool, said allowable to be produced from any well or wells on the lease in any proportion; provided however, that no ^{individual} well would be produced in excess of six (6) times the top unit allowable for the Penrose-Skelly Pool.

(6) That approval of the subject application will not ^{the} violate/correlative rights of any other operator in the Penrose-Skelly Pool.

(7) That the preponderance of the evidence presented in this case ^{indicates} /that waste would occur if the subject application were denied.

(8) That the subject application should be approved.

IT IS THEREFORE ORDERED:

Skelly Oil Company

(1) That the/H. O. Sims lease, described below, be assigned in the Penrose-Skelly Pool a lease allowable/to be determined by multiplying the number of developed 40-acre proration units contained in said lease (15) times the top unit allowable for the pool:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM

Section 33: SE/4

Section 34: SW/4

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM

Section 3: N/2 NW/4 and SW/4 NW/4

Section 4: NE/4

all in Lea County, New Mexico.

(2) That the allowable assigned to the above-described H. O. Sims Lease in the Penrose-Skelly Pool may be produced from any well or wells on said lease in any proportion; provided however, that no individual well shall be produced in excess of six (6) times the top unit allowable for the pool.

~~(3)~~ ^{DONE at} That the effective date of this order shall be 7 o'clock a.m., Mountain Standard Time, July 3, 1958.

Case 354

June 11, 1953

Re: IN THE MATTER OF APPLICATION OF SKELLY OIL COMPANY FOR AN ORDER AMENDING ORDER NO. R-179-A TO AUTHORIZE THE TRANSFER OF ALLOWABLE FROM WATER INJECTION WELLS TO OTHER WELLS ON THE SAME BASIC LEASE AND TO ESTABLISH A LEASE ALLOWABLE FOR ITS H. O. SIMS PILOT WATER FLOOD PROJECT. IT IS ALSO REQUESTED THAT AN EMERGENCY ORDER BE GRANTED WHEREBY THE PETITIONER MAY PRODUCE ITS H. O. SIMS NO. 6 IN EXCESS OF TOP ALLOWABLE.

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

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

Gentlemen:

With this application, Skelly Oil Company is requesting a hearing before the New Mexico Oil Conservation Commission for the purpose of amending Order No. R-179-A to authorize the transfer of allowable from water injection wells to other wells on the same basic lease and to establish a lease allowable for its H. O. Sims lease. In support of this application the following is listed:

1. That Order R-179-A authorized the conversion of H. O. Sims No. 8, SE/4 SW/4 and H. O. Sims No. 9 NW/4 SW/4 Section 34-22S-37E to water injection wells.
2. That water injection was instigated in these wells in August 1953.
3. That the petitioner's H. O. Sims No. 6, located NE/4 SW/4 Section 34-22S-37E is now capable of producing around 52 BOPD.
4. That the petitioner's H. O. Sims No. 10, located SW/4 SW/4 Section 34-22S-37E has also indicated an increase in production.
5. That the petitioner's H. O. Sims No. 7, located NE/4 NW/4 Section 3-23S-37E and H. O. Sims No. 11, NE/4 SE/4 Section 33-22S-37E, should respond to water injection in the near future.
6. That the petitioner requests that allowables for its H. O. Sims No. 8 and 9 injection wells be transferred to producing wells within the Pilot Water Flood area.
7. That a lease allowable be created for the H. O. Sims Pilot Water Flood area whereby the petitioner may produce up to six times the normal unit allowable from any well or wells in the pilot area.
8. That the wells to be considered in this application are part of the same basic lease and are as follows:

H. O. Sims No. 6 - NE/4 SW/4 - 34-22S-37E
H. O. Sims No. 9 - NW/4 SW/4 - 34-22S-37E
H. O. Sims No. 11 - NE/4 SE/4 - 33-22S-37E
H. O. Sims No. 10 - SW/4 SW/4 - 34-22S-37E
H. O. Sims No. 8 - SE/4 SW/4 - 34-22S-37E
H. O. Sims No. 7 - NE/4 NW/4 - 3-23S-37E

9. That the transfer of allowable and the creation of the lease allowable will prevent waste and enable the petitioner to fully evaluate the pilot water flood.

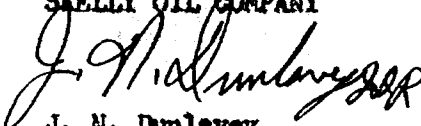
June 11, 1958

10. That until such time as a hearing is granted, an emergency order be written whereby the petitioner may produce its H. O. Sims No. 6 at a rate in excess of the normal unit allowable.
11. That the curtailment of production from the H. O. Sims No. 6 at this time will result in waste and would not be in the interest of conservation and correlative rights.
12. That a plat of the area showing wells and lease ownership is attached.
13. That all offset operators are notified by a copy of this application.

Therefore, the petitioner requests that a hearing be granted for the purpose of amending Order No. R-179-A whereby the petitioner, in the interest of conservation and protection of correlative rights, may transfer allowable from water injection wells and create a lease allowable to enable the production of six times the normal unit allowable from wells within the H. O. Sims Pilot Water Flood area.

Respectfully submitted,

SKELLY OIL COMPANY



J. N. Dunlavey,
District Superintendent.

JND/JDR/s

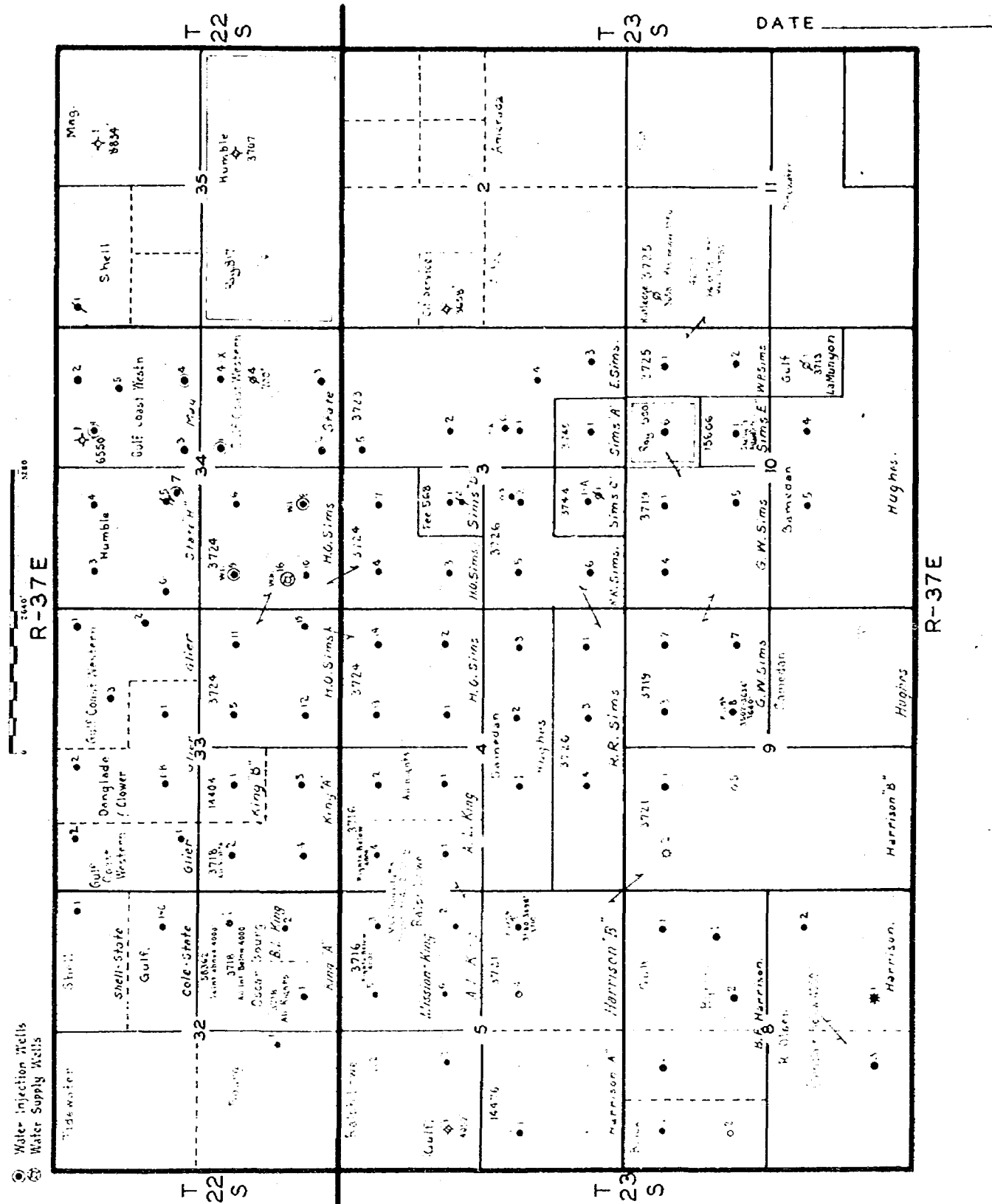
cc: Humble Oil & Refining Co.
Box 1600
Midland, Texas

Gulf Coast Western Oil Co.
916 Petroleum Building
Oklahoma City, Oklahoma

Mr. George W. Selinger
Skelly Oil Company
Tulsa, Oklahoma

Attachment: 1

SIMS AREA



June 5, 1953

Re: IN THE MATTER OF APPLICATION OF SKELLY OIL COMPANY FOR AN ORDER AMENDING ORDER NO. R-179-A TO AUTHORIZE THE TRANSFER OF ALLOWABLE FROM WATER INJECTION WELLS TO OTHER WELLS ON THE SAME BASIC LEASE AND TO ESTABLISH A LEASE ALLOWABLE FOR ITS H. O. SIMS PILOT WATER FLOOD PROJECT. IT IS ALSO REQUESTED THAT AN EMERGENCY ORDER BE GRANTED WHEREBY THE PETITIONER MAY PRODUCE ITS H. O. SIMS NO. 6 IN EXCESS OF TOP ALLOWABLE.

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

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

Gentlemen:

With this application, Skelly Oil Company is requesting a hearing before the New Mexico Oil Conservation Commission for the purpose of amending Order No. R-179-A to authorize the transfer of allowable from water injection wells to other wells on the same basic lease and to establish a lease allowable for its H. O. Sims lease. In support of this application the following is listed:

1. That Order R-179-A authorized the conversion of H. O. Sims No. 8, SE/4 SW/4 and H. O. Sims No. 9, NW/4 SW/4 Section 34-22S-37E.
2. That water injection was instigated in these wells in August 1953.
3. That the petitioner's H. O. Sims No. 6, located NE/4 SW/4 Section 34-22S-37E is now capable of producing in excess of the normal unit allowable.
4. That the petitioner's H. O. Sims No. 10, located SW/4 SW/4 Section 34-22S-37E has also indicated an increase in production.
5. That the petitioner requests that allowables for its H. O. Sims No. 8 and 9 injection wells be transferred to producing wells within the Pilot Water Flood area.
6. That a lease allowable be created for the H. O. Sims Pilot Water Flood area whereby the petitioner may produce up to six times the normal unit allowable from any well or wells in the pilot area.
7. That the wells to be considered in this application are part of the same basic lease and are as follows:

H. O. Sims No. 6 - NE/4 SW/4 34-22S-37E
H. O. Sims No. 9 - NW/4 SW/4 34-22S-37E
H. O. Sims No. 11 - NE/4 SE/4 33-22S-37E
H. O. Sims No. 10 - SW/4 SW/4 34-22S-37E
H. O. Sims No. 8 - SE/4 SW/4 34-22S-37E
H. O. Sims No. 7 - NE/4 NW/4 3-23S-37E
8. That the transfer of allowable and the creation of the lease allowable will prevent waste and enable the petitioner to fully evaluate the pilot water flood.
9. That until such time as a hearing is granted, an emergency order be written whereby the petitioner may produce its H. O. Sims No. 6 at a rate in excess of the normal unit allowable.
10. That all offset operators are notified by a copy of this application.

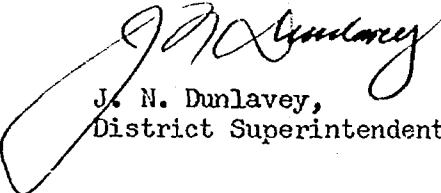
Case 354
R-179-A

June 5, 1956

Therefore, the petitioner requests that a hearing be granted for the purpose of amending Order No. R-179-A whereby the petitioner, in the interest of conservation and protection of correlative rights, may transfer allowable from water injection wells and create a lease allowable to enable the production of six times the normal unit allowable from wells within the H. O. Sims Pilot Water Flood area.

Respectfully submitted,

SKELLY OIL COMPANY



J. N. Dunlavey,
District Superintendent.

JND/JDR/e

cc: Humble Oil & Refining Co.
Box 1600
Midland, Texas

Gulf Coast Western Oil Co.
916 Petroleum Building
Oklahoma City, Oklahoma

Mr. George W. Selinger
Skelly Oil Company
Tulsa, Oklahoma

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. 354
ORDER NO. R-179

THE APPLICATION OF GULF COAST
WESTERN OIL COMPANY (SUCCESSORS
TO C. E. WILLINGHAM) FOR AN ORDER
GRANTING PERMISSION TO PRODUCE ITS
T. O. MAY, WELL NO. 5, NE/4 NE/4
SECTION 34, TOWNSHIP 22 SOUTH, RANGE
37 EAST, NMPM, LEA COUNTY, NEW MEXICO,
IN THE PENROSE-SKELLY POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 o'clock a. m. on April 15, 1952, May 20, 1952, June 19, 1952, and July 15, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 1st day of August, 1952, the Commission, a quorum being present, having considered the records and the testimony adduced and being fully advised in the premises,

FINDS:

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

(2) That the original applicant, C. E. Willingham, has assigned his T. O. May lease, NE/4 Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, to Gulf Coast Western Oil Company.

(3) That by virtue of Commission Order No. R-103, the Commission granted permission to drill an unorthodox well to be located 1310 feet from the North and East lines of Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, to be known as the T. O. May, well No. 5.

(4) That the proposed well was to be drilled as a test well to determine the feasibility of water flooding the producing horizon in the Penrose-Skelly Pool.

-2-

Case No. 354

Order No. R-179

(5) That the applicant now desires to produce the well pending the outcome of negotiations between himself and offset operators for a joint water flooding project in the area.

(6) That offset operators, namely Skelly Oil Company, and Humble Oil and Refining Company have no objection to the granting of a temporary three month allowable to the well.

IT IS THEREFORE ORDERED:

That the applicant herein, Gulf Coast Western Oil Company, be, and it hereby is authorized to produce its T. O. May well No. 5, NENE Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, for a period of 3 months effective August 1, 1952.

Provided further, that the allowable assigned the well shall not exceed the normal unit allowable as set by the Commission for the Penrose-Skelly Pool.

Provided further, that at the regular monthly hearing of the Commission on October 15th, 1952, this case shall again be heard and a determination made as to the future allowable to be assigned this well.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

GUY SHEPARD, Member

R. R. SPURRIER, Secretary

S E A L

Case 354

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

June 23, 1958

C
O
P
Y

Mr. J. N. Dunlavey
Skelly Oil Company
P.O. Box 38
Hobbs, New Mexico

Dear Mr. Dunlavey:

We enclose two copies of Emergency Order E-11 issued
by the Oil Conservation Commission on June 18, 1958.

Very truly yours,

A. L. Porter, Jr.
Secretary - Director

bp

Letter Mailed
6-24-58
BP.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 2, 1958

IN THE MATTER OF)
)
)
)
)
)

CASE NO 354

TRANSCRIPT OF PROCEEDINGS

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
3-6691 5-9546

NEW MEXICO OIL CONSERVATION COMMISSION

Page 1

Mabry Hall

Santa Fe, NEW MEXICO

HEARING DATE July 2, 1958 Examiner

REGISTER

TIME: 9:00 a.m.

NAME:	REPRESENTING:	LOCATION:
Joe D. Ramey	Shelly Oil Co	London, Okla.
Lee R. King	"	Hobbs, N.M.
Eugene H. Weiss	"	Farmington, N.M.
C. E. Goff	Austrian Oil Exp. Co. Inc	Houston, Tex.
Franklin D. Dwyer	"	"
Dwight D. Dwyer	Astoria Oil & Gas Co.	Galveston, Texas
P. J. McHugh	Aztec Oil & Gas Co	Albuquerque, New Mex
Blaine B. Neill	U.S.G.S.	Farmington, N.M.
R. E. Broschot	Neville B. Pounce, Inc.	Elmwood, N.M.
D. R. Correns	Amerado Pet Corp.	Hobbs, N.M.
Jason Kellie	PAN AMERICAN	Roswell, N.M.
Jack H. Campbell	Kellie & Co.	Elmwood, N.M.
Robert H. Dick	Campbell & Russell	Roswell, N.M.
	Ambassador Oil Corp.	Ft. Worth, Tex.
Nancy Roy	N.M. State Oil	

NEW MEXICO OIL CONSERVATION COMMISSION

Mabry Hall

Santa Fe, NEW MEXICO

REGISTER

HEARING DATE Examiner

July 2, 1958

TIME: 9:00 a.m.

NAME:	REPRESENTING:	LOCATION:
Ralph L. P. Porter, Wash.	W. L. L. Co.	Albion S. L. L. Co.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 2, 1958

-----)
In the matter of the application of Skelly Oil :
Company to amend Order No. R-179-A to permit the :
transfer of allowables from water injection wells :
to producing wells on the same basic lease and to :
establish a lease allowable for its H. O. Sims : Case 354
pilot water flood project in the Penrose-Skelly :
Pool in Lea County, New Mexico, to enable the pro- :
duction of six times the normal unit allowable from) :
any well or wells in said project. :
-----)

BEFORE:

Mr. Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order, please.
The first case on the docket this morning will be Case 354.

MR. PAYNE: In the matter of the application of Skelly
Oil Company to amend Order No. R-179-A.

MR. SELINGER: George W. Selinger representing the
applicant. We have one witness, Mr. Joe Ramey. We would like
to have him sworn.

(Witness sworn.)

JOE D. RAMEY

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

DIRECT EXAMINATION

BY MR. SELINGER:

Q State your name.

A Joe D. Ramey.

Q You are associated with what company?

A Skelly Oil Company.

Q In what capacity?

A District Petroleum Engineer.

(Marked Skelly's Exhibits One through Six for identification in the case.)

Q Where are you located, Mr. Ramey?

A Hobbs, New Mexico.

Q Are you familiar with Skelly Oil Company's operation in what we designated as the Sims area, classified by the commission as the Langley-Mattix area?

A Yes, I am.

Q Are you also familiar with the pilot water flood injection program on our Sims lease?

A Yes.

Q Is that a cooperative flood with Humble and Gulf Coast Western?

A Yes.

Q Will you describe the area that our Sims lease is and the location of the Humble and Gulf Coast Western?

A First I would like to say that that's the H. O. Sims lease.

Q Skelly H. O. Sims lease.

A Yes, we have several other Sims leases in the area. The H. O. Sims lease consists of the southeast quarter of Section 33, the southwest quarter of Section 34, in Township 22 south, Range 37, east and the northeast quarter of Section 4, and the west half, and the northeast quarter of the northwest quarter of Section 3 in Township 23 south, Range 37 east.

Q Now, I'll ask you hasn't the Commission heretofore in 1952 issued Order R-179 and Order R-179-A which approved a pilot injection program to the three companies involved?

A Yes, it did.

Q Referring to Exhibit One, will you advise the Examiner just what that purports to show?

A This is a plat of the area in question, with our H. O. Sims lease colored in yellow. The injection wells are outlined in blue.

Q That is not only on Skelly's Sims lease, but also those of Humble and Gulf Coast Western?

A Yes, that's correct. The red enclosed area are those wells mentioned in the application which should respond to water flooding.

Q Those are the wells that have shown response and are responding to the water flood at the present time?

A Yes. Wells Number 6 and 10 have responded at this time.

Q Have you also indicated some increased production in the other adjoining producing wells?

A We have a small increase in our well Number 11. It has increased from 3 to 5 barrels. This has been within the last month and is not enough producing history accumulated to say definitely that it is responding.

Q Now, I'll hand you what has been marked as Skelly Exhibit Two which is entitled, "Pilot Water Flood Performance, H. O. Sims Lease". Would you explain that to the Examiner?

A This is just a performance curve showing injection rates and oil production for our H. O. Sims lease, only the injection well, which is the dashed line, is for wells H. O. Sims wells 8 and 9, and the oil production curve, which is the solid line, is for wells 6, 7, 10 and 11 only.

Q Does that indicate, in a general way, the responsiveness of the production of oil to the injectivity of the water?

A Yes, I believe it does. Although this curve does not reflect it, we had our first increase in December of 1956. Then based on this increase, we stepped up injection in May of 1957, and immediately had a further increase in production; however, after about three months of high injection, why, we encountered some operational difficulties and we were forced to cut back our injection. During that time our production curve seemed to reach a level of about, well, 1150 barrels per month and then again in

May of this year we increased injection again and almost immediately our production curve increased sharply.

Q How much injection of water barrelage is indicated on the last point on your section here?

A We have about 2810 barrels.

Q How many barrels of oil is indicated by your last point on this curve?

A About 1890. Those are monthly.

Q Yes, per month.

A Yes.

Q Now, I hand you what has been marked as Skelly Exhibit Three, which is entitled, "Pilot Water Flood Performance H. O. Sims Well Number Six", and ask you to state what that indicates.

A This is just a production curve showing the monthly production rates for H. O. Sims Well Number Six.

Q Is that the first well to respond to the water flood injection program?

A No, I believe our first concrete response was on the H. O. Sims Well Number 10. However, this one had an increase the month after the H. O. Sims Number 10 increased in December 1956, and our Number 6 in January of '57.

Q What was the productive capacity of Well Number 6 before injection and what is it at the present time?

A Before injection it was about 6 barrels a day; at the present time it is producing 60 barrels a day.

Q Is the producing ability of that particular well increasing

at the present time?

A Yes, it is.

Q Is it your opinion that the well is approaching the zenith or apex of its productive capacity?

A Well, it could be possible. We originally thought it would level off at about one hundred barrels a day based on our injection rate, and our partners in this cooperative flood based on their injection rate; however, the last few months, why, Humble and Gulf Coast Western have increased their injection appreciably and so --

Q -- Would the increase of injectivity by those offset operators, would the productive capacity of this particular well be the first to be affected by the increased injectivity?

A Yes.

Q It is, therefore, that the productive capacity of this well would be greater than one hundred barrels?

A Yes.

Q Now, I hand you what has been marked as Skelly Exhibit Four, which is entitled, "Pilot Water Flood Performance, H. O. Sims Lease, Well Number Ten", and ask you to state what that is.

A This is a production curve showing the monthly production against time for H. O. Sims Well Number Ten.

Q What was the ability of this well to produce before injectivity and at the present time?

A It was approximately 120 barrels per month, or three

barrels a day, and the well is now making slightly in excess of 15 barrels per day.

Q It was three barrels per day before the water flood and it's presently 15 barrels?

A Right.

Q I'll hand you what has been marked as Skelly Exhibit Five, which is entitled, "Pilot Water Flood Performance Injection Wells", and ask you to state what that is.

A This is a curve showing the upper curve as injection pressures on the four injection wells that directly offset our H. O. Sims Number Six and the lower curve is the monthly injection rate.

Q Does the exhibit indicate that Skelly Oil Company on its H. O. Sims wells Numbers Eight and Nine are using a greater injection pressure and greater injection rate than either the Gulf Coast Western or the Humble?

A Our injection rates are considerably above Gulf Coast and Humble, but our injection pressures are not. Our H. O. Sims Number Nine has slightly over 1500 pounds. I believe it's 1565 pounds at this time, and Gulf Coast Western has the high of 1900 pounds. Our H. O. Sims Number Eight is the lowest insofar as injection pressures are concerned.

Q I'll hand you what has been marked as Skelly Exhibit Six, and ask you to state what that is.

A Exhibit Six shows a portion of the log from our H. O. Sims Number Nine injection well and correlated on that log are

permeability and porosity values from the core taken on the Humble state H, Number Seven injection well.

Q Now, Mr. Ramey, at the present time the allowable of the 13 producing wells on the H. O. Sims lease total 91 barrels a day, is that correct?

A That is correct.

Q And there's no allowable for the injection wells Number Eight or Nine assigned under the state?

A That is correct.

Q What is the --

A -- Mr. Selinger, I might correct that. We do have a capacity allowable. We have an emergency order on Well Number Six at this time.

Q That's what I was getting. At the present time Well Number Six that has responded to the water flood does exceed the top unit allowable in existence in this field after 33 barrels?

A That is correct.

Q Now, your request here is for the assignment of a lease allowable covering all of the wells both producing and injection wells, is that correct?

A That is correct.

Q And to operate the property on a unit or lease basis?

A Correct.

Q Under the present 91 barrels of allowable assigning the top of 33 to Well Number Six, that would give you an average of

less than five barrels per well per day for all of the wells in the field?

A Right.

Q On this lease?

A Yes.

Q And your request for assignment of allowable on a lease basis is the top unit allowable multiplied by the total number of wells both producing and injecting as a maximum, is that correct?

A That is correct.

Q You are not asking for capacity allowable but you are asking for the permission to produce up to the unit allowable multiplied by the number of wells on this lease?

A That is correct.

Q And hence you desire the transfer of allowable. With what maximum for any one or single well?

A Up to six times the normal unit allowable for any well.

Q Now, on your Exhibit One you have indicated the area outlined in red which has been affected by the flood either in the past or at the present time, is it your opinion that the effects of the flood will extend on beyond the red line as indicated on your Exhibit One?

A It is very possible. It depends on our future expanse. However, we don't contemplate any future expanse at this time until we can prove that we have a reasonable pay out on our money spent to date. But it is possible that Wells 15 and 4 and also on further down the line to 13, 14 and 12 could respond.

Q In other words, Mr. Ramey, this is a pilot water flood

11
In an area which is of salvage type nature of production, is that correct?

A Yes, very definitely.

Q The economics are one which will depend on whether or not the pilot flood would be expanded?

A That is right.

Q Do you have any estimates of the cost of the project at the present time?

A Well, our cost has been in the neighborhood of \$73,000 to the present time, that includes our water supply well and conversion of Wells Eight and Nine and also a treating plant and injection pumps. In addition to that we will have probably two or three thousand dollars chemical costs, plus labor.

Q At the present time under the theoretical effects of your very limited effect of water flooding, do you have any estimates of the increase resulting from your water injection over and above the primary oil?

A We are looking at on Number Six in the neighborhood of 120 thousand barrels. This is merely a one to one ratio of the primary.

Q Would the assignment of an allowable on a lease basis, based on the total number of wells both producing and injection multiplied by the top unit allowable in existence in this field, be sufficient to give you the flexibility of operation without any restrictions in your mechanical and productive effects?

A Yes, it would.

Q Would the granting of such a request as made herein by the applicant be in the interest of conservation?

A Yes, it would be.

MR. SELINGER: I believe that is all we have. We would like to offer Exhibits One through Six inclusive.

MR. NUTTER: Inasmuch as this has been advertised as a reopening of Case 354 and there may be other exhibits in Case 354, I wonder if we could identify them so that they will be identified as pertaining to this hearing. We can call this Exhibit Number One, Case Number 354, July, 1958.

MR. SELINGER: In other words, just date the case, Number 354, July, 1958.

MR. NUTTER: Let's put the date on the case number and that will identify that.

MR. SELINGER: Then we offer in evidence Skelly Exhibits One through Six, Case 354, July 2, 1958.

MR. NUTTER: Is there any objection to the entrance of these exhibits in this case? If not they will be received.

(Whereupon Skelly Exhibits One through Six, Case 354, July 2, 1958, were received in evidence.)

Q (By Mr. Selinger) Would you refer to your Exhibits Two and Six, Case 354, July, 1958, and explain to the Examiner why the granting of this application would be in the interest of prevention of waste?

A Exhibit Number Two reflects that our injection rate is in proportional in some part to our production rate. Now, in Exhibit Number Six, core analysis plus the log indicates that the Penrose sand of the Queen formation in this area is a lenticular sand that is interbedded with dense impermeable dolomite; so to prevent waste and to prevent early flooding out in our production wells, we must inject water into all zones or each individual sand stringer. Now, the core analysis indicated permeability ranges of from 159 to 588.

Q 149.

A 149. And that at a low injection rate it would be very possible and probable that water would enter into these zones with high permeability. We must have sufficient injection pressures and injection rates to insure the water entry into each individual sand body.

Q So that if any restriction is had, insofar as producing is concerned, it would prevent the flooding of the less permeable zones in the reservoir, and, hence, would not recover any of the oil lying on those low permeable streaks, is that correct?

A That is correct.

Q It is necessary, therefore, to maintain a high injection rate and high pressure and actually unrestricted production of oil in order to flush out the low permeable streaks?

A Yes.

Q Is that evidenced by your Exhibit Six, the variation in

permeability of the several zones from 149 to 588

A That is right. If we had to prorate or cut back our Well Number Six, we would also have to decrease our injection pressures to keep from the possible migration of oil outside of our five spot into low pressure areas. Hence if we reduced our injection rates, we would not be efficiently forcing water into all zones.

Q Now, the Commission has heretofore in a number of cases had comprehensive testimony with respect to the necessity of permitting adequate production to take care of your injection rate in Cases 1294, 1196, and in 1433. Are you familiar with the testimony presented in those cases?

A I have read most of the transcripts of the cases.

Q You have the transcript and have read that?

A Yes.

Q Is it your opinion that the information disclosed in those three cases are somewhat analogous to your thoughts in this particular case?

A Yes.

MR. SELINGER: I believe that's all we have.

MR. NUTTER: Does anyone have any questions of the witness?

MR. PAYNE: Yes, sir.

CROSS-EXAMINATION

BY MR. PAYNE:

Q Does your application include your Number Seven well?

A Yes, it does.

Q That well is reflected on Exhibit Number Two, is that included on the four wells?

A Yes, it is.

Q Have you had any response from this well?

A No, we haven't had any response. However, we do anticipate response in the near future in that well.

MR. NUTTER: Any further questions?

RE-DIRECT EXAMINATION

BY MR. SELINGER:

Q Is Well Number Seven a direct south offset to water injection well Number Eight?

A Yes, it is.

RE-CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Ramey, your lease there, the H. O. Sims lease, is entirely owned by Skelly, is that correct?

A That is correct.

Q Is the royalty interest and any possible overriding royalty interest the same throughout that area?

A Yes, it is the same, about a sixth interest.

Q That comprises 15-40 acre tracts, is that correct?

A That is correct.

Q You have requested a top unit allowable to be assigned to each of the 15-40 acre tracts?

A That is true.

Q With permission to produce the oil in any amount from any well thereon, with the exception that no well could produce six times the top unit allowable?

A That is correct.

MR. SELINGER: I might clarify one additional point with respect to tank batteries. Will you indicate to the Examiner the four tank batteries that are on this lease and which wells go to the tank batteries so they can have that information? Start with the southwest of 34.

A In the southwest of 34, we have, I don't have the exact location of that battery; however, it is in the southwest 34.

MR. SELINGER: Which wells go into which tank battery?

A Wells Six, Ten and 15 go in that battery. Then we have another battery in the southeast of 33, which handles the production from Five, Eleven and Twelve. And in the northeast of Section 4, the battery handles production from Wells One, Two, Three, Four, 13 and 14. Then Number Seven has its own battery.

Q (By Mr. Nutter) Mr. Ramey, do you believe that the influence of the increased injection which you have had in the last year will be felt by the H. O. Sims lease belonging to Skelly?

A I believe it should be, yes.

Q What lease do you feel would be affected by those increased injection rates?

A Well, I think the Gulf Coast Western, Humble State H lease in the southeast of Section 34, and then the Humble State H lease in the northwest of Section 34, and possibly the Gulf Coast Western Glier lease, which is in the northeast of Section 33, north half of the northeast quarter in the northwest of the northeast quarter.

Q Who is the working interest owner in the northeast quarter of Section Three?

A Skelly.

Q Might that lease also be affected by increased injection in Well Number Eight?

A Yes, it could be.

Q So that any leases which may be affected by the increased injection of water are leases owned by operators who are engaged in this pilot project?

A That is correct.

Q Is this water injection project a cooperative type project in any manner?

A Yes, it is.

Q It is. Are the rates of injection in the various wells belonging to the different operators correlated with each other, or are they controlled by mutual agreement?

A They were originally set up to be controlled by mutual agreement. However, we had different dates of initial injection, that is reflected by Exhibit Number Five. On Skelley's two wells,

we started injection in August 1953; Humble followed in December of 1953; and Gulf Coast Western in June of 1954. We originally attempted to balance injection rates by holding ours back, but, however, it appeared that as we lowered injection rates, our partners also lowered injection rates, and then when we received the first indication of increased production, we more or less stepped out on our own to further prove this. I think the time element and the money involved justified this. I can give you those figures on total injection to date if you would like to have them.

Q Yes, sir, I sure would.

A On Skelly H. O. Sims Number Eight, this is up to June the First, 1958, 344,714 barrels; H. O. Sims Number Nine, 275,107; Humble State H, Number Seven, 195,986; Gulf Coast Western, Humble State H, Number One, 205,198.

Q Mr. Ramey, do you believe that water is being injected in these pilot wells in such a manner as to cause drainage across any of these property lines?

A I believe we have more or less balanced injection. In other words, where we are forcing oil from our Number Eight to the east, Gulf Coast Western is in turn forcing oil to the west. And the same applies between the Number Nine and Humble State H, Number Seven.

Q You feel that any drainage that is being caused is being compensated for by counter drainage?

A Yes.

Q Referring to your Exhibit Number Six where you first mentioned the various lenticular sand bodies which had varying degrees of permeability, now, the core data which is presented on the left side of the exhibit is taken from the Humble well, I believe you stated.

A Yes, the Humble State H, Number 7. They drilled an input well and cored a portion of that sand. They did a core from approximately 3570 to 367 or 8.

Q The log which is presented on the exterior portion of the exhibit is from your Sims Well Number Nine?

A No, that is also of the core analysis. That's the actual core.

Q I mean the electric log.

A Yes, that is of the H. O. Sims Number Nine. I might point out that is a shot hole and hence the neutron does not indicate true porosity.

Q Do you have any reason to believe that the permeability and porosity in Humble State Number 7 and your Number Nine are similar?

A I think to a certain degree. There will undoubtedly be different permeabilities within the well bores of these different wells, as is true in any well.

Q Do you have reason to believe that the condition that exists, as evidenced by the core analysis in the Humble well,

that is the lenticular bodies of sand which have variable permeability and porosity, do you have reason to believe that condition exists in your Sims Number Nine Well?

A Yes, I do. I think that existed all over the area when the wells were drilled in. You would have -- each zone would give up oil in differing amounts; cable tool drilling was used predominantly throughout that area; and you would have shows of oil in one zone, where the next zone was too impermeable to give up any free oil as the wells were drilled.

Q So that the evidence which the core analysis presents of varying permeabilities and porosities in the Humble well would apply to the Sims Number Nine Well, to such an extent so that you can testify that if you varied your rate of injection, you would have water going into various zones and not entering the others, is that right?

A I believe that to be true, yes. I will say that the sample log on this H. O. Sims Number Nine reflects essentially the same as the core analysis data indicated, insofar as the lithology is concerned.

Q Do you have the productive capacity of the 13 wells on your H. O. Sims lease at the present time?

A Yes, I have those.

Q Would you read those figures in the record, please?

A Well Number One, two barrels; Well Number Two, two barrels; Well Number Three, three barrels; Well Number Four, two barrels,

Well Number Five, three barrels; Well Number Six, 60 barrels; Well Number Seven, three barrels; Well Number Eight and Nine are injection wells; Well Number Ten, 15 barrels; Eleven, five barrels; Twelve, five barrels; Thirteen, three barrels; Fourteen, four barrels, and Fifteen, twelve barrels.

Q Those are the results of well tests taken on those wells?

A Yes.

Q What were the dates of those tests?

A It was at the last gas-oil ratio. I do not have that, whatever the last required gas-oil ratio was, I believe it was the early part of this year.

Q Do you have the well potentials, as of the most recent G-O. R. test period prior to that?

A I should correct your last question, Mr. Nutter. Those were not, I will say for all but Wells Six, Ten and Eleven, those were as of the gas-oil ratio tests which, I believe, were the earlier part of this year. However, six, ten and eleven, Well Number Six was tested June the 30th, and it produced 60 barrels, also on that same date, we tested Well Number Ten and it produced slightly in excess of 15 barrels, I don't have that, we call the production 15 barrels at this time, and Well Number Eleven was tested earlier in June and was making about five barrels. Those wells, I might point out that Wells Five, Twelve and Eleven, which go into the same battery, are pumped during five different periods of the day, so it is possible to get a production test every day so we can

accurately estimate just what the wells are producing.

Q How about Well Number 15 which is producing 12 barrels a day. Has that experienced any increase, or has it also maintained a relatively high rate?

A We had a little production increase. We recently cleaned that well out. I think it will probably fall down to probably in the neighborhood of four to five barrels.

Q So that it's 12 barrels a day as a result of a clean out rather than water injection?

A Yes, it has not responded to any water injection.

Q What was Well Number Six producing, say, four or five months ago?

A Well, let's take January of 1958, the well produced about 570 barrels for the month. It would be a little in excess of 18 barrels a day.

Q So from January it's gone from 18 to 60?

A Yes.

Q How about Well Number Ten, what was it producing in January?

A About 445 barrels, a little in excess of 14 barrels; however, if you will look at Exhibit Number Four, you will see that that was one of the peak periods. I would say the average was 400 barrels a month, or about 12 barrels a day.

Q So its kick is in the range of about three barrels a day then?

A Yes.

Q You included Well Number Eleven in the wells that had a response didn't you?

A I'll say this, it had during the last month, it has increased from three to five barrels. I don't think we have had sufficient production history; those wells will vary a small amount. I think a three to five barrel increase, I would not definitely say it is getting a response to our injection. However, we can tell more about that within the next few months.

Q Mr. Ramey, you mentioned that you anticipated that you would have approximately 20,000 barrels of secondary recovery?

A Yes.

Q Do you mean from each of the wells in this area?

A I mean from those wells which are completely closed by a five spot. That is what I anticipate for Well Number Six.

Q Its primary was approximately 120,000?

A No, its primary was 75,000, in excess of 75,000; however, I am including one-fourth of the primary of the four injection wells surrounding that.

Q I see. How soon do you think it will be before you have sufficient information on this pilot water flood to know whether you are going to expand it or not?

A Well, that will depend on the response of Well Number Six. I have calculated that we have recovered approximately 9,000 barrels of secondary oil to date. So we'll have to wait for future performance on our Well Number Six.

Q To what degree have wells offsetting the other pilot wells in this project been affected, Mr. Ramey? How about Gulf Coast Western's May Number Three Well?

A The May Number Three hasn't shown any response. As a matter of fact it has shown one-tenth of a barrel decrease. However, they had water break through to that well almost immediately after injection was started in their Humble State H, Number One. They have since gone in and squeezed off some of the formation above the Penrose and have decreased their water production considerably. I might point out that their T. O. May Number Two and Number Five, Number Two has increased from three to 12 barrels and their Number Five --

Q -- Which well was that?

A Their T. O. May Number Two.

Q That would be the well in the northeast of the northeast?

A Northeast of the northeast of Section 34.

Q It has gone from --

A -- Three to 12 barrels. Their Well Number Five, which I believe is also in the same quarter, has increased from five to 12 barrels. Those are production rates as they report them to us.

Q Has Humble State H, Number Six had any change in productivity?

A Not that we have been able to determine. Humble has shown a slight increase on their total lease over what they had when

injection was started. However, they don't show that any one well has increased appreciably. I don't think you could call it a concrete production increase.

Q How about Gulf Coast Western's State Number Two in the southeast of 34?

A They don't report any production increase on their Humble State H lease.

Q So in effect your Well Number Six is the only one that has shown any radical change in productivity to date?

A That's right; however, Well Number Ten, I think it is still increasing, although the increase is gradual. It seems to be more pronounced for the last three months. It's on an upward trend.

MR. NUTTER: Does anyone have any questions of Mr. Ramey?

MR. SELINGER: That's all we have.

MR. NUTTER: If not, he may be excused.

(Witness excused.)

MR. NUTTER: Does anyone have anything further they wish to offer in Case 354? We'll take the case under advisement.

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, 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 8th day of July, 1958.

Ada Dearnley
 NOTARY PUBLIC

My Commission Expires:
 June 19, 1959

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 354
 heard by me on 7-2, 1958.
Ada Dearnley Examiner
 New Mexico Oil Conservation Commission

MAIN OFFICE OCC
1958 JUL 13 AM 8:46

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER CONCERNING
CAPACITY ALLOWABLES FOR
ONE WELL WITHIN A PILOT
WATER FLOOD PROJECT AREA
IN THE PENROSE-SKELLY POOL,
LEA COUNTY, NEW MEXICO.

EMERGENCY ORDER NO. E-11

ORDER OF THE COMMISSION

BY THE COMMISSION:

NOW, on this 18th day of June, 1958, the Oil Conservation Commission of New Mexico, a quorum being present, having considered the application of Skelly Oil Company for an emergency order and being fully advised in the premises,

FINDS:

1. That the applicant Skelly Oil Company, is the owner of certain properties situated within a pilot water flood project area in the Penrose-Skelly Pool, Lea County, New Mexico, which project was authorized by Order No. R-179-A, dated January 15, 1953.

2. That said pilot water flood project has caused an increase in the producing capacity of the Skelly Oil Company H. O. Sims No. 6 Well in the NE/4 SW/4 of Section 34, Township 22 South, Range 37 East, NMPM, to the extent that said well is now capable of producing oil substantially in excess of the top unit allowable for the Penrose-Skelly Pool.

3. That there is a reasonable probability that waste will occur if production from the above-described well is restricted.

4. That an emergency exists which requires the promulgation of an order, without notice and hearing, to eliminate the possibility of waste occurring.

5. That a hearing should be held on July 2, 1958, to determine whether waste will actually occur if production from the aforementioned well is restricted.

6. That in the event the applicant fails to prove that waste will occur if production from said well is restricted, then any oil produced from said well in excess of the normal allowable therefor should be charged against future allowables for the well.

IT IS THEREFORE ORDERED:

1. That the Skelly Oil Company H. O. Sims Well No. 6, located in the NE/4 SW/4 of Section 34, Township 22 South, Range 37 East, NMPM, Penrose-Skelly Pool, Lea County, New Mexico, be granted an allowable equal to its capacity to produce.

2. That this order shall become effective at 7 o'clock Mountain Standard Time on June 18, 1958, and shall expire not later than 7 o'clock a.m. Mountain Standard Time, July 3, 1958.

3. That a hearing be held at 9 o'clock a.m. on July 2, 1958, to permit the applicant to appear and show cause why the above-described well should be granted an allowable equal to its capacity to produce.

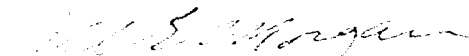
4. That in the event the applicant fails to prove that waste will occur if the production from the above-described well is restricted, then any oil produced from said well in excess of the normal allowable therefor shall be charged against future allowables for the well.

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

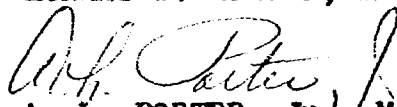
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



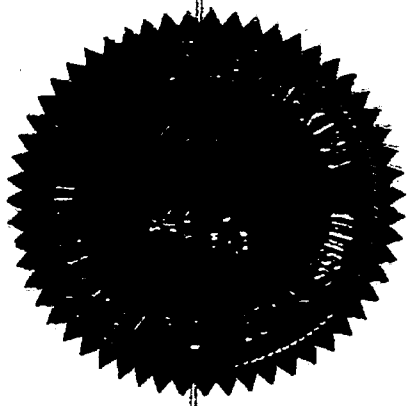
EDWIN L. MECHEM, Chairman



MURRAY E. MORGAN, Member



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



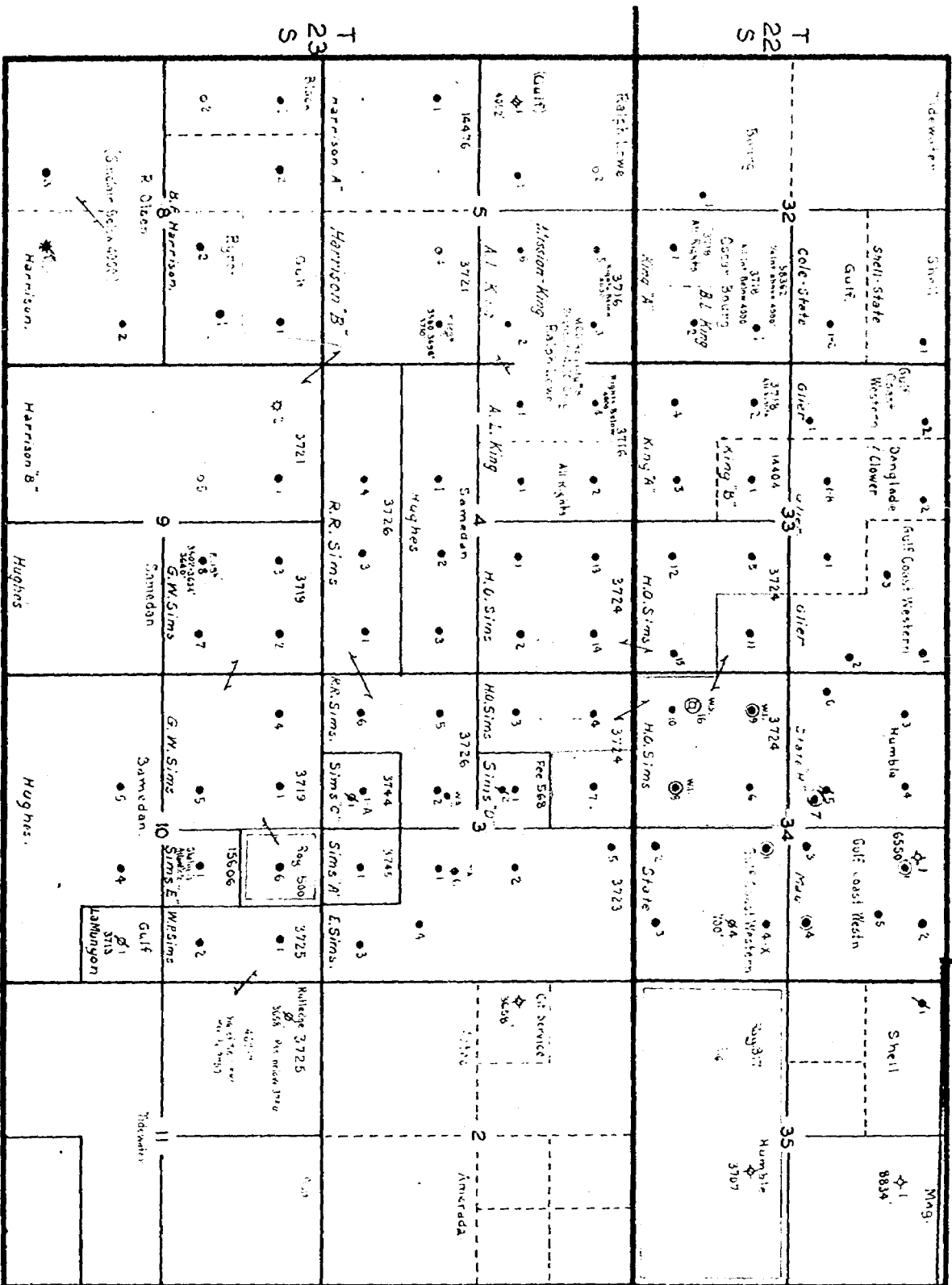
LEA COUNTY NEW MEXICO

SIMS AREA

R-37E

Water Injection Wells
Water Supply Wells

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 354 July 58



R-37E

DATE

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. 354
Order No. R-179-B

APPLICATION OF SKELLY OIL COMPANY
TO AMEND ORDER NO. R-179-A TO
ESTABLISH LEASE ALLOWABLES FOR ITS
H. O. SIMS PILOT WATER FLOOD PROJECT
IN THE PENROSE-SKELLY POOL, IN LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 2, 1958, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 3rd day of July, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, 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, Skelly Oil Company, is the owner and operator of the H. O. Sims Lease in the Penrose-Skelly Pool consisting of the following described acreage:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 33: SE/4
Section 34: SW/4

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 3: N/2 NW/4 and SW/4 NW/4
Section 4: NE/4

all in Lea County, New Mexico.

(3) That the applicant was authorized by Commission Order No. R-179-A to institute a pilot water flood project in the Penrose-Skelly Pool on the above-described H. O. Sims Lease.

(4) That the above-referenced pilot water flood project has caused an increase in the producing capacity of certain wells on the said H. O. Sims Lease to the extent that they are now capable of producing in excess of the top unit allowable for the Penrose-Skelly Pool.

(5) That the applicant proposes that the H. O. Sims Lease be assigned a lease allowable to be determined by multiplying the number of developed 40-acre proration units (15) contained in said lease times the top unit allowable for the Penrose-Skelly Pool, said allowable to be produced from any well or wells on the lease in any proportion; provided however, that no individual well would be produced in excess of six (6) times the top unit allowable for the Penrose-Skelly Pool.

(6) That approval of the subject application will not violate the correlative rights of any other operator in the Penrose-Skelly Pool.

(7) That the preponderance of the evidence presented in this case indicates that waste would occur if the subject application were denied.

(8) That the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That the Skelly Oil Company H. O. Sims Lease, described below, be assigned a lease allowable in the Penrose-Skelly Pool to be determined by multiplying the number of developed 40-acre proration units contained in said lease (15) times the top unit allowable for the pool:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 33: SE/4
Section 34: SW/4

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 3: N/2 NW/4 and SW/4 NW/4
Section 4: NE/4

all in Lea County, New Mexico.

(2) That the allowable assigned to the above-described H. O. Sims Lease in the Penrose-Skelly Pool may be produced from any well or wells on said lease in any proportion; provided however, that no individual well shall be produced in excess of six (6) times the top unit allowable for the pool.

(3) That the effective date of this order shall be 7 o'clock a.m., Mountain Standard Time, July 3, 1958.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

E. L. Mechem
EDWIN L. MECHEM, Chairman

Murray E. Morgan
MURRAY E. MORGAN, Member

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



BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

April 15, 1952

TRANSCRIPT OF PROCEEDINGS

CASE NO. 354

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

April 15, 1952

In the Matter of:)

C. E. Willingham's application)
for permission to produce the)
T. O. May No. 5 well, 1310')
from N and E lines, 34-22S-37E,)
NMPM, Lea County, New Mexico)
in the Penrose-Skelly Pool.)

Case No. 354

(Notice of Publication read by Mr. Graham.)

MR. COWAN: Gentlement, I am Ray Cowan of Brandon and
Cowan from Hobbs representing Dr. Willingham in this case. A
brief history might be in order.

In case No. 297 before this Commission held on August 7,
1951, the Aurora Gasoline Company in a farm out from my client,
Dr. Willingham, requested drilling from an unorthodox well
located in the northeast quarter of Section 34, Township 22,
South Range 37 East in Penrose Skelly field in Lea County, New
Mexico. I imagine you are all familiar with that. The purpose
of that was to determine the feasibility of carrying on the
secondary recovery program for the recovery of oil and gas from

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7-9645 AND 5-9846
ALBUQUERQUE, NEW MEXICO

the Queen or Grayburg formation in the Penrose Skelly pool.

The Commission further held in its order dated August 15, 1951, that in the event the secondary recovery program did not prove to be practicable or feasible that applicant shall be permitted to complete said well if same could produce oil or gas in paying quantities subject to further order of the Commission.

The Commission is well informed on this question. I understand Earlougher Engineering Company in their core analysis on this clearly show that such secondary recovery by hydrafracing or water flooding was not feasible and we will present that core analysis as Exhibit No. 1.

Thereafter on March 1, 1952, by letter which we will hand in as Exhibit No. 2, the Aurora Gasoline Company turned back this property to Dr. Willingham stating that the recovery by this method was not feasible and that they understood that the Commission would approve ordinary production of this well.

There are four well on the lease. This lease is known as the T. O. May lease in the northeast quarter of Section 24, Township 22, South, range 37 East, NMPM. There were four producing wells on this property from the Penrose recovery all of which were extremely small producers. After turning this back to Dr. Willingham, his superintendent completed the well by ordinary methods and it is now producing.

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ROOM 12, CROMWELL BLDG.
PHONES 7-9646 AND 5-9646
ALBUQUERQUE, NEW MEXICO

We have the superintendent here and with the permission of the Commission we will put him on the stand.

We have plats showing the four wells and the unorthodox formation which is T. O. May Number 5, 1300 feet north and 1300 feet west of the east line.

C. C. Coe,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. COWAN:

Q You are Mr. C. C. Coe?

A Yes, sir.

Q I believe you are the superintendent in charge of C. E. Willingham's production in the State of New Mexico?

A Yes, sir.

Q You are familiar with the T. O. May lease?

A Yes, sir.

Q In Section 34 of Township 22 South, Range 37 East?

A Yes, sir.

Q How long have you been in the production end of the oil business?

A About 22 years.

Q You are not a graduate engineer?

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PHONES 7-9646 AND 5-9846
ALBUQUERQUE, NEW MEXICO

A No, sir.

Q But you have practical knowledge of it?

A Yes, sir.

Q You are familiar with the well which Aurora Gasoline Company drilled on a farm out to Dr. Willingham known as the T. O. May No. 5?

A Yes, sir.

Q You are familiar with the reason for drilling that well?

A Yes, sir.

Q And that such drilling was permitted by the Commission?

A Yes, sir.

Q What was the reason for the drilling?

A The reason for drilling was for water flooding purposes.

Q Are you familiar with the outcome of the drilling of that well?

A Yes, sir.

Q What was the result?

A Well, the Aurora stated to us that it would not water flood and turned the well back to us and we taken it off with the understanding that it could be made a producer and that was understood, that the Commission already understood that.

Q Do you know why water flooding wasn't successful?

A Well, the core analysis will show that.

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Q I hand you what has been marked as Exhibit No. 1 and ask you to identify it?

A Yes, sir. That is it from Aurora Gasoline Company, that was made by Earlougher Engineering Company, Tulsa.

Q Core analysis of the T. O. May No. 5 before the Commission?

A Yes, sir.

MR. COWAN: We ask that it be admitted.

MR. SPURRIER: Without objection, it will be received.

Q Thereafter, did you have any correspondence with any of the Aurora Gasoline Company officials?

A Yes, sir, we wrote them to ask them for a statement of whether that would water flood or not and to give us the definite answer whether we could produce it or not.

Q What did they tell you?

A They wrote us a letter that it could be produced but would not water flood.

Q I hand you what has been marked as Exhibit 2 and ask you if that is the letter in which you received that information from the Aurora Gasoline Company?

A Yes, sir, that is it.

MR. COWAN: I ask that this letter be introduced.

MR. SPURRIER: Without objection it will be received.

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MR. COWAN: Permit me to interrupt just a minute. One more word to the Commission. I understand Skelly and perhaps Humble has written and wired the Commission requesting postponement of the case on the ground they wanted to investigate the matter of water flooding more thoroughly. I believe that they have misunderstood the purpose of this hearing since that was disposed of in the former hearing which I have mentioned to the Commission, being Case No. 297, hearing on August 7, 1951, in which this Commission permitted the well to be drilled as an unorthodox location to test the feasibility of water flooding in that Queen and Grayburg formation of the Penrose Skelly Pool.

In this hearing, of course, we are just carrying out the order of the Commission to show that such water flooding was not feasible or practical and that the well was completed and should be considered a regular and ordinary producer.

Q Mr. Coe, can you tell me approximately when the Aurora Gasoline Company completed all they could do on the well?

A Well, sir, I can't tell you exactly, but in October, I believe, we didn't get notice right when they finished.

Q Do you know the approximate amount of money they spent in drilling this well?

A No, sir, I don't, but I think about \$35,000.00.

Q After they turned it back to you, it was not a producer?

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A No, sir.

Q Did you go ahead and complete it to production?

A Yes, sir.

Q At approximately what cost to Dr. Willingham?

A About \$11,000.00.

Q In other words, the total cost of approximately \$45,000.00
for the complete well?

A Yes, sir.

Q What is the production of May No. 5 now?

A It is about 15 barrels.

Q What is the production of the T. O. May No. 1?

A Five barrels.

Q T. O. May No. 2?

A Four barrels.

Q T. O. May No. 3?

A Four barrels.

Q T. O. MAY No. 4?

A Four barrels.

Q In other words, Mr. Coe, the five wells on this 160 acre
unit do not produce one unit allowable, is that correct?

A That is the way I would see it, yes, sir.

Q You have been producing the T. O. May No. 5 under a
temporary allowable permitted by this Commission?

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A Yes, sir.

Q You are now, or Dr. Willingham is now requesting that this Commission permit production under its ordinary allowable?

A Yes, sir.

MR. COWAN: Does the Commission have any questions?

MR. SPURRIER: Does anyone have a question of this witness? Is that all the testimony? We have a letter in the files from Skelly Oil Company which we should read into the record.

"New Mexico Oil Conservation Commission. We are in receipt of notice of hearing set for 9 o'clock a. m., April 15, in Case 354, application of C. E. Willingham to produce the T. O. May well No. 5, Penrose-Skelly Pool. As offset operator, we are concerned with this application and desire postponement until May Hearing in order to secure data and information necessary for such hearing. We respectfully request such postponement... Please advise. George W. Sellinger, Skelly Oil Company."

MR. COWAN: If the Commission please, I believe you received a later letter referring to that telegram, did you not? Which, I think should be partly read into the record. If I may say so.

MR. SPURRIER: If you have a copy of the letter, let's read your copy.

MR. COWAN: "This is to confirm your telegram sent

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yesterday morning as follows:

"In explanation of such request, we wish to advise that both Humble Oil and Refining Company, although they will speak for themselves, and Skelly Oil Company offset the applicants lease in Section 34, Township 22 South, Range 37 East, Penrose-Skelly Area, Lea County, New Mexico, the matter of feasibility of water flooding is necessarily an important part of the hearing and since Humble and others are already water flooding in the Penrose-Skelly field, it will necessitate sometime to secure this information and data and the lack of sufficient time requires the postponement of the hearing."

That is the reason I mentioned to the Commission that I think Skelly is confused on the issues in this particular hearing. Since the water flooding question is now moot. There is no water flooding connected herein now. It is an ordinary small producer in a shallow field.

MR. WHITE: Were these offset operators given notice of this hearing?

MR. COWAN: I presume they have been. I have given them none. They were given notice by publication. I cannot see why they should object to the producing of this well since the entire five wells do not produce a unit allowable.

MR. GRAHAM: When you completed this well did you note

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any interference with the other four wells on that?

A No, sir, they make just the same.

MR. GRAHAM: The same as they always did?

A It hasn't affected any of the four whatever, no less,
no more.

MR. SPURRIER: Do you object to a continuance of the
case to the May hearing as Skelly has requested?

MR. COWAN: Of course, that is entirely up to the Commission.
I object insofar as this is rather a small matter and rather
expensive for us to come up. But I know of no further testimony
which I could put on in support of the application.

MR. GRAHAM: Aurora was completely satisfied that water
flooding was out, is that right?

MR. COWAN: Yes, sir.

MR. GRAHAM: That is no longer a question?

MR. COWAN: They have abandoned and turned it back and
completed as an ordinary producer.

MR. GRAHAM: What did you say it would make?

MR. COWAN: 15 barrels, from 12 to 15.

MR. SPURRIER: Well, I have no discretion, but the case
will be taken under advisement and you will be properly notified
either of continuance or whatever action the Commission takes.

Is there any further comment in the case?

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MR. COE: Might I ask a question myself?

MR. SPURRIER: Certainly.

MR. COE: Will we keep getting a temporary allowable on it while this goes on?

MR. SPURRIER: Yes, sir. If no further questions, the witness may be excused and the case will be taken under advisement.

The next case on the Docket is Case 355.

* * * * *

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

I, ADA DEARNLEY, do hereby certify that the above and foregoing transcript in Case No. 354 is a true and correct record of the proceedings before the Oil Conservation Commission on April 15, 1952, to the best of my knowledge, skill and ability.

WITNESS MY HAND AND SEAL this 16th day of April, 1952
at Albuquerque, New Mexico.


Court Reporter

My Commission Expires:
June 19, 1955.

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BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

TRANSCRIPT OF PROCEEDINGS

CASE NO. 354

July 15, 1952
Regular Hearing

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PHONES 7-8645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
JULY 15, 1952

In the matter of:

This is concerned with request for
permission to produce the T. O.
May No. 5 well, 1310' from N and E
lines, 34-22S-37E, Penrose-Skelly
Pool; the well was formerly operated
by C. E. Willingham, now by Gulf
Coast Western Oil Company.

CASE NO. 354

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY & ASSOCIATES
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PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

CASE 354.

MR. SELLINGER: Representing Skelly Oil Company I am very happy to announce that preliminary meeting was held by the interested parties, namely the Gulf Coast Western Oil Co., Humble Oil and Refining Co., and Skelly Oil Co. and it was agreed that the purposes indicated in the original order No. R-103 in Case No. 297 would now be carried out to the extent that an experimental water flood will be embarked by cooperation of the three companies. As a result the interested parties have agreed that Case No. 354 may be continued to the October 15th hearing and in deference to the signers of the Gulf Company's Western Oil Co. in complying with an experimental water flood. We have likewise agreed to permit the T.O. May No. 5 well to be given an allowable effective today until the October 15th hearing, subject, of course, to the approval of the Commission or until further order of the Commission as a result of the additional hearing. Since the Gulf Coast Western Oil Co. will utilize two wells for input purposes. Therefore, we feel out of fairness to them they should be given an allowable for their No. 5 well pending the experiment water flood purposes.

MR. SPURRIER: Is Humble Oil Company present?

MR. DOW: We're present. We concur.

MR. SPURRIER: You concur in Mr. Sellinger's statement?

MR. DOW: Yes.

MR. SPURRIER: Very well, how about Gulf Coast Western?

MR. SELLINGER: They are not present here but they have

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written two letters to the Commission, one of them dated July 10th and the other July 11th which they agreed to the postponement of the matter to the October 15th hearing or for approximately 90 days and that allowable for their No. 5 well may be permitted effective today.

MR. SPURRIER: Is there an objection to Mr. Sellinger's notion? Then I will recommend to the Commission that the case be continued to the regular October 15th hearing and an order to permit the producing of the well be issued.

The next case on the Docket is Case No. 380.

STATE OF NEW MEXICO)
 : SS
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached Transcript of Proceedings in Case No. 354, before the Oil Conservation Commission, State of New Mexico at Santa Fe, is a true and correct record to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this ____ day of July 1952.

REPORTER

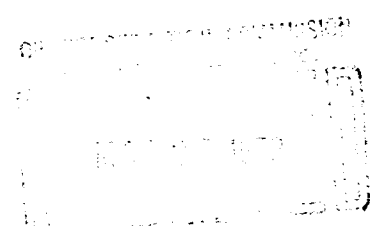
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BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

TRANSCRIPT OF PROCEEDINGS

Case No. 354

Regular Hearing
May 20, 1952



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ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

MAY 20, 1952

In the Matter of:

C. E. Willingham's application for
permission to produce the T. O.
May No. 5 well, 1310' from N and E
lines, 34-22S-37E, NMPM, Lea
County, New Mexico, in the Penrose-
Skelly Pool.

Case No. 354

(Notice of Publication read by Mr. Graham.)

MR. SPURRIER: Mr. Selinger, you may proceed.

MR. SELINGER: My name is George W. Selinger. I represent Skelly Oil Company. We are not the applicants in this case. We, unfortunately, are present today because of certain past history connected to this case, which is Case 354 and Case 297. At no time since this matter has been filed have the parties or operators on both sides ever appeared simultaneously at a hearing. The first time this case was brought up in August, 1951, for the purpose of securing a permit for an unorthodox well for an experimental water input purpose, the Skelly Oil Company at that time wrote a letter to the Commission advising they had no objection for such construction of an experimental input program.

MR. SPURRIER: Who made that application?

MR. SELINGER: The Aurora Gasoline Company of Tulsa and

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Chicago made that application. Then on March 7 Elder and Willingham made an application covering this same well for the purpose of securing what now appears to be an allowable for the well but which the notice did not reflect. That was the purpose. That hearing was set on April 15. The first notice we had of that second application was on April 8, which we immediately wired the Commission and asked for a postponement to the May 20 hearing for the purpose of securing data on other water input projects in the field to be able to present to the Commission.

We followed that April 8 telegram up with a letter from Skelly Oil Company to the Commission stating the reasons why this matter should be postponed to the May 20 hearing in view of the fact that we only had seven days' notice of the April 15 hearing. We followed that up on April 11 with a telephone call to Commission's personnel and we were given the assurance that the matter would be postponed. Neither the Humble Oil and Refining Company, who is an offset operator in the interested application, nor Skelly Oil Company appeared at the April 15 hearing.

We first received word on May 12, much to our surprise and chagrin, that the Commission had permitted the applicant to present their testimony in which we had no opportunity for cross examination. While we are prepared today to present our side of it, unfortunately the other side would have no opportunity of cross examine our witnesses.

Briefly, in a nutshell, this application is, our purpose

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for the hearing today is this. An operator comes in before this Commission and says he wants to conduct a water experimental project, secures a permit for an unorthodox location. Then he does not follow that purpose at all. He intentionally completes the well for producing purposes only. He makes no attempt to diligently carry on such a project. Makes no attempt to even start such a project. And it appears to us now, although I am very reluctant to make the charge in the absence of anyone representing the other side, it appears to us now that the well was intentionally secured as a result of a permit for the purpose of securing an allowable and nothing else. This well is in a lease in the Penrose Skelly field. There are 293 wells in the field, each and every one on a 40-acre unit. This is the first instance of a deviation of such a wide spread over a long period of time program.

We think that the order that has heretofore been secured, granting a permit for an unorthodox location for water input purposes should be rescinded and that the operator or whoever it might be, we understand now that the well first was under the supervision of the Aurora Gasoline Company, then under the supervision of Mr. Willingham, now we understand that it has been sold and under the supervision of the Gulf Coast Western Oil Company of Oklahoma City, all in the space of three months, that that operator, whoever it might be, be obliged to conform to the terms of the Commission's order in actually conducting a water input

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project, which he has not as yet done. Either he be permitted to carry out such a program or that the Commission's order be rescinded. That is the purpose of our appearance this morning, to make that request to the Commission, and we are ready to present testimony.

MR. SPURRIER: Very well. Would you be willing to appear next month with the applicant?

MR. SELINGER: Yes, we would be perfectly willing to do that, but in the meantime this well is enjoying an allowable since March 3, which we think is wrong, and we understand that the allowable is of a temporary nature, but it, nevertheless, is producing five wells on 160 acres to the detriment of the offset, particularly Humble and Skelly. If this matter is continued, we want that well allowable held up pending a complete hearing. Now, Mr. Cowan represented Mr. Willingham. I doubt whether he represents the now so-called owner of the well. I don't know. So it is very difficult to determine who actually represents who on the other side. We do know that Mr. Cowan had received a copy of the letter that the Commission had directed to us and apparently he does not represent the present owner of the well.

MR. GRAHAM: Mr. Selinger, you notified Mr. Ray Cowan that the matter was coming up today?

MR. SELINGER: As regards the Gulf Western Oil Company, I doubt if they have been notified. We have no objection of this matter going over to the next month's hearing, but we want the

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allowable of this well withdrawn, and this matter has been pending now since March, and this well has been receiving an extraordinary allowable, which we don't think they are entitled to.

MR. SPURRIER: What is their allowable?

MR. SELINGER: It has been given 15 barrels a day for the five wells on 160 acres.

MR. GRAHAM: The other wells are doing but little, four or five.

MR. SELINGER: The average of all wells in the Penrose Skelly is about four and a half barrels. It is a matter of requiring a drilling of additional wells. It is for the purpose of drilling unnecessary wells. The basis of securing the permit for the drilling of this fifth well was for the purpose of carrying on an experimental water program. That has apparently not been done. From the intention of the operator it was never intended to be done, because the well was completed as a producer and has been given an allowable back to March, even prior to the April 15 hearing.

MR. SPURRIER: The Commission will continue the case to the June hearing, which is June 19. We will notify this present owner and see that they are here.

MR. SELINGER: We have no objection, Mr. Spurrier, provided the well is not permitted to produce, otherwise we are prepared now to present our testimony.

MR. MACEY: Do you have objections, Mr. Selinger, to

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the Willingham well having an allowable if subsequently their production is cut back, if the order is refused?

MR. SELINGER: We think the Commission should not depart from the practice of allowing one well to 40 acres per unit in this field, which has been done in this field from its inception. If they wish to shut down one of the other wells to permit them four producing wells to their 160 -- but this well was placed on production, we believe, under an avowed purpose for conservation and it now appears it was for the express purpose of securing an additional production allowable. That is what we object to.

MR. SPURRIER: Do you wish to present testimony at this time or do you want to present it when they can cross examine and you can cross examine?

MR. SELINGER: If the Commission will shut down the T. O. May No. 5, we are willing to forego any testimony and have the matter heard in finality next month.

MR. MACEY: What if they shut down the No. 2 instead of the No. 5? What about that?

MR. SELINGER: It would be all right with us.

MR. MACEY: It is on the same 40-acre unit?

MR. SELINGER: Yes.

MR. SPURRIER: Well, the case will be continued to June 19 and we will shut the production down until that time, until after that hearing.

MR. SELINGER: I will say this to the Commission, that

we will take diligent steps to contact the Gulf Coast Western Oil Company and see if we can't, at least, for the first time, present to the Commission a complete hearing at the next state-wide hearing. In addition to what your notice will do, we will make another effort to get them here.

MR. GRAHAM: They appear to be new operators?

MR. SELINGER: They are entirely new operators in New Mexico. They may not be familiar with the procedure of New Mexico.

MR. SPURRIER: The next case on the Docket is Case No. 363.

STATE OF NEW MEXICO)
 :
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 354 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on May 20, 1952, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this _____ day of May, 1952.

REPORTER

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BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

TRANSCRIPT OF PROCEEDINGS

CASE NO. 354

June 19, 1952

E. E. GREESON
ADA DEARNLEY
COURT REPORTERS
BOX 1302
PHONES 5-9422 AND 5-7546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
CIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

JUNE 19, 1952

In the Matter of:

This is concerned with request for
permission to produce the T. O. May No. 5
well, 1310' from N and E lines, 34-22S-37E,
Penrose-Skelly Pool; formerly operated by
C. E. Willingham, now by Gulf Coast Western
Oil Company.

Case No. 354

(Notice of Publication read by Mr. Graham.)

MR. SELLINGER: For the record Skelly Oil Company is
present.

MR. DOW: Humble Oil and Refining Company is present,
represented by Hervey, Dow & Hinkle, by Mr. H. M. Dow and Howard
C. Bratton.

MR. SPURRIER: Will Gulf Coast Western please come for-
ward? You want to proceed with your case?

MR. FORD: My name is Lee Ford, with the Gulf Coast
Western Oil Company. I have tried to go over the case the best
I could and I want to say in the beginning that the Gulf Coast

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Western Oil Company is not here to take sides with the Commission or the major oil companies in anything that has preceeded the hearing today.

As I understand it, just briefly, the first hearing No. 297 August 7, the order No. R-103, October 15, gave the Aurora Gasoline Company of Tulsa, Oklahoma, permission to drill at this unorthodox location, carrying the further proviso that if said well proved that it was not feasible as a secondary proposition, by water flooding, that if it was productive of oil and gas it might be so termed subject to any further order of the Commission.

Now, the Aurora Gasoline Company, as I understand it and I believe the records will verify that, made an agreement with Doctor C. E. Willingham whereby they would purchase the properties if secondary recovery was feasible by water flooding. They want to drill the well and if it was not proving feasible then the well - - then the property was to be turned back to Doctor Willingham and he was to pay the cost of the casing. All that happened before we acquired the property.

Now, quite a bit has been said about the unorthodox location. I am quite sure that the Honorable Commission weighed all evidence at the time they issued the order No. R 103 and I am

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quite sure that they weighed the evidence with regard to whether or not this well should be produced if it was proven that it could not, was not feasible as a secondary recovery proposition.

Then, I understand that C. E. Willingham went ahead and completed the well as a producer. Then on March 7, I believe they made application for an allowable and on March the 15th a temporary allowable was given by this Commission of 15 barrels per day. Then the hearing came. On hearing of May 20, which was postponed, we acquired the property May 1st, we had no notice of any hearing up to that time. That is, the Gulf Coast Western Oil Company did not have, and then the hearing was postponed from May 20th.

I would like to say much has been said about the temporary allowable of 15 barrels. I would like to give a few figures on what the wells have done on it:

In March, 1952, with temporary allowable effective as of March 10th, the 5 wells averaged 5.25 barrels.

In April, 1952, the 5 wells averaged 4.67 barrels.

In May, No. 5 well produced only 22 days. The temporary allowable was rescinded, effective as of May 25. However, the well was shut in May 22, because of lack of storage but for the first 22 days of May the well produced, No. 5, 9.27 barrels per

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day.

Now, No. 1, 2, 3 & 4 averaged 4.10 barrels. So it is established beyond a question of a doubt that No. 5 has not materially effected either one of the other wells on the location. These are stripper wells, as we know. It is a stripper proposition and I am sure that our opponent would like for us to go ahead although we had nothing to do with the previous arrangements or agreements, and try secondary recovery. I don't think that an individual company, like we are, could be asked by this Commission or by any commission to go in there and do that by ourselves.

We acquired this property basing considerable faith upon the proceedings up to the time that we acquired it. That is order No. R 103, the temporary allowable that followed and the proceedings up to that time.

Naturally, we expended money in acquiring property based upon the 5 wells. I feel that it is only fair that Gulf Coast Western Oil Company, if a precedent was set as has been stated, it was by the Honorable Commission and I know they didn't do it without first weighing the evidence they had. I am quite sure that I know as an individual, I would dislike to see anyone come before the Commission at this time and ask for a 5

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well spacing. I don't think any major company would agree to a 5 well spacing but I do think under the circumstances our company should be entitled to produce the 5 wells on this 160 acres.

I believe that is all.

MR. SPURRIER: Anyone have a question of this witness?

MR. SELLINGER: Yes, I do.

L E E F O R D,

having been duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. SELLINGER:

MR. SELLINGER: My name is Sellinger. I am with Skelly Oil Company. From what you say you apparently appear to be an innocent third party purchaser but I would like to ask you, when did Gulf Coast Western acquire that property?

A The Gulf Coast Western acquired the property on April 23, accepted and assumed active operations on May 1st. In other words all division orders, so forth and so on were effective as of May 1st.

Q At that time, Mr. Ford, you knew that the matter of

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ALBUQUERQUE, NEW MEXICO

whether or not this well should be permitted to produce was the subject matter of a hearing set on April 15, and May 20, you knew that, did you?

A I would say naturally we do know but - -

Q (Interrupting) Naturally you didn't know?

A We did know.

Q You did know?

A But having received the proceedings up to that time and what had gone on before we had considerable faith in the outcome of producing the 5th well.

Q You knew, did you not, that the permit for this unorthodox location was specifically granted on the basis of a water pilot injection program, did you not?

A According to your records, yes, sir.

Q You knew that, did you not?

A Yes, sir.

Q That the permit was granted on that basis?

A It was asked for on that basis but with the further proviso in the order - -

Q (Interrupting) That the well could not be permitted to produce until a further hearing, isn't that true?

A No, I said I believe if I am correct, subject to

any further order of the Commission.

Q Let us look and see.

A It is on the second paragraph.

MR. MACY: Would you like for me to read it, Mr. Sellinger?

Q The order says that "if the well proves to be capable of producing oil or gas in paying quantities subject to the further order of the Commission or allocating allowable, therefore after a regular hearing held for such purposes". That is Order 297, is that true, Mr. Macy?

MR. MACY: That is Order No. 103. You didn't read it exactly as I have it.

MR. SELLINGER: You can read the whole paragraph.

MR. MACY: It says "the application is therefore ordered - - that the application of the Aurora Gasoline Company, for the drilling of a test well at an unorthodox location, 1310 feet south of the north line and 1310 feet west of the east line of Section 34, Township 22 south, Range 37 east in New Mexico Penrose Skelly Pool situated in Lea County be and the same is hereby approved upon the conditions that the said well be drilled as an experimental well for the purpose of determining the feasibility of carrying on a secondary recovery program for

the purpose of obtaining the greatest possible ultimate recovery of oil or gas from the Queen or Grayberg formations in the Penrose Skelly Pool and in the event said secondary recovery program should not prove to be applicable or feasible and said well is completed as a well capable of producing oil or gas from said formation that the same may be completed as a producing well subject to such allowable as may hereafter be assigned or allocated thereto by the Commission after a regular hearing thereon".

Q So the order did provide for a hearing before the allowable could be assigned the well?

A We were well acquainted with the fact that they made application for allowable on March 7 and March 15, the temporary allowable was granted.

Q Now, Mr. Ford, the first supplement assigning on allowable was issued on March 10th.

A That is correct.

Q That is prior to the time that any hearing was held for allowable purposes on the well?

A They made the application I understand on March 7.

Q The hearing was set when, April 15th?

A According to records of the proceedings.

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Q So the first supplemental allowable issued was before any hearing for allowable was held?

A That your records will bear out.

Q The second supplemental allowable was issued on March 26, which was prior to any hearing.

A I understand that at intervals of 15 days the temporary allowable was extended.

Q Most of which was extended before any hearing held for allowable purposes on the well?

A Well, the order was rescinded as of May 25, you had a hearing on May 20 and you had one on April 15th.

Q Now the Commission did notify you on or about the 22 or 23 day of May that this well was to be shut down until a hearing was held for allowable purposes.

A Yes.

Q You received that letter?

A Yes.

Q Are you prepared at this time now to testify with respect to the feasibility of water flooding in this well?

A No, sir, because from the hearings and the investigation we made that matter had been conclusive as far as this

Commission is concerned and if we are now to present, for instance, the core analysis was made by Erlacher Engineering Company, one of the best engineers we have who was Gary Simonds was present at all times and they recommended that it was not feasible and I don't think now that we want to bring in that proposition. If you do, then I suggest and I must request that we have permission to ask for further hearing and bring to this Commission the engineer with Erlacher and ^{Erlacher} Gary Simonds.

Q I will hand you what has been marked as an Exhibit by your predecessors, in title and ask you to state to the Commission where that report says that this well is not feasible for water flooding.

A I want to state first that I am not an engineer. I am merely basing what I have had to say upon the records of the hearings to date. It merely states that because of the low permeability and porosity that I believe they do not believe secondary recoveries is feasible through water flooding.

Q Where does it say that, read the language.

A Should I read the Exhibit?

Q Show me where it says in that the feasibility and practicability of water input is not possible. Where does it

say that on that Exhibit?

A I don't think you could use the letter alone. If I was an engineer and I could analyze the entire report I might be able to say so.

MR. SELLINGER: We're prepared to testify from an engineering standpoint that a report on the contrary - - we have never had an opportunity, if the Commission pleases, of presenting any testimony as to practicability and feasibility of this well. In line with my promise to you gentlemen at the May 20th hearing, we notified the Gulf Coast Western Company and told them that we would be prepared at this hearing to present such testimony. As a matter of fact the last sentence on the record ends up by saying that it is possible that water injections would be adviseable.

A Doesn't it say also after all possible recovery has been made by primary methods?

MR. SELLINGER: If the Commission pleases Humble and Skelly are prepared to go ahead with the testimony. This matter has been hanging fire since April. I understood Mr. Ford wishes to have the advice of technical witness. If he desires to have another hearing we will leave that up to the

Commission.

MR. SPURRIER: Would you like to present your testimony now or would you rather wait?

MR. SELLINGER: That was the difficulty last time. These people, his predecessors, made certain statements and gave testimony which was not subject to cross examination which we believe was entirely erroneous. We never had an opportunity of cross examination. We don't wish to take advantage of Mr. Ford in the absence of technical advise.

MR. SPURRIER: The answer to the question is, then, that you would like to put the testimony on at a later hearing when this Erlacher and Mr. Simonds are present for cross examination?

MR. SELLINGER: Mr. Simonds is not with Erlacher. He is a consultant and was present at the May 20 hearing but didn't testify because he was absent a client at the time. He was present at the May 20th hearing.

MR. SPURRIER: I think that Skelly and Humble are here with their witnesses and should not be asked to continue to a later hearing. However, the Commission should state now to you, Mr. Ford, that the hearing will be continued to July 15,

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and you will have your witnesses here?

A Yes.

MR. SPURRIER: Or else you will be in default.

MR. SELLINGER: Is it understood that the order issued by the Commission on the May 20th hearing will be in effect until such a time as a hearing is had for allowable purposes? You issued an order from the bench at the hearing.

MR. SPURRIER: Yes, there will be no oil from the well in question until the hearing is completed and an order is issued.

MR. SELLINGER: What I wanted to get clear was whether the Commission expected us to go ahead at this time. It seems if we did go ahead with our evidence at this time then Mr. Ford's people would have the claim that they were not present to cross examine. I doubt if anything could be gained by going ahead at this time although we are ready and prepared.

MR. SPURRIER: I don't think you should. However, if you want to you have that opportunity. It is agreed that the case will be continued to the July hearing which is July 15th.

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ALBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO)
:
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 354 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on June 19, 1952, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this 24th day of June, 1952.

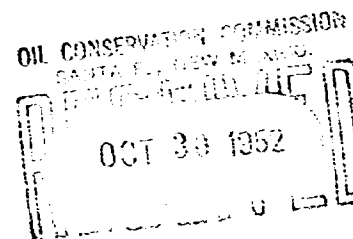

REPORTER

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

TRANSCRIPT OF PROCEEDINGS
CASE NO. 354

October 15, 1952
Regular Hearing



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

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico
October 15, 1952

In the Matter of:

Gulf Coast Western Oil Co. (as successor
to C. E. Willingham) in case requesting
permission to produce T. O. May Well No.
5, NE NE 34-22S-37E, Penrose-Skelly Pool,
Lea County. Order R-179 dated August 1,
provided for October 15 re-hearing for
determination of future allowable.)

Case: 354 -
Continued

TRANSCRIPT OF HEARING

MR. SPURRIER: Case 354, which has been continued from a
previous meeting.

(Mr. Graham reads notice of publication.)

MR. SPURRIER: We have two letters, one from Gulf Coast
Western and one from Skelly, both of which came in at the first of
this month, in which Gulf Coast Western asks that the case be
continued and Skelly agrees with that request. Without objection
I will recommend to the Commission that the case be continued
over to the regular November 20th hearing. Is there any comment
on this case?

MR. DEWEY: Humble concurs in putting it off until November.

MR. SPURRIER: Also, should bring out the fact that we have a 90 day order which will expire October 31st. Without objection - That order, incidentally, is to allow the wells in question to be produced until such time as we can complete the hearing and issue an order, and without objection I will also recommend to the Commission that the 90 day order be extended.

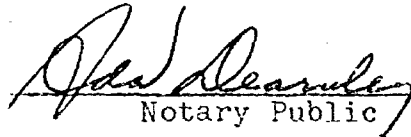
MR. DEWEY: Humble concurs in that.

MR. SPURRIER: Any other comment? The next case on the Docket is Case 407.

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

I, ADA DEARNLEY, do hereby certify that the above and foregoing transcript of proceedings in Case No. 354, taken before the Oil Conservation Commission on October 15, 1952, at Santa Fe, New Mexico, is a true and correct record.

Dated at Albuquerque, New Mexico, this 22nd day of October, 1952.


Notary Public

My Commission Expires:
June 19, 1955.

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 105-106, EL CORTEZ BLDG.
PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

ON CONSTITUTION PROPOSED
DEC 3 1952

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

TRANSCRIPTION OF HEARING

CASE NO. 354

November 20, 1952

E. E. GREESON
ADA DEARNLEY
COURT REPORTERS
BOX 1302
PHONES 5-9422 AND 5-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

NOVEMBER 20, 1952

In the Matter of:

Gulf Coast Western Oil Company (as
successor to C. E. Willingham) in case
requesting permission to produce T. O. May
No. 5, NE NE 34-22S-37E, Penrose-Skelly
Pool.

Case No. 354

(Notice of Publication read by Mr. Graham.)

MR. SELINGER: In case 354 I am very happy to announce
that all parties are here finally in this matter. The applicant
is here and the Humble and Skelly representatives also are here.
There seems to be some question with respect to whether or not
we should go ahead with the presentation of the complete testimony.
I would like to announce to the Commission that all parties are
here and present and prepared to go along with the presentation
of this testimony.

MR. SPURRIER: The question is, Mr. Selinger, whether the
case has been properly advertised I believe.

MR. SELINGER: Well, in my opinion I believe that it has.
The notice of Case 297 which was included with Case 354 and the
notice of 354 all dealt with the main objective of the practica-
bility or feasibility of water flooding. I might suggest if

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there is any doubt in the Commission Attorney's minds of insufficiency of the notice the parties are entirely willing for the Commission to give still a third new case number and re-advertise again and have it set for the December 16 hearing, but we would like the privilege of presenting all this testimony now because all the matters in Case 297, all the matters in Case 354, will be included with the new case number so that it could all be decided at one time. I might say that the area involved is still the same area.

MR. GRAHAM: It is your wish to put on your testimony now and have it considered in a future case?

MR. WHITE: We have no objection to it.

MR. SELINGER: There are no other parties involved because the proposed pilot water injection is in the center of the area owned by the three specific companies.

MR. SPURRIER: Let's proceed, Mr. Selinger.

MR. SELINGER: We have one witness.

MR. SHAFFER: Mr. Shaffer, representing Humble Oil and Refining Company. We have one witness we would like to enter too. Mr. Dewey.

J. D. COOPER

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. SELINGER:

Q State your name.

A J. D. Cooper.

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Q You're associated with what company?

A Skelly Oil Company.

Q In what capacity?

A Petroleum Engineer.

Q Mr. Cooper, are you a graduate Petroleum Engineer of an accredited school?

A Yes, sir.

Q Have you practiced your profession since such graduation with the exception of the time served in the armed forces?

A I graduated after I got out of the Navy.

Q You practiced your profession?

A Since then I have, yes.

Q Have you made a general study of the area involving around Section and including Section 34, Township 22 South, Range 37 East, Lea County, New Mexico, which is a part of the Penrose-Skelly area?

A Of that Section, a general study, yes.

MR. SPURRIER: Speak up.

A Of that Section a general study I have made.

Q Have you on the^{part}/of Skelly Oil Company carried on negotiations with the other operators owning acreage in Section 34?

A I have.

Q Who are the other operators so involved?

A Humble Oil and Refining Company and Gulf Coast and Western Oil Company.

Q Have you had occasion to have a map made which we would

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like to have marked as Skelly's Exhibit No. 1.?

(Map referred to above marked
Skelly's Exhibit No. 1, for
Identification.)

A Yes.

Q Will you kindly explain in very brief terms the purport
of that Exhibit?

A The area shaded in pencil on the Exhibit represents the
acreage of the three companies involved in the area. The five
wells circled with red are proposed water injection wells in
Section 34.

Q I will ask you, Mr. Cooper, whether or not the properties
upon which there are presently producing wells are owned by the
parties involved in this application, namely Gulf Coast Western,
Humble and Skelly, the surrounding producing properties?

A Yes.

Q Where do you propose to inject^{the water}/for a pilot water flooding
project?

A Into the Queen Sand in the Penrose-Skelly field.

Q Is that horizon productive of oil in the Penrose-Skelly
field?

A Yes.

(Skelly's Exhibit No. 2, marked
for Identification.)

Q I will hand you what has been marked and designated by
the Commission as Skelly's Exhibit No. 2, and ask you to state
what that is.

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A That is a section from the electric log of the Skelly H. O. Sims No. 16. That is the deep test drilled in the area and it is in the southwest southwest of 34. It shows on the plat as a dry hole. This is merely a type log of the Queen Sand section which we expect to inject water into.

Q It shows the generalized section typical of that immediate area as to the top of the Queen Sand and the proposed injection with respect to the top of the Queen?

A It is the only log that was available to me in the area and it is fairly old Schlumberger and actually except to show that the Queen is not a clean sand has no value.

Q In other words this is an old field in its salvaged stage which averages less than four barrels per well per day?

A Yes, I believe that is so.

Q It is a cooperative effort in an attempt to increase the production of recoverable oil from the producing horizon, the Penrose-Skelly, by such secondary method?

A Yes.

Q Have you had occasion to look the situation over with respect to the possible success of such a project?

A Yes.

(Skelly's Exhibit No. 3,
Marked for Identification.)

Q I will hand you what has been designated by the Commission as Skelly's Exhibit No. 3 and as a preliminary question to your explanation. I will ask you whether or not that is a part of an Exhibit heretofore introduced in Case 297 and Case 354?

A Yes.

Q Will you explain the Exhibit to the Commission?

A This is a summary sheet from the core analysis made on the T. O. May No. 5 Well, in approximately the center of the northeast quarter of Section 34. The well was drilled by Aurora Gasoline Company to evaluate the possibilities of water flooding in this area. The analysis made by Earlougher Engineering Company in Tulsa. His analysis shows that the oil saturation is sufficient or the residual oil saturation is sufficient to make water flooding profitable provided other considerations such as the lenticularity of the sand and lack of good engineering information, even though we have one core analysis, prevent you from making complete and exact studies. You can still only form an opinion that you can successfully flood this sand.

Q In addition to your studies, with respect to the immediate area, have you not drawn on the experience generally of the oil business, with respect to the permeability of formations to take secondary recovery measures?

A Yes.

(Skelly's Exhibit No. 4,
Marked for Identification.)

Q I will hand you what has been marked by the Commission as Skelly's Exhibit No. 4, and I will ask you to state what that Exhibit shows?

A This Exhibit is a composite of a single well in the Burbank Sand area of northeast Oklahoma. The Exhibit shows on the left side the self potential of the log and in the center where

the casing was set and on the right the permeability of the core analysis that was made on this well. This is an edge well in that area and has permeability averages much less than the average of the T.O. May No. 5. Anyway the T.O. May No. 5 had 33.8 net feet of oil sand, range of 0 to 26, milidarcy permeability average 4.3. This well on Exhibit Four had a range of from 0 to 4.2 milidarcies and I don't have the average. On an input test, injectivity test, the well shown on Exhibit No. 4 accepted 1104 barrels of water in 24 hours by gravity. The dotted line to the right is a radioactive input profile of the water injected into this well. The actual test was made by inputting a radioactive water soluble salt into the water injected into the well for a period of time and measuring the radioactivity or residual radioactivity of the formation where the salt dissolved into the water had gone into the formation. The scale down here shows the barrels per day per foot going into this sand and most of the water you will note is going into a section with a permeability less than three milidarcies.

Q Then as I gather your testimony in comparing Skelly's Exhibits Three and Four you feel that the data indicated on Exhibit Three in comparison to the data in Exhibit Four would indicate to you that the factors on Exhibit Three would be successful for a pilot water injection program?

A It indicates to me that the low permeability in the core analysis of the T.O. May No. 5 is not the criteria to decide whether this can be successfully pilot water flooded. It actually

takes a test.

Q Do you know whether or not such actual water input has taken place in Section 34?

A To my knowledge there has been no water injected into the Queen Sand in that section.

Q Applicant's proposal of the three companies, are desirous of being given permission to so inject water on a pilot program?

A Yes.

Q Now, with respect to the unanimity of the parties involved, has there been a cooperative contract circulated and signed?

A There has been a cooperative agreement circulated. It has been executed by Skelly and Gulf Coast Western and I understand is in the process of being executed by Humble. It provides for the conversion of these five wells to water injection wells and conducting the pilot flood operation.

Q With respect to the possible source of water is there such source available for the institution of a pilot water flooding program?

A Yes, do you want elaboration?

Q If the Commission approved the pilot water injection program in Section 34, Township 22 South, Range 37 East, on the part of not only Gulf Coast Western but Skelly and Humble would the parties be willing to continuously furnish data to the Commission upon request or otherwise?

A Yes.

MR. WHITE: We would like to offer into evidence Skelly's Exhibits No. 1 through 4 inclusive.

MR. SPURRIER: Without objection they will be recieved.

MR. SELINGER: That is all we have of this witness.

MR. SPURRIER: Are there any questions of this witness? Don Walker, with Gulf.

MR. WALKER: I didn't catch the five wells, will you list them again?

MR. COOPER: Yes, I will read them off to you.

MR. WHITE: I have it here, he handed me a map.

MR. SPURRIER: Bill, will you read them into the record?

MR. SELINGER: All right, I will. T. O. May No. 1, in the northwest of the northeast of Section 34; the Gulf Coast Western Humble State No. 1, in the northwest of the southeast of Section 34; the Humble State - -

MR. SPURRIER: (Interrupting) You said that in reverse, excuse me.

MR. SELINGER: (Continuing) - - the Humble State H No. 5, in the southeast of the northwest of 34, and Skelly H.O. Sims No. 9, in the northwest of the southwest and Skelly H.O. Sims No. 8, in the southeast of the southwest of Section 34.

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

MR. SHAFFER: Charles Shaffer, representing Humble Oil and Refining Company. We are in general accord with Mr. Cooper's testimony and we concur in his recommendations. We have Mr. Dewey

here if the Commission would like to ask him any questions about the thing but I believe it has been fully covered by Mr. Cooper's testimony, so we won't offer Mr. Dewey unless you would like to ask him some questions or someone else here.

MR. SPURRIER: Are there any questions of Mr. Dewey as a witness?

MR. GRAHAM: I would like to ask a few questions.

Q Where is this water coming from?

A We have what you might call two sources. Skelly has developed a source of water in the R. R. Sims No. 7 which on the plat is in Section 3, 23 south. It is the northeast of the southwest quarter. That was a deep well and prior to abandonment we perforated the Clear Forks Horizon to test for the water for this pilot flood and we have water available there for three of the five wells. The other two wells will use fresh water from shallow water sands.

Q What approximate volume will be required?

A We hope or we would like to start with about 250 barrels to 300 barrels per day per well. It will depend on the ability of the well to accept the water.

MR. SPURRIER: Any further questions? The witness may be excused.

(Witness excused.)

MR. SPURRIER: If no questions of Mr. Dewey are there any further comments in the case?

MR. SELINGER: I might add that Mr. Hanson, with the Gulf Coast Western, is present. He was sworn in as a witness and he would be willing to answer any questions that the Commission or anyone else might have.

MR. WHITE: I suggest that anyone interested in this case should enter their appearance off record.

MR. SHAVER: He did by a general statement. We will at this time make an appearance for Humble.

A VOICE: We will enter F. R. Hanson, President of the company. We are in accord with the project as the witness has testified to here today. We want to make our appearance for the Gulf Coast Western.

MR. SPURRIER: Any further questions? If not the case will be taken under advisement and we will proceed to Case 362.

STATE OF NEW MEXICO)
 :
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 354 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on November 20, 1952, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this 29th day of November, 1952.

Ada Dearnley
REPORTER

ADA DEARNLEY & ASSOCIATES
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ALBUQUERQUE, NEW MEXICO
-12-



Case 354

SKELLY OIL COMPANY

PRODUCTION DEPARTMENT

J. S. FREEMAN
VICE PRESIDENT

E. A. JENKINS
GENERAL SUPERINTENDENT

TULSA 2, OKLAHOMA

July 10, 1952

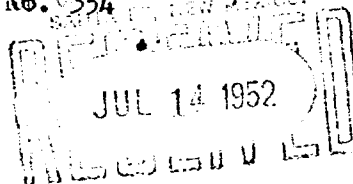
W. P. WHITMORE
CHIEF PETROLEUM ENGINEER

G. W. SELINGER
PRORATION ATTORNEY

J. H. MCCULLOCH
CHIEF CLERK

Re: Case 108. CONSERVATION COMMISSION
NEW MEXICO

Mr. R. R. Spurrier
Oil Conservation Commission
Box 871
Santa Fe, New Mexico



Dear Sir:

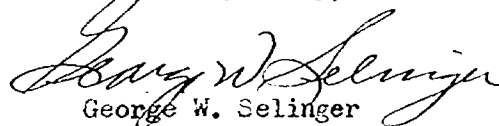
As you are aware this continued hearing is set for 9:00 A.M. July 15, 1952, with respect to Gulf Coast Western Oil Company's T. O. May No. 5 Well in the Penrose Skelly Pool.

A sincere effort is being made between the interested parties; namely, Gulf Coast Western Oil Company, Humble Oil & Refining Company, and Skelly Oil Company with respect to a cooperative institute of pilot water flood, and a meeting of the three interested parties has already been reached to the effect that immediate steps will be taken towards the goal of a pilot water flood program.

Since this will consummate some time, the three interested parties have agreed for the hearing on Case No. 354 to be continued for approximately 90 days, and we suggest the October 15th hearing as the date for a further continuance of Case 354. In order to permit a diligent effort towards such pilot water flooding, Skelly Oil Company is agreeable for the Commission to permit the opening of the T. O. May No. 5 Well for production purposes and to assign a temporary allowable until the October 15 hearing. It is understood that this cooperative venture and agreement as to temporary allowable will in nowise affect the rights of any the parties involved.

We will be glad to take this cooperative step with our neighbors to the end that this matter can be amicably settled.

Yours very truly,


George W. Selinger

GAS:dd

cc: Mr. F. R. Henson, Gulf Coast Western Oil Co., 916 Petroleum Bldg.,
Oklahoma City, Oklahoma.
Mr. R. S. Dewey, Humble Oil & Refining Co., Box 1600, Midland, Texas
Mr. Dunlavey

GULF COAST WESTERN OIL CO.

PRODUCERS OF CRUDE OIL
PETROLEUM BUILDING
OKLAHOMA CITY 2, OKLA.

July 11, 1952

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

Attention: Mr. W. B. Macey, Chief Engineer

Gentlemen:

IN re: Case No. 354 - T. O. May No. 5,1310' from N and E
Lines, Section 34-22S-37E, Penrose-Skelly Pool
Lea County, New Mexico

Due to our unfamiliarity with the rules of your Commission, we have asked for an indefinite postponement of the above referred to hearing, and we find this morning that a postponement cannot be made indefinitely.

We are therefore amending our request of July 10, 1952, to read "a ninety (90) day postponement of the hearing", which is set to be heard on July 15, 1952, in this case.

Yours truly,

GULF COAST WESTERN OIL CO.

F. R. Henson
F. R. Henson, President

FRH:el

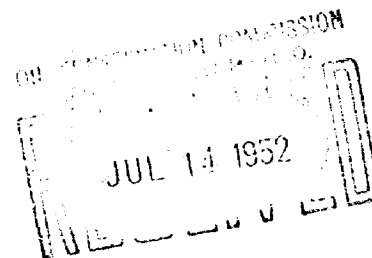
cc: Mr. A. L. Porter, Jr.
Proration Manager
New Mexico Oil Conservation Commission
Box 2045
Hobbs, New Mexico

Skelly Oil Company
Box 38 Hobbs, New Mexico
Attn: Mr. J. M. Dunlavey

Skelly Oil Company
Skelly Building, Tulsa, Oklahoma
Attn: Mr. Jim Cooper

Humble Oil Company
Box 1600, Midland, Texas
Attn: Mr. R. S. Dewey

Case 354



C-1551

HUMBLE OIL & REFINING COMPANY

MIDLAND, TEXAS

July 10, 1952

J. W. HOUSE

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

Attention of Mr. R. R. Spurrier, Secretary

Dear Sir:

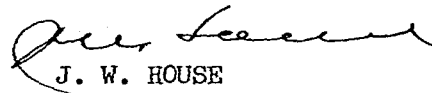
At a meeting of representatives of Gulf Coast Western Oil Company, Skelly Oil Company and Humble Oil & Refining Company to discuss a pilot water injection program for Section 34, T-22-S, R-37-E, the matter of the interchange of a cooperative agreement for water flooding and the selection of input wells was tentatively agreed upon.

It was agreed that pending the execution of a cooperative agreement for water flooding, each operator would request that the Conservation Commission of New Mexico would indefinitely postpone the hearing set for July 15, 1952, on Case 354. This case concerns the request for permission to produce the T. O. May No. 5 well, 1310 feet from the north and east lines, Section 34, T-22-S, R-37-E, Penrose-Skelly Pool, Lea County, New Mexico. This well was formerly operated by C. E. Willingham, now by Gulf Coast Western Oil Company. It was further agreed, that each operator would request that the Conservation Commission of New Mexico would grant a temporary allowable to permit said well to produce to capacity until such time that the Commission is requested by either Skelly Oil Company or Humble Oil & Refining Company to reset Case 354 for hearing.

Humble Oil & Refining Company hereby requests the postponement for an indefinite period of time on the hearing of Case 354 and the granting of a temporary allowable for T. O. May well No. 5 until such time that Case 354 may be reset for hearing by either Skelly Oil Company or Humble Oil & Refining Company.

Yours very truly,

HUMBLE OIL & REFINING COMPANY


J. W. HOUSE

RSD/rs

cc: Mr. George Selinger, Skelly Oil Co., Tulsa, Oklahoma
Mr. F. R. Henson, Gulf Coast Western Oil Co., Oklahoma City, Oklahoma
Mr. Hiram Dow, Hervey, Dow & Hinkle, Roswell, New Mexico
Mr. W. E. Hubbard, Humble Oil & Refg. Co., Houston, Texas
Mr. T. J. Fuson, Humble Oil & Refg. Co., Houston, Texas

164676
Case 357

GULF COAST WESTERN OIL CO.

PRODUCERS OF CRUDE OIL
PETROLEUM BUILDING

OKLAHOMA CITY 2, OKLA.

July 10, 1952

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

ATTENTION: Mr. W. B. Macey, Chief Engineer

Gentlemen:

In re: Case No. 354 - T. O. May No. 5, 1310' from N and
E Lines, Section 34-22S-37E., Penrose-Skelly Pool,
Lea County, New Mexico.

At a meeting of the operators in Section 34-22S-37E, Penrose-Skelly Pool, Lea County, New Mexico, held in the offices of the Skelly Oil Company, Hobbs, New Mexico, yesterday, July 9, 1952, at which there were present J. M. Dunlavey and Jim Cooper of Tulsa, Oklahoma, representing Skelly Oil Company, R. S. Dewey, of Midland, Texas, representing Humble Oil Company, and myself, F. R. Henson, representing Gulf Coast Western Oil Co., of Oklahoma City, Oklahoma, a proposed pilot water flooding project was discussed and tentative agreement reached unanimously between all the operators in Section 34.

As a result of this conference all of the operators in Section 34, viz.: Skelly Oil Company, Humble Oil Company and Gulf Coast Western Oil Co., reached an agreement to request the notification of the Oil Conservation Commission of the State of New Mexico that it is the desire of the said operators that Case No. 354, relating to the request of Gulf Coast Western Oil Co. for permission to produce the T. O. May No. 5 well, be continued indefinitely from the date of July 15, 1952, at which time the Case is set to be heard before the Commission, and that the temporary allowable on the T. O. May No. 5 well be immediately restored.

It was also agreed that the Commission be requested that both the indefinite continuance of the hearing and the temporary allowable for the Gulf Coast Western Oil Co. T. O. May No. 5 remain so until any one of said three operators may request the allowable be discontinued, and/or the said Case be set down for hearing before the Commission.

It is assumed by the Gulf Coast Western Oil Co. that this action on the part of all interested parties will make it unnecessary for appearance at the proposed hearing on this issue set for Tuesday, July 15, 1952, either for the purpose of hearing or restoration of the temporary allowable on the T. O. May No. 5 well.

If we are not correct in this assumption, will you kindly advise

New Mexico Conservation Commission - 2 -

July 10, 1952.

immediately by collect Western Union telegram in order that we may make preparation and be represented at the hearing on July 15th.

Yours very truly,

GULF COAST WESTERN OIL CO.,

F. R. Henson
F. R. Henson,
President

FRH:el

cc: Mr. A. L. Porter, Jr.
Proration Manager of
New Mexico Oil Conservation Commission,
Box 2045,
Hobbs, New Mexico.

Skelly Oil Company,
Box 38,
Hobbs, New Mexico,
Attention: Mr. J. M. Dunlavey

Skelly Oil Company,
Skelly Building,
Tulsa, Oklahoma,
Attention: Mr. Jim Cooper

Humble Oil Company,
Box 1600,
Midland, Texas,
Attention: Mr. R. S. Dewey

(2)

Exhibit # 12

Case 354

AURORA GASOLINE COMPANY

Refiners and Marketers

REFINERIES:
DETROIT, MICHIGAN
ELSIE, MICHIGAN

15011 WYOMING AVENUE
DETROIT 21, MICH.

UNIVERSITY 3-5800

REPLY TO:
TULSA BRANCH OFFICE
308xxx WRIGHT BLDG.
TULSA, OKLAHOMA
TELEPHONE: 2-1010

March 18, 1952

C. E. Willingham, M. D.
808 Peoples Bank Building
Tyler, Texas

Dear Mr. Willingham:

As you recall, some time last year we concluded a deal with you involving the drilling of a test well in the Northeast Quarter (NE $\frac{1}{4}$) of Section 34, Township 22 South, Range 37 East, NNPN, Lee County, New Mexico, for the purpose of determining whether the formation which was productive in the area was susceptible to a secondary recovery project. On October 15, 1951 our application to the Commission for approval of this unorthodox location was granted, this being identified as Case No. 297, Order No. R-103.

The test well was subsequently drilled and cored. An analysis of the core indicated that due to the low permeability of the producing horizon that the value of a water flood was extremely dubious. Accordingly, and in line with the terms of our original agreement, we re-assigned to you the acreage involved including the drill site.

Inasmuch as the order mentioned above, granting approval to this location, indicated that if a secondary project was not feasible that an allowable would be given to this well, we assume that such approval will be transferred to you.

If there is any other data which we can supply, either to you or to the Commission, please do not hesitate to contact us.

Yours very truly,

AURORA GASOLINE COMPANY

M. S. Schiller
M. S. Schiller

MSS/mr

cc - Mr. Amis
Mr. Shier

O K W.B.M.

GULF COAST WESTERN OIL CO.

PRODUCERS OF CRUDE OIL
PETROLEUM BUILDING
OKLAHOMA CITY 2, OKLA.

July 11, 1952.

*Letter to Mr. Macey
in 9-15-52*

*RECEIVED
JUL 14 1952
OIL CONSERVATION COMMISSION*

Mr. W. B. Macey, Chief Engineer,
Oil Conservation Commission,
P. O. Box 871,
Santa Fe, New Mexico.

Dear Mr. Macey:

In re: Case No. 354 - T. O. May No. 5, 1310' from N and
E Lines, Section 34-22S-37E., Penrose-Skelly Pool,
Lea County, New Mexico.

You will have received, ere this letter reaches your desk, Mr. F. R. Henson's letter of July 10 addressed to your attention.

Inasmuch as a tentative agreement has been reached between the three Operators in Section 34-22S-37E for a water flooding project and the Commission has been requested to postpone the July 15 hearing in Case No. 354 and to restore the temporary allowable under our T. O. May No. 5 pending developments, we are wondering if/Will be possible for us to obtain photostatic copies of Exhibits 1 and 2 as introduced in said case at the April 15, 1952 hearing.

Regrettably, we find that Dr. C. E. Willingham, from whom we acquired the property, was furnished only one photostatic copy of the Core Summary, Summary of Core Analyses Data, Results of Permeability Tests, Results of Laboratory Flooding Tests, Special Oil Flooding Tests, Summary of Coring Time, Results of Saturation and photographs of the cores, and, subsequently, same were filed as Exhibit 1 in said case. You will agree that such data will be of tremendous assistance to us in developing the proposed water flooding project. We doubt that your regulations will permit you to remove same from your official file and transmit to us for photostating, which, of course, would simplify matters, therefore, we are wondering if it would be possible for you to procure the photostats and forward to us. If this may be done, will you kindly advise the cost and check will be mailed immediately. Your kind assistance in this matter will be profoundly appreciated.

We are disappointed to learn that time and plans would not permit you to visit our offices when recently in our City and sincerely trust that you had a most enjoyable trip.

Mr. W. B. Macey, Chief Engineer

- 2 -

July 11, 1952.

Thanking you and with kindest personal regards,

Yours very truly,

GULF COAST WESTERN OIL CO.,

Lee Ford

Lee Ford,
Land Department

LF/1.

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

July 9, 1952

C
O
P
Y

Mr. Lee Ford
Gulf Coast Western Oil Company
Petroleum Building
Oklahoma City, Oklahoma

Dear Mr. Ford:

Reference is made to your letter of July 5 pertaining to Case 354.

With reference to the exhibits which have been introduced in this case: Exhibit No. 1, which was introduced April 15, is a copy of a letter from the Earllougher Engineering Company to the Aurora Gasoline Company. Attached to the letter is a Core Summary signed by J. M. Robinson, engineer for Earllougher Engineering, plus a summary of core analyses data. The total number of pages, including the initial letter, is 14, and includes the Results of Permeability Tests, the Results of Laboratory Flooding Tests, Special Oil Flooding Tests, Summary of Coring Time, Results of Saturation Tests, and photographs of the cores. All of the exhibit is a photostat. Exhibit No. 2 is a letter from the Aurora Gasoline Company signed by M. S. Shiller, addressed to Dr. Willingham; the letter is dated March 18, 1952.

I hope that this information will answer your question. I believe that the profile and summary of the results of the core analyses have been introduced in the somewhat lengthy Exhibit No. 1.

I regret very much my inability to contact you in Oklahoma City, but a change in plans prevented my doing so. Hoping to see you next Monday -

Very truly yours,

W. B. Macey,
Chief Engineer

WBM:nr

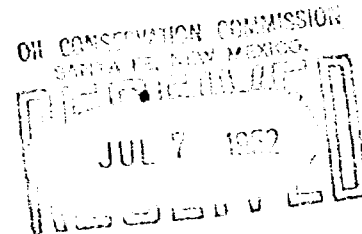
Case 354

GULF COAST WESTERN OIL Co.

PRODUCERS OF CRUDE OIL
PETROLEUM BUILDING
OKLAHOMA CITY 2, OKLA.

July 5, 1952

Mr. W. B. Macey, Chief Engineer,
Oil Conservation Commission,
P. O. Box 871,
Santa Fe, New Mexico.



Dear Mr. Macey:

In re: Case No. 354 - T. O. May No. 5, 1310' from N and E
Lines, Section 34-22S-37E., Penrose-Skelly Pool,
Lea County, New Mexico

We are exceedingly sorry that you were unable to visit our offices as anticipated.

I know that the letter of September 12, 1951, addressed to the Aurora Gasoline Company, Wright Building, Tulsa, Oklahoma, under date of September 12, 1951, by the Earllougher Engineering was introduced as evidence and filed as an exhibit in the above numbered case, however, I do not believe that the profile and summary of the results of the core analysis were so introduced and filed. Am I correct in this assumption?

Thanking you and with best wishes,

Yours very truly,

GULF COAST WESTERN OIL CO.,

Lee Ford
Lee Ford,
Land Department

LF/1

GULF COAST WESTERN OIL Co.

PRODUCERS OF CRUDE OIL

PETROLEUM BUILDING

OKLAHOMA CITY 2, OKLA.

July 17, 1952

Mr. W. B. Macey, Chief Engineer,
Oil Conservation Commission,
P. O. Box 871,
Santa Fe, New Mexico.

Dear Mr. Macey:

In re: Case No. 354 - T. O. May No. 5, 1310' from N and E
Lines, Section 34-22S-37E., Penrose-Skelly Pool,
Lea County, New Mexico.

We hasten to return herewith Exhibit No. 1 in captioned case, consisting of thirteen (13) photostatic pages.

Though we hesitate to further encroach upon your goodness, we should like a copy of Exhibit 2, being the letter from the Aurora Gasoline Company, over the signature of M. S. Shiller, and addressed to Dr. Willingham under date of March 18, 1952. This may be only a typewritten copy, - we might as well include your charming and competent Secretary in our debt of gratitude.

We are most grateful for your kindness in this matter and the writer sincerely trusts that he may have the pleasure of visiting with you in the very near future and personally expressing our appreciation.

Yours very truly,

GULF COAST WESTERN OIL CO.,

Lee Ford
Lee Ford,
Land Department.

OK CONSERVATION COMMISSION
JUL 21 1952

LE/f

Enclosures: Exhibit 1 - 13 photostatic copies

KARLOUGH ENGINEERING

HYDRAULIC CONSULTANTS - CORE ANALYSIS

310 EAST FOURTH STREET

TULSA, OKLAHOMA

September 12, 1951

Aurora Gasoline Company
Wright Building
Tulsa, Oklahoma

Attention - Mr. Maurice Shiller

Re - Core Analysis
T. O. May Well No. 5
Sec. 34, T.22-S., R.37-E.
Lea County, New Mexico

Gentlemen:

Attached are results of analysis, together with profile and summary, covering core received from your above well.

The Penrose (Queen) sand was diamond cored and results of the analysis indicate 33.8 net feet of oil sand with low porosity and low permeability. The oil sand occurs in 4 separate sections throughout an interval of 102 feet from 3577.8 to 3679.8 feet.

Based on the data from this one core alone it may be calculated that a primary oil recovery by gas expansion of 4100 barrels per acre should be obtained from the area of which this core is representative. An effective water flood following primary depletion may yield an additional oil recovery of 2300 barrels per acre. The average recovery to date from this property has been only 1380 barrels per acre indicating a possible 5020 barrels per acre of primary and secondary oil yet to be produced.

If the low primary recovery to date is due to poor drainage caused by the low permeability, it is possible that closer spacing should yield substantially more oil. Therefore, it is recommended that the present core well be completed possibly by hydraulic fracturing. Bottom hole pressure test and production test data might then indicate whether or not there is sufficient oil yet to be recovered to justify the expense to be substantially attractive. It is also recommended that a water flood be conducted as soon as possible to determine the ultimate recovery of the well.

BARRETT'S EXPLORATION COLUMBIA, MISSOURI

Page - 2 -

Company Amoco Petroleum Company Well No. 1
 Location 1316 East First North and East 24th
 Section 34 Twp. 24-S Rge. 12-E County Lee State Missouri
 Formation Cored Pearce (Glen) Type Core Blended, 1/2 inch
 Date Cored 8-31-51 Date Shot _____ Coring Fluid Emulsion Mud

Depths:

Elevation, R.B., Datum	1305.6 Feet
Ground Elevation	311.0 "
Started coring, shale	300.0 "
Top of oil sand section	297.0 "
Bottom of oil sand section	282.0 "
Net feet of oil sand	35.0 "
Bottom of core, shaly sandy dolomite	300.0 "
Total cored	15.0 "
Rock analyzed	100. per cent
Net core recovery	

Shot Record:

Set Packer _____ Feet

Depth, Feet	Feet	Shut	Quartz	Gravel
From	To	Blow	Weight	Per

5-1/2 inch casing set and cemented at 378.0 feet.

Completion Data:

Net core recovery _____; Net fluid in flow _____

EARLOUGHER ENGINEERING

PETROLEUM CONSULTANTS - CORE ANALYSIS

310 EAST FOURTH STREET

TULSA, OKLAHOMA

September 12, 1951

Aurora Gasoline Company
Wright Building
Tulsa, Oklahoma

Attention - Mr. Maurice Shiller

Re - Core Analysis
T. O. May Well No. 5
Sec. 34, T.22-S., R.37-E.
Lea County, New Mexico

Gentlemen:

Attached are results of analysis, together with profile and summary, covering core received from your above well.

The Penrose (Queen) sand was diamond cored and results of the analysis indicate 33.8 net feet of oil sand with low porosity and low permeability. The oil sand occurs in 4 separate sections throughout an interval of 102 feet from 3577.8 to 3679.8 feet.

Based on the data from this one core alone it may be calculated that a primary oil recovery by gas expansion of 4100 barrels per acre should be obtained from the area of which this core is representative. An effective water flood following primary depletion may yield an additional oil recovery of 2300 barrels per acre. The average recovery to date from this property has been only 1350 barrels per acre indicating a possible 5020 barrels per acre of primary and secondary oil yet to be produced.

If the low primary recovery to date is due to poor drainage caused by the low permeability, it is possible that closer spacing should yield substantially more oil. Therefore, it is recommended that the present core well be completed possibly by hydraulic fracturing. Bottom hole pressure test and production test data might then indicate whether or not there is sufficient oil yet to be recovered under primary methods to be economically attractive. If this should prove to be possible then water injection would be advisable.

- (a) 100.0 to 100.0 feet - 0.0 net feet
- (b) 100.0 to 100.0 feet - 0.0 net feet
- (c) 100.0 to 100.0 feet - 0.0 net feet
- (d) 100.0 to 100.0 feet - 0.0 net feet

Results of analysis are summarized in 6 sections based on differences in permeability and porosity. Sections 1, 2 and 3 contain the 16.5 net feet of oil sand in the top zone. Sections 4, 5 and 6 represent the oil sand in the bottom 3 zones.

PERMEABILITY The entire sand section has very low permeability with the weighted average being 4.3 millidarcys. Individual values range from impermeable to 26 millidarcys. Sections 2 and 5 have an average permeability of 7.0 and 17 millidarcys, respectively compared with the average of 0.0, 0.5, 1.7 and 1.0 millidarcys for sections 1, 3, 4 and 6, respectively. Permeability capacity is 144 foot-millidarcys.

POROSITY Weighted average porosity is 13.3 per cent and individual values range from 7.6 to 19.0 per cent. Average porosity of sections 1 through 6 is 12.5, 15.1, 10.4, 13.2, 17.8 and 11.1 per cent, respectively.

PER CENT SATURATION The average oil saturation is 18 per cent and values are fairly uniform throughout the section. Average core water saturation is 53 per cent and values are quite variable, probably due to the variance in permeability and porosity. Laboratory oil flooding tests indicated that the average connate water saturation should be approximately 40 per cent.

OIL CONTENT Average oil content is 18.2 barrels per acre-foot and values range from 14.0 to 24.0 barrels per acre-foot.

LABORATORY WATER FLOODING TESTS Laboratory water flooding tests were conducted on the oil sand section and indicated that the average water saturation should be approximately 40 per cent.

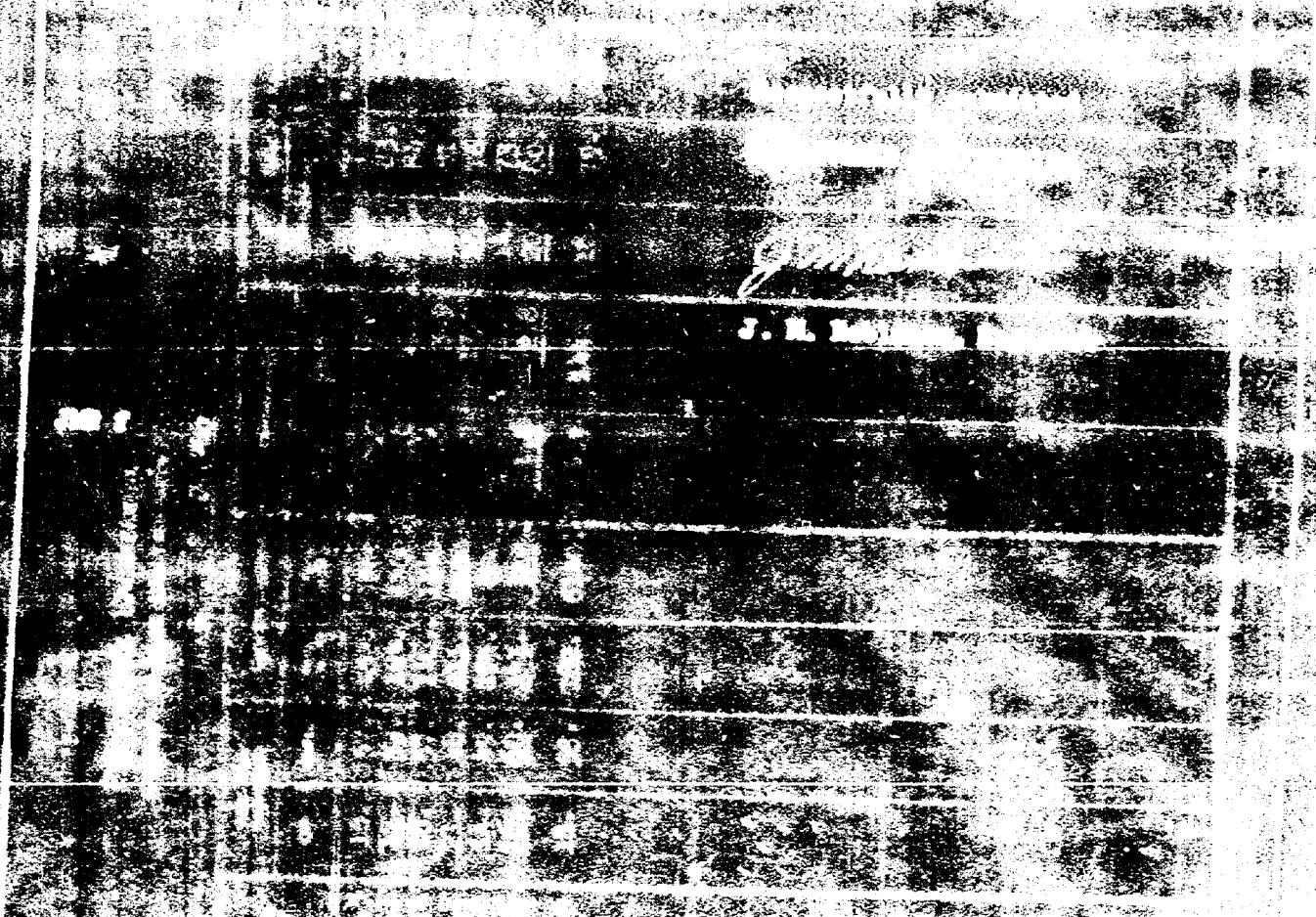
fresh water was extruded and subsequently followed the permeability profile. These flooding tests indicate that even though the permeability is very low, the core during coring due to gas expansion and flushing with drilling mud. No plugging was indicated due to the use of fresh water.

LABORATORY OIL FLOODING TESTS

Eight representative samples were flooded with crude oil in the laboratory at a pressure of 70 psi. They indicated an average residual water saturation of 40 per cent which very nearly represent the average connate water saturation. This is a relatively low connate water saturation for a sand with such low permeability.

CONCLUSIONS

1. There are 33.8 net feet of oil sand located in 4 sections between depths 3577.8 and 3679.8 feet.
2. Permeability and porosity are very low averaging 4.3 millidarcys and 13.3 per cent, respectively. The average core oil saturation is 18 per cent and average core water saturation 33 per cent.
3. Estimated primary oil recovery to zero psi reservoir pressure is 122 barrels per acre-foot or 4100 barrels per acre from the area of which this core is representative.
4. An effective water flood following primary depletion may yield an additional oil recovery of 41 barrels per acre-foot or 1350 barrels per acre assuming the water flood is effective in displacing the oil.
5. The above conclusions are based on the data obtained from the core analysis.



1988

THE UNIVERSITY OF CHICAGO

100

[illegible]

**Drainage and Irrigation
Notes on Surveying**

Company Aurora Coal and Coke

Vol. T. O. No. 2

Set No.	Depth Feet	Perosity Per Cent	Per Cent Saturation			Area of Drainage	Per Cent of Rain		Total Rain
			On	Water	Total		Per	Cent	
1	3548.0	3.4	59.	41.	100.	160.	3.2		
1A	3566.8	13.7	16.	45.	61.	170.	1.2		
2	3587.6	7.0	16.	84.	100.	89.	1.0		
3	3574.0	3.0	44.	56.	100.	100.	1.3		
4	3579.6	2.5	41.	59.	100.	80.	2.7		
5	3578.2	13.1	16.	61.	77.	160.	0.9	0.9	130.
6	3579.2	13.4	16.	52.	68.	160.	0.8	1.7	130.
7	3580.0	13.2	11.	55.	66.	130.	1.1	2.8	140.
8	3580.9	13.3	18.	60.	78.	180.	1.3	4.1	230.
9	3582.3	15.8	17.	45.	62.	210.	0.9	5.0	190.
10	3583.3	14.3	18.	57.	75.	200.	1.2	6.2	240.
11	3584.4	15.1	18.	47.	65.	220.	1.2	7.4	260.
12	3585.6	16.9	18.	52.	70.	230.	1.3	8.7	300.
13	3587.7	10.7	20.	66.	86.	170.	1.0	9.7	170.
14	3588.7	7.8	15.	85.	100.	88.	1.3	11.0	110.
15	3590.0	12.5	22.	54.	76.	210.	0.9	11.9	190.
16	3591.1	13.9	17.	46.	63.	190.	0.9	12.8	170.
17	3592.0	14.0	14.	43.	57.	150.	0.9	13.7	140.
18	3593.1	7.6	21.	58.	79.	120.	1.3	15.0	160.
19	3594.1	9.3	18.	50.	68.	130.	1.5	16.5	200.
20	3595.1	7.4	6.1	--	--	32.	0.5		
24	3616.7	6.5	22.	71.	93.	110.	0.6		
25	3618.0	4.7	24.	35.	59.	88.	1.0		
26	3621.5	11.6	12.	43.	55.	100.	0.6		
27	3628.6	4.2	18.	72.	90.	59.	3.2		
28	3631.6	15.1	17.	38.	55.	200.	1.5	18.0	300.
29	3633.0	16.9	18.	48.	66.	230.	1.2	19.2	280.
30	3634.2	10.3	19.	53.	72.	160.	1.4	20.6	220.
31	3635.3	14.0	24.	40.	64.	260.	1.0	21.6	260.
32	3636.3	11.3	24.	51.	75.	210.	1.1	22.7	230.
33	3638.2	10.5	28.	58.	86.	230.	1.0	23.7	250.
34	3641.5	11.7	23.	41.	64.	210.	2.3	26.0	180.
35	3643.6	18.0	16.	52.	68.	220.	0.8	26.8	180.
36	3653.3	2.4	70.	30.	100.	130.	1.8		
37	3654.0	8.1	23.	52.	75.	140.	0.7		
38	3656.8	5.4	18.	64.	82.	75.	1.2		
39	3660.4	18.8	13.	37.	50.	180.	1.5	28.3	270.
40	3661.5	19.0	16.	63.	79.	230.	0.7	29.0	140.
41	3662.1	18.6	14.	48.	62.	200.	1.4	30.4	160.
42	3663.9	11.1	21.	48.	69.	180.	0.9	30.9	170.
43	3677.1	13.5	7.4	41.	48.	78.	0.6	31.5	170.
44	3677.9	16.8	16.	60.	76.	130.	1.0	32.5	170.
45	3679.4	17.9	16.	70.	86.	130.	1.0	33.5	170.
46	3680.0	18.0	16.	70.	86.	130.	1.0	34.5	170.
47	3680.0	18.0	16.	70.	86.	130.	1.0	35.5	170.
48	3680.0	18.0	16.	70.	86.	130.	1.0	36.5	170.
49	3680.0	18.0	16.	70.	86.	130.	1.0	37.5	170.
50	3680.0	18.0	16.	70.	86.	130.	1.0	38.5	170.
51	3680.0	18.0	16.	70.	86.	130.	1.0	39.5	170.
52	3680.0	18.0	16.	70.	86.	130.	1.0	40.5	170.
53	3680.0	18.0	16.	70.	86.	130.	1.0	41.5	170.
54	3680.0	18.0	16.	70.	86.	130.	1.0	42.5	170.
55	3680.0	18.0	16.	70.	86.	130.	1.0	43.5	170.
56	3680.0	18.0	16.	70.	86.	130.	1.0	44.5	170.
57	3680.0	18.0	16.	70.	86.	130.	1.0	45.5	170.
58	3680.0	18.0	16.	70.	86.	130.	1.0	46.5	170.
59	3680.0	18.0	16.	70.	86.	130.	1.0	47.5	170.
60	3680.0	18.0	16.	70.	86.	130.	1.0	48.5	170.
61	3680.0	18.0	16.	70.	86.	130.	1.0	49.5	170.
62	3680.0	18.0	16.	70.	86.	130.	1.0	50.5	170.
63	3680.0	18.0	16.	70.	86.	130.	1.0	51.5	170.
64	3680.0	18.0	16.	70.	86.	130.	1.0	52.5	170.
65	3680.0	18.0	16.	70.	86.	130.	1.0	53.5	170.
66	3680.0	18.0	16.	70.	86.	130.	1.0	54.5	170.
67	3680.0	18.0	16.	70.	86.	130.	1.0	55.5	170.
68	3680.0	18.0	16.	70.	86.	130.	1.0	56.5	170.
69	3680.0	18.0	16.	70.	86.	130.	1.0	57.5	170.
70	3680.0	18.0	16.	70.	86.	130.	1.0	58.5	170.
71	3680.0	18.0	16.	70.	86.	130.	1.0	59.5	170.
72	3680.0	18.0	16.	70.	86.	130.	1.0	60.5	170.
73	3680.0	18.0	16.	70.	86.	130.	1.0	61.5	170.
74	3680.0	18.0	16.	70.	86.	130.	1.0	62.5	170.
75	3680.0	18.0	16.	70.	86.	130.	1.0	63.5	170.
76	3680.0	18.0	16.	70.	86.	130.	1.0	64.5	170.
77	3680.0	18.0	16.	70.	86.	130.	1.0	65.5	170.
78	3680.0	18.0	16.	70.	86.	130.	1.0	66.5	170.
79	3680.0	18.0	16.	70.	86.	130.	1.0	67.5	170.
80	3680.0	18.0	16.	70.	86.	130.	1.0	68.5	170.
81	3680.0	18.0	16.	70.	86.	130.	1.0	69.5	170.
82	3680.0	18.0	16.	70.	86.	130.	1.0	70.5	170.
83	3680.0	18.0	16.	70.	86.	130.	1.0	71.5	170.
84	3680.0	18.0	16.	70.	86.	130.	1.0	72.5	170.
85	3680.0	18.0	16.	70.	86.	130.	1.0	73.5	170.
86	3680.0	18.0	16.	70.	86.	130.	1.0	74.5	170.
87	3680.0	18.0	16.	70.	86.	130.	1.0	75.5	170.
88	3680.0	18.0	16.	70.	86.	130.	1.0	76.5	170.
89	3680.0	18.0	16.	70.	86.	130.	1.0	77.5	170.
90	3680.0	18.0	16.	70.	86.	130.	1.0	78.5	170.
91	3680.0	18.0	16.	70.	86.	130.	1.0	79.5	170.
92	3680.0	18.0	16.	70.	86.	130.	1.0	80.5	170.
93	3680.0	18.0	16.	70.	86.	130.	1.0	81.5	170.
94	3680.0	18.0	16.	70.	86.	130.	1.0	82.5	170.
95	3680.0	18.0	16.	70.	86.	130.	1.0	83.5	170.
96	3680.0	18.0	16.	70.	86.	130.	1.0	84.5	170.
97	3680.0	18.0	16.	70.	86.	130.	1.0	85.5	170.
98	3680.0	18.0	16.	70.	86.	130.	1.0	86.5	170.
99	3680.0	18.0	16.	70.	86.	130.	1.0	87.5	170.
100	3680.0	18.0	16.	70.	86.	130.	1.0	88.5	170.

Depth Feet	Penetration Imp.	Penetration Imp.		Depth Feet	Penetration Imp.	Penetration Imp.	Penetration Imp.	Penetration Imp.	Penetration Imp.	Penetration Imp.
		Penetration Imp.	Penetration Imp.							
1	3546.7	Imp.	1.2	49	3637.7	Imp.	0.3	33.8	0.2	
2	3547.7	Imp.	0.9	50	3648.3	Imp.	0.3			
3	3548.3	Imp.	1.5	51	3651.2	Imp.	1.2			
4	3566.5	Imp.	0.5	52	3678.3	Imp.	2.0			
5	3567.1	6.1	0.7	53	3688.9	Imp.	0.3	16.9	0.1	
6	3567.4	Imp.	0.4	54	3691.1	1.7	0.8	17.7	1.4	
7	3567.8	Imp.	0.5	55	3691.8	12.	0.3	18.0	3.6	
8	3574.7	Imp.	0.6	56	3692.2	2.6	0.3	18.3	0.8	
9	3574.4	Imp.	0.7	57	3692.5	2.1	0.5	18.8	1.1	
10	3575.3	Imp.	0.7	58	3692.7	1.7	0.4	19.2	0.7	
11	3575.8	Imp.	2.0	59	3693.3	4.3	0.3	19.5	1.4	
12	3577.9	Imp.	0.4	60	3693.7	0.6	0.5	20.0	0.3	
13	3578.5	Imp.	0.5	61	3694.0	0.2	0.6	20.6	0.1	
14	3578.9	Imp.	0.4	62	3694.5	1.2	0.4	21.0	0.5	
15	3579.4	Imp.	0.4	63	3694.9	0.6	0.6	21.6	0.4	
16	3579.8	3.1	0.4	64	3695.6	0.2	0.4	22.0	0.1	
17	3588.1	3.5	0.2	65	3696.0	0.2	0.4	22.4	0.1	
18	3588.4	25.	0.5	66	3696.5	0.1	0.3	22.7	0.1	
19	3581.2	4.9	0.9	67	3696.9	Imp.	0.8			
20	3581.7	2.6	0.4	68	3697.4	0.1	0.5	23.2	0.1	
21	3582.1	3.5	0.4	69	3698.0	0.1	0.5	23.7	0.1	
22	3582.6	4.2	0.5	70	3698.6	1.1	0.4	24.1	0.4	
23	3583.1	3.6	0.7	71	3699.3	0.2	0.4	24.5	0.4	
24	3583.7	2.1	0.5	72	3699.8	Imp.	0.2			
25	3584.2	1.0	0.5	73	3701.2	0.5	0.8	25.3	0.4	
26	3584.7	1.8	0.4	74	3701.8	0.1	0.7	26.0	0.1	
27	3585.1	0.8	0.3	75	3702.1	6.2	0.8	26.8	5.0	
28	3585.4	21.	0.6	76	3703.3	Imp.	1.1			
29	3585.9	8.9	0.3	77	3704.0	Imp.	1.8			
30	3586.4	11.	0.4	78	3705.3	Imp.	0.3			
31	3587.4	0.1	0.6	79	3706.6	0.1	0.4			
32	3588.0	Imp.	0.4	80	3707.0	Imp.	0.4			
33	3588.4	Imp.	0.6	81	3707.4	Imp.	0.5			
34	3588.9	Imp.	0.7	82	3707.8	Imp.	0.7			
35	3589.6	Imp.	0.5	83	3708.1	Imp.	0.8	27.6	21.	
36	3590.4	Imp.	0.4	84	3708.4	26.	0.8	28.0	1.5	
37	3590.8	1.8	0.9	85	3708.7	8.7	0.4	28.3	0.7	
38	3591.4	4.7	0.3	86	3709.1	0.2	0.3	29.0	17.	
39	3591.7	0.9	0.6	87	3709.5	24.	0.7	29.6	1.8	
40	3592.2	0.1	0.3	88	3709.8	13.	0.6	30.1	9.2	
41	3592.8	Imp.	0.5	89	3710.2	19.	0.5	30.4	2.6	
42	3593.4	0.3	0.5	90	3710.7	8.5	0.5			
43	3593.7	Imp.	0.5	91	3711.2	Imp.	0.5			
44	3594.1	Imp.	0.6	92	3711.7	Imp.	0.6			
45	3594.9	Imp.	0.4	93	3712.2	Imp.	0.7			
46	3595.4	Imp.	0.4	94	3712.7	Imp.	0.8			
47	3596.1	Imp.	0.4	95	3713.2	Imp.	0.9			
48	3596.7	Imp.	0.4	96	3713.7	Imp.	1.0			
49	3597.4	Imp.	0.4	97	3714.2	Imp.	1.1			
50	3598.1	Imp.	0.4	98	3714.7	Imp.	1.2			
51	3598.8	Imp.	0.4	99	3715.2	Imp.	1.3			
52	3599.5	Imp.	0.4	100	3715.7	Imp.	1.4			

[illegible]

88

Sample No.	Depth, Feet	Temp.	Specific Gravity	Moisture Content, %	Shrinkage, %	Compaction, %	Notes
7-7	3700.0	14.1	1.01	10.1	1.1	98.9	
7-11	3704.4	14.1	1.01	10.1	1.1	98.9	
7-13	3707.7	14.1	1.01	10.1	1.1	98.9	
7-29	3708.0	14.9	1.01	10.1	1.1	98.9	
7-31	3709.3	14.0	1.01	10.1	1.1	98.9	
7-33	3713.6	14.2	1.01	10.1	1.1	98.9	
7-41	3766.4	10.5	1.01	10.1	1.1	98.9	
7-44	3777.9	14.9	1.01	10.1	1.1	98.9	
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<u>Core No.</u>	<u>Depth</u>	<u>Time Min.</u>	<u>Feet Core</u>
1	3545 to 3580	7.0	35.
2	3580 to 3611	4.7	31.
3	3611 to 3646	5.9	35.
4	3646 to 3673	5.1	27.
5	3673 to 3688	2.6	15.
Total		25.3	143.

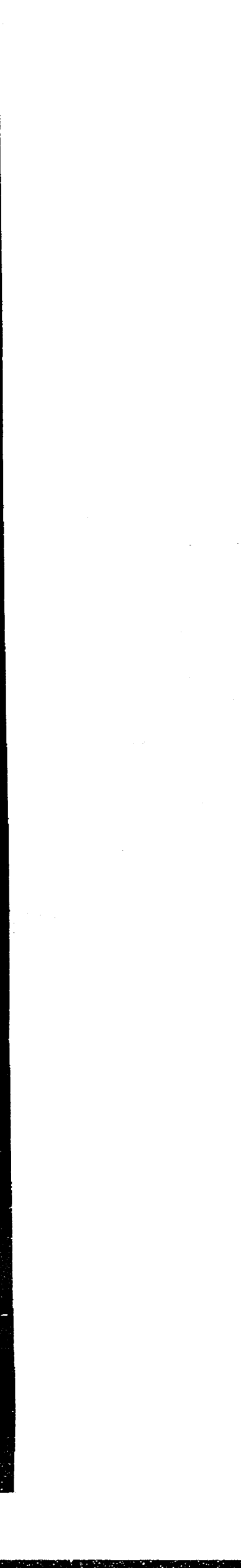
R. B. Elevation 3325 feet - Ground Level to Rotary Boring 9.3 feet

LOGGING TIME

<u>Depth</u>	<u>Time Min./Ft.</u>	<u>Depth</u>	<u>Time Min./Ft.</u>	<u>Depth</u>	<u>Time Min./Ft.</u>
3545	--	3576	11	3607	13
46	18	77	11	08	9
47	19	78	9	09	10
48	8	79	9	10	9
49	11	3580	14	11	10
50	13	81	8	12	8
51	10	82	7	13	12
52	10	83	6	14	14
53	13	84	6	15	11
54	12	85	8	16	12
55	9	86	6	17	9
56	10	87	9	18	11
57	14	88	8	19	11
58	12	89	8	20	11
59	13	3590	10	21	11
3560	12	91	8	22	11
61	13	92	8	23	11
62	13	93	8	24	11
63	14	94	9	25	11
64	13	95	9	26	11
65	14	96	9	27	11
66	14	97	9	28	11
67	14	98	9	29	11
68	14	99	9	30	11
69	14	100	9	31	11
70	14	101	9	32	11
71	14	102	9	33	11
72	14	103	9	34	11
73	14	104	9	35	11
74	14	105	9	36	11
75	14	106	9	37	11
76	14	107	9	38	11
77	14	108	9	39	11
78	14	109	9	40	11
79	14	110	9	41	11
80	14	111	9	42	11
81	14	112	9	43	11
82	14	113	9	44	11
83	14	114	9	45	11
84	14	115	9	46	11
85	14	116	9	47	11
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87	14	118	9	49	11
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90	14	121	9	52	11
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92	14	123	9	54	11
93	14	124	9	55	11
94	14	125	9	56	11
95	14	126	9	57	11
96	14	127	9	58	11
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106	14	137	9	68	11
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109	14	140	9	71	11
110	14	141	9	72	11
111	14	142	9	73	11
112	14	143	9	74	11
113	14	144	9	75	11
114	14	145	9	76	11
115	14	146	9	77	11
116	14	147	9	78	11
117	14	148	9	79	11
118	14	149	9	80	11
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120	14	151	9	82	11
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129	14	160	9	91	11
130	14	161	9	92	11
131	14	162	9	93	11
132	14	163	9	94	11
133	14	164	9	95	11
134	14	165	9	96	11
135	14	166	9	97	11
136	14	167	9	98	11
137	14	168	9	99	11
138	14	169	9	100	11

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WBM

C. E. WILLINGHAM, M. D., F. A. C. S.
808 PEOPLES BANK BUILDING
TYLER, TEXAS

April 29, 1952

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

Dear Sirs:

I have recently sold all my producing properties in
New Mexico to Gulf Coast Western Oil Company of Oklahoma City,
Oklahoma. They took over operation of the property on April
23, 1952.

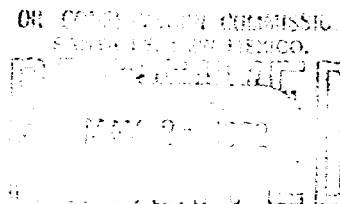
I have posted with you a plugging bond which I would
appreciate your returning to me so that I may cancel my contract
with the Insurance Company.

Very truly yours,

C. E. Willingham
C. E. Willingham, M. D.

CEW es..

*So what about Case 354?
So W. Gulf takes it*





Case 354.
file

SKELLY OIL COMPANY

PRODUCTION DEPARTMENT

J. S. FREEMAN
VICE PRESIDENT
E. A. JENKINS
GENERAL SUPERINTENDENT

TULSA 2, OKLAHOMA

April 9, 1952

W. P. WHITMORE
CHIEF PETROLEUM ENGINEER
G. W. SELINGER
PRORATOR ATTORNEY
J. H. MCCULLOCH
CHIEF CLERK

Re: Case 354, Applicant-C. E. Willingham
Hearing, April 15, 1952

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Attention: Mr. William Macey

Gentlemen:

This is to confirm telegram sent yesterday morning,
to-wit, April 8, 1952, as follows:

"We are in receipt of notice of hearing set
9:00 a.m., April 15, in Case 354, application
C. E. Willingham for permission to produce T.
O. May Well No. 5, Penrose Skelly Pool. As
offset operator we are concerned with this
application and desire postponement until
May hearings in order to secure data and in-
formation necessary for such hearing. We
respectfully request such postponement. Please
advise".

In explanation of such request, wish to advise that
both Humble Oil and Refining Company, although they will speak
for themselves, and Skelly offset the applicant's lease in Sec-
tion 34, Township 22 South, Range 37 East, Penrose Skelly Area,
Lea County, New Mexico, and the matter of feasibility of water
flooding is necessarily an important part of the hearing, and
since Humble and others are already water flooding in the Penrose
Skelly Field, it will necessitate some time to secure this infor-
mation and data and the lack of sufficient time requires the post-
ponement of this hearing.

In addition the undersigned has a hearing set for 10:00
A.M. April 15, before the Colorado Oil and Gas Conservation Commission
and will be engaged in that hearing on that date. We therefore requested,
by our telegram of yesterday, postponement until the May 20 hearings in
Santa Fe, at which time we will be prepared for this hearing.

APR 11 1952

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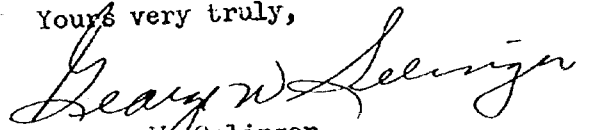
Page 2.

New Mexico Oil Conservation Commission

April 9, 1952

As indicated below we are sending a carbon copy of this letter to the Humble Oil and Refining Company, Mr. C. E. Willingham, the applicant, and we are unable to send a copy of this letter to Brand & Cowan, who are his attorneys, since we do not have their address.

Yours very truly,

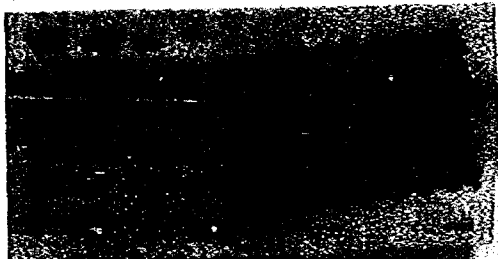

George W. Selinger

CWS:dd

cc: Mr. C. E. Willingham
319 W. Second Street
Tyler, Texas

Mr. John House
Humble Oil and Refining Company
Midland, Texas

Mr. Dunlavey



WESTERN UNION

W. P. MARSHALL, PRESIDENT

1220

(20)

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=Int'l Letter Telegram

VLT=Int'l Victory Ltr.

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

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1952 APR 8 AM 9 29

K TUA117 LONG PD=TULSA OKLA 8 1015A=

NEW MEXICO OIL CONSERVATION COMMISSION=

MABRY HALL STATE CAPITOL BLDG SANTAFE NMEX=

WE ARE IN RECEIPT OF NOTICE OF HEARING SET 900 AM APRIL 15
IN CASE 354 APPLICATION C E WILLINGHAM FOR PERMISSION TO
PRODUCE T O MAY WELL NO 5 PENROSE SKELLY POOL. AS OFFSET
OPERATOR WE ARE CONCERNED WITH THIS APPLICATION AND DESIRE
POSTPONEMENT UNTIL MAY HEARINGS IN ORDER TO SECURE DATA AND
INFORMATION NECESSARY FOR SUCH HEARING. WE RESPECTFULLY
REQUEST SUCH POSTPONEMENT. PLEASE ADVISE=

GEORGE W SELINGER SKELLY OIL CO=

A 480

HUMBLE OIL & REFINING COMPANY
INTER-OFFICE NOTE

DATE _____

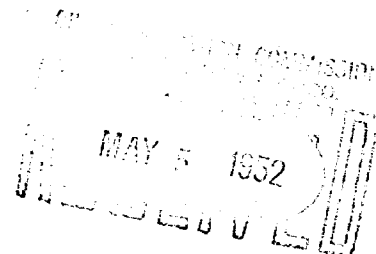
TO Dear Dick

FROM Bob Newmy.

For your information
we are sending you this
blind copy of correspondence.

HUMBLE OIL & REFINING COMPANY
HOUSTON 1, TEXAS
May 1, 1952

COPY



File: 10-2
Re: J. L. Greenwood Lease

Mr. Cooper
Skelly Oil Company
Tulsa, Oklahoma

Dear Sir:

We attach a plat of an area in the Penrose-Skelly Field, Lea County, New Mexico, adjacent to the Willingham No. 5 well in the center of the NE/4 Section 34.

From this plat it appears that Skelly has nearly twice as many producing wells as Mr. Willingham, and that Skelly and Willingham have a very large preponderance of the producing wells.

As the smaller operators can do very little relative to the initiation of a secondary recovery program for the area, it is suggested that Skelly as the major interest in the area contact Mr. Willingham and arrange an operator's meeting to discuss water injection.

With regards to the pilot water injection being carried on by Humble and Magnolia in another part of the field, no effects of water injection have been determined as yet, other than the ability of the formation to take injection water. To make the flood fully effective, additional injection wells are required to furnish a four-way water drive to a centrally located producing well. For your information, we attach a statement covering this pilot injection.

Very truly yours,

J. W. HOUSE

COPY ORIGINAL
SIGNED: R. S. DEWEY
BY: R. S. DEWEY

RSD/rs
Attachment

HUMBLE - MAGNOLIA WATER FLOOD PROJECT - PENROSE-SKELLY FIELD
HUMBLE - J. L. GREENWOOD LEASE
MAGNOLIA - BRUNSON-ARGO LEASE

The area being flooded on the Humble-J. L. Greenwood and Magnolia-Brunson-Argo leases, Penrose-Skelly Field, Lea County, New Mexico, comprises 480 acres in Section 9, Township 22-S, Range 37-E, as shown in Figure 1. Only wells completed in the Penrose-Skelly Grayburg pay are shown, a number of deeper Brunson, Drinkard, and Paddock Field wells being omitted. Seven wells were completed on the Humble-Greenwood lease and eight wells on the Magnolia-Brunson Argo lease in the Grayburg Crystalline dolomite on a 40-acre spacing pattern during the period from May 1937 to July 1940. However, in recent years, several wells have been deepened to other pays.

Prior to initiation of the water flood, production of the Humble Greenwood lease had declined to 13 barrels per day from five producing wells. Magnolia's Brunson-Argo lease was producing 10 barrels per day from the three wells in the flood area. Total cumulative production from the seven original Humble wells to January 1, 1951, was 348,880 barrels or 1,090 barrels per lease acre. Total cumulative production from the Magnolia wells in Section 9 to January 1, 1951, was 211,810 barrels or 1,320 barrels per lease acre. There are insufficient data available from which to determine actual pay thickness. The average porosity for ten core samples at Greenwood 1 was 7.9 percent and only one had a radial permeability as high as one md.

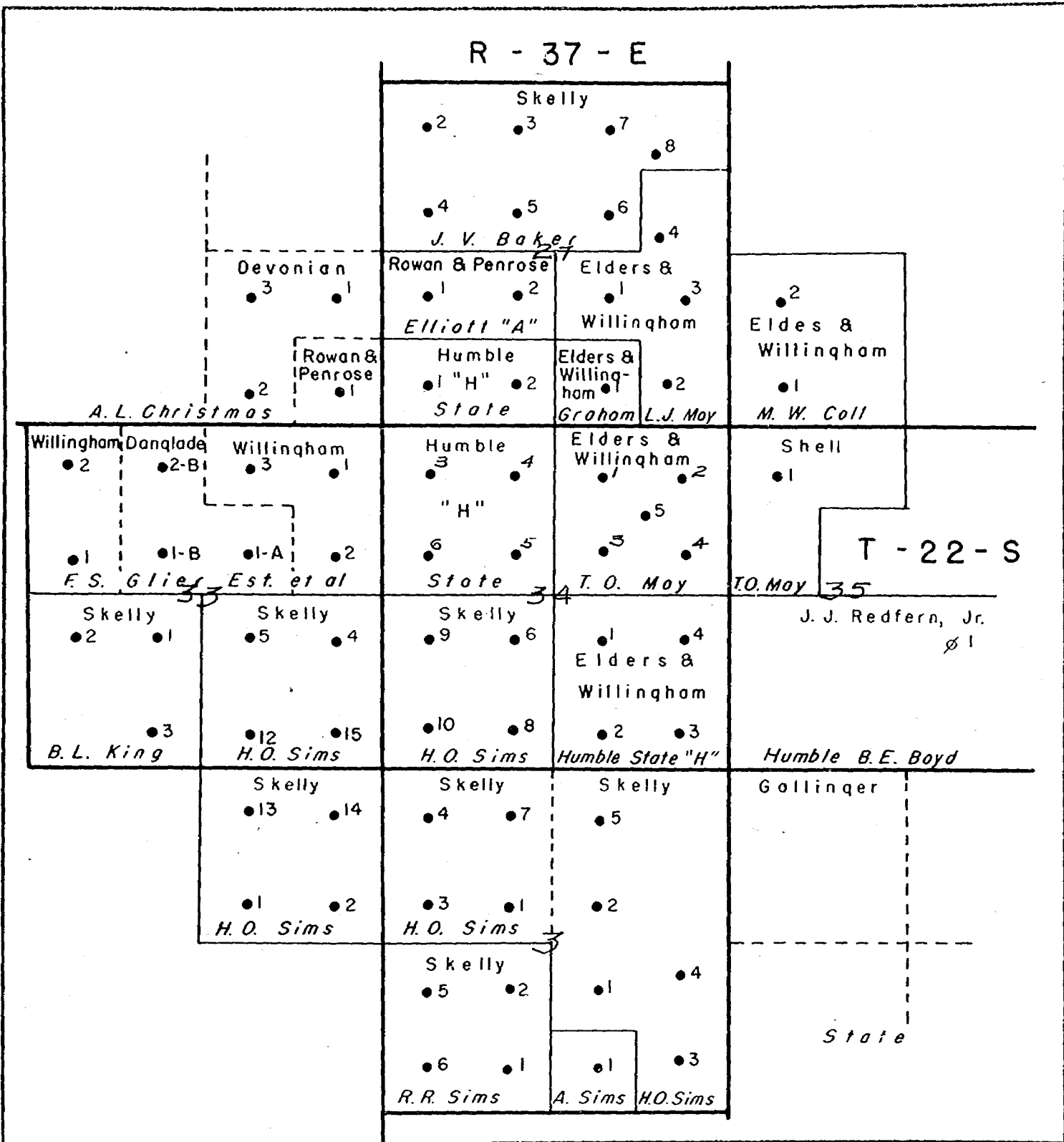
The original reservoir pressure is estimated as 1600 pounds and a subsurface sample showed a saturation pressure of 1457 pounds and a solution ratio of 751 when flashed to 0 pounds trap pressure. The oil shrinkage factor was 0.709. The high initial ratios of the wells suggest the presence of a gas

cap and the oil was probably saturated at the original reservoir pressure.

Because of the lack of reservoir data and actual operating experience of water injection in dolomite reservoirs, the project was initiated on an experimental basis.

On January 12, 1951, injection was begun into Greenwood 3 and Brunson-Argo 8 at the rate of 240 and 300 barrels daily, respectively. Greenwood 5 had been drilled to the Drinkard pay and, when it failed to be a commercial producer, was plugged back to the Grayburg and shut in. In order to convert it to a water injection well the casing was perforated with 150 open hole jet type shots from 3640 to 3715 feet and acidized through the perforations with 3000 gallons of acid. The well then took water by gravity at the rate of 432 barrels per day. On January 25, 1951, Humble Greenwood 5 and 6 were converted to injection wells. No remedial work was required in converting Greenwood 3 and 6 and Brunson-Argo 8 to water input wells.

Injection by gravity was continued throughout 1951 at an average rate of approximately 120 barrels of water per day per injection well. Cumulative water injected to March 1, 1952 was 195,297 barrels which is 366,288 barrels less than the total cumulative oil that has been produced. There have been no changes in production attributable to the water flood project to date. Equipment is being installed to increase the injection rate, and Magnolia recently acidized Brunson-Argo 8, increasing the injection rate from 60 to 135 barrels of water per day by gravity.



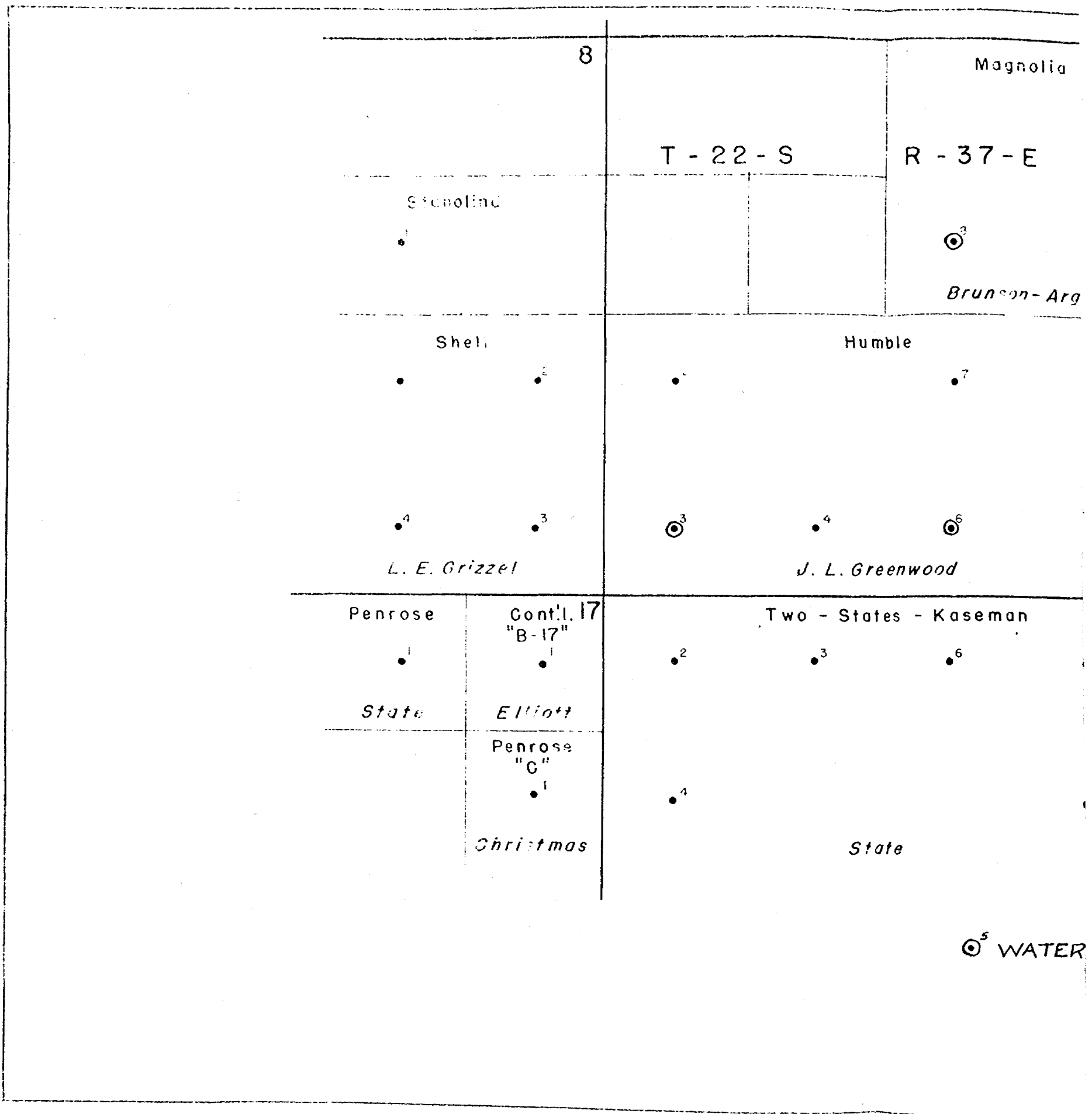
**PENROSE - SKELLY FLD.
HUMBLE - STATE "H"
LEASE & ADJACENT AREA**

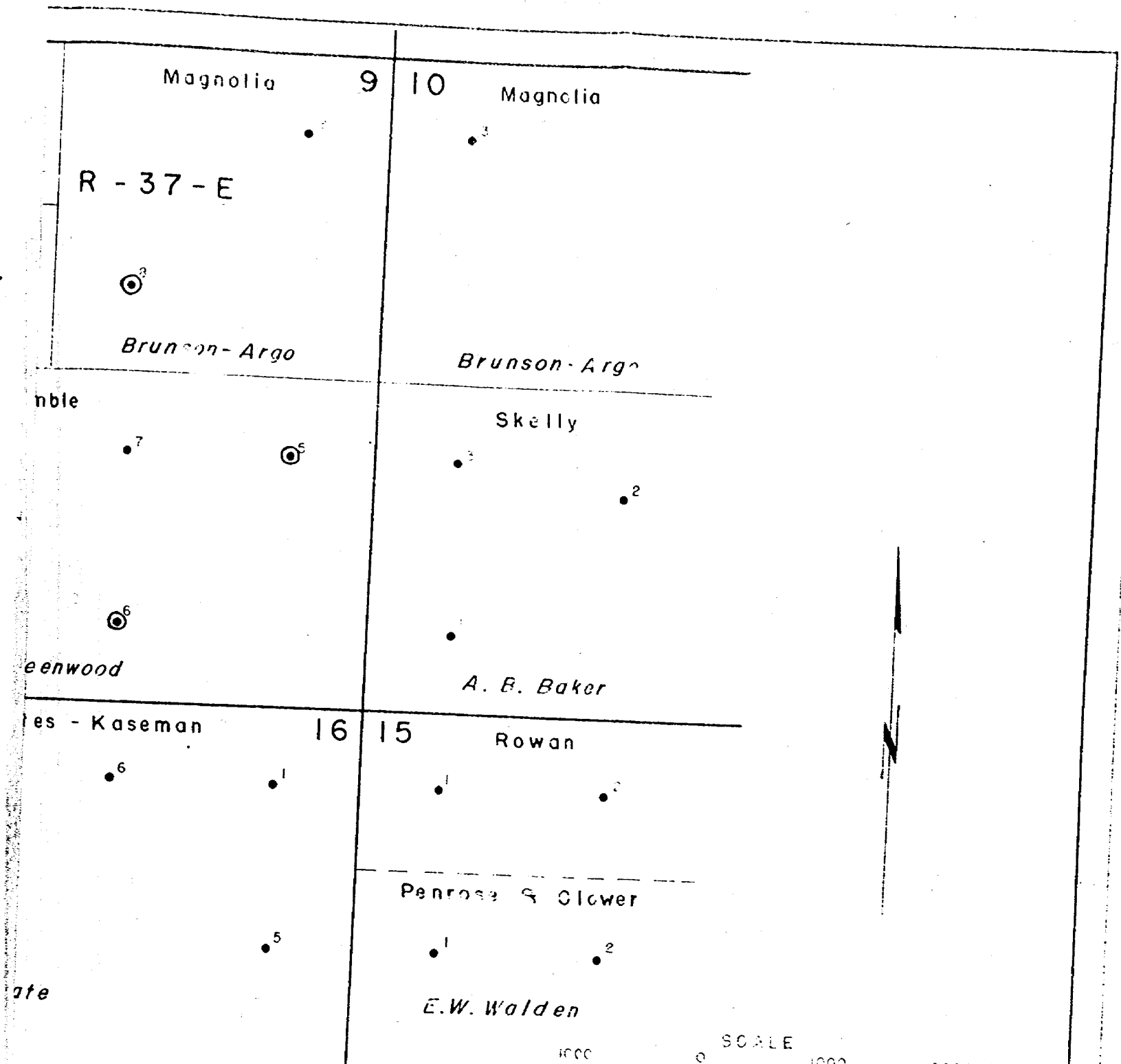
HUMBLE OIL & REFINING COMPANY
CIVIL ENGINEERING DIVISION

DRAWN _____
CHECKED _____
APPR. _____

SCALE _____
DATE _____
REVISED _____

FILE NO. _____

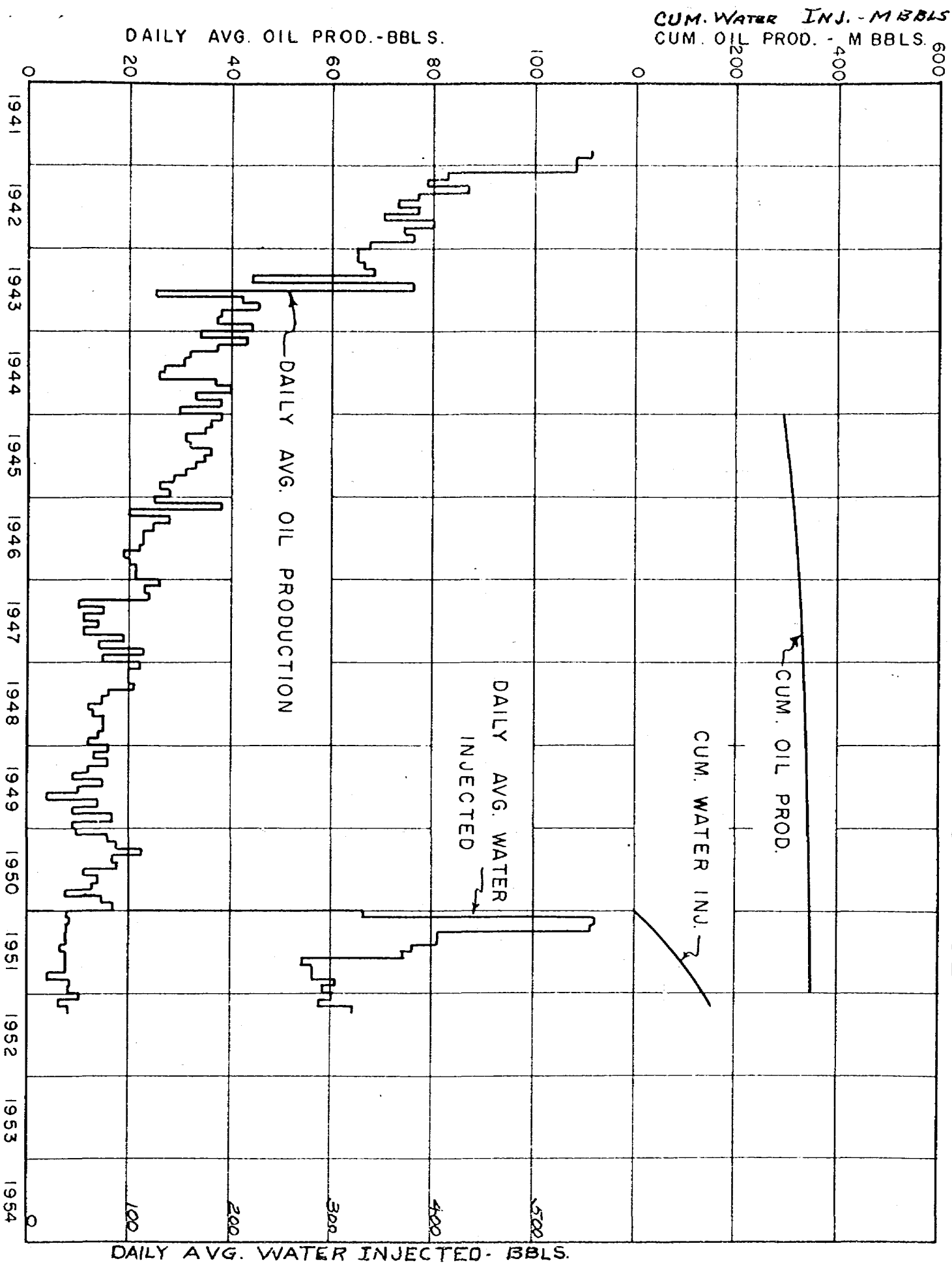


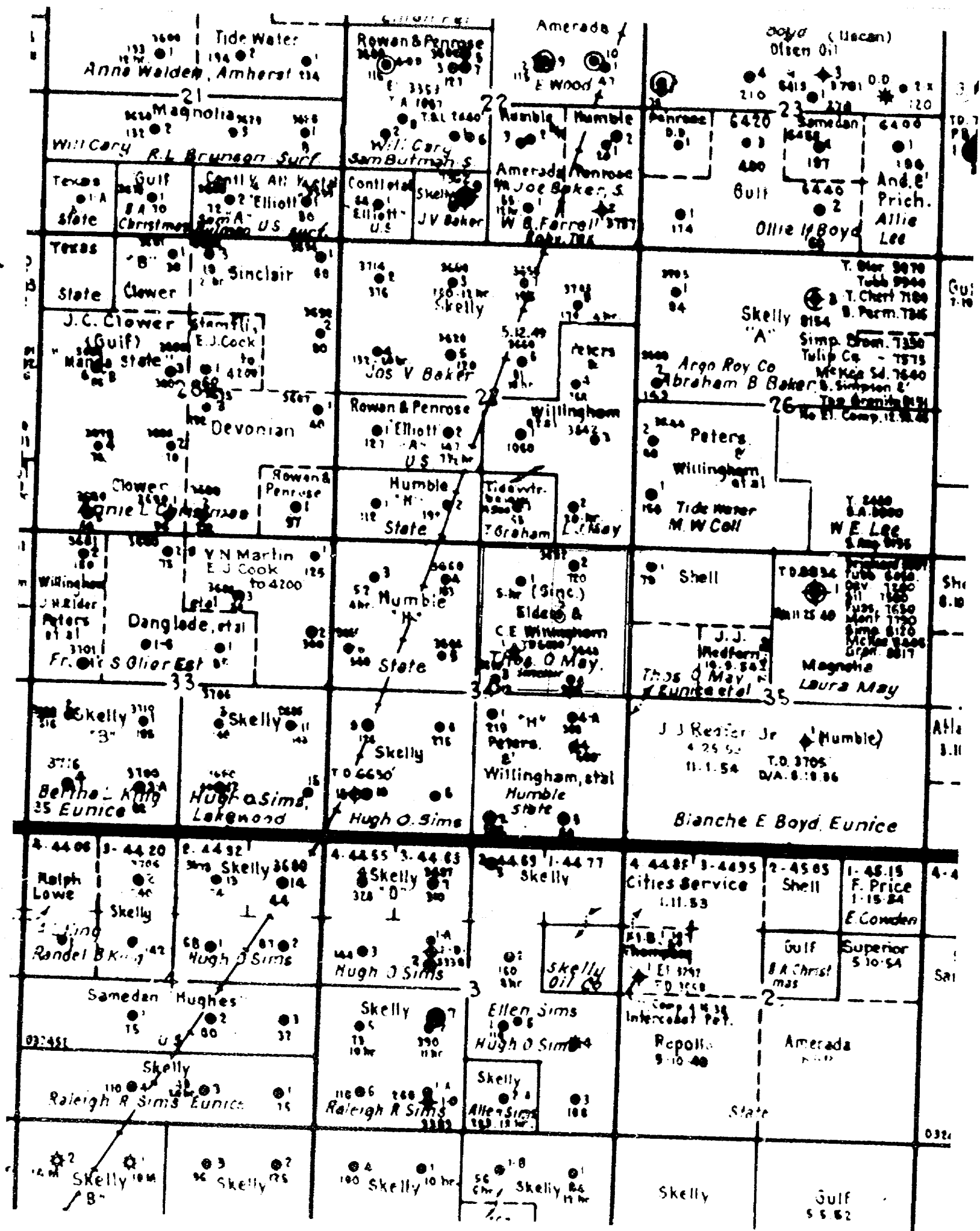


⑤ WATER INJECTION WELL

PENROSE - SKELLY FIELD AREA
ADJACENT TO J.L. GREENWOOD LSE.

HUMBLE - J. L. GREENWOOD LEASE





JOHN R. BRAND

RAY C. COWAN

BRAND & COWAN
ATTORNEYS AT LAW

P. O. BOX 1176 TELEPHONE 3-2195
DASHKO BLDG.
HOBBS, NEW MEXICO

March 7, 1952

Cowan 3-5-52

Oil Conservation Commission
Santa Fe, New Mexico

Attn: Mr. William Macey

Re: Case No.: 297
Order No.: R-103

Gentlemen:

Our client, C. E. Willingham, M.D. of 319 West Second Street, Tyler, Texas, is the owner of an oil well drilled as a test well 1310 feet South of the North line and 1310 feet West of the East line of Section 34, Township 22 South, Range 37 East, N.M.P.M., Lea County, New Mexico. This well was drilled by the Aurora Gasoline Company under contract with Dr. Willingham, and the drilling of such well as an unorthodox well location was permitted by the Oil Conservation Commission of New Mexico in the above styled and numbered case on August 7, 1951 in Santa Fe, New Mexico at 10:00 A.M. Such permission was granted after due hearing and publication to determine the feasibility of carrying on a secondary recovery program by water flooding for the recovery of oil or gas from the "Queen" or "Grayburg" formation in the Penrose Skelly pool, and that the Commission ordered that in the event such secondary recovery did not prove to be practicable that applicant should be permitted to complete said well, if it prove to be capable of producing oil or gas in paying quantities, subject to the further order of the Commission.

That the water flooding program contemplated by the order of the Commission proved impracticable and not feasible for the reason that the formation was too tight to take water, as will be fully shown to the Commission by the Core Analysis of Earlougher Engineering of Tulsa, Oklahoma, which report will be presented to the Commission upon a hearing of this cause.

March 7, 1952


My client, and your applicant, C. E. Willingham, further states that the said Aurora Gasoline Company did on or before October 19, 1951 return said well and all interest therein to your applicant, and that your applicant did thereafter, by the use of cable tool drilling equipment and ordinary methods, complete such well to production in the Queen sand section, and that the same is now capable of producing, and does produce, twelve to fifteen barrels of oil per day by natural flow through two inch tubing.

Your applicant, therefore, prays that the Commission set a time and place for hearing on this application, and that upon such hearing it grant to applicant the right to produce such well, according to the allowable or allowables, under the present and future rules and regulations of the Oil Conservation Commission of the State of New Mexico.

Very truly yours,

BRAND & COWAN

By:


Attorneys for Applicant
C. E. Willingham, M. D.
Hobbs, New Mexico

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

April 2, 1952

C
O
P
Y

BRAND & COWAN
Box 1176
Hobbs, N. M.

Attention: Mr. Ray Cowan

RE: OGC Case 354

Gentlemen:

Reference is made to your application dated March 7, 1952, in which your client, Mr. C. E. Willingham, makes application for permission to produce the T. O. May Well No. 5, formerly operated by Aurora Gasoline Company.

This application has been set for hearing at 9 a.m. on April 15, 1952, as Case 354. Legal advertisement has been properly issued.

Very truly yours,

R. R. Spurrier
Secretary - Director

RRS:nr



SKELLY OIL COMPANY

PRODUCTION DEPARTMENT

J. S. FREEMAN
VICE PRESIDENT

E. A. JENKINS
GENERAL SUPERINTENDENT

TULSA 2, OKLAHOMA

May 9, 1952

W. P. WHITMORE
CHIEF PETROLEUM ENGINEER

G. W. SELINGER
PRORATION ATTORNEY

J. H. MCCULLOCH
CHIEF CLERK

Re: Case No. 354
Hearing originally set
April 15, 1952

Mr. R. R. Spurrier
New Mexico Oil Conservation Commission
Mabry Hall
Santa Fe, New Mexico

Dear Sir:

Prior to the April 15 hearing, we requested that this matter be continued to the May 20th hearing, and we understand that Humble made a similar request. The continuation was predicated on the basis of insufficient time to secure data which we thought was pertinent to the presentation of this matter. We would appreciate your advising us whether or not this matter is set for the May 20th hearing.

In looking over the April Schedule we note that the lease designated as the T. O. May lease in Section 34-22S-37E is listed in the Penrose Skelly Pool, and each of the four wells, that is, wells Nos. 1, 2, 3 and 4, are assigned an allowable. We also note that Supplement #40, effective March 10, 1952, assigns an allowable to the T. O. May No. 5 well, and Supplement #40-A, effective March 26, 1952, again assigns an allowable to the No. 5 well.

In looking over Order No. R-103 in Case 297, said order permitted the Aurora Gasoline Company, as applicant, the drilling of an unorthodox well for conducting an experimental well to determine the feasibility of carrying on a secondary recovery program for the recovery of oil or gas from the Queen or Grayburg formation in the Penrose Skelly Pool, and specifically provides that before an allowable for oil producing purposes can be assigned this well that a hearing be held for such purpose. We do not feel that this lease should be assigned five wells on the 160 acres for allowable purposes, and we believe that the allowable on the No. 5 well should be held up pending the hearing in compliance with this order.

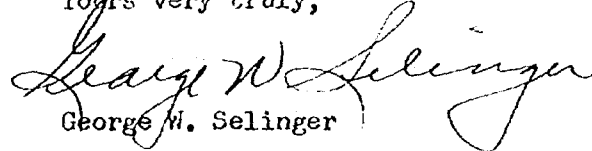
Mr. R. R. Spurrier
New Mexico Oil Conservation Commission
Mabry Hall
Santa Fe, New Mexico

-2-

May 9, 1952

We would, therefore, appreciate hearing from you in regard to both matters. (1) As to whether or not the hearing will come up on the 20th, and (2) whether or not the Commission will grant Mr. C. E. Willingham an allowable prior to the hearing.

Yours very truly,


George W. Selinger

GWS:dd

cc: Mr. J. W. House
Humble Oil & Refining Company
Midland, Texas

Mr. Dunlavey



SKELLY OIL COMPANY

PRODUCTION DEPARTMENT

J. S. FREEMAN
VICE PRESIDENT
E. A. JENKINS
GENERAL SUPERINTENDENT

TULSA 2, OKLAHOMA

June 2, 1952

W. P. WHITMORE
CHIEF PETROLEUM ENGINEER
G. W. SELINGER
PRORATION ATTORNEY
J. H. MCCULLOCH
CHIEF CLERK

Re: Case 354

Gulf Coast Western Oil Company
Petroleum Building
Oklahoma City, Oklahoma

Gentlemen:

We have been given to understand through sources which we will not vouch for that you are the owner and operator of a well designated as the T. O. May No. 5, located in Section 34-228-37E, N.M.P.M., Lea County, New Mexico. This well has been the subject matter of hearings in which the Aurora Gasoline Company and C. E. Willingham have been involved for sometime, and at the May 20th hearing held in Santa Fe, New Mexico, we were prepared on this application and no one appeared.

The Oil Conservation Commission upon our request ordered the well shut down and the oil heretofore produced from this well has been charged against this well awaiting a final disposition of the matter. It was with great reluctance that we insisted on this course of action by the Commission in the absence of any appearances, and we stated to the Commission at that time that we would make a sincere effort to contact the owner and operator of the well to advise him to be present at the hearing to be held at Santa Fe on Thursday, June 19, and discharging our promise to the Oil Conservation Commission we are taking this means of advising you that Skelly Oil Company and Humble Oil & Refining Company will present testimony at that hearing so that final disposition can be made of this matter.

Yours very truly,

(Signed) GEORGE W. SELINGER

George W. Selinger

GWS:dd

cc: Mr. R. S. Dewey, Humble Oil & Refining Company, Midland, Texas
Mr. R. R. Spurrier, Oil Conservation Commission, Santa Fe, New Mexico

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

June 3, 1952

C
O
P
Y

Mr. F. R. Henson
Gulf Coast Western Oil Company
Petroleum Building
OKLAHOMA CITY 2 - OKLAHOMA

Dear Sir:

Reference is made to previous correspondence concerning your
T. O. May Well No. 5, located in the Penrose-Skelly Pool.

In answer to your request in your letter of May 26, I am enclosing a copy of the transcript in Case 354, held April 15 and continued to May 20. I regret that we are unable to furnish you with any copies of the exhibits entered in the case; however, these exhibits will be available for your inspection at your convenience in our offices here in Santa Fe, and I would suggest that either you or one of your representatives come to Santa Fe the day before the hearing to inspect the exhibits.

I am also enclosing a copy of Order No. R-103 entered in Case 297, which was the order which originally granted the unorthodox location.

As these copies of the transcript are a part of our permanent file, we will appreciate your returning them to this office at your convenience.

Yours very truly,

W. B. Macey
Chief Engineer

WBM:mr
Encl.

GULF COAST WESTERN OIL CO.

PRODUCERS OF CRUDE OIL

PETROLEUM BUILDING

OKLAHOMA CITY 2, OKLA.

May 26, 1952

W. B. Macey

Case 354

297

Mr. W. B. Macey, Chief Engineer
New Mexico Oil Conservation Commission
PO Box 871
Santa Fe, New Mexico

Dear Sir:

In response to your letter of May 23, 1952, with reference to our T. O. May lease, formerly owned by Dr. C. E. Willingham, being the NE $\frac{1}{4}$ of Sec 34-22S-37E, in the Penrose Skelly Pool, we kindly request that you supply us with the record of the case in this matter in order that we may prepare ourselves for the hearing to be had on the matter on June 19th.

Yours very truly,

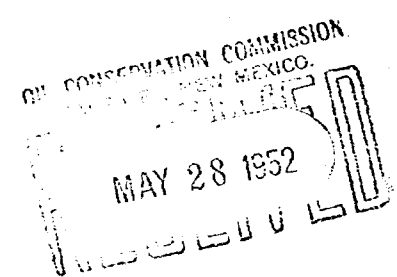
GULF COAST WESTERN OIL CO.

F. R. Henson
F. R. Henson, President

FRH:el

cc: Oil Conservation Commission,
Hobbs, New Mexico

OKRS



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WESTERN UNION

1220

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

W. P. MARSHALL, PRESIDENT

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LA24 KB026

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W B MACEY, OIL CONSERVATION COMMISSION=

MABRY HALL SANTA FE NMEX=

THANKS FOR YOUR LETTER MAY 12 CASE 354. WOULD APPRECIATE IF IT IS POSSIBLE FOR TRANSCRIPT OF TESTIMONY AND EXHIBITS TO BE SENT TO THE LA FONDA HOTEL IN MY NAME SO THAT WE CAN GO OVER SAME MONDAY NIGHT WHEN WE ARRIVE PRIOR TO THE TUESDAY MORNING HEARING. IF SATISFACTORY PLEASE LEAVE SAME AT THE HOTEL DESK FOR ME TO PICK UP WHEN REGISTERING MONDAY NIGHT=

=GEORGE W SELINGER SKELLY OIL CO=

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.
MAY 14 1952

12 354=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

ATION COMMISSION
O. BOX 871
A FE, NEW MEXICO

Case 354

May 12, 1952

Mr. George W. Selinger
Skelly Oil Company
Tulsa 2 - Oklahoma

Dear Sir:

Reference is made to your letter of May 9 pertaining to Case 354.

In answer to your questions, Case 354 is not listed on the docket, but the case will be heard in accordance with your request of April 9. The applicant, C. E. Willingham, submitted testimony and exhibits to support his application at the April 15 hearing.

At the present time, Mr. Willingham is producing the T. O. May Well No. 5, Penrose-Skelly Pool, through permission of the Commission.

For your information, we recently received a communication from Mr. Willingham to the effect that he had sold this lease to the Gulf Coast Western Oil Company of Oklahoma City.

Yours very truly,

W. B. Macey
Chief Engineer

WBM:ar

cc: Mr. Ray Cowan
Box 1176
Hobbs, N. M.

C
O
P
Y

JOHN R. BRAND

RAY C. COWAN

BRAND & COWAN
ATTORNEYS AT LAW

P. O. BOX 1176

TELEPHONES: LOCAL 315

L. D. 10

DASHKO BLDG.

HOBBS, NEW MEXICO

March 7, 1952

354

Oil Conservation Commission
Santa Fe, New Mexico

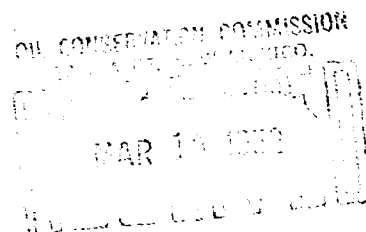
Attn: Mr. William Macey

Re: ~~Case No.:~~ 297
Order No.: R-103

Gentlemen:

Our client, C. E. Willingham, M.D. of 319 West Second Street, Tyler, Texas, is the owner of an oil well drilled as a test well 1310 feet South of the North line and 1310 feet West of the East line of Section 34, Township 22 South, Range 37 East, N.M.P.M., Lea County, New Mexico. This well was drilled by the Aurora Gasoline Company under contract with Dr. Willingham, and the drilling of such well as an unorthodox well location was permitted by the Oil Conservation Commission of New Mexico in the above styled and numbered case on August 7, 1951 in Santa Fe, New Mexico at 10:00 A.M. Such permission was granted after due hearing and publication to determine the feasibility of carrying on a secondary recovery program by water flooding for the recovery of oil or gas from the "Queen" or "Grayburg" formation in the Penrose Skelly pool, and that the Commission ordered that in the event such secondary recovery did not prove to be practicable that applicant should be permitted to complete said well, if it prove to be capable of producing oil or gas in paying quantities, subject to the further order of the Commission.

That the water flooding program contemplated by the order of the Commission proved impracticable and not feasible for the reason that the formation was too tight to take water, as will be fully shown to the Commission by the Cone Analysis of Earlougher Engineering of Tulsa, Oklahoma, which report will be presented to the Commission upon a hearing of this cause.



Oil Conservation Commission
Case No. 297, Order No. R-103

2

March 7, 1952

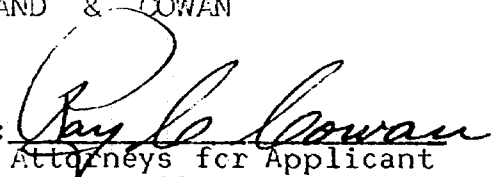
My client, and your applicant, C. E. Willingham, further states that the said Aurora Gasoline Company did on or before October 19, 1951 return said well and all interest therein to your applicant, and that your applicant did thereafter, by the use of cable tool drilling equipment and ordinary methods, complete such well to production in the Queen sand section, and that the same is now capable of producing, and does produce, twelve to fifteen barrels of oil per day by natural flow through two inch tubing.

Your applicant, therefore, prays that the Commission set a time and place for hearing on this application, and that upon such hearing it grant to applicant the right to produce such well, according to the allowable or allowables, under the present and future rules and regulations of the Oil Conservation Commission of the State of New Mexico.

Very truly yours,

BRAND & COWAN

By:


Attorneys for Applicant
C. E. Willingham, M. D.
Hobbs, New Mexico

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

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1201

SYMBOLS
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K-TUA408 PD=WUX TULSA OKLA 27 1147A=

R R SPURRIER, NEW MEXICO OIL CONSERVATION COMMISSION=

MABRY HALL SANTA FE NMEX=

AS PREVIOUSLY REQUESTED WE DESIRE CSE 354 CONTINUED CASE FOR PILOT WATER FLOODING PROJECT ON BEHALF OF SKELLY, HUMBLE AND GULF COAST WESTERN IN PENROSE SKELLY POOL, LEA COUNTY TO BE HEARD AT THE NOVEMBER 20 HEARING. WOULD APPRECIATE ADVICES OF SUCH CASE BEING HEARD ON NOVEMBER 20 BEING

GEORGE W SELINGER SKELLY OIL CO=

CONSERVATION COMMISSION
 SANTA FE, NEW MEXICO
 RECEIVED
 OCT 27 1952

:354 20 20=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

ESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
FULL RATE TELEGRAM	
DAY LETTER	NIGHT LETTER

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1206

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise this message will be sent at the full rate	
FULL RATE	LETTER TELEGRAM
VICTORY LETTER	SHIP RADIOGRAM

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED
			OIL CONSERVATION COMMISSION	

Send the following message, subject to the terms on back hereof, which are hereby agreed to

MR GEORGE SELINGER
 SKELLY OIL CO
 TULSA OKLAHOMA

OCT 27 1952

UPON RECEIPT OF PROPER APPLICATION FOR WATER FLOODING WE WILL ADVERTISE AND CIRCULATE. SPECIFY AREA INVOLVED.

R R SPURRIER



SKELLY OIL COMPANY

PRODUCTION DEPARTMENT

J. S. FREEMAN
VICE PRESIDENT
E. A. JENKINS
GENERAL SUPERINTENDENT

TULSA 2, OKLAHOMA

September 17, 1952

W. P. WHITMORE
CHIEF PETROLEUM ENGINEER
G. W. SELINGER
PRORATION ATTORNEY
J. H. MCCULLOCH
CHIEF CLERK

Case 354
Re: Case No. 354

Mr. William Macey
Oil Conservation Commission
Mabry Hall
Santa Fe, New Mexico

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.

SEP 19 1952

Dear Sir:

We are in receipt of a copy of Order No. R-179, issued in Case No. 354, with respect to the application of Gulf Coast Western Oil Company (successors to C. E. Willingham) for a pilot water project in the Penrose Skelly Pool. Under the terms of the order, at the regular monthly hearing of the Commission to be held on October 15, 1952, the case will be heard again and a further determination made as to the future allowable of a well which was drilled as a test well to determine the feasibility of water flooding the producing horizon in the Penrose Skelly Pool.

Since the matter was initiated, Humble Oil & Refining Company, the applicant, Gulf Coast Western Oil Company et al, and Skelly are in the process of working out a cooperative pilot water flood project, and we desire in this same case the hearing to be enlarged for the joint cooperative parties presenting a cooperative pilot injection program. The three cooperative parties, we believe, will be in a position to present additional information at the October 15 Hearing.

Yours very truly,

George W. Selinger
George W. Selinger

GWS:dd

cc: Gulf Coast Western Oil Company, Oklahoma City, Oklahoma
Humble Oil & Refining Company, Midland, Texas
Mr. Dunlavey

July 21, 1952

Mr. Lee Ford
Land Department
Gulf Coast Western Oil Co.
Petroleum Building
Oklahoma City 2, Oklahoma

Dear Mr. Ford:

In reference to your letter of July 17, 1952, in regards
to your request for Exhibit No. 2, in Case No. 354.

Enclosed you will find a copy of this Exhibit which
you may keep for your files.

Very truly yours,

For W. B. Macey
Chief Engineer

WBM:lh
enc.

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

September 5, 1952

C
O
P
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Gulf Coast Western Oil Co.
Petroleum Building
Oklahoma City 2 - Oklahoma

Attention: Mr. Lee Ford

Gentlemen:

We attach signed copy of Order R-179 issued in Case 354,
and call your attention to its being scheduled for hearing
again on October 15, 1952.

Very truly yours,

W. B. Macey
Chief Engineer

WBM:mr

cc: Mr. George Selinger
Skelly Oil Co.
Tulsa 2 - Oklahoma

Mr. R. S. Dewey
Humble Oil & Refg. Co.
Box 1600
Midland, Texas

F

GULF COAST WESTERN OIL CO.

PRODUCERS OF CRUDE OIL

PETROLEUM BUILDING

OKLAHOMA CITY 2, OKLA.

October 4, 1952.

Mr. R. R. Spurrier, Secretary and Director,
New Mexico Oil Conservation Commission,
P. O. Box 871,
Santa Fe, New Mexico.

Dear Sir:

In re: Case No. 354 - T. O. May No. 5, Sec. 34-22S-37E.,
Penrose Skelly Pool, Lea County, New Mexico.

We are in receipt of copy of letter of October 1 addressed to you by Mr. George W. Selinger, Proration Attorney for the Skelly Oil Company, requesting that the hearing under captioned Case for October 15 be continued to the November 20 meeting.

We are assuming that the request will be acted upon favorably by the Commission and that we will be permitted to produce our T. O. May No. 5 under the temporary allowable. If we are wrong in this assumption, kindly advise us immediately so that we may govern ourselves accordingly.

Best regards

Yours very truly,

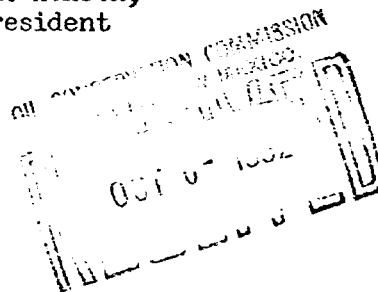
GULF COAST WESTERN OIL CO.,

F. R. Henson
F. R. Henson,
President

FRH/f.

cc: Mr. George W. Selinger,
Proration Attorney,
Skelly Oil Company,
Tulsa 2, Oklahoma.

Mr. R. S. Dewey,
Humble Oil and Refining Company,
P. O. Box 1600,
Midland, Texas.



GULF COAST WESTERN OIL CO.

PRODUCERS OF CRUDE OIL
PETROLEUM BUILDING

OKLAHOMA CITY 2, OKLA.

September 19, 1952

Case 354

Skelly Oil Company
Skelly Building
Tulsa 2, Oklahoma

Attention: Mr. George W. Selinger

Gentlemen:

RE: Case #354 Oil Conservation Commission
State of New Mexico

C We are in receipt of a carbon copy of your letter of September 17, 1952, addressed to Mr. William Nacey, Oil Conservation Commission, Santa Fe, New Mexico, referring to Order No. R-179 issued in Case No. 354.

O We note that you have requested of the Commission that the hearing set for October 15, 1952, in the above referred to case, be enlarged for presenting a cooperative pilot injection program. You state that the three cooperative parties, viz: Skelly Oil Company, Humble Oil & Refining Company, and Gulf Coast Western Oil Co., will be in position to present additional information on the pilot injection program at the October 15th hearing.

P We believe that the cooperative agreement should be agreed upon and executed by the three cooperative parties before a hearing is had upon the matter. Since we have had under consideration such cooperative agreement, we suggest that a final draft of the same be made and submitted for execution at an early date.

Y We will object to this matter being taken up before the Commission until such time as we have had an agreement between the parties as to what we intend to do and how it should be done in this pilot water flooding project.

Yours truly,

GULF COAST WESTERN OIL CO.

F. R. Henson
F. R. Henson, President

FGR:el

cc: Mr. Jim Cooper, Skelly Oil Company, Tulsa
cc: Mr. Gunlavey, Humble Oil & Refining Company, Midland, Texas
cc: Mr. William Nacey, Oil Conservation Commission, Mabry Hall, Santa Fe, N.M.

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. 354
ORDER No. R-179

THE APPLICATION OF GULF COAST WESTERN
OIL COMPANY (SUCCESSORS TO C. E. WILLINGHAM)
FOR AN ORDER GRANTING PERMISSION TO PRODUCE
ITS T. O. MAY, WELL NO. 5, NE/4 NE/4 SECTION 34,
TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM, LEA
COUNTY, NEW MEXICO, IN THE PENROSE-SKELLY
POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 o'clock a. m. on April 15, 1952, May 20, 1952, June 19, 1952, and July 15, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 1st day of August, 1952, the Commission, a quorum being present, having considered the records and the testimony adduced and being fully advised in the premises,

FINDS:

- (1) That due notice having been given as required by law, the Commission has jurisdiction of the case and the persons and subject matter thereof.
- (2) That the original applicant, C. E. Willingham, has assigned his T. O. May lease, NE/4 Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, to Gulf Coast Western Oil Company.
- (3) That by virtue of Commission Order No. R-103, the Commission granted permission to drill an unorthodox well to be located 1310 feet from the North and East lines of Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, to be known as the T. O. May, Well No. 5.
- (4) That the proposed well was to be drilled as a test well to determine the feasibility of water flooding the producing horizon in the Penrose-Skelly Pool.
- (5) That the applicant now desires to produce the well pending the outcome of negotiations between himself and offset operators for a joint water flooding project in the area.
- (6) That offset operators, namely Skelly Oil Company, and Humble Oil and Refining Company have no objection to the granting of a temporary three month allowable to the well.

Case 354

IT IS THEREFORE ORDERED:

That the applicant herein, Gulf Coast Western Oil Company, be and it hereby is authorized to produce its T. O. May well No. 5, NENE Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, for a period of 3 months effective August 1, 1952.

Provided further, that the allowable assigned the well shall not exceed the normal unit allowable as set by the Commission for the Penrose-Skelly Pool.

Provided further, that at the regular monthly hearing of the Commission on October 15th, 1952, this case shall again be heard and a determination made as to the future allowable to be assigned this well.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Edwin L. Mechem

EDWIN L. MECHEM, Chairman

Guy Shepard

GUY SHEPARD, Member

R. R. Spurrer

R. R. SPURRIER, Secretary

SEAL



SKELLY OIL COMPANY

PRODUCTION DEPARTMENT

J. S. FREEMAN
VICE PRESIDENT

E. A. JENKINS
GENERAL SUPERINTENDENT

TULSA 2, OKLAHOMA

October 1, 1952

W. P. WHITMORE
CHIEF PETROLEUM ENGINEER

G. W. SELINGER
PRORATION ATTORNEY

J. H. MCCULLOCH
CHIEF CLERK

Re: Case No. 354

Mr. R. R. Spurrier
Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Dear Sir:

Supplementing our letter of September 17 addressed to Mr. Macey in referring to Order No. R-179 in Case 354, and with respect to docket of cases set for 9:00 a.m. October 15, 1952, please be advised that Case No. 354 should be continued to the November 20 hearing due to the fact that operators have not had sufficient time to work out the cooperative program, and therefore the present status quo should be continued to the November 20 hearing, or until such time as a final deposition can be had of the matter.

We will endeavor to have the cooperative agreement executed by the three cooperative parties before a hearing is had on the matter, which we hope to have accomplished prior to the November 20 hearing.

Yours very truly,

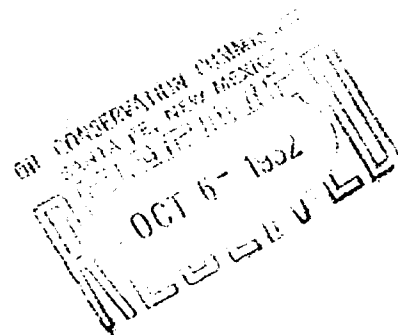
George W. Selinger
George W. Selinger

GWS:dd

cc: Gulf Coast Western Oil Company
Attention: Mr. F. R. Henson
Petroleum Building
Oklahoma City 2, Oklahoma

Mr. R. S. Dewey
Humble Oil & Refining Company
Midland, Texas

Mr. Dunlavey



DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
FULL RATE TELEGRAM	\$
DAY LETTER	S
NIGHT LETTER	E

WESTERN UNION

1206 10-51

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise the message will be sent at the full rate	
FULL RATE	
LETTER TELEGRAM	
SHIP RADIOGRAM	

W. P. MARSHALL, PRESIDENT			CHARGE TO THE ACCOUNT OF	TIME FILED
NO. WDS. CL. OF SVC.	PD. OR COLL.	CASH NO.	OIL CONSERVATION COMMISSION	

Send the following message, subject to the terms on back hereof, which are hereby agreed to

DECEMBER 1 1952

MR GEORGE SELINGER
SKELLY OIL COMPANY
TULSA OKLAHOMA

CASE 354 READVERTISED FOR DECEMBER 16 HEARING

R R SPURRIER

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

November 5, 1952

C
O
P
Y

Skelly Oil Company
Box 1650
Tulsa 2, Oklahoma

Attention: Mr. George W. Selinger - Proration Attorney

Gentlemen:

Application regarding your Pilot Water Flooding, Sec. 34, 22-S - 37-E, Lea County, New Mexico, was received in this office October 31, 1952. The request that this matter be heard at the next regularly scheduled hearing of the Commission, which is November 20, 1952, must be denied.

In order for the Commission to legally advertise a case and to permit the Commission time to study an application, it has been made a policy that applications must be submitted to this office at least thirty days before a regular hearing.

Therefore, your application will be scheduled for the hearing on December 16, 1952.

Very truly yours,

R. R. Spurrier
Secretary - Director

lh
cc:
Gulf Coast Western Oil Company
Oklahoma City, Oklahoma

Humble Oil and Refining Company
Midland, Texas



SKELLY OIL COMPANY

PRODUCTION DEPARTMENT

J. S. FREEMAN
VICE PRESIDENT
E. A. JENKINS
GENERAL SUPERINTENDENT

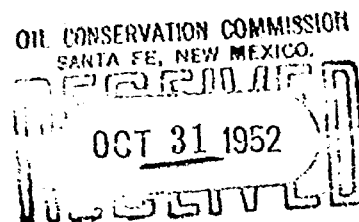
TULSA 2, OKLAHOMA

October 29, 1952

W. P. WHITMORE
CHIEF PETROLEUM ENGINEER
G. W. SELINGER
PROBATION ATTORNEY
J. H. McCULLOCH
CHIEF CLERK

Re: Pilot Water Flooding
Section 34-22S-37E
Penrose Skelly Pool
Lea County, New Mexico

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



Gentlemen:

By means of this application, Skelly Oil Company wishes to state the following:

1. That heretofore the Commission has granted permission for pilot water flooding to an operator in this pool resulting in issuance of orders which are on file with this Commission. That the latest Order No. R-179, in Case 354, has been issued by this Commission to the Gulf Coast Western Oil Company, as successors to C. E. Willingham.

2. That said Case No. 354 has been continued from time to time with the latest continuance set for Thursday, November 20, 1952.

3. That this application seeks to supplant, amend, modify, and continue such matters as reflected in Case 354, from a proposed pilot water flood by a single operator to one of a joint cooperating water flooding program on behalf of Gulf Coast Western Oil Company, Humble Oil & Refining Company, and Skelly Oil Company.

4. That applicant, on behalf of the three companies, desires to embark on such a joint water flooding project in the Queen Sand, which is the oil producing reservoir in the Penrose Skelly Pool, on a pilot water flooding basis in Section 34, Township 22 South, Range 37 East, and such other adjoining sections which may be necessary to be made a part of the program as may be indicated by the evidence to be presented at this hearing.

5. That the proposed pilot water flood project is to determine the feasibility of water flooding the producing horizon in the Penrose Skelly Pool as a secondary recovery program, which if successful will result in the recovery of additional amounts of oil and gas which might otherwise not be recovered.

October 29, 1952

6. That such a program is in the interest of conservation in that if successful an ultimately greater amount of oil and gas would be recovered, and that such a program would not violate any of the correlative rights of the cooperating companies or the rights of any other operator in this pool.

Therefore, the Skelly Oil Company, on behalf of itself and its cooperating offset operators as hereinbefore mentioned, requests that the Oil Conservation Commission set this application down for hearing on November 20, as a supplement to the two cases continued in Order No. R-179, Case 354, and permit a pilot water flooding project to determine the feasibility of water flooding the Queen producing horizon in the Penrose Skelly Pool.

respectfully submitted,

SKELLY OIL COMPANY

George W. Selinger

George W. Selinger

GAS:dd

cc: Gulf Coast Western Oil Company
Oklahoma City, Oklahoma

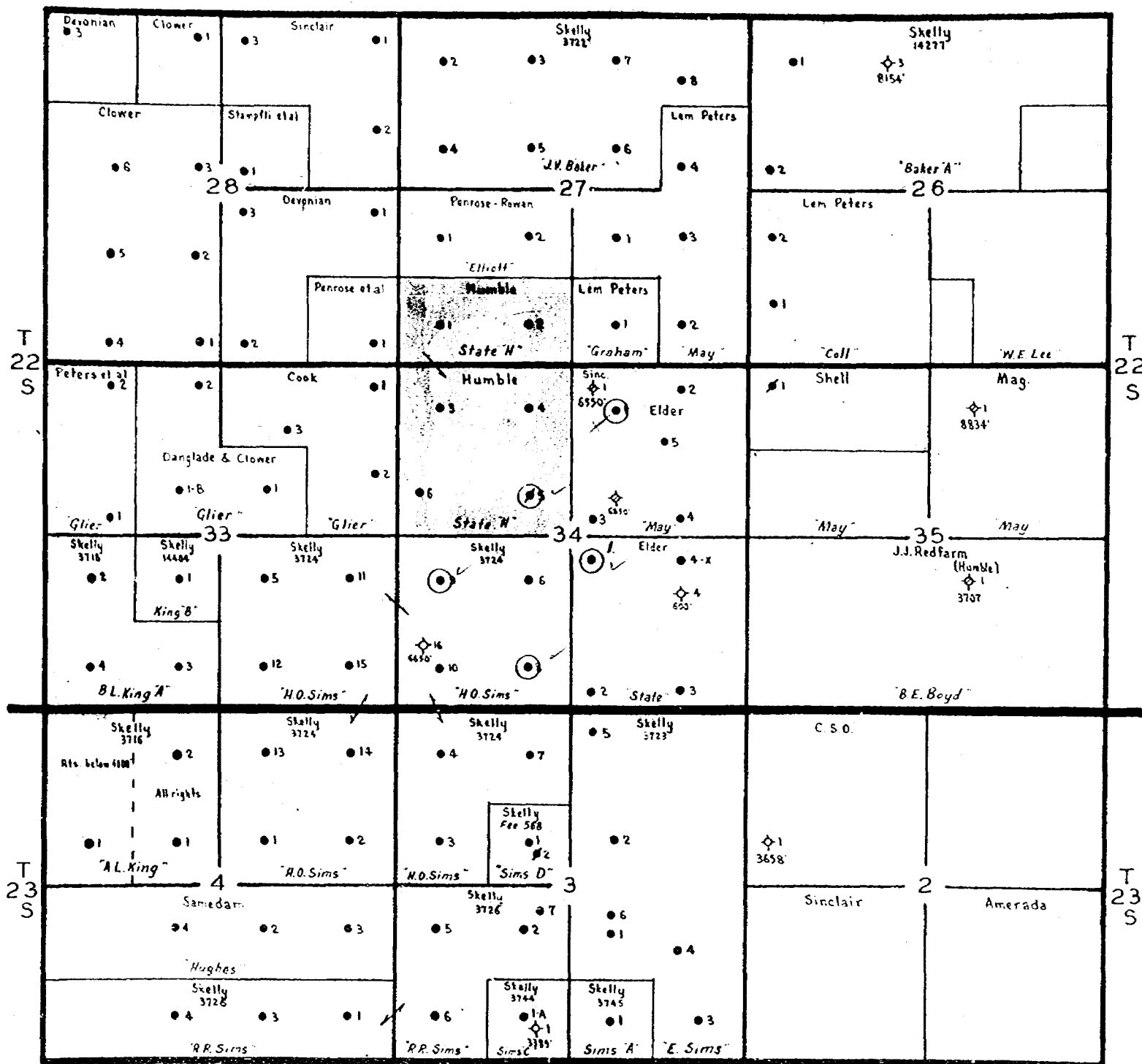
Humble Oil & Refining Company
Midland, Texas

DATE 12-16-52

EXHIBIT

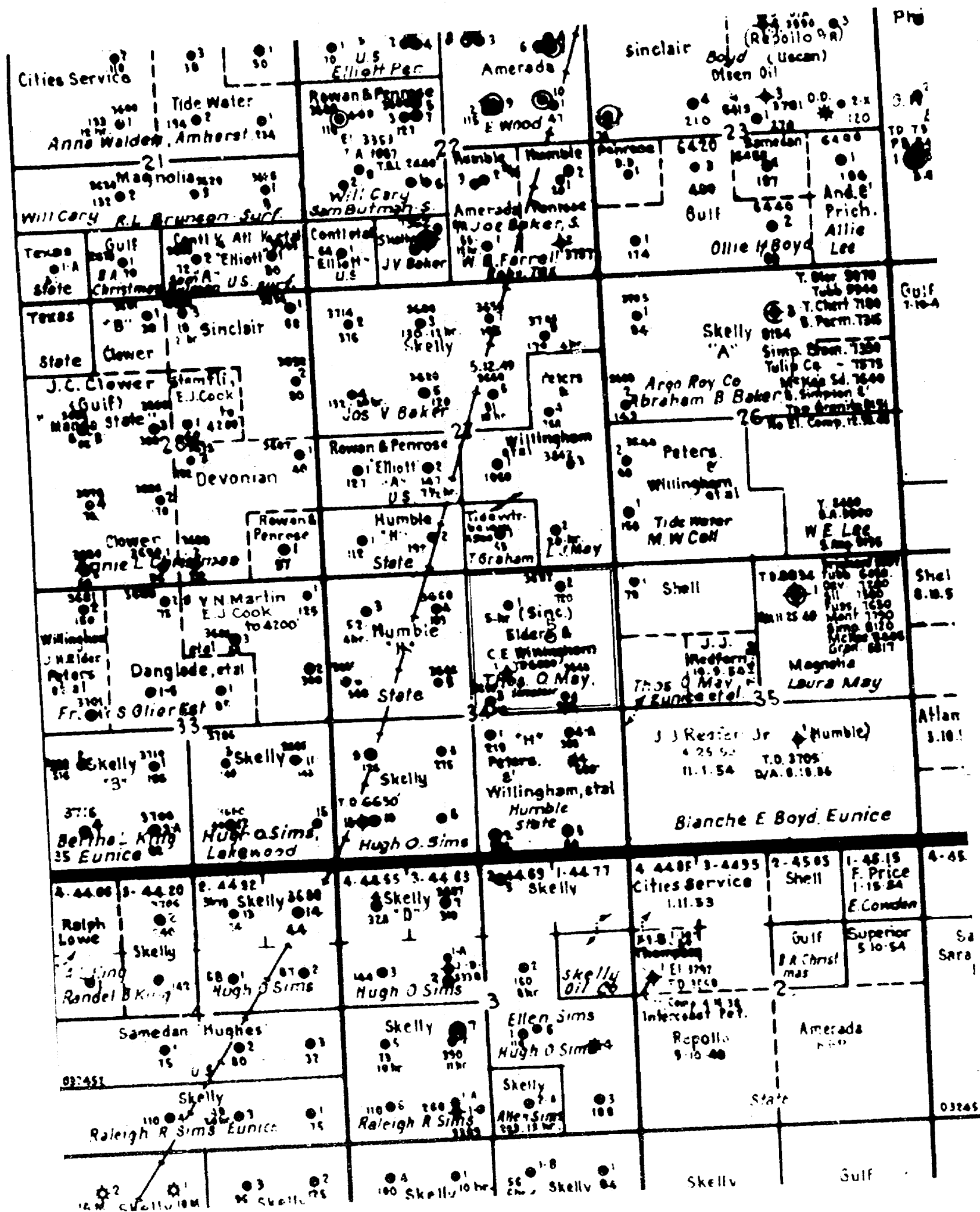
R-37E

○ INJECTION WELL



R-37E

SCALE 1"=2000'



COOPERATIVE AGREEMENT FOR WATER FLOODING

EXHIBIT

2

Case 354

THIS AGREEMENT made and entered into on this the 28th day of October, 1952, by and among GULF COAST WESTERN OIL COMPANY, a corporation, hereinafter designated as "Gulf Coast Western", SKELLY OIL COMPANY, a corporation, hereinafter designated "Skelly", and HUMBLE OIL & REFINING COMPANY, a corporation, hereinafter designated "Humble".

WHEREAS, said parties respectively represent that they are the owners of the oil, gas and mineral lease or leases set out and described in connection with their respective names on the Schedule of Leases attached hereto and marked Exhibit "A" for identification and made a part hereof by reference, insofar as said lease or leases cover and affect the following described land in Lea County, New Mexico, to wit:

Section 34, T-22-S, R-37-E, Lea County, New Mexico

WHEREAS, all parties hereto desire to provide for the conversion of certain wells on said leases into water input wells to the end that said wells may be used for cooperative pilot water flood project purposes in the Queen Sand lying in and under the above-described land;

NOW, THEREFORE, for and in consideration of the premises the parties hereto agree as follows:

1.

That GULF COAST WESTERN shall with reasonable promptness convert and equip, for water input purposes into the Queen Sand, T. O. May Well No. 1, NW/4 NE/4 and Humble State Well No. 1, NW/4 SE/4, both in Section 34, T-22-S, R-37-E, Lea County, New Mexico. The cost and expense of converting, equipping and operating said input wells shall be borne by GULF COAST WESTERN.

2.

That SKELLY shall with reasonable promptness convert and equip, for water input purposes into the Queen Sand, H. O. Sims Well No. 8, SE/4 SW/4, and Well No. 9, NW/4 SW/4, both in Section 34, T-22-S, R-37-E, Lea County, New Mexico. The cost and expense of converting, equipping, and operating said input wells shall be borne by SKELLY.

3.

That HUMBLE shall either recomplete and equip, for water input purposes into the Queen Sand, State "H" Well No. 5, SE/4 NW/4, Section 34, T-22-S, R-37-E, Lea County, New Mexico, or, at its election, drill and equip a well in the same governmental quarter quarter section for water input purposes into the Queen Sand. It is understood and agreed that Humble shall have the right to delay said recompletion or drilling for a period of sixty (60) days after water injection has begun in any GULF COAST WESTERN or SKELLY water input well hereinabove provided for in order to observe the operation of said water input well. At the end of said sixty (60) days, if the water input well under observation has shown that adequate volumes of water can be injected into the Queen Sand, then HUMBLE shall, with reasonable promptness thereafter, either recomplete, or at its election, drill the water input well hereinabove provided for.

4.

The rate of injection of water into each of said wells, when so converted or drilled, shall be approximately equal, the number of barrels injected per day to be mutually agreed upon between the parties. The injection wells shall be kept in proper repair and records maintained of the volumes of water injected and injection pressures required. Each party shall furnish the other parties

hereto with monthly reports showing the amount of water injected into its input well, or wells, and the injection pressure required.

5.

All costs and expenses for obtaining, transporting and injecting water into the aforementioned input wells shall be borne respectively by each company upon their own leases.

6.

It is understood that this project is primarily experimental and any party hereto may withdraw from participation therein by giving 60 days written notice directed to each of the other parties at its last known business address. Said notice may be given at any time after any well on the lease or leases of the party giving notice has actually begun to serve as a water input well in the Queen Sand; however, it is understood and agreed that water injection into said well shall continue during said 60 day period subsequent to the giving of notice at the rate provided in Paragraph 4 above.

It is further understood and agreed that, after consent of all parties hereto has been obtained, this project may be extended to other leases in accordance with the terms and conditions mutually agreed upon between the parties.

7.

In the event that any party hereto desires to plug and abandon any water input well or wells, written notice of such desire shall be directed to each of the other parties hereto at its last known business address, and the other party, or parties, or either of them, shall have for a period of 30 days from receipt of such notice an option to acquire the water input well or wells of the party desiring to plug and abandon same together with the pipe and equipment therein and thereon at a price equivalent to the salvage value of said pipe and equipment less the cost of plugging and abandoning said well or wells. In the event said option is exercised, the party desiring to plug and abandon its water input well or wells shall assign without warranty of title, such acreage and operating rights under its lease or leases as are necessary for the continued operation of said injection well or wells by the party exercising the herein provided option.

8.

It is further understood that this agreement may be extended to include additional leases and additional operators under terms and conditions mutually agreed upon between the parties hereto and parties seeking to participate in water flooding the Queen Sand.

9.

This contract shall in no way affect the obligation of either party hereto to produce the oil from its own wells, and each party shall be entitled to all production from its own wells and leases. The duties, liabilities and obligation of the parties hereto are intended to be several and not joint or collective and nothing herein contained shall ever be construed to impose a partnership obligation or liability with regard to any of the parties hereto. Each party shall be individually responsible only for its obligations as same are set out herein and shall be liable only for its proportionate share of the cost and expenses as herein stipulated.

10.

All the provisions of this agreement are hereby made subject to the conservation laws of the State of New Mexico and to the valid rules and regulations of the Oil Conservation Commission of said State, and to all other applicable state and federal laws, rules, and regulations.

11.

All obligations of any party hereto shall be suspended while, but only so long as, said party is prevented from complying with such obligations, in part or in whole, by strikes, lockouts, Acts of God, unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials in open market, acts of the public enemy, wars, blockades, riots, epidemics, or in any and all other matters beyond the reasonable control of said party, whether similar to the matters herein specifically enumerated or not; provided, however, that performance shall be resumed within a reasonable time after such cause has been removed; and, provided further, that no party hereto shall be required against its will to adjust any labor dispute.

12.

The terms, covenants and conditions hereof shall run in favor of and be binding upon the parties hereto, their successors and assigns. All counterparts of this instrument, executed by one or more parties, shall be construed together and have the force and effect of one instrument as if all executing parties had signed that instrument.

SIGNED the day and year first above written.

ATTEST:

GULF COAST WESTERN OIL COMPANY

BY: _____

ATTEST:

SKELLY OIL COMPANY

BY: _____
Vice-President

ATTEST:

HUMBLE OIL & REFINING COMPANY

BY: _____

EXHIBIT "A"

SCHEDULE OF LEASES

Attached to and made a part of that certain "COOPERATIVE AGREEMENT FOR WATER FLOODING" dated October 28, 1952, by and among GULF COAST WESTERN OIL COMPANY, SKELLY OIL COMPANY, and HUMBLE OIL AND REFINING COMPANY.

LEASES OWNED BY GULF COAST WESTERN OIL COMPANY

Lease dated October 2, 1935, by and between Thomas O. May, and Wife, Ruby May, as Lessors, and Repollo Oil Company, as Lessee, recorded in Volume 18, Page 635, of the records of Lea County, New Mexico, covering the NE/4 of Section 34, T-22-S, R-37-E, Lea County, New Mexico.

Lease dated June 6, 1932, by and between the State of New Mexico, as Lessor, and Humble Oil and Refining Company, as Lessee, State Lease No. B-934, approved and filed with Commissioner of Public Lands July 27, 1932, covering SE/4 of Section 34, T-22-S, R-37-E, Lea County, New Mexico.

LEASES OWNED BY SKELLY OIL COMPANY

Lease dated April 1, 1926, by and between Hugh O. Sims, as Lessor, and Frank W. Dauron, as Lessee, recorded in Book 4, Page 149, of the records of Lea County, New Mexico, covering the SE/4 of Section 33, the SW/4 of Section 34, both in T-22-S, R-37-E, and the N/2 NW/4 and SW/4 NW/4 of Section 3, the NE/4 of Section 4, both in T-23-S, R-37-E, all in Lea County, New Mexico.

LEASES OWNED BY HUMBLE OIL AND REFINING COMPANY

Lease dated June 6, 1932, by and between State of New Mexico, as Lessor, and Humble Oil and Refining Company, as Lessee, State Lease No. B-934, approved and filed with Commissioner of Public Lands July 27, 1932, covering among other lands the NW/4 of Section 34, T-22-S, R-37-E, Lea County, New Mexico.

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

CASE: 354

(Readvertised) Application of Skelly, Gulf Coast Western and Humble for approval of secondary recovery program by water flooding through injection of water into four input wells to be located in 34-22S-37E, Penrose-Skelly Pool, Lea County, New Mexico.

TRANSCRIPT OF HEARING

December 16, 1952

BEFORE: Hon. Ed. Mechem, Governor and Chairman
Hon. Guy Shepard, Land Commissioner and Member
Hon. R. R. Spurrier, Director and Member

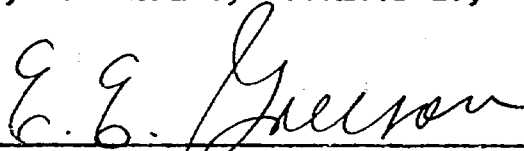
STATE OF NEW MEXICO

ss

COUNTY OF BERNALILLO

I HEREBY CERTIFY That the within transcript of hearing in the above styled case before the Oil Conservation Commission of the State of New Mexico is a true record of the same to the best of my knowledge, skill and ability.

DONE at Albuquerque, New Mexico, December 20,
1952.



E. E. Greeson
Reporter

MR. SPURRIER: The next case on the docket is case No. 354 which is a readvertisement.

(Mr. Graham reads the notice of publication.)

MR. SELINGER: My name is George W. Selinger for the applicant. We have one witness, Mr. Cooper, whom we would like to have sworn.

As a preliminary statement I would like to offer in evidence by reference the transcript in Case No. 299 of August 7, 1951; the transcript of the hearing here in Case 354 on April 15, 1952; Case No. 354 on May 20, 1952; June 19, 1952; July 15, 1952; October 15, 1952 and November 20, 1952.

J. D. COOPER,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. SELINGER:

Q State your name.

A J. D. Cooper.

Q Mr. Cooper, are you the same witness that testified at the November 20th hearing in this matter?

A Yes.

Q At that time you testified on behalf of Gulf Coast Western, Humble and Skelly for a cooperative pilot water flood program in Section 34, Township 22S, Range 37E,

Penrose-Skelly Pool, Lea County.

A That's right.

Q Now, in the November the 20th hearing there were four exhibits introduced by the applicant. Have you had occasion to look over those exhibits and read the transcript, and those exhibits are true and correct to your best knowledge; is that correct?

A That's correct.

Q Now, the five input wells that have been referred to -- Mark this Applicant's Exhibit 1, please, sir. -- the five input wells testified to at the November 20th hearing, will you again give the description and location of those five wells?

A Gulf Coast Western, T. O. May No. 1 in the northwest of the southeast of 34. And Gulf Coast Western, Humble State No. 1 in the northwest of the southeast of 34. Humble State H No. 5 in the southeast of the northwest of 34. Skelly H. O. Sims No. 9 in the northwest of the southwest of 34. And Skelly H. O. Sims No. 8 in the southeast of the southwest of 38.

Q All in Township 22S, Range 37E?

A Yes.

Q That is the same wells indicated on Applicant's Exhibit 1 in this case?

A That's right.

Q Now, Mr. Cooper, from the study you have made, does it indicate a pilot input program should be undertaken to determine its feasibility for flooding the entire pool if such pilot program is found successful?

A Yes.

Q Is there a sufficient source of supply of water to carry on such a program?

A Yes, sir, there is sufficient water to carry out the pilot.

Q And how much water do you plan on using initially?

A Two hundred and fifty to three hundred barrels per well per day.

Q Now, Mr. Cooper, this has been a cooperative program instituted by the three companies and a contract has been drawn up. Is that correct?

A That's correct.

MR. SELINGER: Will you mark that Applicant's Exhibit 2? We would like to offer in evidence Applicant's Exhibits 1 and 2. And I believe that is all we have.

MR. SPURRIER: Without objection they will be received. Does anyone have a question of this witness? If not, the witness may be excused. Do you have anyone else?

MR. SELINGER: That's all.

MR. SPURRIER: Does Humble have a witness?

MR. SHAVER: No, we have nothing to present, Mr.

Chairman.

MR. SPURRIER: Is there any other comment in the case?

The case will be taken under advisement and we will move on to Case 407.

— o —

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 354
ORDER No. R-179-A

THE APPLICATION OF SKELLY OIL
COMPANY, GULF COAST WESTERN OIL
COMPANY, AND HUMBLE OIL AND
REFINING COMPANY FOR AN ORDER
GRANTING APPROVAL OF A SECONDARY
RECOVERY PROGRAM BY WATER FLOOD-
ING THROUGH THE INJECTION OF WATER
INTO FIVE INPUT WELLS TO BE LOCATED
IN SECTION 34, TOWNSHIP 22 SOUTH,
RANGE 37 EAST, NMPM, LEA COUNTY,
NEW MEXICO, IN THE PENROSE-SKELLY
POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on December 16, 1952, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this ^{yh} 15 day of January, 1953, the Commission, a quorum being present, having considered the records and the testimony adduced and being fully advised in the premises,

FINDS:

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

(2) That by virtue of Order R-103, the Commission granted permission to drill an unorthodox well to be located 1310 feet from the North and East Lines of Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, to be known as the T. O. May, Well No. 5.

(3) That by virtue of Order No. R-179 the Commission granted permission to produce the T. O. May, Well No. 5, pending the outcome of negotiations among the operators in the area for a joint water flooding project.

(4) That negotiations have now been completed among the interested parties in the area for a joint water flooding project, and that it would be in the interest of conservation if permission were granted by the Commission to revert to a secondary recovery program by water flooding.

(5) That a secondary recovery program by water injection is of an experimental nature in this particular pool, and periodic reports should be submitted to the Commission by the Petitioner disclosing its acts and doings in the matter.

IT IS THEREFORE ORDERED:

(1) That the application of Skelly Oil Company, Gulf Coast Western Oil Company and Humble Oil and Refining Company for permission to institute a secondary recovery program on leases in Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico by injecting water into five injection wells be, and the same hereby is approved.

(2) That permission is hereby granted to inject water into the following wells, said water to enter the Queen sand producing horizon of the Penrose-Skelly Pool.

Township 22 South, Range 37 East, NMPM

Gulf Coast Western Oil Company, T. O. May, No. 1, NW/4 NE/4 Section 34.

Gulf Coast Western Oil Company, Humble State, No. 1, NW/4 SE/4 Section 34.

Skelly Oil Company, H. O. Sims, No. 8, SE/4 SW/4, Section 34.

Skelly Oil Company, H. O. Sims, No. 9, NW/4 SW/4, Section 34.

Humble Oil and Refining Company, State H, No. 5, SE/4 NW/4, Section 34.

PROVIDED, HOWEVER, that in the event that the Humble Oil and Refining Company, State H, Well No. 5, does not prove feasible for use as a water injection well, Humble Oil and Refining Company is hereby granted permission to drill for water injection purposes another well in the SE/4 NW/4 Section 34.

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

IT IS FURTHER ORDERED:

That Gulf Coast Western Oil Company be and it hereby is authorized to produce its T. O. May, Well No. 5, NENE, Section 34, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, in lieu of the production lost by the conversion of the T. O. May, Well No. 1 to a water injection well.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



EDWIN L. MECHEM, Chairman


E. S. WALKER, Member


R. R. SPURRIER, Secretary

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

January 21, 1953

Gulf Coast Western Oil Company
Petroleum Building
Oklahoma City, Oklahoma

Gentlemen:

We attach a copy of Order R-179-A issued by the Commission on
January 15, 1953, in Case 354.

Yours very truly,

R. R. Spurrier
Secretary - Director

RRS:nr

cc: Humble Oil & Rfg. Co., Midland
Attention: Mr. John House

Skelly Oil Company, Tulsa
Attention: Mr. George Selinger

June 11, 1958

Re: IN THE MATTER OF APPLICATION OF SKELLY OIL COMPANY FOR AN ORDER AMENDING ORDER NO. R-179-A TO AUTHORIZE THE TRANSFER OF ALLOWABLE FROM WATER INJECTION WELLS TO OTHER WELLS ON THE SAME BASIC LEASE AND TO ESTABLISH A LEASE ALLOWABLE FOR ITS H. O. SIMS PILOT WATER FLOOD PROJECT. IT IS ALSO REQUESTED THAT AN EMERGENCY ORDER BE GRANTED WHEREBY THE PETITIONER MAY PRODUCE ITS H. O. SIMS NO. 6 IN EXCESS OF TOP ALLOWABLE.

New Mexico Oil Conservation Commission
P. O. Box 371
Santa Fe, New Mexico

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

Gentlemen:

With this application, Skelly Oil Company is requesting a hearing before the New Mexico Oil Conservation Commission for the purpose of amending Order No. R-179-A to authorize the transfer of allowable from water injection wells to other wells on the same basic lease and to establish a lease allowable for its H. O. Sims lease. In support of this application the following is listed:

1. That Order R-179-A authorized the conversion of H. O. Sims No. 8, SE/4 SW/4 and H. O. Sims No. 9 NW/4 SW/4 Section 34-22S-37E to water injection wells.
2. That water injection was instigated in these wells in August 1953.
3. That the petitioner's H. O. Sims No. 6, located NE/4 SW/4 Section 34-22S-37E is now capable of producing around 52 BOPD.
4. That the petitioner's H. O. Sims No. 10, located SW/4 SW/4 Section 34-22S-37E has also indicated an increase in production.
5. That the petitioner's H. O. Sims No. 7, located NE/4 NW/4 Section 3-23S-37E and H. O. Sims No. 11, NE/4 SE/4 Section 33-22S-37E, should respond to water injection in the near future.
6. That the petitioner requests that allowables for its H. O. Sims No. 8 and 9 injection wells be transferred to producing wells within the Pilot Water Flood area.
7. That a lease allowable be created for the H. O. Sims Pilot Water Flood area whereby the petitioner may produce up to six times the normal unit allowable from any well or wells in the pilot area.
8. That the wells to be considered in this application are part of the same basic lease and are as follows:

H. O. Sims No. 6 - NE/4 SW/4 - 34-22S-37E
H. O. Sims No. (8) - NW/4 SE/4 - 34-22S-37E
H. O. Sims No. 11 - NE/4 SE/4 - 33-22S-37E
H. O. Sims No. 10 - SW/4 SW/4 - 34-22S-37E
H. O. Sims No. (9) - SE/4 SW/4 - 34-22S-37E
✓ H. O. Sims No. 7 - NE/4 NW/4 - 3-23S-37E

9. That the transfer of allowable and the creation of the lease allowable will prevent waste and enable the petitioner to fully evaluate the pilot water flood.

*Emergency
Grant this
warrant*

Case 354

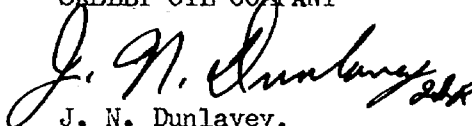
June 11, 1958

10. That until such time as a hearing is granted, an emergency order be written whereby the petitioner may produce its H. O. Sims No. 6 at a rate in excess of the normal unit allowable.
11. That the curtailment of production from the H. O. Sims No. 6 at this time will result in waste and would not be in the interest of conservation and correlative rights.
12. That a plat of the area showing wells and lease ownership is attached.
13. That all offset operators are notified by a copy of this application.

Therefore, the petitioner requests that a hearing be granted for the purpose of amending Order No. R-179-A whereby the petitioner, in the interest of conservation and protection of correlative rights, may transfer allowable from water injection wells and create a lease allowable to enable the production of six times the normal unit allowable from wells within the H. O. Sims Pilot Water Flood area.

Respectfully submitted,

SKELLY OIL COMPANY


J. N. Dunlavey,
District Superintendent.

JND/JDR/e

cc: Humble Oil & Refining Co.
Box 1600
Midland, Texas

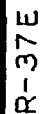
Gulf Coast Western Oil Co.
916 Petroleum Building
Oklahoma City, Oklahoma

Mr. George W. Selinger
Skelly Oil Company
Tulsa, Oklahoma

Attachment: 1

SIMS AREA

R-37E



DOCKET: EXAMINER HEARING JULY 2, 1958

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, New Mexico

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 354:

In the matter of the application of Skelly Oil Company to amend Order No. R-179-A. Applicant, in the above-styled cause, seeks an order amending Order No. R-179-A to permit the transfer of allowables from water injection wells to producing wells on the same basic lease and to establish a lease allowable for its H. O. Sims pilot water flood project in the Penrose-Skelly Pool in Lea County, New Mexico, to enable the production of six times the normal unit allowable from any well or wells in said project.

CASE 1475:

Application of Sinclair Oil and Gas Company for permission to commingle oil from two separate pools in common storage. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the Kemnitz-Wolfcamp Pool and Kemnitz-Pennsylvanian Pool production from its State Lea 692 Well No. 1 located 660 feet from the South lines of Section 24, Township 16 South, Range 33 East, Lea County, New Mexico.

CASE 1476:

Application of Austral Oil Exploration Company for permission to commingle production from two separate leases. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the Townsend-Wolfcamp Pool production from its W. M. Snyder "D" Lease, comprising Lots 5 and 6, and its W. M. Snyder "E" Lease, comprising Lot 2 of Section 6, all in Township 16 South, Range 36 East, Lea County, New Mexico. Applicant proposes to measure the production from each of the above-described leases by means of metering separators.

CASE 1477:

In the matter of the application of Amerada Petroleum Corporation for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Ida Wimbeley No. 4 Well located 660 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard formation adjacent to the Justis-Drinkard Pool and oil from the Fusselman formation adjacent to the Justis-Fusselman Pool through parallel strings of 2-3/8" tubing.

CASE 1478:

In the matter of the application of R. Olsen Oil Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 160-acre non-standard gas proration unit in the Tubb Gas Pool consisting of the N/2 NW/4, SW/4 NW/4, and NW/4 SW/4 of Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

- CASE 1294: Application of Ambassador Oil Corporation for an order amending Order No. R-1053. Applicant, in the above-styled cause, seeks an order amending Order No. R-1053 to approve a development pattern for the entire water flood project operated by the applicant in the Caprock-Queen Pool, Chaves and Lea Counties, New Mexico, and to permit administrative approval for the conversion of water injection wells in said project, which is within the limits of the North Caprock-Queen Unit No. 2, authorized by Commission Order R-1194.
- CASE 1402: Application of Neville G. Penrose, Inc. for an order amending Order R-1151. Applicant, in the above-styled cause, seeks an order amending Order No. R-1151 to extend the time allowed for the flaring of gas from its McCallister Well No. 1, located 660 feet from the North and West lines of Section 7, Township 22 South, Range 38 East, Tubb Gas Pool, Lea County, New Mexico.
- CASE 1479: Application of Aztec Oil and Gas Company for an oil-oil dual completion and for permission to commingle production from two separate pools. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its State BD-36 Well No. 1, located 1980 feet from the South and East lines of Section 36, Township 22 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Blinebry formation adjacent to the Blinebry Oil Pool and oil from the Drinkard Pool through parallel strings of 1 1/2 inch tubing. The applicant further proposes to commingle the Blinebry and Drinkard production from said well in common storage.

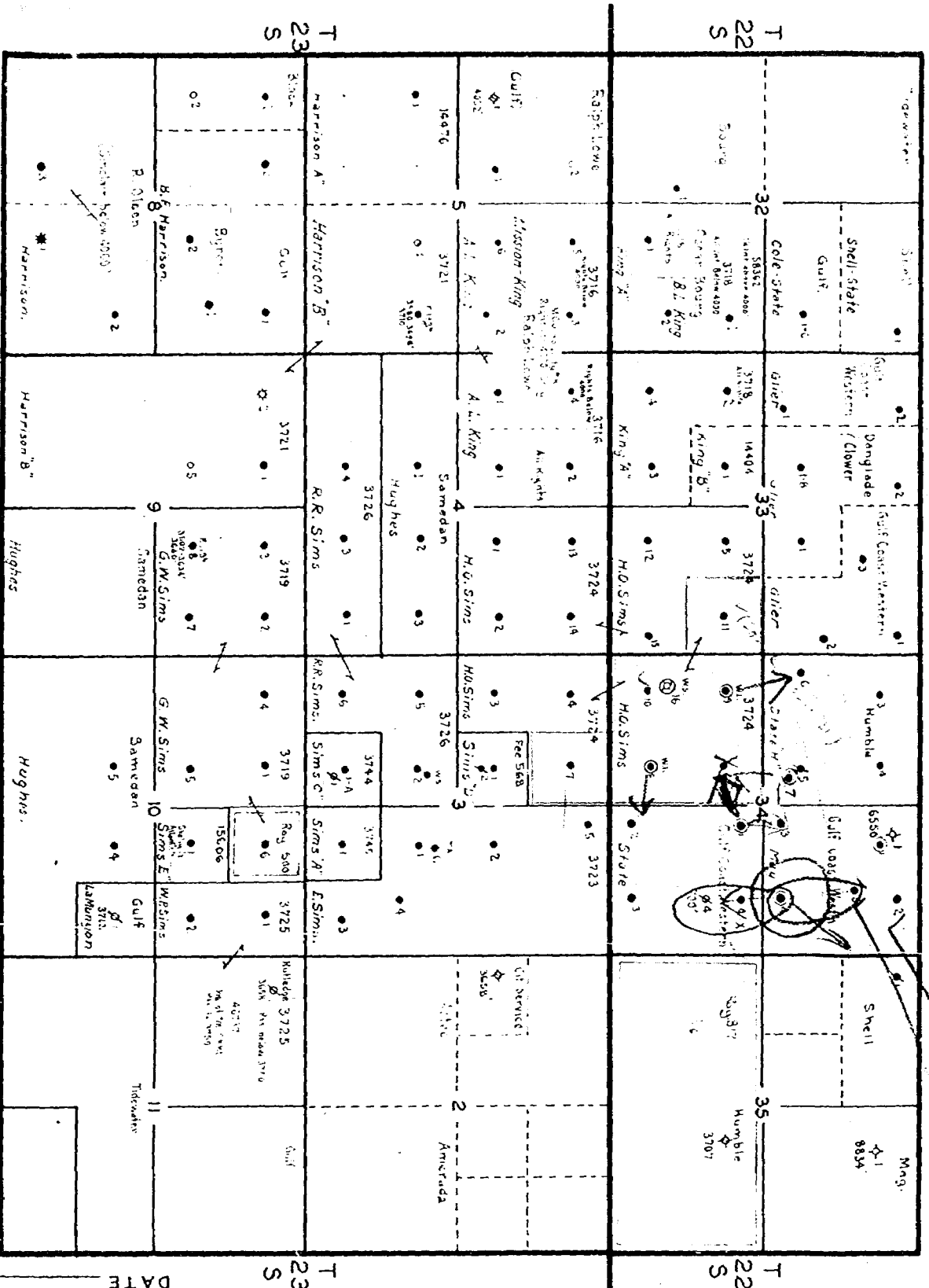
June 16, 1958

ga

LEA COUNTY NEW MEXICO SIMS AREA

Water Injection Wells
Water Supply Wells

R-37E



R-37E

DATE

EX 1