

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
October 24, 1957

TRANSCRIPT OF HEARING

CASE NO. 1335

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

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:)

Application of Gulf Oil)
Corporation for approval)
of a 480-acre non-)
Standard gas proration)
unit in the Eumont Gas)
Pool, Lea County,)
New Mexico.)
)

CASE NO.
1335

BEFORE:

MR. DANIEL S. NUTTER, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: The next case will be Case No. 1335.

MR. COOLEY: Case No. 1335. Application of Gulf Oil Corporation for approval of a 480-acre non-standard gas proration unit in the Eumont Gas Pool, Lea County, New Mexico.

MR. KASTLER: Gulf has as its witnesses in Case 1335 Mr. Guy Swartz and Mr. Don Walker.

MR. COOLEY: Identify yourself for the record.

MR. KASTLER: My name is Bill Kastler, attorney.

Mr. Walker, will you please take the stand?

(Witnesses sworn)

DON WALKER

having been first duly sworn, testifies as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Please state your name and occupation?

A Don Walker. I'm District Proration Engineer for Gulf Oil Corporation in Fort Worth.

Q Have you previously appeared before the New Mexico Oil Conservation Commission and qualified as an expert witness?

A Yes, sir.

Q Are you familiar with what Gulf is seeking in its application in Case 1335?

A I am, sir.

Q Would you please state what our application is for?

A Gulf's application in this, in Case 1335 is for permission to extend a 160 acre unit surrounding H. T. Mattern "E" Well No. 10 across Section lines to include 320 acres in the north half of Section 12 in Township 22 South, Range 36 East to form a 480 acre unit.

Q Has a plat been prepared for submission with this application showing the proposed 480 acre non-standard gas proration unit?

A Yes, sir, it has.

MR. KASTLER: We would like to have this marked as Exhibit 1.

MR. NUTTER: The plat is so identified.

(Marked as Gulf's Exhibit No. 1)

Q Mr. Walker, will you please state what is shown on Exhibit No. 1?

A A little repetition here, but actually it just shows the -- outlines the 480 acre unit which includes the southwest quarter of Section 1 and the north half of Section 12, in said Township 22 South, Range 36 East, Lea County.

Q Was this prepared by you or under your direction?

A Yes, sir.

Q Where is the proposed unit well situated?

A The proposed unit well of Gulf H. T. Mattern "E" Well No. 10 is located 1980 feet from the West line and 660 feet from the South line of Section 1 in same Township 22 South, Range 36 East.

Q How has this well been completed?

A How has it been completed? It is a plug back.

Q The completion data, please?

A All right, sir. This well was originally drilled as an oil well in the Arrowhead Oil Pool to a total depth of 3790 feet. It was completed in June of 1940, and produced from the Grayburg.

Up until just recently, the fact is, it was August this year, it was plugged back to 3665 feet and recompleted as a single zone gas well in the Eumont.

Q Does the well make any fluid now?

A On the initial test which was taken on August 26th it made no fluid. We haven't produced it up until September 27th, and there's no fluid off record and I don't anticipate it will make any.

Q Will you state what pipeline connection has been made to the unit well?

A Permian Basin Pipeline System.

Q Are there any other wells on the proposed unit?

A Yes, sir, there are eleven other wells within the boundary of the proposed unit, but they are all oil wells producing from the Arrowhead Pool, and there are no gas wells.

Q Are the royalty interest uniform throughout the 440 acres of the proposed unit?

A Yes, sir. The fee lands and there's no diversity of ownership.

Q Have you prepared a plat to outline the other approved non-standard proration unit in this general area?

A Yes, sir.

MR. KASTLER: We would like this to be identified as Exhibit No. 2.

MR. NUTTER: It shall be.

(Marked Gulf's Exhibit No. 2)

Q Mr. Walker, would you explain what is shown on, or what appears on Exhibit No. 2?

A This is merely an area plat on which we have outlined units which have non-standard proration units which have been approved by the commission in the past; and outlined in red with E's on the unit wells are other proration units on the north south, I mean northwest and east and southeast. There are none on the south, at the direct south, at this time. However, it probably, in our opinion, is due to the operator not having gone to the, just hasn't completed his gas wells. We think it's productive to the south.

Q Would you please explain what the green line designates which goes generally north and south towards the bottom of the map?

A That's the southwest boundary of the pool limits of the Eumont, I believe, also, that's the northeast boundary of the Jalmat; but the extent there is the southwest boundary of the Eumont Pool limits?

Q In your opinion is this well capable of producing the extra allowable if this proposed unit should be approved?

A Yes, sir. Of course, the Eumont allowable is very low at this time, but this well potentialled for 3400 MCF per day at 180 pounds PSI. On August 26th, the estimated open flow is 5500 MCF; and based on current allowables this well will more than produce the extra allowable if the proposed unit is granted as requested.

Q Do you have anything else to add?

A I don't believe so.

MR. KASTLER: Mr. Nutter, I would like to move to admit Exhibits 1 and 2 into evidence at this time.

MR. NUTTER: Without objection they will be received. Does anyone have any questions of Mr. Walker?

MR. COOLEY: Yes, please.

MR. NUTTER: Mr. Cooley.

BY MR. COOLEY:

Q Mr. Walker, would you point out on Exhibit 1 what the former or the present 160 acres gas proration unit dedicated --

A We'll, I'm doing a bit of assuming there when I say there is a present 160 acre unit. On September 26th we made application for administrative approval of 160 acre unit, which I understand has been approved, but consist only of the southwest quarter of Section 1. The area immediately surrounding well No. 10.

Q This well was first completed in the Eumont in August of this year?

A Yes, sir, and immediately filed for the 160 acre unit, thereafter requested this hearing for expansion of the cross section lines.

Q Does the proposed unit as outlined in red on Exhibit 1 comprise the entire H. T. Mattern lease?

A No, sir. It comprises though the entire H. T. Mattern "E" lease. There's a H. T. Mattern "F" up in the north part of that

plat, and there's a H. T. Mattern "D" on the east portion of that plat. However, the royalty ownerships are the same as under all of them, but they are not as big a tract designated.

Q And to date that portion of the H. T. Mattern "E" lease lying in the north half of Section 12 has not been dedicated to a Eumont gas well?

A That is right .

Q Would you tell me how far the H. T. Mattern No. 10 --

A Yes, sir.

Q -- is located from the boundary line, the nearest boundaries of the proposed unit?

A 660 feet.

Q 660 feet from the East line of the unit?

A Yes, sir, and also from the South line of the Section. I gave the distances, I know what you are asking and the answer is 660. When I gave the location I gave it from, 660 from the South line of the Section, see, but it is 660 from the East line of the unit.

Q And --

A 1980 feet from the north or west.

Q The nearest offset then is the Continental Lockhart Lease to the east?

A Yes, sir, which is dedicated to this well No. 6.

Q Do you feel that well No. 6 located in the southeast

quarter, southeast quarter of Section 1 will afford compensating drainage on behalf of Continental Oil Company?

A Yes, sir, as will their well No. 4 in the south half of the north half which is the unit well in that long 160 acre strip there, and --

Q How far is that well No. 4 to which you just referred from your H. T. Mattern lease, 660 or 320?

A I don't believe it's either one. I have a rule, it doesn't look right. I don't believe I'm willing to testify as to the location of that well.

Q Certainly not exceed 660 feet by very much would it?

A No.

MR. COOLEY: I think that's all the questions I have.

MR. NUTTER: Any further questions of the witness? Mr. Kastler, will your other witness testify as to the interval of completion on this structure?

MR. KASTLER: Yes, he will.

MR. NUTTER: If there is no further questions from Mr. Walker, he may be excused.

(Witness excused)

GUY A. SWARTZ

having been first duly sworn, testifies as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Please state your name and occupation.

A My name is Guy A. Swartz. I'm a staff production geologist with the Gulf Oil Corporation, Roswell, New Mexico.

Q Have you previously appeared before the New Mexico Oil Conservation Commission?

A Yes.

Q And qualified as an expert witness?

A Yes, sir, I have.

Q Are you familiar with the geological aspect of the Eumont Gas Pool?

A Yes, sir, I am.

Q For Exhibit No. 3 have you prepared a contour map of the area?

A Yes, sir. I would like to present Exhibit No. 3 which is a contour map of the area approximately two miles around the subject well. This map shows the subject well, the Gulf Oil Corporation H. T. Mattern "E" No. 10 to be located near the top of the Arrowhead Pool structure which has a gentle north south trending anticline, approximately three miles wide and seven miles long. The map was contoured on the top of the Queen formation and shows the structural relationship of the subject well compared to all others in the area.

It would also indicate from its position on the lease that the well would probably drain all the acreage involved under the

application.

Q For Exhibit No. 4 do you have a log of the unit well, which was either prepared by you or at your direction, has been marked to show the producing intervals that you might well notice on this well No. 10?

A Yes, sir. I would like to present Exhibit No. 4 which is a radio activity log which was run on this well on May 7, 1957, prior to any of the work-over or recompletion work on the well.

Q Will you state what is shown in red on this log, please?

A The perforations productive of gas are shown in red on the log, and are indicated to be opposite the Yates and Queen formations. The formations and their depths which were encountered in the well, as well as the plug back depth are shown in black.

Q Mr. Swartz, from your knowledge of the producing sections encountered in this well and the other gas producing characteristics of the Eumont Gas Pool do you consider all of the acreage to be included in this proposed unit will be productive of gas?

A Yes, sir.

Q That being the case do you consider that the granting of this application will result in protection of correlative rights?

A Yes.

MR. KASTLER: Mr. Nutter, at this time I would like to move that Exhibits No. 3 and 4 be admitted into evidence in Case 1335.

MR. NUTTER: Without objection Gulf's Exhibits 3 and 4 will be entered. Anyone have a question of the witness?

BY MR. NUTTER:

Q Mr. Swartz, in your direct testimony you were referring to the Arrowhead Pool. This map is contoured on top of the Queen formation, is that correct?

A Yes, sir, which has a marker within the Eumont Pool.

Q The entire Queen formation as within the Eumont Pool?

A That is correct.

MR. COOLEY: Then your statement that the well is near the top of the Arrowhead Pool was mistaken, you meant Eumont?

A No, sir. The Eumont structures are conformable or more or less parallel with those formations which mark the top of the Arrowhead, and this general area has been referred to more in the past, and is rather well known as the Arrowhead structure, it being a small anomaly within the Eumont Pool.

MR. NUTTER: All of your perforations are located within the vertical limits of the Eumont Gas Pool?

A Yes, sir, they are.

MR. NUTTER: Thank you. Any further questions of the witness? Mr. Swartz, would your expert opinion as a geologist be that the entire 480 acres which Gulf seeks to dedicate into the Mattern No. 1 Well would be productive of gas from the Eumont Gas Pool?

A Yes, sir. The gas, oil contact in the Eumont Pool in this area is approximately minus 200 feet sea level datum and based upon the contour map and the intervals indicated on the radio activity log it would appear that all intervals would be productive of gas over the entire lease.

MR. NUTTER: Thank you. Any further questions of the witness? If not he may be excused.

(Witness excused)

MR. NUTTER: Anyone have anything further they wish to offer in Case 1335. If not, we will take the case under advisement.

