

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE 1684

TRANSCRIPT OF HEARING

JUNE 3, 1959

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BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
JUNE 3, 1959

IN THE MATTER OF:

CASE 1684 Application of Honolulu Oil Corporation for :
an unorthodox gas well location. Applicant, :
in the above-styled cause, seeks an order :
authorizing an unorthodox gas well location :
in an undesignated Yates gas pool for its :
State Well No. 1-B, located 1830 feet from :
the South line and 2130 feet from the East :
line of Section 13, Township 11 South, Range :
27 East, Chaves County, New Mexico. :

BEFORE:

Daniel S. Nutter, Examiner.

T R A N S C R I P T O F P R O C E E D I N G S

MR. NUTTER: Take next Case 1684.

MR. PAYNE: Case 1684. Application of Honolulu Oil Corporation for an unorthodox gas well location.

MR. CHRISTY: Sim Christy of Hervey, Dow & Hinkle, Roswell, New Mexico, for the applicant Honolulu.

(Witness sworn)

GEORGE R. HOY,

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

MR. CHRISTY: I might state to the Commission before we

start that we are chagrined to come at this late date for the present application. We, as the testimony will show, are approximately ten years late. We have since checked our records, we trust, very thoroughly, and we believe this is the only error involved of this nature in this area.

DIRECT EXAMINATION

BY MR. CHRISTY:

Q Would you please state your name, address and occupation?

A George Hoy. I am employed by Honolulu Oil Corporation as division department engineer at Midland, Texas.

Q Mr. Hoy, have you previously testified before this regulatory board as a petroleum engineer or a geologist?

A No, sir, I have not.

Q Would you briefly state to the Examiner your educational background and qualifications and experience in the geological and engineering field?

A I graduated from New Mexico School of Mines in 1942 with a Bachelor of Science degree in geological engineering in 1945. I was employed for approximately eight months by Stanolin Oil & Gas Company as a petroleum engineer in West Texas. I was then employed for approximately six months by a drilling mud company as a service mud engineer. Since 1946 I have been employed by Honolulu Oil Corporation in West Texas.

Q And New Mexico?

A Yes, sir, and New Mexico.

Q Mr. Hoy, this application concerns certain lands situated in Township 11 South, Range 27 East, NMPM, Chaves County, New Mexico. Are you familiar with that general area?

A Yes, sir, I am.

Q And the geological and engineering data concerning wells in that general area?

A Yes, sir.

Q Are you familiar with the application in Case 1684 before this Examiner today?

A Yes, sir, I am.

MR. CHRISTY: Does the Commission have any questions concerning the applicant's qualifications?

MR. NUTTER: No, sir, he is qualified. Please proceed.

Q Mr. Hoy, will you briefly state to the Examiner what the application seeks in this case?

A Application for unorthodox gas well location.

Q And this is State Lease "B" 8385, is that right?

A Yes, sir.

Q Now, has this well already been drilled?

A Yes, sir, it has.

Q Why was it located where it was initially, do you happen to know?

A It was located initially as a stratographic test in conjunction with seismographic work being done in the area.

Q Do you know why an application for unorthodox gas well

location was not previously made to the Commission?

A No, sir. Apparently oversight and ignorance.

Q Now, would you please give us briefly a well history on this well involved?

A The subject well, Honolulu Oil Corporation's State of New Mexico Well No. 1-B, located 1830 feet from the South line, 2130 feet from the East line, Section 13, Township 11 South, Range 37 East, Chaves County, New Mexico. This location is in the recently designated Chisum Yates Gas Pool.

Q Now, I refer you to what has been marked as Exhibit 1, and ask you if you will please identify and explain Exhibit 1?

A Honolulu's Exhibit 1 is a map of the area showing all of the wells drilled in the Chisum (Yates) Gas Pool, Chisum (San Andres) Oil Pool, and the Chisum (Siluro-Devonian) Oil Pool, together with all of the dry holes drilled in the area.

Q Does the map show the total depth of the wells drilled?

A Yes, sir.

Q Now, I refer you to what has been marked as applicant's Exhibit 2, and ask you if you will please identify and explain it?

A A Honolulu's Exhibit 2 is a plat of Section 13. This plat shows the location of all wells drilled in Section 13 and the distances of all wells from lease lines. The producing wells shown on Exhibit No. 2 are in three separate oil and gas pools. State Well No. 1-B is in the Chisum Yates Gas Pool. State Wells Nos. 1 and 3 are in the Chisum (Siluro-Devonian) Oil Pool and State Wells

Nos. 1-A and 2-A are in the Chisum (San Andres) Oil Pool.

The Honolulu State 1-B was originally drilled as a stratigraphic test in conjunction with seismograph work being done by Honolulu in the area. The well was spudded on October 28, 1949, and drilled to a total depth of 335 feet with cable tools. A string of seven inch casing was set at 200 feet and cemented from shoe to surface in the annulus with 50 sacks of cement. Lithology of the geologic column penetrated in this well is as follows:

0' to 11' was caliche and sand
11' to 30' - red shale
30' to 130' - sandstone
130' to 143' - limestone
143' to 232' - anhydrite
232' to 325' - sandstone
325' to 335' - dolomite and sandstone

No water was encountered in this hole. A show of gas was encountered in the Yates sandstone from 232' to 325'. After cleaning the well out a valve was put in the 7 inch casing and the well shut in. This well has never been artificially stimulated in any way.

Referring to Exhibits Nos. 1 and 2, the area map and location plat. None of the other wells drilled in this area have encountered any shows of oil or gas in the Yates sand section. Honolulu State No. 3, located 1970' from the South line and 660' from the East line of Section 13, drilled to a total depth of 402' and lost circulation completely. This hole was completely dry when circulation was lost. The Yates sand section was encountered between 235' and 350' in this well. When circulation was lost, no gas whatsoever appeared in the well. Honolulu State "A" Well No. 1, located

1880' from the South line and 1980' from the East line of Section 13, was drilled with cable tools to a total depth of 2065'. The Yates sand section was encountered between 248' and 320' in this well. No shows of gas were found in the Yates while drilling this well. The Texas Company State "AM" No. 1, located 1980' from the North and West lines of Section 13, did not have any shows in the Yates sand which occurred between 260' and 365'. In fact, none of the wells drilled in the area shown on Honolulu's Exhibit No. 1 encountered gas in the Yates sand section except State Well No. 1-B. This would indicate that the geographical extent of this Yates sand gas reservoir is small.

Q Now, referring you to what has been marked as applicant's Exhibit 3, and ask you if you will please identify and explain it?

A Exhibit No. 3 is an analysis of a gas sample from this well taken on November 22, 1949. This is analysis No. 15,443 made by E. W. Saybolt and Company in Houston, Texas, dated November 25, 1949. The analysis is self-explanatory. You will note in the analysis the extremely high nitrogen content, 50.12 mol percent. The calculated heating value of the gas based on this analysis was 654 BTU per cubic foot. A well test made at the time this sample was taken had an initial shut-in pressure of 16 psig, a stabilized open flow rate of 54,400 cubic feet per day at a stabilized flow pressure of 3 psig. The above data are presented to show that this well was non-commercial at the time of its initial completion. The well had extremely low shut-in and delivery pressures, low delivery

volume, low heating value, and high nitrogen or inert gas content.

Q I believe that Exhibit shows that the test was made November 22, 1949?

A Yes, sir, that is correct.

Q Now, I refer you to applicant's Exhibit 4 and ask you if you will please identify and explain it?

A Honolulu's Exhibit No. 4 is an analysis of a gas sample from this well taken May 1st, 1959. This sample was analyzed on May 2nd, 1959 by Petroleum Analytical Laboratory Service of Odessa, Texas, and is identified as their run number 1258. This analysis again shows the high inert gas content - 40.73 mol percent - of this Yates gas from the State 1-B well. The calculated heating value of the gas based on this sample is 788 BTU's per cubic foot. This sample also shows a hydrogen sulfide content of 50 grains per standard cubic foot. A well test taken at this time, at the time this sample was obtained had an initial shut-in pressure of 16.1 psig. The stabilized open flow rate of 69,800 cubic feet per day had a stabilized flow pressure of 9.5 psig. This test again indicates that the well has no commercial value because of its low delivery pressure, low delivery rate, and high inert gas content, the well as shown in there is insufficient gas to supply one four-room pumper house on the lease.

Q Mr. Hoy, in your opinion, is the well in question a commercial producer of oil or gas?

A No, sir, it is not.

Q What is holding the lease?

A Oil production from State "A" Well Nos. 1 and 2 in the Chisum San Andres reservoir and oil production from State Wells Nos. 1 and 3, in the Chisum Siluro-Devonian Oil Pool.

Q Do you have any exact production figures on this State 1-B Well?

A No, sir, we do not.

Q What has been done with the gas that has been produced?

A The gas has been used occasionally as supplementary lease fuel for the operation of pumping engines of oil wells on the same lease.

Q Has any of the gas been flared?

A No, sir, none has been flared.

Q Has any of the gas been sold or marketed?

A No, sir, none whatsoever.

MR. CHRISTY: I don't believe we have any further questions. Excuse me, one other thing.

Q (By Mr. Christy) I might ask you, Mr. Hoy, were Exhibits 1 and 2 prepared by you or under your direction and supervision?

A Yes, sir, they were.

Q Are Exhibits 3 and 4 true and correct copies of original instruments that Honolulu possess?

A Yes, sir, they are.

MR. CHRISTY: We have no further questions of this witness at this time.

MR. NUTTER: Are there any questions of the witness?

MR. PAYNE: Yes, sir.

MR. NUTTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q The closest that this well is to any boundary of the tract it was dedicated to is 510 feet, is that right?

A Yes, sir, that is right.

MR. PAYNE: That's all. Thank you.

QUESTIONS BY MR. NUTTER:

Q Mr. Hoy, inasmuch as this has been classified as a gas pool by the Commission, what do you propose to dedicate to the well so far as acreage is concerned?

A A standard 160-acre gas unit, which would be the NW/4 of the SE/4.

MR. PAYNE: You mean the SE/4?

A Yes, excuse me, the entire SE/4.

Q Does Honolulu own all of this acreage?

A Yes, sir, we do.

Q Do you have any -- now, you stated that you didn't know the volume of gas that has been produced in the well. Do you have any estimate of the volume of gas?

A No, sir, none whatsoever.

Q And I missed the heating value as determined by the last analysis that was run on the well, the one in May of '59.

A The last -- let's see, calculated heating value was 788 BTU's per cubic foot.

Q Well, I note that the heating value has gone up, and also the mol percent of inert gas has gone down from the original test to the latest analysis.

A Yes, sir, that is correct.

Q Do you think the quality of the gas is improving there with age?

A Yes, sir, it would appear to be.

MR. NUTTER: Any further questions of Mr. Hoy?

QUESTIONS BY MR. PORTER:

Q How deep is this well?

A The total depth of this well is 335 feet.

Q You don't anticipate drilling other wells?

A No, sir, we don't. We don't anticipate drilling any more wells to the Yates in this area.

MR. PORTER: That's all.

MR. NUTTER: If there are no further questions of the witness, you may be excused.

MR. CHRISTY: At this time we would like to offer in evidence applicant's Exhibits 1 through 4 inclusive.

MR. NUTTER: Without objection, Honolulu's Exhibits 1 through 4 will be admitted in evidence. Does anyone have anything further in Case 1684? Take the case under advisement and take a ten-minute coffee break.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, J. A. Trujillo, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in Stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 11th day of June, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Joseph P. Ingella
NOTARY PUBLIC

My Commission Expires:

October 5, 1960

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 1684,
heard by me on 6-3, 1959.
[Signature], Examiner
New Mexico Oil Conservation Commission