BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

April 23, 1957

IN THE MATTER OF CASE NO. 1242

TRANSCRIPT OF PROCEEDINGS

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
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ALBUQUERQUE - SANTE FE
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BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO April 23, 1957

IN THE MATTER OF:

Application of Gulf Oil Corporation for permission to effect a gas-oil dual completion for its Alice Paddock No. 3 Well in the Blinebry Oil Pool and Tubb Gas Pool, Lea County, New Mexico, in accordance with Rule 112-A of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Alice Paddock No. 3 Well in the Blinebry Oil Pool and Tubb Gas Pool located 660 feet from the South line and 660 feet from the East line of Section 1, Township 22 South, Range 37 East, Lea County, New Mexico. Applicant proposes to produce said well by means of parallel strings of tubing.

CASE NO.

BEFORE:

Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: Next case on the Docket is Case No. 1242.

MR. COOLEY: Case 1242. Application of Gulf Oil Corporation for permission to effect a gas-oil dual completion for its Alice Paddock No. 3 Well in the Blinebry Oil Pool and Tubb Gas Pool, Lea County, New Mexico, in accordance with Rule 112-A of the Commission Rules and Regulations.

MR. KASTLER: My name is Bill Kastler and I am from the Law Department of Gulf Oil Corporation at Roswell, New Mexico, and we

have as our witness, Mr. Bumpass.

CHARLES BUMPASS

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

DIRECT EXAMINATION

BY MR. KASTLER:

- Q Mr. Bumpass, will you please state your full name and your place of residence?
 - A Charles Bumpass, Hobbs, New Mexico.
 - Q By what company are you employed, and what is your position?
 - A Gulf Oil Corporation, my position is area petroleum engineer.
- Q Have you testified previous before the New Mexico Oil Conservation Commission, or any of its hearing officers?
 - A No, sir, I have not.
- Q What technical degree do you have, and where was your schooling taken?
- A I was graduated from the Agricultural and Mechanical College of Texas, and received a Bachelor of Science degree in Petroleum Engineering.
- Q What has been your experience since leaving school? Have you been continually engaged in the petroleum industry?
- A I have. Initially, I was employed by Gulf in 1947, and from that date until this date, I have been employed by Gulf.

 The previous, the first four years, I was in Gulf's employment in the Permian Basin, in Texas, Counties of Clay, Winkler and Andrew.

- Q What were you doing there Mr. Bumpass?
- A Engineering work. In April of '51, I was transferred to Hobbs and have been in Lea County since that day.
 - Q And your present position is what again?
 - A Area Petroleum Engineer.
- Q All right. As the engineer, petroleum engineer, for the area, are you familiar with the techniques and devices used, and the well history of Gulf's Alice Paddock Well No. 3, connected with this proposal?

 A I am.
- MR. KASTLER: Does the Commission have any further questions pertaining to the qualifications of the witness?
- MR. NUTTER: No, sir, the witness's qualifications are acceptable.
- Q (By Mr. Kastler) Mr. Bumpass, will you briefly state what Gulf Oil Corporation is seeking in its application in Case 1242?
- A Gulf Oil Corporation is seeking approval to effect a gasoil dual for its Alice Paddock Well No. 3 in order that we may produce the Tubb Gas Zone, and the oil from the Blinebry Zone.
 - Q I see. Is there anything unusual about this application?
 - A The fact that we have oil, above the gas.
- Q Have you prepared an Exhibit, or a location map, which would show the lease and other facts, and ownership, pertinent to Gulf's Alice Paddock No. 3?
 - A It was prepared at my direction, yes, sir.
 - MR. KASTLER: May this be marked as Exhibit No. 1, in Case 12,2?

MR. NUTTER: It may.

Q (By Mr. Kastler) Mr. Bumpass, will you explain please, what is shown by this map, Exhibit No. 1, and what the Township and Range is?

A This Exhibit shows the Gulf Oil Corporation's Alice Paddock Lease, which is comprised of the East Half of Section 1, Township 22 South, Range 37 East. It further shows the location of the subject well as being located in the Southeast Quarter of the Southeast Quarter of this Section, Township, and Range.

- Q Is this a state or a fee lease?
- A It is a fee lease.
- Q Is Gulf the operator under this lease, and the owner of substantially all the operating rights?
 - A It is.
- Q Have the surrounding owners been given notice of the application of this case?

 A Yes, sir.
- Q Do you have a well log now which will show the producing intervals and the proposed completion zones involved in this plan?

A Yes. sir.

MR. KASTLER: We desire this electrical log to be marked as Exhibit No. 2 in Gulf Oil Corporation's Case 1242.

Q (By Mr. Kastler) Using this log, will you outline all you know about the well? Would you briefly outline the well's history of the subject well?

A Yes, sir. This log, Schumberjay E. Z. electric log. On

this log is shown some formation tops. Those of particular interest in this case is the Blinebry and Tubb Formations. In addition to these formation tops, it is also illustrated the perforated intervals bought in the Tubb and the Blinebry Formations.

Q When was the well originally completed, and would you go into that aspect of the case, please?

A Yes, sir. This well was originally projected to the Drinkard Formation for the purpose of testing that zone. The Drinkard proved to be a non-commercial producer, and the well was plugged back and completed in the Tubb Gas Zone. It has been produced as a Tubb Gas Well since that approximate time. This well was completed sometime in, early in 1946 as a Tubb Gas Well.

In Gulf's application, submitted around June of 1956, Gulf was seeking approval for a gas-gas dual in the Tubb and Blinebry Zones. That application was approved under Commission Order DC-318, and work was commenced on July the 7th, 1956, to effect this dual gas-gas well.

As shown on this log, the perforated intervals -- there were three distinct intervals within the interval 5,545 to 5,760 in the dual completion, or attempted completion of this Blinebry Gas Zone.

Each of these three sections were tested selectively; treated selectively and tested subsequent to the treatment selectively, and so forth, to obtain gas in commercial quantities. This work was ineffective in obtaining a commercial gas well, and we had a

very small show of gas from these three zones. And, around July the 3rd, and in further effort to obtain what we were seeking, the well was fractured, treated with eighteen thousand gallons of sand-oil, and subsequent to recovering load oil, amounting to around a thousand barrels, or water load in the neighborhood of four hundred barrels. This load had been recovered. By August the 24th and the well was capable of flowing, by heading flow, approximately forty-two barrels of oil and twelve barrels of water in a twenty-four period with three quarter inch corrigond with very small tubing pressure, and the pressure was approximately 900 pounds.

In a further effort to evaluate and determine what we had, since the gas was still a very small amount, too small to be considered a commercial gas well, we installed test pumping equipment, and produced the well during the approximate period of September 26th, 1956, through November the 3rd, 1956. The purpose of this test was to determine how the well would respond after a prolonged period of testing. The result was that the well was capable of producing approximately twenty-nine barrels of oil per day and around eleven barrels of water per day. The gas-oil ratio was in the neighborhood of twenty-eight hundred, which would be a gas volume daily of approximately eighty-four thousand cubic feet per day.

Q Do you have a diagram of it?

A I might add that this well in the Blinebry zone, has been, not been produced since this time. We had an advance allowable granted to us by the Commission for this test, and after testing was

completed, the casing side of the Blinebry Zone was closed in, and we have continued to produce the Tubb gas through the tubing.

Q I see. Is that hooked up to any pipeline at the present time?

A No, sir, we are utilizing that gas for lift purposes on the Alice Paddock Lease.

Q Now, do you have a diagram prepared under your direction or by you, which shows the proposed method for the requested dual gas-oil completion?

A Yes, sir.

MR. KASTLER: May these three exhibits be marked as Gulf's Exhibits No. 3 in Case 1242.

Q (By Mr. Kastler) Mr. Bumpass, will you please outline the proposed completion now, as shown on Exhibit No. 3?

A Yes, sir. The diagram, particular sketch here, shows, in the left column, the present condition of the well, which shows merely the Tubb perforations, the Baker Model "D" Packer, the circulating valve that is used in the dual completion, and the total back depth, in addition to the casing pattern, which is composed of 13 and 3/8, 9 and 5/8, and 7 inch casing strings.

The drawing to the right is the proposed dual completion drawing, showing the approximate mechanical equipment that we propose to use. It differs from the drawing on the left in that, primarily, this is two strings of tubing, or called parallel strings of tubing.

In red is shown the Tubb Gas Zone of production, which is

6,150 to 6,250. That production will be produced though the tubing up through the Baker Packer to the surface.

The Blinebry perforation is illustrated, Blinebry's producing Zone is illustrated in light green, and is in the interval 5,545 to 5,760, and it will also be produced by or through a separate string of two inch tubing. This well, as previously mentioned, will be pumped, will be equipped with rod, rods and sub-surface pump, and of course a surface pumping unit.

Q I see. Is this type of packer used, Baker Model "D" Packer, successfully and has it been used to any extent in the field in Southeastern New Mexico?

A Yes, sir, the use of this packer by Gulf, in particular Southeast New Mexico, is almost exclusive, and it has been accepted by the industry as a suitable and desirable packer.

- Q In your opinion, will the proposed method of dual completion adequately separate the two producing zones?
 - A It will.
- Q Can adequate tests be performed to insure complete separation of the respective zones and to measure reparately the reserves and determine the gas-oil ratio, and so forth, could all that be done?

 A It will.
- Q Will Gulf comply with such further operating tests and reports required by the Commission if the application is granted?
 - A Yes, sir.
 - MR. KASTLER: I move to admit the introduction of Exhibits Nos.

1, 2 and 3, which were prepared at the direction of Mr. Bumpass?

MR. NUTTER: Without objection, Gulf's Exhibits 1 through 3 will be admitted in Case 1242.

MR. KASTLER: I have nothing further.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Bumpass, I note that Exhibit 3 portrays the string of tubing to the Blinebry Formation as two inch High Drill and that the application mentions two strings of two and three-eights inch of tubing. Is there any discrepancy there? The Exhibits also shows two inch enternal --

A In, you have limitations in using sizes of tubing string. It might even be impossible at the time we propose to do this work, to obtain High Drill. You can even run two string of two inch EUE, with turndown collars or coupling.

MR. WALKER: May I say one word? I wrote the application and helped make the study, so the application is wrong. Exhibit No. 1 is right.

MR. NUTTER: The Exhibit is the mechanical installation.

A I think it would be well to say that our intention is to use two strings of two inch tubing, whether it be High Drill or EUE, or what have you, Mr. Nutter. Whether or not we will be able to get the High Drill at that time, we do not know. We hope we may be able to.

Q It will be two inch tubing regardless?

A We will have to turn down couplings which will be somewhat of an expense to us.

- Q You will use two inch tubing?
- A Yes, sir, two inch tubing.
- Q I have one more question, Mr. Bumpass. You have 40-acres dedicated to the Blinebry Oil Well. Is that 40-acres unit dedicated to any Blinebry Gas Well?

A No, sir, I believe not. Our intention in this thing, you know, was to obtain a Blinebry Gas, but --

Q Yes, sir.

A -- by circumstances we were unable to get any kind of a gas well. Time will tell whether we were fortunate enough in getting an oil well.

Q It will be possible to pump the Blinebry Formation?

A That's true, with this particular mechanical hook-up here. It will be very little different than a commercial installation in a small completion, in that you will have a string of two inch tubing through which your production will be derived through the mechanics of rods, accentuated by the bottom hole pump, and the casing annulus, of course, will allow the exhaust of the gas from the oil zone, which should improve to a maximum extent the efficiency of the bottom hole equipment we have, which is a very desirable feature in pumping wells.

Q Does anyone else have any questions?

MR. KASTLER: I just want to ask if it is appropriate to

request that we amend, or that the application be amended so that in place of two and three eights inch tubing, there will be substituted a request to complete this with two inch High Drill tubing?

MR. NUTTER: If you wish, Mr. Kastler, you can merely amend your application to conform with the Exhibits and the testimony offered at the Hearing.

MR. KASTLER: Right. Do you wish that to be done in writing.

MR. NUTTER: No, sir, you can just make a verbal request that the application be so ammended.

MR. KASTLER: May I request that the application be ammended to conform with the evidence brought out in the hearing?

MR. NUTTER: Yes, sir. Mr. Mankin.

BY MR. MANKIN:

Q Mr. Bumpass, what is the latest test that you have on the Tubb Formation in this particular well?

A Mr. Mankin, I think the latest test we have on record, on official record, is a test on November 153, absolute open flow of a thousand and seventy MCF's per day.

Q How much liquid does that well produce?

A We would have to furnish you that, sir, we do not have a representative test, other than one that was conducted back in 1950, and it was only a two hour testing, which I do not believe would be representative.

MR. NUTTER: You can furnish that test to the Commission?

A Well, yes, sir.

Q (By Mr. Mankin) There has been no test taken since 1953?

A I am sure there has been on this, by Order R-64, but I just do not have those figures here with me. I can furnish you those with some information we have. I think we have that Tubb pamphlet in our hotel room, but we can furnish you that.

Q So will have that as a matter of record --

A Sure.

Q -- that's the reason I asked. Is there any separation equipment on the wells in which you could collect the liquids, if they are produced from the Tubb?

A Yes, sir, we have. I believe I am correct in saying that we have had, for a long time, a high pressure separator, and a tank battery for this well.

Q How about the low pressure gas, is the low pressure gas sold?

A I believe that it is. I couldn't verify that exactly at this time, but I believe it is.

- Q You have no knowledge then, as to whether this is making any great amount of liquid concentrate from the Tubb?
 - A Not readily, no, sir.
- Q Do you have knowledge that the off-set well, which is the Sinclair's Rogers Number 2, in the Northeast of the Northeast of Section 12, is a Tubb Oil Well?
 - A Where was that location, sir?
 - Q Northeast, Northeast of Section 12, a direct south off-set

to this well?

- A No, sir, I was not aware of that.
- Q That's the reason for my question. That is a Tubb Oil Well, and I wondered if you had knowledge of what this well was making in the way of liquids?

A No, sir. I think I can supply you that information, in the time it would take to get that pamphlet -- I mean my records of the Tubb Committee Report. That's in my hotel, I didn't bring it with me.

- Q Is there a gas-oil contact in the Tubb in this area?
- A I do not think I know about that, sir.
- Q That's the reason I wondered if this was below or right at the gas-oil contact, if you had knowledge of that?
 - A I do not have knowledge of that, sir.
- Q Is it not true that in this particular area, that most of these wells are below the gas-oil contact in the Blinebry.

A Well, that, sir, I do not think I could say. All I know is that we must be below it because it is not there.

Q Is it not true that there are a considerable number of Blinebry Oil Well in this immediate area?

A I know of the Texas Company's Blinebry 7, I believe it is. It's not too far in distance from this well, and I know that our Haygens, which is down in 38, was a similar case. We went in there with intentions of making it a Blinebry Drinkard Gas-Oil dual, but we, the gas did not develop, and we have a Blinebry Oil Well

- Q Is not the Southeast Well; Southwest Southeast off-set to this well in Section 7, a Blinebry Oil Well, which is the Penrose Oil Well No. 1 in the Northwest Northwest of Section 7?
 - A I don't know of that, it very likely is.
- Q And also directly, the Penrose Roger's No. 2, two locations South of your well, is that not a Blinebry Oil Well and also the Hinton well just directly South of that, No. 4? In other words, is there any --
 - A It may be as you relate there. I am sure it is.
- Q It is noted on your Exhibit 2, that some of the perforations in the Blinebry are shown about the Blinebry top. Will you explain that particularly -- In other words, perforation 5,548, 5,600, some of those are above the top of the Blinebry?

A That's right, that's 5,545, I believe. In lieu of 5,548. I believe we are still within the Blinebry what is defined as the Blinebry vertical limits.

- Q In other words, that "B" is the Blinebry marker then. In other words the "B" depicted on the number 5,585 is the Blinebry marker?
 - A Yes, sir, that's correct.
 - Q So that's presently assigned then, is that correct?
 - A Yes, sir, that's my understanding, yes, sir.
- Q Your Exhibit No. 1, shows a 320-acre unit, that is only the lease, is it not, Mr. Bumpass?
 - A That's correct, yes, sir.

- Q There is presently assigned to that well a standard 160acre unit?

 A Yes, sir.
- Q All the other wells on the particular lease, which are Wells Nos. 1, 2 and 4, are they not Paddock Wells?
 - A That's correct, yes, sir.
- Q So there is no dual dedication of acreage, either Blinebry or Tubb, is that correct?

 A That's correct.
- Q This particular well is, in both cases, within the vertical horizontal limits of the Blinebry Oil Pool and the Tubb Gas Pool, is that correct?
 - A I didn't get the first part of your question.
- Q Is this particular well within both, the Blinebry Oil Pool and the Tubb Gas Pool?

A Yes, sir, it is.

MR. MANKIN: That's all.

MR. NUTTER: Anyone else? Mr. Utz.

BY MR. UTZ:

Q Mr. Bumpass, do you consider Gulf fortunate or unfortunate in getting an oil well rather than a gas well in the Blinebry?

A Well, time will tell. This I know, that we have expended a considerable amount of money in trying to accomplish our original goal at the outset, and we have ended up with something like a twenty-nine barrel oil well that's going to entail further and considerable expenditure to effect this dual completion, and in addition, we are going to have to be out a considerable expenses

for an additional battery for the storage of this production from the reserve estimates on it. There is a chance that we can make some money, considering salvage of Class "B" equipment, both surface producing and storage. Have I answered the question?

MR. UTZ: Yes, you have. It if had been a top allowable, you would have been fortunate, would you not?

A Yes, sir.

MR. UTZ: That is all.

MR. NUTTER: You dilligently tried to complete a gas well though, didn't you?

A Just before we gave up, we got it.

MR. MANKIN: I have one question. Mr. Bumpass, your application here seeks today a Blinebry Oil Well and a Tubb Gas Well. If this particular well should go to Tubb oil, you are aware that this application as sought here today, would not cover that particular situation, are you not?

A Yes, sir, that's correct.

MR. NUTTER: Anyone else have any questions of the witness?

If not, the witness may be excussed.

MR. NUTTER: Anyone else have anything further to offer in Case 1242? If not, we will take the case under advisement, and take a 15 minute recess.

CERTIFICATE

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 Hearing was reported by me in Stenotype at the time and place hereinbefore set forth; that same was thereafter transcribed into typewritten transcript by me; and that same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 9th day of May, 1957, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

J. G. Dinjelen NOTARY PUBLIC

My Commission Expires: October 5, 1960.