BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
EXAMINER HEARING
January 24, 1962

Case 2478

IN THE MATTER OF:

Applicant in the above-styled cause, seeks permission to complete C.H.Weir "B" Well No. 5, located in Unit G of Section 11, Township 20 South, Range 37 East, Lea County, New Mexico, as a triple completion (conventional) in the Skaggs-Drinkard & Skaggs-Glorietta Pools & in an Undesignated Blinebry Gas Pool, with the production of oil from the Drinkard zone to be through a combination string of 2 1/16 inch & 1 1/4 inch tubing, the production of oil from the Glorietta to be through a parallel string of 2 1/16-inch tubing & the production of gas from the Blinebry zone to be through the casing-tubing annulus. Applicant further proposes, as an alternative manner of completion in the event the Blinebry gas cannot efficiently be produced through casing-tubing annulus to produce gas from the Blinebry zone through a string 1-inch tubing.

BEFORE:

ELVIS UTZ, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: We will call Case Number 2478.

MR. MORRIS: Application of Texaco, Inc. for a triple completion, Lea County, New Mexico.

MR. KOCH: My name is Sumner S. Koch, of the law firm of Gilbert, White, & Gilbert of Santa Fe, appearing on behalf of Texaco, Inc. We will have one witness.

MR. MORRIS: Will you stand and raise your right hand, please? (Witness complies.) Do you solemnly swear that the testimony you are about to give will be the truth, the whole truth, and nothing but the truth, so help you God?

MR. BLACK: I do.

C. R. BLACK,

called as a witness herein, having been first duly sworn on oath was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KOCH:

Q Would you state your name and occupation?

A I am C.R. Black. I am employed by Texaco, Incorporated as a Petroleum Engineer from Midland, Texas.

Q Have you previously testified and been qualified before this Commission --

A Yes, sir, I have.

Q -- in the capacity of Petroleum Engineer?

A Yes, sir, I have.

Q Would you please tell the Examiner what the application Number 2479 seeks?

A This is the application of Texaco, Inc. to triple complete its C. H. Weir "B" Well No. 5 in the Drinkard, Blinebry and Glorietta formation. These are the Skaggs-Drinkard Pool, the Skaggs-Glorietta and Undesignated Blinebry Gas zone.

Q And what is the current status of the well?

A At the present time we have reached the total depth and have set casing. The Drinkard formation has been perforated in testing and we are in the process of completing the Blinebry zone.

Q Have you prepared a plat showing the immediate areas?

A Yes, sir I have.

(Whereupon Applicant's Exhibit 1 marked for identification)

Q It has been entered as Exhibit No. 1 Would you explain that exhibit?

A Exhibit 1 is a plat showing the immediate area surrounding the Texaco C. H. Weir "B" lease. This lease is denoted by the yellow line. It consists of the east half of Section 11, Township 20 south, Range 37 east. The subject-well is circled in red. It is located 1980 feet from the north line of the Section and 1650 feet from the east line. The offset operators and their wells are shown with the appropriate field designation, being shown below each well. Also included on this plat is a list of the offset operators and their addresses.

Q Do you have, or does Texaco have similar triple completions in this area or nearby?

A No, sir, we do not, we have two other C. H. Weir Wells. Well No. 4A is a diagonal and C. H. Weir, A Well No. 7 which is located in the northwest quarter of the southwest quarter of Section 12. These two wells were triply completed in the Drinkard, Glorietta and Eumont Gas Pools. This, to our knowledge, is the first Blinebry gas zone in this immediate area. The nearest Blinebry is in the Monument Pool, however, this is all production. The nearest Blinebry on gas production is some miles to the south. The C. H. Weir Well No. 4 is located in the southwest quarter of Section 12.

It flowed 1761 MCFF gas per day. We feel that Blinebry is productive in this well.

Q Have you prepared a diagramatic sketch of the proposed installation?

A Yes, sir, I have.

(Whereupon, Texaco Inc.Exhibit No. 2 for identification.)

Q That is marked Exhibit 2.

A Exhibit No. 2 is a diagrammatic sketch proposed of the triple completion installation. We did drill an eleven inch hole to 1430 feet. At that point, we set 8 5/8 inch casing. We circulated sacks of cement. We continued with a 7 7/18 to 3927 feet. At that point we had to reduce the hole to 6 3/4 inch and we drilled to a total of 6937 feet. This exhibit was prepared prior to reaching the total depth and the total depth should be amended from 6900 to 6937. At that point we set a 5 1/2 inch casing and cemented with 100,050 sacks and by the use of a temperature survey the actual top of the cement was found to be 2525 feet.

MR. UTZ: That was the top of the cement at 525 feet?

A 2525 feet.

MR. UTZ: That is on the 5 1/2?

A Yes, sir.

Q Do you have information on the crude character of each formation?

A Yes, sir. The Skaggs-Drinkard formation was actually

perforated from 6830 to 6900. This will be amended to estimated 6870 to 6880, 6885 to 6890.

MR. UTZ: Would you read those again?

A 6870 to 6880, 6885 to 6890. We perforated this section and treated it with acid on a sweeping test. It swept 78 barrels of oil in twenty four hours with no water. We expect an intermediate type crude, intermediate swept crude with API gravity of 35 degrees. The estimated gas oil ratio is from 350 to 1800 cubic feet per barrel. The estimated bottom hole pressure is 2400 PSI and it is anticipated that this well will be artificially lifted initially. The undesignated Blinebry zone will be perforated from 5880 to 5930. We expect a gas zone with a sweet condensate, with a gravity of 58 degrees API. The expected gas oil ratio is 45,000 cubic feet per barrel. We estimated that the bottom hole pressure will be 2500 PSI. We anticipate that this zone will flow to the degree shown and will flow for some fifteen years. The Skaggs-Glorietta will be perforated from 5247 to 5267. We expect an oil complete with a gravity of 40 degrees & PI and the estimated gas oil ratio should be between 300 and 900 cubic feet per barrel and we expect a bottom hole pressure of 1700 PSI. This zone should also be pumped initially.

Q Do you expect any corrosion and paraffin problems?

A In the Blinebry and Drinkard zones we expect no corrosion or paraffin problems. However, noted in the Glorietta zone, we expect mild corrosion, if any, and mild paraffin problems. We will

conduc' coupon surveys and if we find that there is excessive corrosion in the Glorietta we will commence a corrosion prevention program to treat this. We do plan to plastic coat the upper fifteen feet of the Glorietta duct in order to prevent paraffin.

Q Would you please explain the down hole equipment to be used?

A In this method we will set a Baker Model "D" packer, and a Baker Model"FA "will be set at 5300 feet, and a dual zone flow tube will be latched in the Baker Model "FA" packer. We will then run a string of 1 1/4 inch OD Aztec tubing from 5210 feet into the Baker Model "D" at 6730. The triple completion flow tubing will run on this string of tubing and set in the Baker Model "FA"packer at 5210 from the triple zone flow tube to exhibit the surface. The Drinkard will be produced through a combination string of 2 1/16 inch OD Aztec tubing. We will then run a string of 2 1/16 inch tubing for the Glorietta zone and welatched into the triple zone set at 5210. The Blinebry gas zone will be produced up the annulus of 2 7/8 inches and a 1 1/4 inch Aztec tubing. It will then be dumped on the top of the packer and produced to the annulus.

Q Now, since the notice here called for a possible alternative method of completion for the Blinebry gas, I believe it was, do you have an exhibit to illustrate this method?

A Yes, this would be Exhibit 3. If during the process of completing this well, then we will test the Blinebry zone, and if it is determined that we cannot obtain efficient flow up the

annulus, in other words, if we are producing condensate in such a volume that we fill up the annulus we propose to triply complete the well so as the Blinebry gas can be produced through a string of one inch tubing. Exhibit 3 shows this proposed installation. In this installation we will set a Baker Model "D" packer at 6730, a Baker Model "FA" packer at 5310 and we will run a dual zone flow tube on a string of 2 1/16 inch OD Aztec tubing and latch into the Baker Model "FA" packer at 5300. Below this dual zone flow tube to from 5310 to 6730 we will run a string of 211/600 Aztec and a 1 1/4 inch Aztec tubing. We will run a Baker parallel anchor at 5280 and we will run a Skaggs-Glorietta at 5247. The Skaggs-Glorietta A zone will be produced through a string of 2 1/16 inch tubing set into this Baker parallel anchor at 5280. The Blinebry will be produced through a string of one inch tubing set in the dual zone flow tube at 5310.

Q You have a log available on this well?

A At the present time we do not have a finished copy of the well available, however, as soon aa one is available we will submit it to the Commission.

Q And in your opinion is this installation in the interest of sound conservation practices?

A Yes, sir, I believe it is.

MR. KOCH: We move the introduction of applicant's Exhibit 1, 2, and 3.

MR. UTZ: Without objection applicant's Exhibit 1, 2, and

3 will be entered into the record.

(Whereupon Texaco Exhibit 1,2 and 3 admitted into evidence)

MR. KOCH: That completes our examination.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Black, what was the gravity of your Drinkard zone?

A The gravity should be 35 degrees

Q The Gloriett a was 58?

A No, sir, the Blinebry, the Gloriett a was 40.

Q Yes, sir.

A This is based on other Drinkard and Gloriett a gravity tests in the area.

Q What is Aztec tubing, how does it differ from the other types of tubing?

A It is more or less what you would call a flush joint tubing, it is very similar to high drill, rather, it doesn't have the upset on it.

Q I wonder if you can say why you decided to complete this as a conventional triple rather than three strings of small casing?

A No, sir, I cannot give the reason why. That is done by another department that I am not familiar with. Our other triple completions in this area are conventional and as far as I know they were following the same thing possibly.

Q You do have some slim hole completions in the southeast?

A Yes, sir, we do. We do not have in this. Whether there are any problems which would prevent slim hole completions I can't answer that.

MR. UTZ: Are there any other questions?

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Black, did you state what type of well is shown in the northeast of the northwest of Section 11, Southwest Production No. 1?

A No, sir, that is not shown on the plat, however, I have been informed that that is a Eumont oil well.

Q Where is the nearest Blinebry gas production to your proposed triple?

A The exact distances I do not know, it is some miles south in the Blinebry gas field which is below the City of Eunice and this is some ten miles north of the City of Eunice.

Q There are none shown on your plat here?

A To our knowledge there are no Blinebry gas wells in this immediate area, within a five mile radius at least.

Q You feel confident that you will encounter that gas zone?

A Yes, sir, our preliminary logs and field copies of logs have indicated that this zone is present in our well and it is correlative to the drill zone that was drill stem tested in our Well No. 4.

MR. MORRIS: Thank you.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Black, how do you propose to determine whether or not you flow the Blinebry through tubing?

A At the time we test it, if we feel that it is making sufficient condensates so that it will not flow efficiently through the annulus, we feel that in testing this zone as an individual zone during the completion process, we can determine whether it will efficiently flow through the casing. It is my opinion if there is, what you would call substantial, if there is substantial condensate production, certainly we will run the string of one inch tubing.

Q By substantial condensate production would you care to elaborate as to GOR?

A A I would say if the GOR certainly falls below 30,000 to one which we would produce that through tubing. Certainly, if we are producing, in my opinion, more than 20 barrels of condensate a day, we could probably produce that through one inch tubing. We have recently completed our Henderson No. 6 in the Blinebry gas pool. The Blinebry was completed through the string of one inch tubing and we obtained absolute open flow of 6 1/2 MCF feet of gas per day so we feel we can certainly efficiently produce.

Q Did you plan to make this determination from drill stem?

A No, it will be actual completion tests. At the present time we are completing in the Blinebry. We are completing, of course, with a single string of tubing and a packer in the hole.

Depending on what type of test we get from this zone will determine whether we run the string of tubing or not.

Q I see. What size tubing do you plan to run?

A One inch. That is one inch OD Aztec tubing. The actual nominal idea of that tubing is 1.049. When you get below an inch and a half tubing your nomenclature refers to ID rather than OD.

Q Do you believe that this well could be tested with a GOR of 3,000 or less?

A That is something that I feel not qualified to answer. Our Gas Line Department could determine that.

Q Do you feel that test is a pretty good indication?

A Yes, sir, I have been informed that by obtaining, you can determine if you have efficiency below by 1.4 tests.

MR. UTZ: Are there any other questions? The witness may be excused.

Do you have any further questions?

MR. KOCH: Nothing further.

MR. UTZ: Are there any other statements in this case. The case will be taken under advisement.

(The witness excused.)

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, KATHERINE PETERSON, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill, and ability.

Katherine Peterson
COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2475, heard by me on January 24, 1962.

Examiner
New Mexico Oil Conservation Commission

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. ....., heard by me on ....., ...

Examiner
New Mexico Oil Conservation Commission

NEW MEXICO OIL CONSERVATION COMMISSION

Examiner Hearing - Elvis A. Utz

Santa Fe, NEW MEXICO

REGISTER

HEARING DATE January 24, 1962 TIME: 9 A.M.

NAME:	REPRESENTING:	LOCATION:
O. Seth		S. Fe
Pete Porter	O.C.C.	Santa Fe.
Jimmy A. Kirk	Texaco	S. Fe
John J. Casey	Jennco Oil Co	(Gilbert, White & Gilbert)
James E. Sheldon	" " "	Durango Colo
C.A. Block	Texaco Inc.	Roswell, N.M.
P.T. McGrath	U.S.G.S.	Midland Texas
Jack M Campbell	Campbell & Russell	Farmington
& Bob Macaffee	Union Oil	Roswell
Kenneth A Swanson	Aztec Oil & Gas Co.	Midland
Jim F. Burrous	"	Dallas
John C Pearson	Union Oil Co	"
Jim S Mayfield	Southern Union Prod.	Roswell
Geo A Hurley	Kewanee Oil Co	Farmington
Frank E. Irby	State Engr. Office	Farmington
A.R. Kendrick	OCC	Santa Fe
D.D. Stokes	Shell Oil Co	Artesia
W.G. Hatt		Roswell, N.M.

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING - ELVIS A. UTZ

SANTA FE, NEW MEXICO

REGISTER

HEARING DATE JANUARY 24, 1962 TIME: 9 A.M.

NAME:	REPRESENTING:	LOCATION:
Garrett C. Whitworth	El Paso Nat. Gas. Co.	El Paso, Tex.
F. Norman Woodruff	" " " " "	" "
CHAS. F. MALONE ATWOOD & MALONE	PAN AMERICAN PETR. CORP.	ROSWELL
George W. Eaton	" " "	Farmington
Lewis D. Galloway	El Paso Natural Gas Co	Farmington
Jerry Hickson	El Paso Natural Gas	El Paso