

BEFORE THE
Oil Conservation Commission
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 801

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY AND ASSOCIATES
COURT REPORTERS
ROOMS 105, 106, 107 EL CORTEZ BUILDING
TELEPHONE 7-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION

Santa Fe, New Mexico
December 16, 1954

IN THE MATTER OF:

Application of Skelly Oil Company for
permission to effect a gas-gas dual completion
of its Baker 'B' Well No. 15, located 1830' FSL
and 2130' FEL of Section 10, Township 22 South,
Range 37 East, for production of gas from both
the Blinbry and Tubb Gas Pools; and for
establishment of a 240-acre non-standard gas
proration unit consisting of SW/4 and W/2 SE/4
of said Section 10.

Case 801

BEFORE:

MR. E. S. (Johnny) WALKER
MR. WILLIAM B. MACEY

TRANSCRIPT OF HEARING

M A X E. C U R R Y,

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

DIRECT EXAMINATION

By: MR. SELINGER:

Q State your name, please.

A Max E. Curry.

Q And you are associated with Skelly Oil Company?

A I am.

Q In what capacity?

A As petroleum engineer.

Q Where are you stationed, Mr. Curry?

A Hobbs, New Mexico.

~~Q Have you heretofore testified before the Commission as a~~

petroleum engineer?

A I have.

Q Are you familiar with the Skelly Oil Company's A. B. Baker lease in Section 10, Township 22 South, Range 37 East?

A I am.

Q Are you in a process of completing the Baker 'B' No. 15 well?

A We are.

Q Is that well going to be a dual completion?

A Yes.

Q To be producing gas?

A That is true, gas from the Tubb and Blinebry formations.

Q I hand you what has been marked as Skelly Exhibit 1, which is the map, will you explain to the Commission very briefly what that is.

A This plat shows nine sections surrounding the section on which Skelly A. B. Baker lease is located. This has a contour in red of the top of the Blinebry Zone and contoured on 20 foot intervals, more or less, to show the general structural pattern of the Blinebry formations in that area.

Q And where is the proposed dual completed well, in the northeast corner of the lease?

A That is correct, it is designated by this -- by No. 15 here.

Q And have you indicated on that exhibit the surrounding gas units in green?

A Yes, these are composed of ^a160 acre unit in this position, an 80 acre, this is in the Tubb and Blinebry, this is an 80 acre unit in the Blinebry, an 80 acre unit to the east in the Tubb

and Blinebry. In the next section, in Section 11 is 160 acre unit of the Tubb and Blinebry.

Q Mr. Curry, very briefly, therefore, all of the acreage in Section 10 is surrounded by presently producing and assigned gas units in either the Tubb or Blinebry or both, is that correct?

A That is correct, they are designated by the green lines.

Q Now is the acreage of the Baker 'B' in Section 10 the only unassigned acreage in Section 10 to gas production at the present time?

A That is correct.

Q I will hand you what has been marked as Exhibit 2, is that a sheet showing the proposed dual completion of the well?

A That is correct. I have some information I might add to that which was not available at the time this was made, just before I left Hobbs, I saw a rush print of the log. I did not have a log available on this well at this time but we found the top of the Blinebry formations as designated by the New Mexico Oil Conservation Commission to be 5430 feet from the derrick floor and the Tubb formation top was found at 5928 feet.

Q Now as Skelly Exhibit 3, has been marked document showing diagramatic sketch of the dual completion, is that correct?

A That is correct.

Q And you have indicated the formations in various colors, have you not?

A Well, the integral parts of the physical make up of the well are in different colors.

Q The Blinebry is the top formation and the Tubbs is the lower formation, is that correct?

A That is correct, this shows the Blinebry completion and then the Tubbs completion here.

Q Well, briefly what you propose to do here is to set the two inch tubing within the seven inch OD casing, is that correct?

A That is correct.

Q Now will such a proposal keep separate the Tubbs and the Blinebry gas production?

A That is correct. This actual separation will be maintained by the Baker model D packer which is used quite frequently in New Mexico for that purpose.

Q Do you know whether a similar method is used in other fields to this date or in other states?

A It is.

Q And you are asking for an exception in addition to the dual completion approval for the assignment of the remaining acreage in Section 10, which is not now assigned for Tubbs or Blinebry gas production?

A That is true, that is the yellow on Exhibit No. 1.

Q I'd like to offer in evidence Skelly Exhibits 1 through 3, both inclusive, and that is all we have.

MR. MACEY: Is there an objection to the introduction of Skelly's Exhibits 1 to 3, in Case 801? If not, they will be introduced in evidence. Are there any questions of the witness?

MR. MACEY: What was the top of the Blinebry on the electric log that I asked you?

A 5430, that is derrick top and the Tubbs, 5928. Those are the markers that were picked for those fields, Bill.

MR. MACEY: Any other questions of the witness? If not,
he may be excused.

(Witness excused.)

MR. MACEY: Take the case under advisement.

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } ss.

I, MARGARET McCOSKEY, 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 December, 1954.


Notary Public-Court Reporter

My commission expires
August 15, 1956.

BEFORE THE
Oil Conservation Commission
SANTA FE, NEW MEXICO
March 16, 1955

IN THE MATTER OF:

CASE NO. 801

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY AND ASSOCIATES
COURT REPORTERS
ROOMS 105, 106, 107 EL CORTEZ BUILDING
TELEPHONE 7-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
March 16, 1955

IN THE MATTER OF:

The application of Skelly Oil Company for permission to dually complete a well, and for approval of a non-standard gas proration unit.

Applicant, in the above-styled cause, seeks an order granting permission to effect a gas-gas dual completion of its Baker 'B' Well No. 15, located 1830 feet from the south line and 2130 feet from the east line of Section 10, Township 22 South, Range 37 East, Lea County, New Mexico, for production of gas from both the Blinebry and Tubb Gas Pools; and for an exception pursuant to Rules 7(a) of Orders R-372-A and R-373-A to permit the establishment of a 240-acre non-standard gas proration unit consisting of SW/4 and W/2 SE/4 of said Section 10.

Case No. 801

In this cause, originally heard by the Commission on December 16, 1954, the Commission issued its Order R-590 which approved the proposed dual completion and ordered Skelly Oil Company to appear and present further testimony and evidence pertaining to the establishment of the 240-acre non-standard proration unit in the Tubb and Blinebry Pools.

BEFORE:

Honorable John F. Simms
Mr. E. S. (Johnny) Walker
Mr. William B. Macey

TRANSCRIPT OF HEARING

MR. MACEY: The next case on the docket is Case 801.

MR. SELINGER: George W. Selinger, representing Skelly Oil Company. We have two witnesses we would like to have sworn.

(Witnesses sworn.)

MR. SELINGER: If the Commission please, the hearing on this application was first heard on December 16, 1954, and on the 25th day of February, we received Order No. R-590 granting permission for the Skelly Oil Company to dually complete its Baker B No. 15, and making no decision as to a non-standard gas unit.

The purpose of this hearing, I presume, this morning, is to hear additional testimony with regard to that phase, that is the non-standard gas unit in the Tubbs and Blinebry Gas Pools.

In order to make the record complete, as Skelly's Exhibit 1, we would like to offer Order No. R-590 as its first Exhibit, No. 1.

(Marked Skelly Oil Company's Exhibit No. 1, for identification.)

B. L. A N D E R S O N ,

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

DIRECT EXAMINATION

BY MR. SELINGER:

Q State your name?

A B. L. Anderson.

Q Are you associated with Skelly Oil Company?

A Yes.

Q In what capacity?

A Geologist.

Q Where are you located, Mr. Anderson?

A Hobbs, New Mexico.

Q Are you familiar in a general way with the Blinebry and Tubbs gas development in addition to other development of both oil and gas pools in Southeastern New Mexico?

A Yes, I am.

Q Are you more particularly familiar with Skelly Oil Company operations in southeast New Mexico?

A That is correct.

Q Are you also particularly familiar with the Baker B Lease and specifically the No. 15 Well?

A Yes, sir.

Q That well is completed on what formation?

A In the Blinebry and Tubb Gas Pools.

Q Was that well specifically drilled for gas production or was it a re-worked, or re-completed salvage of an old hole?

A It was specifically drilled to those formations.

Q Have you had occasion to -- In confining your study to the eight sections diagonally ~~and directly offsetting~~ the section containing the Baker B Lease, insofar as contouring, both as to the Blinebry and as to the Tubb gas formation, have you had occasion to contour?

A Yes, I have.

Q Are they on the board there on the extreme right?

A They are.

MR. SELINGER: Now the first exhibit with respect to contouring on the Blinebry, we will have marked as Skelly's Exhibit 2.

(Marked Skelly Oil Company's Exhibit No. 2, for identification.)

MR. SELINGER: As to the Tubbs, Exhibit 3.

(Marked Skelly Oil Company's Exhibit No. 3, for identification.)

Q Referring to Skelly's Exhibit 2, with respect to the Blinebry, what does that exhibit show?

A Exhibit 2 comprises the nine sections of which the Baker B Lease is centrally located. The contour intervals are shown on the map on top of the Blinebry marker, as established by the Commission. The general features of Exhibit 2 show a large high area in the east central part of the map. Incidentally, this high area is the highest part of the Blinebry structure in the whole township and in the township to the north. Skelly's Baker B Lease is outlined in bright orange on the map, making it readily discernible.

The Blinebry gas wells that have been completed to date are shown with blue gas symbols, they are rather hard to see from this far away. The general structural picture shows this high area, the crest of which is on the very easternmost edge of Skelly's 240-acre Baker B Lease. Then, surrounding that high area are a number of smaller lower highs. The map was contoured on a ten-foot contour interval, the ten-foot contours don't show up from very far away, but the 50-foot contour intervals were colored in heavier so you can see that, the heavy lines being the 50-foot contour intervals. There is only a matter of about 100 feet of dip from the crest of the structure to the extremities of the map. This makes it a generally flat structure. Some, possibly a hundred feet of dip to the mile.

Q Now, on that exhibit, Mr. Anderson, you have shown a green line running from the northeast to the southwest, and a red line running from the north to the south, is that correct?

A That is correct.

Q What does that indicate?

A Those lines running diagonally from the northeast corner

to the southwest corner of the lease, and north and south across the western half of the lease, are cross sections which are our next two exhibits.

MR. SELINGER: Will you go up there and mark that Exhibit Exhibit 4 and the one to the left of that as Exhibit 5?

(Marked Skelly Oil Company's Exhibits Nos. 4 and 5, for identification.)

Q In other words, the green line and the red line on Exhibit 2 are the paths of cross sections, Skelly Exhibits 4 and 5, is that correct?

A That is correct.

Q Now, with respect to Exhibit 3, what is that exhibit?

A Exhibit 3 is a contour map on the top of the Tubbs marker, as established by the Commission. It shows a very profound similarity to the general structure indicated on the Blinebry marker of Exhibit No. 2, and the reason for this remarkable similarity is the fact that the Blinebry interval is very consistent throughout the area indicated on the map. In fact, the highest well indicated on the map is Amerada's No. 3 Baker in the northeast of the southeast of Section 10, and it has a thickness of 490 feet for the Blinebry, and up here in the northwest corner of the map, Shell's No. 1 Reinwold, right here in the northwest corner of the map, has a thickness of 504 feet. So, there is only 14 feet of thickening in the Blinebry interval, from the highest part of the structure to the extremities of the map.

Q When you talk about the map you are referring to Exhibit 2?

A I am referring to Exhibit 2.

This consistent thickness of the Blinebry interval indicates to me that there were uniform conditions of deposition prevailing at the time that the Blinebry formation was deposited. Since the conditions were uniform and widespread over quite an area, as you can see, it resulted in homogeneous beds extending clear across the area from one side to the other. If the beds were homogeneous, we would expect them to have beds of continuous porosity and permeability developed. As you can see from the map, any of you that are acquainted with structural maps, it doesn't look like a structure caused by uplift mountain building movements. It is a structure superimposed on an older structure, and due to sedimentation deposition of beds over an old high.

Q With respect to Exhibit 3, the Tubb, do you have similar explanation to that exhibit as you did with respect to Exhibit 2? Is there a similarity?

A The similarity is in that the structure of the Blinebry follows the structure of the Tubb. I haven't drawn any more maps showing the top of the Drinkard, which is the next lowest zone.

Q Insofar as your Exhibit 3, which is a contour on top of the Tubb, you have that similarity which you have indicated with respect to the Blinebry in Exhibit 2, is that correct?

A That is correct.

Q In both instances the highest point of structure lies just immediately east of the Skelly Baker B Lease, which is outlined in orange in both Exhibits 2 and 3, is that right?

A That is right.

Q Will you explain Exhibit 4 to the Commission?

A Exhibit 4 is a cross section, northeast to southwest across the Baker B Lease. It was chosen in that particular location so that the extremities of the lease could be shown on the section. It was drawn through the wells that it is drawn through, so that it could show the extremities of the lease, the conditions that exist.

This heavy line at the top is the top of the Paddock marker as established by the Commission. The next heavy line is the top of the Blinebry and then the lower heavy line is the top of the Tubbs marker, as indicated in the box at the lefthand side of the Exhibit. The dashed lines in the upper half of the exhibit encompass the vertical limits of the Blinebry gas zone as set out at the present date, and the dashed lines in the lower half of the exhibit set out the vertical limits of the Tubbs gas zone as indicated in the boxes on the righthand side of the map.

Q When you say set out, you mean they are in compliance with the present definitions of the Commission orders as to the vertical limits of the Tubbs and the Blinebry, is that correct?

A Yes, that is correct. They are the Commission's limits as of now.

Q Will you explain the coloring of the blue and red on that exhibit?

A The blue bands across the upper half represent the porous zones in the Blinebry gas interval that can be correlated from one end of the cross section clear across to the other. Similarly, the red bands indicate the porous zones in the Tubbs zone that can be correlated from one end of the section to the other.

Q What is the ~~demarcation~~ on the bottom of that exhibit which has the names of different operators?

A The heavy lines across the bottom with the arrows and the names of the companies listed here, indicate the boundaries of the leases that the section crosses.

Q Will you point out on the map to the Commission the limits of the Baker B Lease that is involved in this application?

A The easternmost limits is at this second, third arrow in from the righthand margin, and the western limit is this first arrow in from the lefthand margin.

Q Does that take in the entire 240 acres of the Baker B Lease?

A Yes, it does.

Q Do you have any additional explanation with respect to Exhibit 3?

A Exhibit 3 was built by using the Commission's Blinebry and Tubbs markers as has been stated, and correlating these other electric logs with those points. The section shows that there are porous zones from one extremity to the other, and it was very easy to correlate these porous zones clear across the whole lease.

Also, the electric log indications on each one of these wells show that the porous zones are of about equal magnitude. That is, they all have about the same amount of porosity in each well. You might notice that here on the righthand side, the two wells shown on the righthand side of the section there is a little thinning of the porous zones in both the Blinebry and Tubbs gas intervals, but it is a very slight thinning of the porous zones over the top of this structure.

Q Generally then, in explanation of that exhibit, there is

an ease in correlating the porous zones across the entire cross section, is that correct?

A That is correct.

Q What explanation do you have with respect to Exhibit 4?

A Exhibit 4 is the north-south cross section as previously mentioned, across the western half of Skelly's Baker B Lease, and it ties in with Exhibit 4. It ties in with Exhibit 4 on Skelly's Baker B Well No. 5 down here in the southeast quarter of the southwest quarter of Section 10. It shows essentially the same thing. The blue bands are the porous zones of the Blinebry gas interval and the red bands at the lower part are the porous zones of the Tubb gas zone. The consistency of the beds are even more pronounced in Exhibit 5 than they are in Exhibit 4. There is no thinning to speak of at all in the western half of the Baker B Lease as shown by those red bands.

Q Well, Mr. Anderson, then, as a result of your study in preparing Exhibits 2, 3, 4 and 5, have you come to any conclusions with respect to the geological interpretation of the Tubb and Blinebry insofar as it effects the Skelly Baker B Lease?

A A Yes, I have.

Q Will you state those conclusions to the Commission?

A First that the formations under question are very uniform throughout the whole arial extent of the Skelly Baker B Lease; second, the degree of porosity seems to be consistent from one extremity of the lease to the other. Therefore, I see no reason why one well shouldn't drain gas in each one of these formations for the whole 240-acre lease.

MR. SELINGER: I believe that is all. We would like to offer in evidence, Skelly's Exhibits 2, 3, 4 and 5 at this time.

MR. MACEY: How about Number 1?

MR. SELINGER: We offered that in evidence before.

MR. MACEY: Any objection to the introduction of these exhibits? If not they will be received. Any questions of the witness?

CROSS EXAMINATION

BY MR. MONTGOMERY:

Q Mr. Anderson, I was wondering, I notice you haven't indicated any porous zone in the interval between the top of the Tubb and the bottom of the Blinebry gas pool. In your opinion, do you believe that there is possibly production in there?

A In this immediate area I do not believe there is any production there.

Q The present limits of the Blinebry and Tubb Pools are probably all right in this particular area?

A In this particular area I believe they are all right.

Q I notice you have a drillstem test in that interval on your Baker B 15?

A That is correct. I put these drillstem tests symbols on the exhibit merely to make it complete, not because the test showed a great deal, but that particular test you have reference to recovered only 60 feet of mud, so it shows that the zone is barren.

MR. MONTGOMERY: Thank you.

MR. MACEY: Anyone else? If not the witness may be excused.

MR. SELINGER: If the Commission please, you have in your file an affidavit, as a matter of fact, two affidavits, but the one I want to introduce now, which we sent to you on February 21st, which is an affidavit by W. F. Bailey, Staff Geologist at Tulsa. We would like to introduce that as Skelly's Exhibit 6.

(Marked Skelly Oil Company's Exhibit No. 6, for identification.)

MR. SELINGER: This is a very brief affidavit, so I thought I would read it for the record. "Comes now W. F. Bailey, Tulsa, Oklahoma, and states upon oath that he is a geologist in the employ of the Skelly Oil Company; that he is familiar with geological facts surrounding Skelly Baker B Lease composed of 240 acres described as the west half of the southeast quarter and the southwest quarter of Section 10, Township 22 South, Range 37 East, Lea County, New Mexico, which lease is within the boundaries of the Tubb and Blinbry Gas Pools as defined by the Commission, and that the entire 240 acres is reasonably productive as evidenced by gas wells surrounding said 240-acre tract, and other available information.

M A X E. C U R R Y ,

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

DIRECT EXAMINATION

By MR. SELINGER:

Q State your name.

A Max E. Curry.

Q You are associated with Skelly Oil Company?

A Yes.

Q In what capacity?

A District Engineer.

Q Where are you located, Mr. Curry?

A Hobbs, New Mexico.

Q Have you heretofore testified before the Commission as an engineer?

A I have.

Q Are you familiar with the Skelly Oil Company operations in Southeast New Mexico, both as to oil and gas?

A I am.

Q Are you familiar with the Skelly Baker B Lease in Township 22 South, Range 37 East?

A I am.

Q Are you likewise familiar with the Skelly Baker B No. 15 Well?

A I am.

Q From what producing horizons is that well producing?

A It is producing from within the limits of the Tubb and Blinebry Gas Pools as designated by the Commission.

Q When you say limits, you mean the geographical limits?

A I mean both the horizontal and vertical limits as set out by the Commission.

Q Was that well a recompleted or reworked well of a salvage hole, or was it drilled specifically to the Tubb and Blinebry gas zones?

A This well was originally projected and completed as a Tubb and Blinebry gas producer.

Q Is that a comparatively recent completion?

A It is.

Q Is there production surrounding this entire 240-acre tract?

A There is, as designated by Mr. Anderson's Exhibit No. 2 and 3.

(Marked Skelly Oil Company's
Exhibit No. 7, for identification.)

Q I will hand you what has been marked as Skelly's Exhibit 7 and ask you to state what that is.

A This Exhibit No. 7 is a portion of the radioactivity logs that were run on Skelly Oil Company's Baker B No. 15 Well. I say a portion, it includes only the zones close to the Tubb and Blinebry gas pool.

Q Does that exhibit show the dual completion of the wells as to both the Tubb and Blinebry gas zones?

A It does.

Q Have you had occasion to prepare an exhibit to show the surrounding proration units, both as to the Tubb and Blinebry pays?

A Yes, I have.

MR. SELINGER: Will you mark that as Exhibit 8?

(Marked Skelly Oil Company's Exhibit
No. 8, for identification.)

Q Will you explain that Exhibit to the Commission?

A Exhibit 8 shows the adjacent sections to Section 10, which contains the Baker B Lease of Skelly Oil Company, and on this exhibit, the dashed lines surrounding the various units here in the Blinebry proration units are indicated, and the solid lines surrounding various units indicated the Tubb proration units

which have been approved by the Commission.

Q Now, Mr. Curry, have you similarly, like Mr. Anderson, used as the basic proposition the eight direct and diagonal offset sections to the section containing the Baker B Lease?

A That is correct.

Q Does that indicate the units in this nine section area?

A It includes all that are on the proration schedule the last date I examined those.

Q I will ask you, is the Skelly Lease that is indicated in the orange outline, surrounded in every direction except the northwest and southwest by proration units?

A Every lease line, each of the four lease lines are bounded by proration units which are presently being drained by producing wells.

Q There are no units of wells to the northwest or to the southwest, are there?

A No, there are not.

Q Similarly there are no units in the blank spaces in the other sections of the nine section area?

A To my knowledge there are not.

Q You have indicated all of those proration units, both as to the Tubb and Blinbry that are on the schedule?

A That is correct.

Q Now, Mr. Curry, you are familiar, are you not, with the Commission's comparatively recent memorandum with respect to a so-called radial influence of a well?

A I am.

MR. SELINGER: I will refer you next to the exhibit which I would like to have you mark as Exhibit 9.

(Marked Skelly Oil Company's Exhibit No. 9, for identification.)

Q Now, under the so-called radial influence memorandum of the Commission, does all of the acreage contained in the Baker B Lease, for which a non-standard gas unit is requested come within the maximum limits of that memorandum?

A Yes, on this exhibit a circle with a radius as set out, at 3,735 feet, as set out in this memorandum has been inscribed, with its center on the Baker B No. 15 Well. The furthestmost point of the Baker B Lease is 3,608 feet which falls within the circle described on this exhibit.

Q Now, Mr. Curry, have you had occasion to work up the statistics with respect to the Blinebry Pool in this nine section area as taken from the latest proration schedule of the Commission on March, in the month of March of this year?

A I have.

(Marked Skelly Oil Company's Exhibit No. 10, for identification.)

Q Does that show all of the assigned acreage and all of the allowable and the overage and the underage for all of the wells in the Blinebry in this nine section area?

A Among other statistics, yes, it includes all of those.

Q Did you similarly make a composition with respect to the Tubb Pool?

A That is correct.

(Marked Skelly Oil Company's Exhibit No. 11, for identification.)

Q Does that show the same information as you showed on the Blinebry?

A It shows similar information, yes.

Q Mr. Curry, have you had occasion to look throughout all of this Commision's orders with respect to the Blinebry and Tubb both as to dual completion and unorthodox non-standard gas units?

A I have.

(Marked Skelly Oil Company's Exhibit No. 12, for identification.)

Q I want to call your attention particularly to several interesting things which may or may not be in effect as of now, but was in effect at the time the particular order was issued. Referring to Exhibit 11 on this D.C, dual completion Order 108, that was the dual completion for Blinebry gas and Blinebry oil, is that correct?

A That is correct.

Q Do you have any knowledge as to whether or not that is the present situation?

A Well, to the best of my knowledge, that situation still exists, yes.

MR. SIMMS: Are you referring to 12 or 11?

MR. SELINGER: Excuse me, I am referring to 12.

Q Does this exhibit also indicate the orders upon which non-standard gas units were issued?

A It does.

Q Does it indicate that there are some Tubbs gas units and some Blinebry gas units in excess of 160 acres?

A It indicates some Tubb units that are in excess of 160 acres.

Q It also indicates from the order it has a Blinebry unit in excess of 160 acres, but do you know whether or not that situation prevails as of now?

A No, I do not.

Q Mr. Curry, the well, the Baker B No. 15 has been given an allowable of 160 acres since the date it became eligible in January of this year, is that right?

A I didn't get you?

Q The Baker B No. 15 was given 160 acre allowable from the middle of January when it was made effective for an allowable for both the Tubb and Blinebry?

A That is correct. I believe the date was January 14th.

Q The applicant hasn't been receiving any credit for the additional 80 acres up to the present time, is that correct?

A That is correct.

Q Are there offset wells completely surrounding the unit which have been given allowables, both as to the Tubb and Blinebry, whichever zone it was eligible for?

A Yes, there are.

Q To the extent that allowables have been granted to the surrounding offset wells, the Baker B Lease has been discriminated against insofar as the 80 acres that it is not receiving credit for is concerned, is that correct?

A That is correct.

Q If any relief is given by the Commission to the applicant, would you recommend that an order to promote an equitable assignment of allowable to the applicant's lease, that the relief be granted from the time the well was eligible for allowable, namely

January 14th?

A I would.

Q Both as to the Tubb and Blinebry pay?

A That is correct.

Q Mr. Curry, as an engineer, is there any doubt in your mind that the well will drain both the Tubb and the Blinebry from its present location throughout the entire unit of 240 acres?

A No, there is no doubt in my mind based upon Mr. Anderson's interpretation of the geological features in this particular area. It is generally considered that beds which have been laid down as Mr. Anderson indicated, homogeneous in nature, as to thickness and porosity, are generally assumed to be comparable in permeability as well as the other characteristics of these beds.

Q Now, referring to your Exhibit 10, which shows the pro-ration units that exhibit indicates the location of the well on the unit, does it not?

A I believe you are referring to 9.

Q Yes, Skelly's Exhibit 9.

A Yes, this exhibit shows that the No. 15 Well is 2,130 feet from the section line, 810 feet from the east lease line and 1,830 feet from the south line of the section and the lease.

Q Mr. Curry, that well was located at that point in an effort to comply with the Commission's memorandum and orders in the assignment of acreage on 160 acre basis, and 320, in which they stated that the nearest line for 160 acres should be 660 and the nearest line for 320 acres should be 990, is that correct?

A That is correct, it is proportionately spaced for the 240 acres along those lines.

Q So, the distance of 810 feet is proportionately in line with 660, 160 acres, and 990, 320 acre basis?

A That is correct.

Q Mr. Curry, there are other wells on the Baker B Lease, other than the No. 15 Well, are there not?

A Yes, on each of these Exhibits 2, 3, 8 and 9, only the wells that have penetrated the sections under question, or the producing horizons have been shown on these exhibits.

Q In addition to those wells, there are other shallower wells likewise on that lease?

A That is right.

(Marked Skelly Oil Company's Exhibit No. 13, for identification.)

Q Now, I hand you what has been marked as Exhibit 13, is that the schedule of all the oil wells on the Baker B Lease, regardless of its pay formation?

A That is correct.

Q That exhibit indicates the particular oil wells as to their pay, they group them in pay, is that correct?

A That is correct.

Q Will you explain to the Commission why you would be unable to rework, recomplete in a satisfactory manner any of the other wells on the extreme west 80 acres, if the Commission only assigns a maximum of 160 acres to this lease, to the particular well?

A Yes, there are three shallower wells, Wells No. 1, 2 and 3, now producing from the Penrose-Skelly Field. These wells, of course, do not penetrate these horizons and would have to be deepened. Outside of the fact that one of them is pumping, the mechanical

equipment of these wells is not such that the wells can be deepened and equipped in a manner in which we would prefer, and be acceptable to the Commission.

Q Are any of Wells 1, 2 and 3 part of a water injection program approved by this Commission, at the present time?

A Skelly Oil Company is presently engaged in a pilot water flood project with other operators in the Penrose-Skelly Field. At such time that this pilot project might indicate favorable results of a water flood project, these wells would be definitely important to that project. The Drinkard producing wells No. 6, 7, 8, 9 and 11 are all producing a greater amount of oil than could be abandoned under any economical aspect of operation of this lease.

Q Let me ask you this, if the Commission assigned a maximum of 160 acres, it would necessarily have to be the east 160 acres of the 240-acre tract, is that correct?

A Well, I would assume it would have to be if the unit were essentially in the shape of a rectangle.

Q Wells 1 and 3 are in the west 80 acres, is that correct?

A That is correct.

Q So that Well No. 2 would be eliminated from any consideration, it being on the 160 acres to the east?

A Well No. 2 is producing also from the Eumont Gas Pool.

Q Is that part of the water pilot program?

A No, it is not.

Q Wells 7, 8 and 11 are also producing from the Drinkard on the 160 acres?

A Just a moment, I said a Eumont Gas Pool. It is producing

from one of the shallow gas pools, it probably would be the Langmat Gas Pool.

Q Wells 7, 8 and 11 are likewise producing from the Drinkard on this 160 acres which is the east portion of the 240-acre tract?

A That is correct.

Q We can eliminate those three wells. Wells 4, 5, 10 and 12 are likewise producing on the 160 acres which is the eastern portion of the 240-acre tract?

A That is correct.

Q Well No. 14 is producing from the Brunson. It is in the west 80 acres of the 240-acre tract?

A It is.

Q Will you explain to the Commission why you feel the reworking or the recompleting, in the light of your present experience, of old salvage holes for gas production, both as to the Tubbs and Blinebry, is not as satisfactory as drilling a specific particular well to those pays?

A I think that would probably be best indicated by the fact that to my knowledge, there are only two wells that have been projected originally to these producing horizons which would be our Baker B 15 Well and Shell's No. 5 Long. Both of these wells have an extremely high potential when compared with the other wells within this nine section area, or any other part of the field.

Q What is the openflow potential of the Baker B 15, as to the Tubbs and the Blinebry pay?

A The absolute openflow?

Q Isn't it on one of the exhibits up there?

A It is shown on Exhibit 4.

Q Read it off.

A In the lower, just below the log tracing of the Baker B 15 Well, this exhibit shows that the absolute openflow potential of the Blinebry zone was 18,300,000 cubic feet per day with 37.1 barrels of distillate recovery per million cubic feet, and that gravity of the distillate was around 72.2 degrees API. The Tubbs zone calculated an absolute openflow potential of 25,000,000 cubic feet. The distillate recovery in that zone was 42.2 barrels of distillate, and 39.7 degrees of API gravity distillate. These high potentials will very favorably compare to the more or less salvage operations of the other wells completed in this area. Most of these wells have potentials something like nothing in excess of 6,000,000 in either the producing zones.

Q As a matter of fact, most of them are marginal wells unable to make their assigned allowable?

A Quite a few of them are.

Q For that reason you have come to the conclusion that it would be inadvisable and impractical from the conditions that you find them existing on the Baker B Lease, to attempt to rework or recomplate a well on the west 80 acres where there is an old hole now?

A Yes, I do. Probably these completions indicate that not only our initial potential will be much greater, but it is conceivable that the ultimate recovery will be increased also, due to the ability of controlling your treatments to a greater degree.

Q In other words, you can have more successful completions in drilling a well specifically to these two pays rather than a

reconditioned or a reworking job.

A That has been our conclusions.

Q In the event the Commission does not assign the remaining 80 acres to this well, to build it up to a 240-acre unit, there is no other place for this 80 acres to go home to roost?

A There can be no unitization that I can see that would be acceptable to the Commission and any other method of exploiting the reserves under this acreage would necessarily entail either drilling a new well or recompleting one of the old wells.

Q Now that you have found it impractical to recomplete one of the old holes, do you think that it is advisable to drill an entirely new well to the 80 acres, considering the cost involved? You might tell the Commission what the cost of a well is.

A Well, the best figure I have on this cost is something like \$120,000.00, for it would vary between \$100,000.00 and \$120,000.00 for the type of completion we have made on out Baker B 15 Well.

Q That is to make a dual completion to both horizons?

A That is right.

Q Do you feel that the drilling of such a well is an unnecessary economic wasteful well to drain the resources under that 240-acre tract?

A I do, yes.

Q Do you believe that the recovery from this well will be as equal to the recovery of any additional wells that may have to be drilled on 240 acres, if the Commission denies this application?

A I believe that any additional recovery that might be enjoyed by recompleting one of these wells, or drilling another

well would be negligible.

Q Is your answer applicable to both the gas and the fluid or distillate?

A That is correct.

MR. SELINGER: I believe that is all we have of this witness. We would like to offer into evidence, Skelly's Exhibits 7 through 13, both inclusive.

MR. MACEY: Without objection they will be received. Any questions of the witness?

MR. REIDER: The Roman Elliott B 13 Carr is an 80 acre unit allocation. To the best of my knowledge, at the present time there is no unit in the Blinebry Pool in excess of 160 acres.

MR. SELINGER: Well, Mr. Reider, all that I can say is that the Order C-108 will have to speak for itself. The Commission granted that 320. That will be for the Commission and the Staff to harmonize the issuance of the order.

MR. MACEY: How could the Commission possibly approve a proration unit on a dual completion?

MR. SELINGER: Sir?

MR. MACEY: How could they possibly approve a proration unit on a dual completion case. You said it was a DC Order. That is a dual completion.

MR. SELINGER: That is on the Blinebry oil and gas. The order he is referring to is Order R-545 in Case 782. How the Commission issued the order on a 320-acre basis and assigned it

now a 160 acres, I don't know, that is up to the Commission to harmonize the issuance of the order and its administration. That is the order. It stands for what it is worth. It is Order 545.

MR. MACEY: That only applies to the Tubb.

MR. SELINGER: That is the Ohio Wortman No. 9. We understand that applies to Blinebry and Order 519 in Case 747 applies to the Tubb.

MR. MACEY: What was the last one, Case 747?

MR. SELINGER: Case 747, Order 519.

MR. MACEY: That applies to the Tubb and Trinity production. How do you reconcile that, in that you said that we allowed a pro-ration unit in excess of the 160 acres in the Blinebry?

MR. SELINGER: If the Order 545 does not apply to the Blinebry -- I stand corrected.

MR. REIDER: I believe you were using R-520 with relation to your unit allocation. The order was in effect at the time this well was drilled. Well, it was general statewide, Rule 104-B. Your well is located correctly, but neither order was applicable at that time. It didn't state that the well located in a certain position was entitled to so much acreage, nor was it inferred.

MR. SELINGER: You came out with a memorandum saying that in assigning 160 acres, the well on the shortest distance must be 660. For 320 the well must be 990. On 240 you can calculate that the 810 is right comparatively between 160 and 320.

MR. MACEY: What he is trying to point out is that what you are quoting is a rule for an entirely different pool, the Eumont.

MR. SELINGER: That may be, but that the Blinebry and Tubb came under the general statewide at the time of inception --

MR. MACEY: Well, I don't agree with you. Order R-372-A applied to the Blinebry then and applies now.

MR. SELINGER: Order 372 came later. We are talking about prior to 372, the prior order was 356 and prior to that was 264. Your 264 created the Blinebry and Tubb units, your pools. Your Order 356 gave you standby gas pools and gave 640 acres to all gas pools regardless. Yes, Mr. Reider?

MR. REIDER: Exception to 640, it created a standard unit of 160 acres.

MR. SELINGER: 346 gave 320, and we are going to put it in evidence right here.

MR. MACEY: You can put it in evidence, but I want to point out to you that Order 372-A was in effect when you drilled the well.

MR. SELINGER: Rule 8 of Order 356 provides for 640-acre maximum units.

MR. REIDER: Yes, it says as maximum not more than 640 acres.

MR. SELINGER: That is all we are talking about. We don't want to exceed the 640. It created standard 160, and gave the operators the option of assigning 640 acres.

MR. REIDER: I don't know why we are quibbling about words. You can assign 640 if you desire.

MR. SELINGER: You referred to the order, this well was spudded on the day, or the day before the Order 372-A that you

talked about, which is 160 acres. 372 still continued your 356 order of 640-acre maximum. Your 372-a, which was issued on November 10, 1953 provided for your 160 acres and this well was spudded before that date or on that date.

MR. MACEY: It was spudded in 1954, last of October, November.

Q (By MR. SELINGER) Was it spudded in November?

A November 11th.

MR. MACEY: Any questions of the witness? If not the witness may be excused.

(Witness excused.)

MR. SELINGER: Exhibit 14, we would like to offer in evidence an affidavit which is very brief and I will read it. "Comes now B. W. Ratliff, who states that he is a petroleum engineer in the employ of Skelly Oil Company; that he is familiar with the Baker B Lease containing 240 acres and described as the west half southeast quarter and the southwest quarter of Section 10, Township 22 South, Range 37 East, Lea County, New Mexico, which lease is within the boundaries of the Tubbs and Blinbry Gas Pools as defined by the Oil Conservation Commission, and that the location of its No. 15 Well, located 1930 feet from the south line and 2130 feet from the east line of the section will enable said well to adequately, economically and efficiently drain said 240 acres as a unit assigned to said well."

MR. MACEY: Is there objection to the offering of this exhibit in evidence? If not it will be received.

MR. SELINGER: Applicant rests.

MR. MACEY: Anyone have anything further?

MR. STANLEY: I would like to make a statement. During this testimony that has been entered into the Blinebry case, both by the Gulf Oil Corporation and myself, if I remember correctly the case was held in Hobbs during the month of October, 1954. If I remember the case correctly, it required considerable work by myself after the usual quitting time of five o'clock, which may be unusual for a State employee. However, I would like to bring about one very important point in this case.

The testimony has proved that the Skelly Oil Company's Baker B 15 enjoys the unique advantage of being located on top of the Blinebry structure. I feel reasonably sure that the entire vertical limits, as set up by the Commission in the Blinebry Pool and in this well are entirely productive of gas. Nevertheless, I would recommend to this Commission that we proceed with caution in the granting of 240-acre units, or units in excess of 160 acres down structure, due to the fact that there was considerable oil production, or considerable oil being produced at the present time under the guise of distillate.

MR. MACEY: Anyone else?

MR. SELINGER: I want to say this to the Commission. In the first place every order that this Commission issues must of necessity by law provide for a means of exception. Secondly, every exception should stand on its own as to its own merits. We do not wish to assume the entire burden of the Blinebry-Tubbs Rules and Regulations as to what is proper and what is not. If you will note, all the testimony and exhibits with the exception of one, is confined to a nine section area, which encompasses a section

containing this lease, and the diagonal and direct offsets. We did not go outside the scope of that particular area. We felt that our testimony should be confined to the merits of our own particular case.

Secondly, the matter that Mr. Stanley refers to at the Hobbs hearing, at which I was present, the Gulf presented what was in our opinion, very conclusive evidence that this is primarily both the Tubbs and the Blinebry predominantly and primarily a gas reservoir. They proved, beyond any single shadow of a doubt, that the oil production, so-called Blinebry oil production, consisted of less than one percent of the reserves of the entire Blinebry structure; that of twenty-seven or twenty-eight thousand acres of gas, only 600 acres were to be assigned to the Blinebry Oil Pool. Further than that we are talking about mere pennies when you talk about the Blinebry Oil Pool. Why? Because you have got 15 wells in the Blinebry Oil Pool. What is their average, it is less than seven barrels a day. Are we going to let the tail wag the dog in this case?

We are talking about an exception to the Blinebry gas pool. We are talking about an exception to the Tubb gas pool. We are talking about those two gas pools. We are not talking about the oil. The hearing on October 20th at Hobbs showed this Commission the relative merit between the oil production and the gas production and overwhelmingly the odds were that this should be considered as a gas pool. If you attempt to adjust the rights and equities of the operators in the gas phase, as to what might happen to the oil, you are certainly going to have a condition which is worse than we have now, that operators in both those gas pools don't

know whether they are coming or going.

I just want to point out that when he refers to the oil he is talking about a minute part of the reserves of that huge Blinebry and huge Tubb structure, the relative merits between 28,000 acres and 600 acres certainly overwhelmingly indicates that both those zones, those structures are clearly predominantly gas and should be treated as such, and should be handled by the Commission in its Rules and Regulations as such.

MR. STANLEY: I would like to make a statement. I do not object to the Skelly Oil Company having a 240-acre unit, for the simple reason that I feel that it is entirely productive of gas; that you enjoy the unique feature of being on top of the structure; that you do not produce any dark oils; that you will drain the entire 240 acres out of that one well.

MR. SELINGER: Thank you, Mr. Stanley.

MR. STANLEY: Nevertheless, I think that the testimony has shown that there is a difference of opinion, by definition of what constitutes condensate and what constitutes oil. My figures show in that original case, I believe approximately that there is a greater amount of oil to be recovered in that reservoir than the minute amount, Mr. Selinger, that you stated, but that is a difference of opinion.

MR. SELINGER: Argue that with Gulf, that is what they stated.

MR. MACEY: Anyone else? If not we will take the case under advisement.

