

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico February 14, 1957 IN THE MATTER OF: Application of R. Olsen for approval of an: oil-oil dual completion in the Blinebry Oil Pool and an undesignated oil pool in the Tubb formation, Lea County, New Mexico) in exception to Rule 112-A of the Commisse: ion Rules and Regulations and Rule 8 of 4.1 Order R=610, Special Rules and Regulations: for the Blinebry Oil Pool. Applicant, in) the above-styled cause, seeks an order granting approval of an oil-oil dual com-) pletion for its Olsen-Sarkeys Well No. 1 located 1980 feet from the North line and) 660 feet from the West line of Section 25,: Township 21 South, Range 37 East, Applin) cant proposes to utilize parallel strings : of tubing and to perforate between 5640) Case No. 1205 feet to 5830 feet in the Blinebry Oil Pool: and from 6230 feet to 6316 feet in an undesignated oil pool in the Tubb formation. BEFORE: Honorable Edwin L. Mechem Mr. A. L. Porter Mr. Murray Morgan TRANSCRIPT OF HEARING MR. PORTER: The Commission will consider next, Case 1205. MR. GURLEY: This is the application of R. Olsen for approval of an oil-oil dual completion in the Blinebry Oil Pool and an undesignated oil pool in the Tubb formation, Lea County, New Mexico, in exception to Rule 112-A of the Commission Rules and Regulations and Rule 8 of Order R=610, Special Rules and Regulations

for the Blinebry Oil Pool.

MR. GIRAND: Let the record show, W. G. Girand, representing R. Olsen. I have two witnesses, Mr. West and Mr. French.

MR. PORTER: Mr, West and Mr. French, will you come forward and be sworn, please?

(Witnesses sworn.)

MR. GIRAND: I have several exhibits that I would like to take a few minutes for the reporter to identify them, or mark them for identification.

MR. PORTER: Sure.

(Marked Olsen Exhibits Nos. 1 through 8 for identification.)

MR. PORTER: Mr. Girand, will you proceed with your questions?

JOHN FRENCH,

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

DIRECT EXAMINATION

By MR. GIRAND:

- Q State your name.
- A Johnny French.
- Q Where do you live?

A Jal, New Mexico.

Q By whom are you employed?

A R. Olsen.

Q How long have you been employed by R. Olsen?

A 23 years.

Q In what capacity are you presently serving?

A Production Superintendent.

Q How long have you been Production Superintendent?

A Since 1947.

Q Mr. French, in the drilling of a well known and designated as the Olsen-Sarkeys Well No. 1, located 1980 feet from the North line and 660 feet from the West line of Section 25, Township 21 South, Range 37 East, were you actively engaged in watching that well during the drilling period?

A Yes, sir.

MR. PORTER: Incidentally, his qualifications are acceptable.

MR. GIRAND: I deliberately did not try to qualify the man as an expert. I'm not trying to put on expert testimony with this witness.

MR. PORTER: I thought that was what you were attempting to do.

MR. GIRAND: No, sir, I wanted the Commission to know that he had some information, but not that he was qualified as an expert.

MR. PORTER: You may proceed,

Q As Production Superintendent you were watching the drilling of this particular well?

A Yes, sir, I had charge of it.

Q .Mr. French, when was the well spudded in?

A. It was spudded in, I believe it was October 8, 1956.

Q Thereafter, on November 14, 1956, did you file a request for dual completion as a gas-gas well?

A Yes, sir.

Q Will you state briefly what occurred in the drilling operations that prompted you, on behalf of Mr. Olsen, to file that request?

A We lost circulation in the San Andres as 4,553 and we were unable to stop it.

Q Was that request granted by the Commission?

A Yes, sir.

Q Was that order No. DG-377, I believe?

A Yes, sir.

Q An administrative order?

A Yes, sir, that is right.

Q After the request was granted, what installation, and how did you complete your hole, what did you do?

A Well, we set a packer at 6,404.

Q Was that the total depth of your well?

A No, sir, the total depth of our well was 7,212.

Q You plugged back to ---

A (Interrupting) We plugged back to 6,390.

Q What size casing did you use?

A 23 pound, 7 inch, J-55.

Q It was set at 6,404 feet?

A 6,404, yes, sir.

Q Then after that what did you do?

A Well, we installed a Baker Series 100 Model D Retainer Production Packer Product Number 4-15D.

Q Is that the instrument shown on the drilling here?

A Yes, sir.

Q And marked Exhibit Number 3?

A Exhibit 3.

Q A copy of this drawing was attached to the application, was it not, Mr. French?

A That is right, yes, sir.

Q is that drawing a reproduction of the advertised drawing of that type of packer made by the Baker people?

A Yes.

Q It is the standard and usual form of equipment used in setting a packer where you have two production strings?

A Yes, sir.

Q After setting the packer, did you test the zone known as the Blinebry?

A Yes, sir.

Q What was the result of that test?

A Well, now, Mr. West has that.

Q He made an additional test?

A We had 100 barrels of oil a day, cut 20 percent mud, and acid water of 35 hundred to 1.

Q At the time you started drilling this well, Mr. French, did you anticipate encountering oil in any section?

A No, sir.

Q What was the well projected for?

A For the Abo.

Q For oil or gas in that zone?

A Oil.

O Were you able to complete in that Abo for oil?

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A No, sir, it was barren.

Q You did find two sections, one between 6,230 and 6,316, and one between 5,640 and 5,830, is that correct?

A That is right, yes, sir.

Q What are the wells in the immediate vicinity producing from, those vertical limits?

A They will produce gas and distillate.

Q On your production, what is the gravity of the fluid that you are producing?

A The gravity on the Blinebry oil is 37 and on the Tubb is 44.

Q What was the gas-oil ratio in the two sections?

A On the Tubb it was a thousand and thirty-five to one, and on the Blinebry, thirty-five hundred to one.

Q What, Mr. French, type of tubing have you in the hole?

A We have two strings of J=55 two-inch up set tubing and the Blinebry string has AT Norse shaved collars.

Q At the time you filed this application, Mr. French, you asked for relief from Order DC-377, did you not?

A Yes, sir.

Q That was a gas-gas dual order, was it?

A That is right.

Q I'll hand you here an original letter and ask you if that was a letter received by R. Olsen in regard to our request to cancel Commission Order DC=377?

A Yes, sir.

MR. GIRAND: We would like to offer this letter.

MR. PORTER: Do you want to enter it as one of the exhibits? MR. GIRAND: Yes, sir.

MR. PORTER: Would you like to offer all the exhibits at one time?

MR. GIRAND: We will offer all at one time, but for proving up certain points, we want to offer this.

MR. PORTER: Is there objection to the Olsen Exhibit No. 57 If not it will be admitted.

Q Mr. French, referring you to Exhibit Number 2, I'll ask you to identify that exhibit.

A This is a contour map made on top of the Drinkard section in that area by Mr. Dewey Watson, a geological engineer that does our geological work.

Q Does that map show the location of the Olsen-Sarkey Number 1 Well?

A Yes, sir.

Q Does it show the other well producing in the area there from the same zones in which this Sarkey Well has been completed?

A It shows the wells are producing from there in the same zone, but, however, he doesn't have them spotted on the map. There is a few he doesn't have spotted on the map producing from the same zone.

Q Referring to --

A (Interrupting) This is a Drinkard contour map.

Q Drinkard contour map?

A Yes, sir.

Q What is the Harper Turner Well?

A Well, it is dually completed in the Blinebry and the Tubb.

Q In Section 26?

A It is dually completed now in the Blinebry and the Tubb section.

Q As gasmgas dual?

A Yes, gas-gas dual.

Q That is a well immediately east of the R. Olsen-Sarkey? A Yes.

A IGS:

Q What about the Green Briar Well in the north?

A It is dually completed.

Q In both zones?

A Yes, sir.

Q Now, the production zone of each of the wells you mentioned there, is it similar or within the tolerance based on the surface elevation of the zones you are producing from the Sarkey Well?

A Yes, sir.

Q Now, the Magnolia Well in the northwest of the southwest of 24, what well, where was it completed?

A It is completed in the Drinkard section.

Q The R. Olsen Oil Company has a well down in the southwest of the southwest of Section 25, does it not?

A Yes, sir.

Q What kind of well is it?

A It is completed dually in the Blinebry and the Drinkard, gas-gas.

Q Gas and gas?

A Yes, sir.

Q Now, at the time of your drilling, or after you lost circulation in the drilling of your well, did you then anticipate that you would encounter gas and gas in the two zones?

A Well, we didn't anticipate that we would encounter the amount that we did.

Q But you did, as a result of that lost circulation, you did file application for dual completion?

A Yes, sir, when we went through the Tubb section we had a good looking show, and we were afraid it would get away from us and we would have no way of controlling it.

Q Basing your enswer on your experience as a Production Superintendent, have you ever produced a well through where there were two zones being produced, two strings of tubing?

A No, not with the two strings of tubing. I have produced with one string and one through the casing.

Q Do you know of any mechanical reason why the well can't be produced through two strings of tubing?

A No, sir.

Q The type of packer that is set in this well, do you feel, based on your experience, that it's capable of retaining the two zones separate, one from the other?

A Yes.

Q Did all of the offset lessees receive notice of this application?

A Yes.

Q That notice was given by registered mail?

A Yes.

Q Mr. French, have you been furnished a copy of the cost incurred by Mr. Olsen in the drilling of this well to date?

A Yes, sir.

Q I hand you here what has been marked Exhibit 7 and ask you, is that the cost statement that was furnished you by your employer?

A Yes, sir. That was furnished me by our Auditing Department.

Q I realize that you had nothing to do with the preparation of this statement, but was the statement made at your request, in regard to this hearing?

A Yes, sir.

Q As far as you know, is the statement true and correct?

A It is.

Q Mr. French, the gas wells that are dually completed in the immediate area of the well of the Olsen-Sarkey Well, what is the gravity of their fluid?

A They run all the way from, I believe it's around 55 to 69.

Q Is that 55 to 69 degrees?

A Yes, with quite a bit of variation.

Q Is that in the Tubb area?

A In the Tubb.

Q Tubb zone?

A Yes, sir.

Q What is the gravity of the fluid you are producing from the Tubb zone?

A 44.

Q What is the gravity of the fluid you are producing from the Blinebry zone?

A 37.

Q What is the gravity of the fluid that the gas wells are producing from the Blinebry zone?

A Well, I believe 65 was about the highest gravity, from 55 to 65.

Q Do you feel, Mr. French, and believe, from the type of installation that you have installed on this well, that it can be produced from both zones without a co-mingling of the fluids?

A Yes, sir.

Q How near is the nearest Tubb oil well to the Olsen-Sarkey Well, if you know?

A Well, now, I believe it's about three miles.

Q Do you know how many wells are producing from the Tubb zone in that area?

A There's four, to my knowledge.

Q Is that including your --

A (Interrupting) Not in the immediate area, in the Tubb Gas Pool.

Q In the Tubb Gas Pool?

A Yes.

Q Have you had occasion to check the production records on those wells?

A I have checked them on three.

Q On three of the wells? Where did you obtain that information?

A From the production reports.

Q. I hand you here a tabulation marked Exhibit Number 8, and

ask you. is that the tabulation that was made on that? A Yes, sir. That was the information made from those reports? 0 A Yes, sir. Q Covering the production of those particular wells? From looking at the production reports, does the record show that the wells are falling off in the total amount of production? A Yes, sir. Q Is that true among all of them? A Well, on these I checked it is. Q I believe the oldest well is the Humble State V-7M, is that correct? A Yes, sir. Q That is located in Section 10, 21, 37? A That is right. Q Mr. French, I hand you here, Exhibit marked Olsen Number 4 and ask you to state for the record what that exhibit is supposed to represent? A This is the Christmas Tree, OCT, dual completion type of Christmas tree. Q The topmost connection, to which string of tubing is it attached? A That is attached to the Tubb section. Q And the lowermost? A It is to the Blinebry section. Q Is that a standard set of connections and the usual type used on a drill completion where you are operating two strings of DEARNLEY - MEIER & ASSOCIATES INCORPORATED GENERAL LAW REPORTERS ALBUQUERQUE - SANTE FE 3-6691 2-2211

tubing?

A Yes, sir.

Q It is customarily used by the oil industry in such operation?

A That is right.

Q You feel it is adequate for the service which it commands in this case?

A That is right.

Q Mr. French, do you believe that at the present time there is sufficient knowledge of the extent and nature of the Tubb Oil Pool to warrant the drilling of future and additional wells?

A No, sir, I don't.

Q Do you feel that additional time should be allowed to see how the production holds up, would be advantageous to all the operators in the area?

A Yes.

Q Would you recommend that to the Commission?

A Yes, sir.

MR. GIRAND: I believe that's all.

MR. PORTER: Does anyone have a question? Mr. Nutter?

CROSS EXAMINATION

By MR. NUTTER:

Q What is the bottom hole pressure for each of the two zones involved?

A We haven't had time to take the bottom hole pressures.

Q Do you have any flowing pressures on the two zones?

A Mr. West has.

MR. PORTER: Then I assume that Mr. West will present that testimony.

MR. GIRAND: Mr. West ran the test, Mr. Nutter, on the well and I will offer him next.

Q I wonder if you would repeat your GOR on the two zones, please?

A Well, our GOR on the Blinebry was 3,500 to 1; on the Tubb section it was 1,035 to 1.

Q Mr. French, will the oil from the two separate zones be measured and stored and sold separately?

A Yes, sir.

Q So that any change in the gravity which might indicate comingling could be detected?

A Yes, we have two separators and two separate tank batteries. MR. NUTTER: Thank you.

MR. PORTER: Mr. Mankin?

By MR. MANKIN:

Q Mr. French, referring again to your testimony and the exhibit which you presented, although it wasn't presented by you, the structure map, contour map on the Tubb formation you indicated that R. Olsen had completed a gas-gas dual in the southwest quarter, southwest quarter of Section 25, directly south of the well in question. Do you not feel that was a Tubb gas and Drinkard oil?

A No. sir, it is a Tubb gas and Blinebry gas.

Q You said Drinkard.

A No, I said the map is contoured on the Drinkard.

Q It is a Tubb gas, Blinebry gas dual?

A Yes.

Q Is that particular well making considerable liquid in both the Tubb and Blinebry?

A Yes.

Q Do you have any idea of their producing ratios?

A Well, no, I don^tt.

Q Would it be in the neighborhood of 100,000, or in the neighborhood of 5,000, or what, do you have any idea?

A No, sir, I really don't have any idea.

Q The reason I'm asking the question is that when you originally drilled this well, you assumed gas production from both zones. I wondered if you had any indication that this might be oil production?

A We completed it in the Drinkard when I was with the Olsen --

Q You are speaking of the well in the southwest southwest on Section 25?

A Yes, when I originally completed it.

Q There has been other oil wells completed just south of the well in the Blinebry, have there not?

A Well, not to my knowledge there hasn't.

Q Isn't the Sinclair Hill in the southeast southeast of 26 a Blinebry oil well?

A Well, I didn't know it if it was. Let's put it that way.

Q Does R, Olsen intend to take bottom hole pressures in both these zones in this well within a very reasonable or short time?

A Yes.

Q Is it equipped so that you can?

A Yes.

Q Can be taken through the tubing?

A Take them through the tubing, yes, sir.

Q On both zones?

A Yes, sir.

Q Do you have any knowledge of the characteristics of this reservoir that would indicate whether this well in question here today might not show increase on both zones so much that they would become gas wells?

A No, sir, I have no knowledge of that.

Q Isn't there a possibility that it might?

A Yes, there is a possibility that it will.

Q In that same respect, would it not be best for the reservoir to keep just one well only in the northwest quarter of Section 25 and not develop further for Tubb and Blinebry until further tests can be conducted on both zones?

A Well, I'm not qualified to answer that question.

Q If, I mean it is characteristic of the reservoir that this may go to gas in both zones. In other words, deplete the small Sinclair accumulation of oil. Is it not possible that waste would occur if you develop the oil?

A Yes.

Q In other words, while you are testing both the Blinebry and the Tubb in this particular well in question here today, you could act enough information to determine whether that well would

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suffice for the entire quarter section, whether it would go to gas or would be for further development in the future? A Yes. MR. PORTER: Do you have any further questions, Mr. Mankin? MR. MANKIN: Not at this time. MR. PORTER: Not from this witness? MR. MANKIN: Is Mr. West going to testify as to the reservoir? MR. WEST: Not as to reservoir. MR. PORTER: Does anyone else have a question of Mr. French? If not the witness may be excused. (Witness excused.) MR. PORTER: We will recess the meeting until 1:30. (Noon recess.) MR. PORTER: The meeting will come to order, please. Mr. Girand, your next witness. MR. GIRAND: Were they through with the examination of Mr. French? MR. PORTER: I believe Mr. French was dismissed before the noon recess. MR. GIRAND: I would like to call Mr. West. JOHN WEST. called as a witness, having been first duly sworn, testified as follows: DIRECT EXAMINATION By MR. GIRAND: Q State your name, please, **DEARNLEY - MEIER & ASSOCIATES**

A John West.

Q Where do you live?

A Hobbs, New Mexico.

Q In what business are you engaged?

A Engineering.

Q Do you operate an engineering concern in Hobbs, New Mexico?

A Yes, sir.

Q How long have you operated that?

A Since 1946.

Q Mr. West, will you briefly state your educational and business experience?

A I graduated from New Mexico University with a BS in Engineering in 1943, and went directly to Military Engineering for the next three years, and after I got out of the Service I came to Hobbs and have been working in the engineering business there ever since.

Q Has your principal business in Hobbs been in connection with making tests for oil and gas well locations?

A Yes, sir.

Q And general line of engineering associated with the oil industry?

A Yes, sir.

MR. GIRAND: Is the Commission satisfied with his qualifications?

MR. PORTER: Yes, sir.

Q Mr. West, .at the request of R. Olsen did you have occasion

to run a packer leakage test on the R. Olsen-Sarkey Well Number 1, located in Section 25, Township 21 South, Range 37 East?

A Yes, sir.

Q Mr. West, I hand you here an instrument that has been identified as Olsen's Exhibit Number 6. I will ask you -- it contains three pages, I will ask you if that report and the accompanying instrument were prepared by you, or under your direction?

A Yes, sir, they were.

Q Will you state to the Commission what the report shows, and how it is illustrated by the graph and chart that accompany the report?

A Do the engineers have a copy of these?

MR. GIRAND: If the Commission please, I am going to blame it on my secretary because you always do. The duplication of those exhibits were not put in my file. I will furnish the Commission and the staff with several copies of this upon my return home. The witness can testify as to what he has prepared or I'll put them on the blackboard where everyone can see.

MR. PORTER: I believe he can do it satisfactorily from where he is.

MR. GIRAND: I do have copies of the actual reporting data.

A When Mr. French said that he would like for me to run a packer leakage test and showed me the well and the head, which he identified as one being the Tubb completion and one the Blinebry, we found out how long the well had been shut in and attached to the tubing in both the Tubb and the Blinebry a two-pin recorder so that we could record the tubing pressure and we let the recorder record a little while and then turned the Tubb to flowing and it flowed for six hours before it was pretty well stabilized and the Blinebry at that time had continued to rise slightly during the time that the Tubb had drawn down. The start of the test the Blinebry pressure was just a little less than 1,400 pounds, and the Tubb pressure was 650 pounds. After the Tubb was flowed, it drew down, at first, to 250 pounds, and then it built back up, and pretty well levelled off at 400 pounds as a fairly stable flowing pressure. After the Tubb was then shut in, it built back up, and at the end of 24 hours from when we first started, it was built back to slightly more than 700 pounds, and the Blinebry had remained, at no place had the Blinebry done any dropping in pressure. It had climbed slightly, to almost 1,450 pounds. Then we started our test. We let it set over night and we started our test again.

We were going to flow the Blinebry and leave the Tubb shut in and during the night we had a slight leak form in our connection, and it was a fairly cold night and the leak caused the tube to the recorder to freeze up, and the pressure for several hours was not recording. So, we cancelled that part of our test and waited 24 hours and started again. This time again flowing the Blinebry and leaving the Tubb shut in, and the Blinebry started off at about 925 or 930 and dropped way down below the 250 and then it head up real quick like for a little while, up a thousand and fifty pounds, and then slowly dropped down until it was pretty well stabilized at just barely more than 250 pounds, then it was shut in and allowed to build up to the end of our 24-hour time on our clock, and the Tubb during this time never did drop down, it went slightly up all the way, and wound up about ten pounds or 15 pounds higher than what it had started to the limits of the accuracy of reading this type of chart. So we had, in reality, had, during the course of the two tests, we had flowed the Tubb and let it draw down while the Blinebry remained constant; we had let them reverse the process and let the Tubb stay constant and draw the Blinebry down; and in neither case did the one that was not producing drop at any time during the time that the one that was producing made it's drop, which would be expected, which to me is pretty conclusive that there is no communication, between the bottom of the tubing from the two different zones.

Q Did your test also show the amount of oil produced during your test period and the gravities of that oil?

A Yes, we gauged our oil for both tests and we computed it on to a daily basis as is required in the form which the Commission has set up.

Q What did the test show in regard to the Tubbs zone?

A The daily production?

Q Yes.

A It produced at the rate of 126.7 barrels of oil per day. Q What was the gas flow?

A The gas flow was at the rate of 131.7 MCF per day.

Q Did you make any gravity test on the oil produced?

A Yes, we did.

Q What was the gravity of the oil produced?

A The gravity of the Tubb was 44.4 API, at 58 degrees on the Fahrenheit scale. I didn't check it back since it was so close to 60.

Q What was the production test on the Blinebry zone?

A The Blinebry flowed 162.66, that's daily, projected to a daily rate.

Q In other words, though your test was for only six and a quarter hours, you calculated it for a daily basis?

A On a daily basis.

Q What was the gravity of that oil?

A 37.1 at 59 degrees.

Q Did you have occasion to check the gas flow rate at the time of that production?

A Yes, that gas flow rate was 569.31 daily, that is MCF on daily for the Blinebry.

Q Then did you determine the gas-oil ratio of the two zones?

A Well, I did, but I don't have it down here.

Q Do you have any notes you can refer to?

A No, some of those engineers have a slide rule.

Q I withdraw the question at this time. In just a moment maybe we can let him have a slide rule.

A Well, it looks as if the Blinebry would be 3490, roughly.

Q Is that cubic feet per barrel of oil?

A Per barrel, right. Now, we'll get the other one. It looks

like it would be about 2400.

Q 2400 MCF or cubic feet per barrel?

A That is the cubic feet per barrel.

Q Mr. West, basing your answers on the tests you made on the Olsen-Sarkey Number 1 Well on January 11th, and again on January 14th, will you state your opinion as to whether or not there is any chance or probable chance of communication between the Tubb zone and the Blinebry zone under the tests made by you at that time?

A No. In my opinion there is very definitely no communication. First, because the pressures had no tendency whatsoever to equalize, that is the first, the point that I base my opinion on mainly, and, secondly, the great difference in the gravity and the great difference in the gas-oil ratio of the two different zones.

Q Then, if communication had occurred, it would have been an easy matter to determine under these tests?

A Well, I think very definitely that our pressure, the fact that our pressure remained constant in one while the other one was six hours pulling down, there was no sign of the two zones trying to equalize. Therefore, definitely no communication.

MR. PORTER: Mr. Nutter, did you wish to make a comment in the calculation?

MR. NUTTER: Yes, in view of what Mr. West stated the GOR was this morning, I run on 1035.

- A You have it there, Warren, did I make an error? MR. NUTTER: I think you said 2400.
- A Yes, I might have miscalculated right there. MR. MANKIN: I think it is approximately a thousand.

A I probably looked at the wrong line when I was putting it in the slide rule here.

MR. MANKIN: 131/126, roughly.

MR. PORTER: It is born out by the figures on your form, which is obvious that it is --

A I got the wrong thing in my slide rule awhile ago.

MR. GIRAND: Can we consider the statement of Mr. West corrected to the proper calculation on the oil-gas ratio in the Tubb zone?

MR. PORTER: Yes.

Q I hand you here an instrument that has been identified as Olsen's Exhibit Number 3. Was that drawing prepared by you, or under your direction?

A Yes, sir.

C From what instrument did you make the drawing?

A From sales catalogs of the packer people.

Q It is a pre-production of their advertised schematic of their production packer?

A That is right.

Q Model, what number there, 4-15-D?

A Model 4-15-D.

Q Is that the type of installation that you were informed was located in the well bore?

A That is right. I did not see this go in, that was what was reported to me was there.

Q In making your test, did you have occasion to see the wellhead connections or Christmas tree?

A Yes.

Q As identified by Olsen's Exhibit Number 4?

A Right.

Q Now, the taller of the two pipes were gauges?

A Right.

Q To which string of tubing was it attached?

A To the Tubb.

Q To the Tubb zone?

A Right.

Q And the shorter to the Blinebry?

A Right. That is the way I take it. Like I said, I'm just taking their word for that.

MR. GIRAND: I believe that's all.

MR. PORTER: Mr. West, one question. Was this test witnessed by a Commission representative?

A Not completely. When this thing first came up I called Mr. Fischer and asked him about the way that we could test it, and how he wanted the test conducted. Well, he outlined it for me, and I asked him, would he like to come down. I believe he was down there two times.

MR. PORTER: During the test?

A During the test.

MR. PORTER: That is all. Anyone else? Mr. Mutter?

CROSS EXAMINATION

By MR. NUTTER:

Q First, I want to tell you, don't feel bad about getting an

error with the slide rule. I have trouble with it all the time.

I notice that you had a variation in flowing pressure for both of the zones, a considerable variation. Do you have any idea what the stabilized flowing pressure would be for each of the zones after this thing had been opened up and flowed for a considerable length of time?

A You will notice toward the end of each one of those there was pretty much of a levelling off. On the Tubb I would say it went about, well, over an hour just right on 400 pounds. Now, the Blinebry was much more erratic in its flow, but the low part of the ups and downs stopped right on about 250 pounds on the Blinebry.

Q So there is considerable difference between the two pressures after they stabilized?

A Yes, sir. There's one very definite peculiar characteristic that you will notice, too, the Tubb, after being open dropped sharply; the Blinebry dropped sharply and then it for some reason reached a higher pressure flowing than it ever had while it was shut in. It headed up and went to a pressure that was higher than it had ever been during the entire test.

MR. NUTTER: Thank you.

MR. PORTER: Mr. Mankin?

By MR. MANKIN:

Q Mr. West, do you have any knowledge of any other flowing tests that have been performed, other than what was on the packer leakage test here? A No. sir, I don't.

Q Would it be your idea that possibly additional testing is necessary to be able to determine what this well will produce and how it should be produced?

A You're getting a little bit out of my --

Q (Interrupting) You are not a reservoir engineer?

A No, sir, I am strictly in the testing business.

Q Then you have no information on reservoir characteristics?

A No, I don't.

MR. MANKIN: That is all.

MR. PORTER: Mr. Utz?

By MR. UTZ:

Q Mr. West, would you say that 1,380 pounds shut-in pressure, which I believe was a 48-hour shut-in pressure on the Blinebry, was a stabilized pressure?

A Well, yes. In other words, to me, my definition of a stabilized pressure might differ from yours slightly, but, in other words, it might continue to gain slightly, but, maybe up to 96 hours, but I think it would be very slight.

Q VEry nearly stabilized?

A Yes, sir.

Q How about the 715 pound pressure on the Tubb, how nearly stabilized do you think that was?

A Well, it only gained about, with the limits of this type of recording instrument, it gained considerably less than 50 pounds in the 24 hour period, so I would say it was close to being stabilized anyway. Q Mr. West, can you tell me what the interval between the bottom of the Blinebry tubing, where the packer is set, what the interval is?

A Not from experience. I am just, I'll have to tell you what it is from information that was handed to me.

Q I agree with you, but I can't make it out here.

A The bottom of the tubing, the packer is set at 9,500 to 9,502, and the tubing is set at 5,869, which would give us a little over 31 feet.

Q 3,100 feet, 5869 and 59 ---

A No, 59 ---

Q 5965?

A No, it's 5,900 to 5,902 is where the packer is. ^The bottom of the tubing is at 5869.

MR. PORTER: That is your Blinebry tubing?

A Yes, sir.

MR. UTZ: That's all.

MR. PORTER: Anyone else have a question of Mr. West? The witness may be excused.

(Witness excused.)

MR. GIRAND: I would like to recall Mr. French.

JOHN FRENCH

recalled as a witness, having been previously duly sworn, testified further as follows:

RE-DIRECT EXAMINATION

By MR. GIRAND:

Q Mr. French, can you explain the increase in the pressure

in the Blinebry zone?

- A Yes, sir.
- Q After the shut-in period?

A Well, you have, the Blinebry has the casing type with the volume chamber; the build-up on the Blinebry in the casing section is 1,500. Your fluid in the tubing in the static head is the reason you den't have as much build-up on the tubing. When the gas let the fluid out of the hole, it let the casing pressure break around for awhile. That is the reason the pressure went up quite awhile. We have 1,700 build-up on the casing on the Blinebry, but the fluid in the hole in the tubing will keep your tubing from building as high as your casing pressure.

MR. GIRAND: No further questions.

MR. PORTER: Anyone else have a question?

RE-CROSS EXAMINATION

By MR. MANKIN:

Q You indicated that this well cost a certain amount, around \$165,000.00, something like that?

A Up to date it has cost \$167,000.00.

Q You have no information on the economics of single complete ion for Blinebry oil or Tubb oil, do you?

A No, sir.

MR. PORTER: Does anyone else have a question? The witness may be excused.

(Witness excused.)

MR. GIRAND: At this time we would like to introduce Exhibits

1 through 8.

MR. PORTER: We believe we have admitted Exhibit No. 5. Exhibits 1, 2, 3, 4, 6, 7 and 8. Without objection they will be admitted. Is that all you have?

MR. GIRAND: I would like to make a short statement.

MR. PORTER: Yes.

MR. GIRAND: So little is known of this Tubb oil in the area, and all of the Tubb production is surrounding this particular well, being now a gas well, the majority of it being completed dually with other gas zones, we find ourselves in this position. that it hardly warrants the drilling of additional wells until we see what the actual picture is going to be. The Tubb oil, for four wells now producing, and they are scattered over two townships and spaced some three to seven or eight miles apart, it should and could develop. While I am not qualified to answer personally, it could develop that this could develop into a gas and oil well or gas and gas well, as originally anticipated, and for the time being, we would like to get the indulgence of the Commission. We think we have established there is no communication between the two zones, and we're willing and we will make any and all tests that the Commission might desire from time to time, and as often as the Commission desires, but we would like to be able to look around awhile before we go out and spend some more money.

We only have 160 acres on the tract, and if it turns to a gas well, then we have all the bore hole we have for that type of production, because that 160 acre allocation would be about the minimum you could afford to drill that type of well on. We are kind of like the boys who went looking for something and found something else, and we were all set up for a different thing, and until the industry and until we know more about what we do have down there, we feel we'll be entitled to complete our dual completion as oiloil under such regulation as the Commission deems necessary, to be sure and protect the Commission and the other operators from the comingling of the two zones. And due to the gravity differential in the oils, it should be easily ascertained should there be any comingling, one being 37 gravity and the other 44, and your pressures being greatly differentiated. That is about the extent of our case.

MR. PORTER: Does anyone else have a statement to make in this case? Any further comments? We will take the case under advisement.

STATE OF NEW MEXICO) : SS. CUUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 23rd day of February, 1957.

My Commission Expires: June 19, 1959

DEARNLEY - MEIER & ASSOCIATES INCORPORATED GENERAL LAW REPORTERS ALBUQUERQUE - SANTE FE 3-6691 2-2211

BEFORE THE

Gil Conservation Commission

SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO.____

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY AND ASSOCIATES

COURT REPORTERS 605 SIMMS BUILDING TELEPHONE 3-6691 ALBUQUERQUE, NEW MEXICO