

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico
July 24, 1958

EXAMINER HEARING

TRANSCRIPT OF HEARING

Case 1484

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3-6691 5-9546

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
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EXAMINER HEARING

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IN THE MATTER OF: :

Application of Gulf Oil Corporation for a non-
standard gas proration unit. Applicant, in the
above-styled cause, seeks the establishment of
a 160-acre non-standard gas proration unit in
the Tubb Gas Pool consisting of the NE/4 SE/4,
NE/4 NE/4, and the S/2 NE/4 of Section 31,
Township 22 South, Range 38 East, Lea County,
New Mexico, said unit to be dedicated to its
Scarborough Estate Well No. 2, 1880 feet from
the North line and 660 feet from the East line
of said Section 31. Case
1484

BEFORE: Mr. Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. PAYNE: Case 1484. Application of Gulf Oil Corporation
for a non-standard gas proration unit.

MR. KASTLER: If the Examiner please, my name is Bill
Kastler from Roswell, representing Gulf Oil Corporation, and our
witnesses in both Cases 1484 and 1485 will be Gerald J. Savage,
geologist, and J. Don Walker, proration engineer. May they be
sworn at this time, please?

(Witnesses sworn.)

MR. UTZ: Will there be any other appearances in this case?
If not, you may proceed.

3
MR. KASTLER: Mr. Savage, will you take the stand?

GERALD J. SAVAGE

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

DIRECT EXAMINATION

By MR. KASTLER:

Q Would you please state your name and address and occupation with Gulf Oil Corporation?

A Gerald J. Savage, Roswell, New Mexico, production geologist for the Gulf Oil Corporation.

Q Have you previously qualified as an expert geologist to testify before the New Mexico Oil Conservation Commission?

A Yes, I have.

Q Are you familiar with Gulf's application in Case No. 1484?

A Yes, I am.

Q Will you please broadly outline what is being sought in that application?

A Gulf seeks a non-standard proration unit consisting of the Northeast quarter of the Northeast quarter, the Northeast quarter of the Southeast quarter, and the South half of the Northeast quarter of Section 31, Township 22 South, Range 38 East.

Q Have you prepared a location plat that shows readily the proposed unit?

A Yes, I have.

(Marked Gulf's Exhibit No. 1,
for identification.)

Q Referring now to Exhibit No. 1, Mr. Savage, would you state what all may be concerned on that paper?

A This exhibit specifically shows the Gulf Scarborough Estate Lease in Section 31.

Q How is it designated?

A Outlined by means of a hashed line. It also shows the "T" shaped proposed gas proration unit to be assigned to Gulf's Scarborough Estate No. 2, and it also shows outlined in red the location of Gulf's Scarborough Estate No. 2.

Q Have you prepared or caused to be prepared an electric log which will show the completion data of the well involved?

A I have caused to be prepared copies of the electric log on Gulf's Scarborough Estate No. 2. This, which I have caused to be labeled Exhibit No. 2.

Q In Case 1484?

A Yes, sir.

(Marked Gulf's Exhibit No. 2,
for identification.)

Q Will you proceed to explain what can be seen on Exhibit No. 2?

A Specifically shown on this electric log is the top of the Tubb Formation at a depth of 6,000 feet, and the various perforations between the depths of 5,982 feet and 6,229 feet, such perforations being within the vertical limits of the Tubb Gas Pool.

Also shown is the initial potential which on February 18, 1958, through 2 3/8" tubing and 4" orifice flowed 2,100,000 cubic feet of gas per day with an 1800 pound back pressure, which gives us an estimated open-flow of 6,200,000 cubic feet of gas per day.

Q Have you prepared, or caused to be prepared, a structure map which shows the Tubb Formation?

A Yes, sir, I have copies of a contour map on top of the Tubb Formation.

Q Has this been labeled Gulf's Exhibit No. 3 in Case 1484?

A Yes, sir, it is.

(Marked Gulf's Exhibit No. 3, for identification.)

Q Will you explain what is shown on Exhibit No. 3?

A Exhibit No. 3 shows contours on top of the Tubb Formation with a contour interval of 25 feet. Also shown is the pertinent Gulf lease and the location of Gulf's Scarborough Estate No. 2 outlined in red.

Q Based upon your knowledge of this area and your studies and examination of the contours, structures, can this area reasonably be supposed to be productive of gas in the Tubb Gas Pool?

A Yes, sir, it can. Specifically, there are several wells down dip and also up dip which are Tubb gas producers, and specifically Gulf's No. 2 T. R. Andrews located 1980 feet from the North and East lines of Section 32, and Gulf's T. R. Andrews No. 3,

located 1980 feet from the South and East lines of that same Section 32.

There are approved gas proration units down structure to the East and up structure to the North and West, and from this information it can be reasonably assumed that the proposed gas proration unit would be productive of Tubb gas.

Q Mr. Savage, were Exhibits No. 1, 2 and 3 either prepared by you or at your direction and under your supervision?

A Yes, sir.

MR. KASTLER: At this time, if the Examiner please, I would like to move for the admission of Exhibits No. 1, 2 and 3, Case No. 1484, into evidence.

MR. UTZ: Without objection they will be received.

MR. KASTLER: If the Examiner, please, I have no further direct testimony questions of Mr. Savage at this time. I plan now to introduce Mr. Walker and he will testify in more detail as to the production aspects and proration unit.

MR. UTZ: Are there questions of the witness?

CROSS EXAMINATION

By MR. UTZ:

Q Mr. Savage, are there any Tubb producing wells South of this proposed unit?

A No, sir, there aren't.

~~Q Then is it my understanding that you base the productivity~~

of the Northeast, of the Southeast, on the fact it joins the pool and the 320 acre unit established to the East there in Section 32?

A I'm not sure I understand what you mean.

Q Well, let's just reiterate what you stated awhile ago, I believe, how you base the productivity of the proposed unit.

A It is my opinion that if gas is produced from a formation at one location down dip from a particular well, and that same formation is productive of gas from locations up dip, that the intervening acreage can also be assumed to be productive of gas in this immediate area.

Q I'm lost on your contour here. What contour interval runs through the Southeast quarter of Section 31?

A It is a contour interval of 25 feet.

Q 27-25, isn't it?

A Very nearly so, yes, sir.

Q What control do you have on the contour that runs through the Southeast quarter of Section 31?

A I have the control obtained from electric logs, subsea datum, computed on all of the wells in this area, although the datums aren't supplied by each well, the contours are the result of those datums. I wish to correct a statement that I believe you just made. You said 27-25 for our well. However, 27-25 is the contour line that just ~~about goes through Gulf's No. 33 Scarborough~~ Estate location.

Q That's the contour I had in question. I wanted to know

what control you had over the location of that contour.

A Of that contour. All right. We have the control from electric logs of all of the wells in Section 31 and Section 32.

Q Particularly your Scarborough No. 3?

A No. 3, yes, sir, Cities Service No. 2 State P Pan American No. 1, State T and all three of the wells on T. R. Andrews lease.

MR. UTZ: Any other questions of the witness? If not, the witness may be excused.

(Witness excused.)

DON WALKER

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

DIRECT EXAMINATION

By MR. KASTLER:

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

A Don Walker, I am with Gulf Oil as division proration engineer located in Ft. Worth.

Q Have you previously qualified to testify as an expert before the New Mexico Oil Conservation Commission?

A Yes, sir.

Q And are you familiar with Gulf's application in Case No. 1484?

A I am.

Q Is it necessary to have an exception to Rule 5 of Order 586 involved in the granting of this application?

A Yes, sir, the Tubb rules, as set out in R-586, prescribes that we have 160 acre square quarter sections of a legal subdivision, I believe it's called of a section, and this is a "T" shaped proposed unit which would require an exception to that rule.

Q Do you have any information to add in connection with the completion of this well, would you give the history of it?

A This well was drilled as a new well and completed on March the 10th of this year, originally intended to make a Tubb gas, Drinkard dual. The total depth --

Q Drinkard oil?

A Drinkard oil. 7,060 feet was the total depth and the casing was set at that point and plugged back to 7052. Top of the cement behind the pipe was estimated 6425. The 7" casing was operated with F I gun at intervals from 5982 to 6229. The Drinkard oil zone was perforated with four one-inch jet holes per foot at intervals from 6813 to 7051.

I don't believe that Drinkard perforated zone was shown on the log, but that is the right interval.

Q This is a gas over oil dual completion, isn't it?

A Yes, sir, our application for approval of this was submitted, I believe, last November.

Q Would you outline the characteristics and ~~disposition~~ proposed disposition of the gas?

A The well is not now connected. We are waiting on

connection from Permian Basin Pipeline Company and the gas is considered sweet.

Q Is there any fluid being made in the gas well?

A There was no fluid reported on the initial test. However, we expect to make fluid, some fluid incidental with the gas production.

Q Is this Scarborough No. 2 well the only Tubb gas well on the lease at this time?

A Yes, sir, there are three Drinkard wells and one Blinebry well which is No. 3, but this is the only Tubb gas well on this lease.

Q Is there any diversification of the royalty interest?

A No, the Scarborough lease is 320 acres and it is fee lands and there is no diversity of royalty ownership.

Q Would you testify to the ability of the wells to produce at the increased allowable rate?

A On the initial flow this well produced at the rate of 2100 MCF per day at 1800 pounds back pressure. During the year 1958 the Tubb Gas Pool allowable averaged 544 MCF allowable per day. During '57 the daily allowable averaged 385 MCF per day based on the capability of this well and the allowables which had been granted Tubb gas wells in the past. It's very much able to produce the 160 acre allowable.

Q Is it your belief and your opinion, based on your studies

and calculations, that all the acreage would be productive of gas from the Tubb Zone if this proposed non-standard proration unit were approved?

A I believe it is, yes.

Q If granted, would this application then result in the conservation of gas?

A And protection of correlative rights?

Q Yes.

A Yes, sir.

MR. KASTLER: Those are the only questions on direct testimony I have at this time.

MR. UTZ: Does anyone have a question of Mr. Walker?

CROSS EXAMINATION

By MR. FISHER:

Q Mr. Walker, is that No. 3 Scarborough Estate abandoned?

A No, sir. That is a Blinebry-Drinkard dual which is the subject of the next case, 1485, today.

Q You have an abandoned mark on this map.

A I guess, Mr. Fisher, that's just our designation of a gas-oil dual with the "X" across a completion dot.

By MR. PAYNE:

Q Is Section 31 in the Tubb Gas Pool?

A I understand that it is not at this time.

Q What would be your recommendation for putting it in?

A ~~We would recommend that Section 31 be brought within the~~

boundary of the Tubb Gas Pool as defined.

Q Mr. Walker, do you have any plans at this time to drill a Tubb Gas Well on the balance of the Scarborough Estate lease?

A It was the intention of forming this unit in this shape to allow us to drill another Tubb well and completely develop this 320 acre lease.

MR. PAYNE: Thank you.

By MR. UTZ:

Q Do you have any idea, Mr. Walker, where that well would be drilled?

A No, sir, I believe I would have to ask Mr. Savage on that if they have any actual plans as yet.

MR. SAVAGE: It is our plan to make that location 1980 feet from the South and West lines of Section 31.

Q Mr. Walker, I believe that we now have an NSP No. 425 which covers 120 acres of this unit? A Yes, sir.

Q Were you aware of that?

A Yes, sir. That was authorized some time ago. Let me see the exact date of that.

Q It was authorized April 14, 1958.

A April 14 of this year, and I was surprised when I found that we weren't producing that gas yet.

Q The text of your application is to form a 160 acre new unit, isn't that correct?

A That was the way it was written, but it probably should have been to extend the presently approved unit as set forth in NSP 425 to increase it from 140 to 160 acres.

MR. PAYNE: Do you wish to amend your application at this time in that regard?

A If we could do it, I would appreciate having that opportunity, yes.

MR. PAYNE: I believe your application as presently drafted is better since the NSP 425 was an administrative order. If your application here is granted, we'll just expand administrative Order NSP 425.

A That will be fine with us.

Q Mr. Walker, do you have any idea what the producing line pressures are at this time in this area?

A I'm afraid that I don't.

Q Who would be your purchaser?

A Permian Basin Pipeline Company.

Q The 6,200,000 was an absolute open-flow that Mr. Savage stated, was it not?

A Yes, sir.

Q Do you happen to have a copy of that test?

A I'm sorry, I don't have one with me, but I'll be glad to furnish you with a copy of the test.

Q The point I want to make in this questioning is the ability of the well to produce its allowable at existing line pressures.

A Yes, sir.

Q Do you have any idea as to what the deliverability of the well would be, at the existing line pressures?

A It estimated on this February 18 test, it did produce at the rate of 2100 MCF per day with 1800 pound back pressure. Based on allowables which have been current the past two years, in 1956 it was 544 MCF per day and in 1957 it was 385 MCF per day, the 2100 MCF with 1800 pound back pressure, which certainly far exceeds the likely line pressure, indicates to me that we are capable, this well is capable of producing 160 acre allowable.

MR. UTZ: Are there any other questions of the witness? If not, the witness may be excused.

(Witness excused.)

Any other statements to be made in this case? If not, the case will be taken under advisement. We will proceed to Case 1485.

