

BEFORE THE OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

CASE NO. 71

IN THE MATTER OF THE APPLICATION OF GULF OIL CORPORATION FOR AN ORDER FIXING AN APPROPRIATE LIMITING GAS-OIL RATIO FOR THE DRINKARD-YESO POOL AND ANY EXTENSIONS THEREOF.

Pursuant to notice by the Commission, duly made and published, setting December 8, 1945, at 10 o'clock A. M., for hearing in the above entitled matter, said hearing was convened on said day, at said hour, in the New Mexican Room of the La Fonda, Santa Fe, New Mexico, the Commission sitting as follows:

HON. JOHN E. MILES, State Land Commissioner, Member
HON. R. R. SPURRIER, State Geologist, Secretary
HON. CARL B. LIVINGSTON, Chief Clerk and Legal Adviser

R E G I S T E R

<u>NAME</u>	<u>COMPANY</u>	<u>ADDRESS</u>
Glenn Staley	Lea County Operators	Hobbs, N. M.
Clarence Hinkle	Potash Company of America, Atty.	Roswell, N. M.
Geo. D. Riggs	Geologist	Carlsbad, N.M.
George W. Selinger	Skelly Oil Company	Tulsa, Okla.
E. J. Gallagher	Gulf Oil Corporation	Hobbs, N. M.
Paul C. Evans	Gulf Oil Corporation	Hobbs, N. M.
Harry A. Aurand	Potash Company of America	Carlsbad, N. M.
M. W. Phelan	Richfield Oil Corporation	Los Angeles
George K. Gibson	Richfield Oil Corporation	Los Angeles
T. P. Ellsworth	Richfield Oil Corporation	Bakersfield, Cal.
Lewis Finch, Jr.	Stanolind Oil & Gas Company	Ft. Worth, Tex.
J. O. Seth, Atty.	Stanolind Oil & Gas Company	Santa Fe, N. M.
John M. Kelly	Geologist	Roswell, N. M.
C. S. Rose	Repollo Oil Company	Midland, Texas
G. H. Gray	Repollo Oil Company	Midland, Texas
Robert A. Pierce	Potash Company of America	Carlsbad, N. M.
L. W. Lodwick	Independent	Roswell, N. M.
Roy O. Yarbrough	Oil Conservation Commission	Hobbs, N. M.
Foster Morrell	U. S. Geological Survey	Roswell, N. M.
Chuck Aston	Consulting Geologist	Artesia, N. M.
Robert L. Bates	State Bureau of Mines & Mineral Resources	Socorro, N. M.

"NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The Oil Conservation Commission as provided by law hereby gives notice of the following hearing to be held at Santa Fe, New Mexico, at 10 o'clock A. M., December 8, 1945;

CASE NO. 71

IN THE MATTER OF THE APPLICATION OF GULF OIL CORPORATION
FOR AN ORDER FIXING AN APPROPRIATE LIMITING GAS-OIL RATIO
FOR THE DRINKARD-YESO POOL AND ANY EXTENSIONS THEREOF.

Given under the seal of said Commission at Santa Fe, New
Mexico, on November 21, 1945.

OIL CONSERVATION COMMISSION

BY: (SGD) R. R. SUPRIER

R. R. SPURRIER, SECRETARY

SEAL"

P R O C E E D I N G S

MR. PAUL C. EVANS, GULF OIL CORPORATION.

I am at present employed as District Engineer at Hobbs, I would
like to offer myself as a witness.

(After being duly sworn, Mr. Evans testified as follows)

MR. EVANS: First I will give you some information regarding
my professional qualifications - I graduated from Texas A &
M in petroleum engineering, and in 1937 I was employed by the
Gulf Oil Corporation, and have worked in numerous fields in
Illinois, Michigan, Oklahoma and New Mexico. In 1942 I
entered the military service and have recently returned, and
am at present District Engineer for the Gulf Oil Corporation
at Hobbs.

The Gulf Oil Corporation desires to bring to your attention
paragraphs 3 and 4 of said application.

No. 3. "Under the provision of Proration Order No. 545,
wells in the above described area producing from the Yeso
formation would be classified under new and undeveloped pools
and thereby would have a limiting gas-oil ratio of 2000 cubic
feet per barrel."

No. 4. "Gulf Oil Corporation believes that a limiting gas-oil
ratio of 2000 cubic feet per barrel is too low for the Yeso

formation in the general area as described hereinabove."

The solution ratios in the Monument and Eunice pools where we have extensive information from bottom hole samples indicates that the solution gas in the Monument pool is approximately 454 cubic feet per barrel and in the Eunice pool is approximately 445 cubic feet per barrel. The bottom hole samples from three different wells indicates the solution ratio to be approximately 1139 cubic feet per barrel, or $2\frac{1}{2}$ times the average solution ratios in Monument and Eunice pools. It also must be remembered the limiting ratio in the Monument pool is 4000 cubic feet per barrel and in the Eunice pool 6000 cubic feet per barrel, while limiting ratio in the Drinkard area is only 2000 cubic feet per barrel.

The gas-oil test on Gulf wells and the ratio as listed in the Lea County operators' report on one well of another Company in the area indicates the area average gas-oil ratio to be 2471 cubic feet per barrel, based upon 7 wells, 6 Gulf wells and one other company well which should be brought to the attention of the Commission, is the Gulf Vivian No. 1 discovery well of the pool. The original gas-oil ratio was 1272 cubic feet per barrel. While after producing approximately one year the 45,000 barrels of oil, the gas-oil ratio has progressively increased to 3942 cubic feet per barrel. In view of the higher solution of gas as compared to two of the older pools, the average of gas-oil ratios of a number of producing wells in the Drinkard Area pool, and the actual increase in gas-oil ratio on Gulf Vivian No. 1. Applicant believes a gas-oil ratio which is just and in keeping with the State's conservation policy should be established. It is the opinion of the Applicant that a ratio of 5,000 cubic feet per barrel be set as the limiting ratio in the Drinkard-Yeso pool, due to the above mentioned

facts, and that this gas-oil ratio will be adequate and will tend to relieve the increased ratios in this pool for the present and until further development and production in the future.

JUDGE SETH: (Representing Stanolind Oil and Gas Company)

How many sections are in the Drinkard-Yeso pool?

MR. EVANS: Right off hand I don't have any complete information.

JUDGE SETH: About 11 isn't it?

MR. EVANS: I believe that is right.

JUDGE SETH: How many units would that be, about 176 - 16 x 11.

MR. EVANS: That is right.

JUDGE SETH: How many wells in the pool?

MR. EVANS: The Gulf has about 9 and there are other wells drilling. The Texas Company has those I believe, has recently completed one.

JUDGE SETH: That means about 10 wells drilled and a few more drilling.

MR. EVANS: That is right.

JUDGE SETH: What percentage of the total number of wells that might be drilled do the present drilled wells amount to?

MR. EVANS: Approximately 7% or 8%.

JUDGE SETH: The present limiting gas-oil ratio is the general regulation of 2,000.

MR. EVANS: That is all undeveloped.

JUDGE SETH: You gave, I believe, your Gulf well exceeding that gas-oil ratio?

MR. EVANS: That is right.

JUDGE SETH: I believe that is all.

COMMISSIONER MILES: Anymore questions?

MR. SPURRIER: What is the highest gas-oil ratio record among those wells you speak of?

MR. EVANS: The highest ratio, as I stated, was not one taken from our own, was taken from the Texas Company with the Lea County Operators, possibly 5,000.

JUDGE SETH: It seems to me with the comparatively small number of wells in this field, 7 or 8, for the total of each unit, until the total of each unit were drilled, it is too early to begin increasing the gas-oil ratio. The matter should wait for their more complete development. This is particularly true, in view of the national pressure for gas conservation. It seems they are just starting the matter too early. Only about 1/14 of the number of wells drilled - the matter should wait for further development.

COMMISSIONER MILES: Anybody else a statement or question?

MR. SPURRIER: This cas will neither be approved or disapproved at this time, but will be taken under advisement.

COMMISSIONER MILES: I would like to make this statement, that I am of the opinion we have been a little slow on acting on some of these cases. Ordinarily it is a matter to me which is a little foreign, and I would like the opportunity of having someone study the cases. This is the first time we have had a member on the Board, as a Geologist, for sometime. I am sure our Geologist will take prompt consideration and soon make a decision.

MR. SPURRIER: I would like to add that I will do everything I can do on the matter as Governor Miles has mentioned.

If no other matters or comments to be taken up we will adjourn.

C E R T I F I C A T E

I, Vastie Fowler, Reporter for the Oil Conservation Commission, hereby certify that I took down the statements made at the hearing held before the Commission on May 14, 1945, in the Matter of the Application of Gulf Oil Corporation for an order fixing an appropriate limiting gas-oil ratio for the Drinkard-Yeso Pool and any extensions thereof, Case No. 71, and that the foregoing transcript constitutes, to the best of my knowledge and belief, a true and correct copy of all the oral statements and exhibits presented before the Commission.

Vastie Fowler
Vastie Fowler, Reporter