BEFORE THE
OIL CONSERVATION COMMISSION
Hobbs, New Mexico
April 25, 1956

IN THE MATTER OF:	)
	)
	)
	)
CASES NOS. 1059 & 1060	)
	)
(Consolidated)	)

TRANSCRIPT OF PROCEEDINGS

BEFORE THE
OIL CONSERVATION COMMISSION
Hobbs, New Mexico
April 25, 1956

Application of The Texas Company for an order approving a dual completion in the Blinebry Oil Pool and the Tubb Gas Pool in compliance with Rule 112 (a) of the New Mexico Oil Conservation Commission Statewide Rules and Regulations.

Applicant, in the above-styled cause, seeks an order granting them permission to dually complete their A. H. Blinebry (NCT-1) Well No. 7 in the Blinebry Oil Pool and the Tubb Gas Pool; said well being located 1980 feet from the North line and 1974 feet from the East line of Section 19, Township 22 South, Range 38 East, Lea County, New Mexico.

Application of The Texas Company for an order granting a 320 acre non-standard gas proration unit in the Tubb Gas Pool, Lea County, New Mexico, in exception to Rule 5 (a) of the Special Rules and Regulations of the Tubb Gas Pool as set forth in Order R-586.

Applicant, in the above-styled cause, seeks an order granting the establishment of a 320 acre non-standard gas proration unit in the Tubb Gas Pool, Lea County, New Mexico; said unit to consist of the E/2 of Section 19, Township 22 South, Range 38 East, Tubb Gas Pool, Lea County, New Mexico; said unit to be dedicated to applicant's A. H. Blinebry (NCT-1) Well No. 7 located 1980 feet from the North line and 1974 feet from the East line of Section 19, Township 22 South, Range 38 East, Lea County, New Mexico.

Cases Nos. 1059
(Consolidated) 1060

BEFORE:

Warren W. Mankin, Examiner

TRANSCRIPT OF HEARING

EXAMINER MANKIN: Next case is Case 1059, application of the Texas Company for an order approving dual completion in the Blinebry Oil Pool and

the Blinebry Oil Pool and the Tubb Gas Pool and also Case 1060, application of Texas Company for an order granting a 320 acre non-standard gas proration unit in the Tubb Gas Pool.

MR. GURLEY: Will you state who you have as witnesses.

MR. FOLMAR: H. N. Wade. My name is L. W. Folmar.

H. N. WADE

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

DIRECT EXAMINATION

By L. W. FOLMAR:

Q Will you state your name please?

A H. N. Wade.

Q By whom are you employed?

A The Texas Company

Q Are you a graduate of an accredited college?

A Yes, I am a graduate of Texas A & M.

Q And what degree did you receive?

A A B. S. Degree in Petroleum Engineering.

Q How long have you been engaged in the practice of petroleum engineering?

A 6 years.

Q And was that with the Texas Company?

A Yes.

Q Are you acquainted with drilling and producing operations in the West Texas-New Mexico area?

A Yes

Q Are the qualifications of the witness accepted?

MR. MANKIN: They are. These two cases here will be heard together for the purpose of testimony.

MR. FOLMAR: Yes.

MR. MANKIN: Is there objection to hearing these two cases together, Case 1059 and 1060 for the purposes of testimony? If not, they will be so consolidated for the purposes of testimony.

Q Mr. Wade, I hand you what has been marked as Exhibit A and ask you to identify that for the Examiner.

A Exhibit 1 as marked, is a plat which shows the vicinity of the leases in the vicinity of the Blinebry NCT-1 Well No. 7 WHICH is located in the SW/4 of the NE/4 in position G, Section 19, Township 22 South, Range 38 East, Lea County, New Mexico. The well's location on the lease is, as shown, 1974' from the east line and 1980' from the north line. The lease in question comprises the E/2 of Section 19, Township 22 South, Range 38 East.

Q Mr. Wade will you give the Commission data on this well involved in this application?

A The A. H. Blinebry NCT-1 Well No. 7 was completed March 11, 1956, at a total depth of 6260' and plugged back to 6252 with cement. 7" casing was set at 6260' and cemented with 500 sacks. Top of the cement was found to be at 2960 by a temperature survey. The Blinebry formation was perforated from 5558' to 5688' and is producing oil from that interval at present. The Tubb interval from 6120 to 6200' is expected to be productive of gas. This interval has been perforated but is confined at present below a packer set at 6105.

Q Would you give the production test that has been conducted on this well?

A The Blinebry zone in this well was open to production on March 9, 1956

and after being treated with 16,500 gallons of acid and 20,000 gallons of oil mixed with 20,000 pounds of sand it produced 170 barrels of 42 degree API gravity oil in three hours with a gas-oil ratio of 1182. It is presently producing top allowable for a 40 acre unit in the Blinebry Oil Pool.

Q Has any test been made on the Tubb zone to date?

A No, the Tubb zone has not been tested.

Q Mr. Wade, the zone which has been open from 5558 to 5688, is that zone within the Commission's designation for the Blinebry Oil Pool?

A Yes, it is. It is within the vertical delineation of the Blinebry Oil Pool.

Q And the perforations from 6120 to 6200', which will be subsequently open to production, is that interval within the Commission's designation of the Tubb Gas Pool?

A Yes, it is.

Q Mr. Wade I hand you what has been marked as Exhibit B, would you identify what that shows?

A Exhibit B - Exhibit 2, as marked, is a diagramatic sketch of the proposed dual completion procedure in the A. H. Blinebry NCT-1 Well No. 7. Shown in this sketch are two retainer production packers, one set at 5540' above the Blinebry Oil zone and one set at 6105' below the Blinebry Oil zone but above the Tubb Gas zone. A Baker dual zone flow tube will be placed in the tubing string immediately above the upper retainer production packer. A string of pipe will extend from the dual zone flow tube through the two packers. Seal therefore will prevent communication between the packers and string of pipe. An Otis Type X crossover choke will be inserted in the upper portion of the Baker dual zone flow tube to direct the flow of oil shown in red on the drawing with the tubing and gas shown in blue to the casing

annulus.

Q Mr. Wade I now hand you what Mr. Gurley has just marked as Exhibit 3 and ask you to identify what that is.

A The Otis Type X crossover type choke as shown diagramatically in Exhibit 2 is shown in greater detail in Exhibit 3. The drawing is on the whole self-explanatory but it should be noted that the Blinebry Oil as shown in red is kept separate from Tubb gas as shown in blue by the porting arrangement in the body of the crossover assembly and by the seal rings on the choke assembly. This crossover assembly has been used with a great degree of success and is accepted by the industry for the purpose of preventing the commingling of well fluids when used in a dually completed well.

Q What type of production do you expect to obtain from the Tubb zone?

A I think that we should expect production of a distillate of approximately in a range of 65 to 70 degrees API and with a gas distillate ratio of in a range of 200,000 to 400,000 cubic feet per barrel.

Q Well then, the production from that zone would be in the Commission's definition a gas producer.

A Yes.

Q In your opinion, Mr. Wade, will the equipment which is set in this well adequately prevent the commingling of these fluids from these two separate sources of supply?

A In my opinion, it will.

Q One thing, Mr. Wade, this arrangement will prevent the production of oil from the upper zone through a crossover packer through 2" tubbng to the surface, is that correct?

A That is correct.

Q And will prevent the production of gas from the lower zone through the crossover arrangement to be produced through the annulus space between the tubing in the casing.

A That is correct.

Q Now, Mr. Wade, would you please refer back to what I call Exhibit A and what Mr. Gurley marked as Exhibit 1. On that exhibit would you point out the 320 acre non-standard gas proration units which is being requested for assignment to the Texas Company, Blinebry through the Tubb.

A The proposed unit, as outlined in yellow on Exhibit 1, consists of the E/2 of Section 19, Township 22 South, Range 38 East, Lea County, New Mexico, and comprises 320 acres. This unit lies within the previously established horizontal limits of the Tubb Gas Pool.

Q Mr. Wade what is the size of the standard gas proration unit for the Tubb Gas Pool as established by the Commission rules now?

A 160 acres.

Q Then the reason this is a non-standard proration unit is because of its size.

A That's correct.

Q On Exhibit A, Mr. Wade, have you shown the location of other Tubb Gas wells in the area?

A Yes, I have.

Q Would you please point those out?

A It will be noted that Tubb gas production is presently being realized from Gulf Oil Corporation's Well Well No. 2 located in the SW/4 NE/4 of Section 32, 22-28; from Gulf Oil Corporation's Gutman A No. 2 located in the NE/4 NW/4 Section

19, 22-38; from Cosden Petroleum Company's Edith Butler Well No. 3 located in the SE/4 SW/4 of Section 18, 22-38; from Gulf Watkins Well No. 1 located in the SW/4 SE/4 of Section 29 and from Gulf Andrews located in the SW/4 NE/4 Section 32.

Q Mr. Wade, have you had an opportunity to interpret the structural position of this proposed 320 acre unit?

A Yes, I have.

Q From this interpretation do you conclude that the entire 320 acres can reasonably be presumed to be productive of gas?

A Yes.

Q To your knowledge, Mr. Wade, are there any other 320 acre units presently approved by the Commission in the Tubb Gas Pool?

A Will you state that question again, please?

Q Are there any other 320 acre units approved by the Commission in the Tubb Gas Pool?

A Yes, at present, there is one other 320 acre unit in the Tubb Gas Pool. This is assigned to Ohio Oil Company Lou Worthan Well No. 9 located at position E in Section 11, 22-37.

Q Are there any other units with a size in excess of 160 acres in the Tubb Gas Pool?

A Yes, there are two. 240 acres is assigned to the Skelly Oil Company's Baker B No. 15 located at J, Section 10, 22-37, and 240 acres are assigned to N. B. Hunt Weatherly No. 1 at G in Section 21, 21-37.

Q Mr. Wade, referring back to the Ohio Oil Company's Worthan No. 9, what is the distance from that well to the farther most point of the acreage assigned to it?

A Approximately 4900 feet.

Q Referring to the Skelly Oil Company Baker B No. 15 what is the farther most point of the acreage assigned to that well from that well?

A 3800 feet approximately.

Q Now, referring to the N. B. Hunt Weatherly Well No. 1, what is the distance of the farther most point from the well of the acreage assigned to that well?

A Approximately 3800'.

Q And as far as this application is concerned what is the farther most point on the acreage that we are requesting be assigned to the Texas Company well?

A It will also be approximately 3800'.

Q In your opinion will this well effectively and efficiently drain 320 acres?

A In my opinion it will.

Q In your opinion will this well be capable of producing a 320 acre allowable?

A Yes, in my opinion, it will.

Q And if this unit is assigned to this well, as requested, in your opinion, will correlative rights be protected?

A Yes, they will.

Q That's all the questions of the witness.

MR. MANKIN: Is there further questions of the witness in this case? Mr. Wade, I believe you indicated that the Tubb Gas zone from the preliminary testing that had been previously made on completion of this well, indicated that it would possibly produce liquids, or at least from the production history of the wells in the area that they would produce liquids.

A Yes, they will produce some gas distillate.

MR. MANKIN: However, you feel --- might I ask first --- this is 2" tubing which will be in the well and what is the production string - what size is it?

A It is 7".

MR. MANKIN: 7". So you feel that you would have sufficient lead capacity in the annulus to lift the liquids that would be produced with the well.

A Yes, with the gas distillate ratios being produced in the vicinity, I think that we would have no difficulty lifting any fluids that were produced.

MR. MANKIN: Originally this well was drilled to be a Tubb Gas and a Blinebry Gas Well ----

A That's right.

MR. MANKIN: On the Blinebry oil zone that was found instead of the Blinebry gas zone, I don't believe I heard what the ratio that is producing that, did you have that?

A No. Yes, I did give it. It was 1182.

MR. MANKIN: It's fairly low and normal ratio for the Blinebry Oil Pool.

A Yes, I would say that was very normal.

MR. MANKIN: In this particular installation it will not be possible to get true bottom hole pressures of either zone, particularly of the Tubb - it would be impossible to get any other than surface pressures on this particular well, is that true?

A Did you say either zone?

MR. MANKIN: First on the Tubb through the annulus, the Tubb Gas zone, it will not be possible to determine bottom hole- - - -

A Yes, we can if you pull the choke and put in a blank, you can always take bottom hole pressures through by rearranging the porting in the crossover equipment, you can always take bottom hole pressures.

MR. MANKIN: But in the present installation it would require some change - -

A That's right.

MR. MANKIN: To take the bottom hole pressures in the Tubb. As far as the bottom hole pressure that is flowing the Blinebry oil at this point rather than from - -

A That is correct.

MR. MANKIN: And that would likewise have- - - the bottom could be run in this particular well above the choke.

A That is correct.

MR. MANKIN: And the pressure assimilating the datum above the choke could be - - -

A That is correct. You can very actually determine bottom hole pressure of the well

MR. FOLMAR: I would like to submit the three exhibits, No. 1 being submitted for both cases and No. 2 and 3 submitted for Case 1059, if that is possible.

MR. MANKIN: Is there objection to entering Exhibits 1, 2 and 3 in these combined cases, 1059 and 1060, for the purpose of testimony in this case. If not, they will be so entered.

MR. FOLMAR: I have a statement.

MR. MANKIN: Is there further question of the witness in this case? Did you have something further?

MR. FOLMAR: Just a statement.

MR. MANKIN: Just a statement. Well if there is no further question of the witness, the witness may be excused. Proceed.

MR. FOLMAR: We believe the testimony given in this case has shown that the proposed unit requested can be reasonably presumed to be productive of gas and that the Blinebry NCT-1 Well No. 7 to which the acreage is to be assigned will adequately drain the proposed unit. Therefore, in the interests of conservation and the protection

of correlative rights and the prevention of waste, we request that the Commission enter an order permitting the assignment of the 320 acre Tubb gas unit as applied for. As far as Case 1059, concerns the dual completion, we believe the granting of this permit to dually complete the well between these two separate sources of supply as recognized in the rules and regulations for these two fields, will be in the interest of conservation and will protect correlative rights. We believe that the proposed dual completion is mechanically and geologically feasible and will prevent commingling of the well fluids from these two zones, and we request that the Commission enter an order granting approval of the dual completion.

MR. MANKIN: I have one further question, Mr. Fdmar. I notice the original application indicated that the retainer production packer would be set at 5750 feet but I notice that the exhibit 2 - that that had been changed to 6105, that is the present well situation.

MR. FOLMAR: That is as it was yesterday and it is simply a matter of during the operation you don't always follow exactly your original plan.

MR. MANKIN: The other was the proposed final. Is there any further statement to be made in this case - these cases rather? If not, we will take the two cases under advisement - Case 1059 and 1060.

STATE OF NEW MEXICO)
)
COUNTY OF SANTA FE)

I, Bobby Postlewaite, do hereby certify that the foregoing and attached transcript of proceedings before the Oil Conservation Commission Examiner, at Hobbs, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

Dated this 25th day of May, 1956.

Bobby Postlewaite