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

IN THE MATTER OF:

CASE NO. 1062

TRANSCRIPT OF PROCEEDINGS

BEFORE THE OIL CONSERVATION COMMISSION Hobbs, New Mexico

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Application of Sinclair Oil and Gas Company for an order approving a dual completion to produce gas from the Yates, Seven Rivers and upper Queen formations of the Eumont Gas Pool and to produce oil from the lower Queen formation of the Eumont Gas Pool in compliance with Rule 112 (a) of the New Mexico Oil Conservation Commission Statewide Rules and Regulations and for an order granting an exception to Rule 5 (a) of the Special Rules and Regulations for the Eumont Gas Pool as set forth in Order R-520 in establishment of an 80 acre non-standard gas proration unit.

Applicant, in the above-styled cause, seeks an order granting them permission to dually complete their Ida White No. 2 Well to produce gas from the Yates, Seven Rivers and upper Queen formations of the Eumont Gas Pool and oil from the lower Queen formation of the Eumont Gas Pool: said well being located 1650 feet from the South line and 2310 feet from the East line of Section 35, Township 20 South, Range 36 East, Lea County, New Mexico, and in addition applicant seeks approval of an 80 acre non-standard gas proration unit consisting of the N/2 SE/4 of Section 35, Township 20 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico; said 80 acres to be dedicated to applicant's Ida White No. 2 Well.

CASE NO. 1062

BEFORE:

WARREN W. MANKIN, Examiner

TRANSCRIPT OF HEARING

EXAMINER MANKIN: We will proceed now with Case No. 1062, the application of Sinclair Oil and Gas Company for an order approving a dual completion to produce gas from the Yates Seven Rivers and upper Queen of the Eumont Gas Pool and to produce oil from the lower Queen formation of the Eumont Gas Pool and also for an 80-acre non-standard proration unit.

WEBB: My name is Layton Webb, an attorney with Sinclair. The present address is Petroleum Life Building, Midland, Texas. I have one witness today, Mr. R. M. Anderson, and ask him to be sworn.

R. M. ANDERSON

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

DIRECT EXAMINATION

By Mr. Webb:

- Q. Mr. Anderson, are you a graduate from a credited engineering school?
 - A. I am.
 - Q. And what school is that?
 - A. Carnegie Institute of Technology, Pittsburg, Penn.
 - Q. And by whom are you employed?

- A. Sinclair Oil and Gas Company.
- Q. And in what position are you employed?
- A. Petroleum Engineer.
- Q. And what has been your experience in the West

 Texas New Mexico oil field with regard to petroleum engineering?
- A. I worked both in the field and in the office for the last eight years in a petroleum engineering capacity and more recently have been particularly interested in proration work in New Mexico.

MANKIN: His qualifications are acceptable.

- Q. Mr. Anderson, I hand you what has been marked applicant's Exhibit No. 1, and ask you to identify this Exhibit, if you will please, sir.
- A. This is an ownership map, showing the oil and gas leases in the vicinity of Sinclair's Ida White lease, which is located in Section 35, Township 20 South, Range 36 East. On this ownership map I have indicated the proration units currently in effect in the Eumont Gas Pool as taken from the April 1956 gas proration schedule.
- Q. Now is the lease in question, Sinclair's Ida White lease, is it marked colored entirely in red as contrasted to -- encircled in red on this ownership plat?
 - A. Yes, sir.
- Q. Mr. Anderson, the well in question here, the Ida White Well No. 2, do you have the completion data on that well?

- A. Yes, sir. The No. 2 Well was completed March 28th, 1955. Drilled to a T.D. 3,900 feet. 7" casing was set at 3,899 feet. The 7" casing was perforated in the Queen formation from 3,858 to 3,880 feet.
- Q. And what is the location of that well as shown on your ownership plat?
- A. The well is located 1650 feet from the South line and 2310 feet from the East line of Section 35, Township 20 south, Range 36 East, Lea County, New Mexico.
- Q. And the size of the subject proration unit sought to be established at this hearing is shown as what on your plat?
 - A. It is eighty acres.
 - Q. Would you identify the legal description?
- A. Yes. It is the 80 acres in the N/2 SE/4 of that section.
- Q. Now, does Sinclair have presently producing on this particular lease, any gas wells, that's any wells classified as gas wells and being produced as such?
 - A. No, sir.
- Q. Actually how many wells are presently located on the lease at this time?
- A. We have two wells on the lease that are presently producing.
- Q. And the other well being the Ida White No. 1 Well, is that correct?
 - A. That is correct.

- Q. When was that well completed?
- A. The Ida White No. 1 well was completed October 6, 1937 as an oil well in the Eunice-Monument Oil Pool. It was reclassified September 1, 1955 as an oil well in the Eumont Gas Pool. The No. 2 well was drilled and is classified as an oil well in the Eumont Gas Pool.
- Q. Within the vertical and horizontal limits of the Eumont Gas Pool?
- A. Yes, sir. The No. 1 well is apparently it was drilled at such a time that electric logs were not run or commonly run at that time and were not run on that well and the well was completed when an oil productive zone was encountered, which was the common practice at that time. And it is believed from correlation in the vicinity and I believe that is the basis of the Commission's action in reclassifying the well. It is believed that a portion of the Queen formation as well as the Grayburg formation is open in the No. 1 well. So it is in effect producing both from the - on the border - both from the Queen formation and the Grayburg formation by virtue of this completion in 1937.
- Q. That's the No. 1 well, not the well subject of this hearing?
 - A. That is correct.
- Q. Have you made an investigation or do you know whether the leasehold interest and the royalty interests are common under this 80 acre tract which is the proposed non-standard unit?

- A. Yes, sir, both the royalty and leasehold interests are common under this proposed 80-acre unit.
- Q. Based upon your knowledge and your investigation and your work in this area in the Eumont Gas Pool area and the Eunice-Monument Oil Pool area, do you believe that the entire 80 acres may be reasonably presumed to be productive of gas?
- A. Yes, sir, I believe that it may reasonably be presumed to be productive of gas, the entire eighty acres.
- Q. Now, you mentioned awhile ago on your ownership plat that you had prepared a more or less schedule of the surrounding gas units surrounding this subject proration unit here as compared with the location of the well on this tract. Comparing the location of the well on this tract with the location of other oil wells, some of which have been dually completed in there, would you say this is reasonably in line with what has been done in other proration units in this area?
- A. Judging from my general knowledge of the area and judging from this plat, on which I did not spot the individual wells as shown on the plat, but to the best of my knowledge and belief this is an up to date, accurate ownership map of the area and furnished by the contract map contracting company and I believe that the wells are accurately spotted and if that is true why then our tract is certainly in line with the general practice in the area.

- Q. Now, do you believe and it is your opinion that the granting of this proration unit and the dual completion, which we will discuss in a few minutes, would protect correlative rights in the common reservoir in the Eumont Gas Pool?
 - A. Yes, sir, I believe that it would.
- Q. You have attached to your application --would you like to take this in two parts and have the questioning on the proration unit or go on through and take up the dual completion, or say your proposed dual completion procedure, we can do it either way.

MANKIN: Either way that you desire to do it. It might be best to segregate them as much as possible.

Q. I will state then, that we have more or less closed our evidence as to the proration unit and perhaps you would like to ask some questions prior to the time we get into the dual completion.

MANKIN: Yes I would. In regard to the proration unit, Mr. Anderson are you aware that there is a pending administrative application before the Commission for the Bay Petroleum, I meant for the Tennessee Ntl. Gas Company, which has the NW/4 of Section 35 adjoining your lease, that there Well No. 2 is pending a dual completion and a 160-acre non-standard unit. Have you been so informed as an offset operator?

A. That matter has not come across my desk. I am not - I didn't realize that, no, sir.

MANKIN: In which the applicant, Tennessee Gas Transmission Company, attempts to dually complete a presently - a present

Eumont lower Queen oil well as a - also with the upper Queen gas well and to form a 160-acre unit out of the NW/4. You are not aware of that application?

A. No, sir.

MANKIN: As an offset operator, I believe you were furnished a copy of that application, I just wondered if you were aware of it.

A. No, sir. It is quite possible that we were furnished with a copy of that and it is my duty to check all such applications as they come in. However, in the midst of changing our office from Fort Worth to Midland, that could possibly be where I missed seeing it. I have not seen that application and I have no knowledge that it has been made.

MANKIN: I just wanted to bring your plat up to date that such an application is pending for a non-standard unit of the NW/4 of Section 35 and also for dual completion of their No. 2 Well, the Bay No. 2, which is a diagonal offset to the well in question here today. I have another question. If that particular application is granted for a 160-acre non-standard unit, that will leave Amerada which has the N/2 SW/4 completely circled with other units without gas production. Is that correct?

A. That is correct.

MANKIN: Is that not common royalty ownership, that is the same royalty ownership as - - under the Amerada lease as under the Sinclair lease?

- A. I do not know, but my ownership map shows it to be.

 MANKIN: Has any attempts been made to form a unit with

 Amerada?
 - A. No, sir.
 - Q. Then you are going on your own 80 acres and --
- I believe that I can say this that we have negotiated Α. with Amerada on several units in this vicinity and have been able to come to terms with them and we would be willing to form a 160acre unit with them comprising the N/2 of the S/2 of that Section Under the same terms and conditions that are prevelant in the area and as we have made with both Amerada and other companies. Now, I don't know for sure, I don't believe we have in existence such a unit with Amerada but I know we have negotiated with them and agreed with them and it is a matter of time now in getting all the papers signed up to form such a unit. So I know that we can get together with Amerada and should Amerada be interested in assigning their acreage to our well in forming one of these agreements we would certainly look favorably toward it and in a very cooperative spirit. However, we felt that we should possibly go in and get our well dualled and make sure that we are going to have a gas well and at the same time combine with the application for a dual with our application for a non-standard unit which is common practice and so we would get our well recompleted with the 80-acre unit and then if we had a good enough well there why I am sure that Amerada would approach us and request that they be allowed to come in.

MANKIN: I have another question. In your application dated March 27, 1956, you indicated that your present well there is completed 3758 to 3880 and your proposed diagrammatic sketch reflects that same information, however I noticed your testimony here this morning indicated that it was 3858 to 3880. In other words there was a 100 foot variance. Which is correct?

A. 3758 to 3880 is the correct interval.

MANKIN: As presently producing?

A. As presently producing in the well that we propose to dual, yes.

MANKIN: Then your application and your accompanying diagrammatic sketch was correct?

A. Yes, sir.

MANKIN: Your testimony this morning however indicated that -- I believe that a question was asked of you of the perforation and you indicated 3858 to 3880. Do you wish to have that testimony corrected?

A. Yes, sir. I wish to correct that, I had it written down in error here. The actual perforations are 3758 to 3880.

MANKIN: That's all the questions that I have right now, in regard to the unit. Is there further questions of the witness in regard to the non-standard proration unit before preceding with the dual completion testimony? If not, proceed.

- Q. Mr. Anderson, you have attached to your application, dated March 27, 1956, a sketch of the proposed dual completion procedure on the Ida White Well No. 2. Would you care to explain that to the Commission and explain your sketch? I am sorry I do not have any other copies of it here.
- A. Well, I believe we are proposing a routine dual completion such as is commonly done in the area. Mechanically, there is no unusual features to it. We intend to set a production packer above the existing lower Queen perforations and perforate the Yates Seven Rivers and upper Queen above that production packer. We intend to produce the oil from the lower Queen through the tubing and the gas from the upper Queen, Yates and Seven Rivers formations through the annulus. Now, as to the exact perforations that we propose to make we have not definitely made up our mind on that as yet. However we do propose to perforate somewhere between the intervals 3206 to 3720.
- Q. I have one question. Did you actually test the Seven
 Rivers and the upper Queen and Yates in this well or are you basing
 your information on other wells producing from those - that particular
 horizon in the area?
- A. No test was made in drilling through those formations. We do not have any drill stem test information at all on this particular well. We did run a log, radio-active log on the well and several specific zones are indicated on that log as being possibly gas productive. We intend in the actual dualling of the well and the recompleting of the well as a dual we intend to selectively perforate and test the different zones that are indicated productive

and base our final completion and our final perforated intervals on that work in the field. We do have recommended zones however at this time, but we don't wish to say definitely if we will use them all.

Q. I see. And again in connection with your dual completion as well as with the formation of the non-standard proration unit, do you believe that this will protect correlative rights in the common reservoir and tend to promote the prevention of waste?

A. I do.

MANKIN: Mr. Anderson, I noticed that your diagrammatic sketch indicated the top of the cement behind the 7" to be at 2510. Is that by an actual temperature survey?

A. Yes, sir.

MANKIN: Is the temperature survey available and also a copy of the log to the Commission?

A. I don't have the---

MANKIN: Could it be made available?

A. Yes, sir. We could furnish you with copies. I wish to take a minute on that temperature survey—to check that. Yes, on the "Miscellaneous Report on Wells" we reported on April 6, 1955 that we ran a temperature survey which indicated the top of the cement back 7" casing at 2510 from the surface, so I am sure that the temperature survey was right, we will furnish you with the copies.

MANKIN: Could that be made available to the Commission separately, a copy of the temperature survey and a copy of the radio-active log.

A. Yes, sir.

MANKIN: I notice from the sketch and from the testimony which you have given as to the existing Queen perforations which are producing oil and proposed gas perforations that there is only 38 feet between the two zones. Do you feel that you can get proper separation without having communication, with only 38 feet between the two zones?

A. I am very doubtful that it can be done and the proposed Eumont perforation--perforated interval as shown on that sketch was to merely be all inclusive of the--of all of the possible zones that we might have.

MANKIN: Don't you feel that there might be a question of communication with only 38 feet between them and if you insist upon perforations being that close together that it certainly would be within reason to have the pipe perforated again and a squeeze job to insure that there was adequate separation to mean adequate cement bond back of the pipe to be sure that there is no communication.

A. I would certainly think that that would be--if it became necessary in testing these other zones and they were found to be barren or non-productive commercially and we were forced to go that low to attempt to get gas production, I certainly

would think that it would be necessary to perforate and squeeze immediately below the vicinity of 3720 to make sure and to have a dry test to make sure that we have adequate shut-off from that lower zone.

MANKIN: Then Sinclair would not be adverse to performing the necessary squeeze job if that was necessary as a prudent operator to be certain that there was not communication between the two zones if this application were approved.

A. That is correct. I might state further, that structurally our No. 1 Well is in a more favorable position for gas production.

It is a little higher on structure and is in a more favorable position. However, we hesitated to, when we had a well with new casing on the lease, we hesitated to attempt to dually complete a twenty year old well in that area and take a chance on having trouble such as a blow-out at the casing depth.

MANKIN: The particular well in this application is approximately one year old and therefore it would be in a much better position, the equipment in the well, for properly dually completing.

- A. Yes, sir.
- Q. Actually you do have 7" casing in the old well, is that right?
 - A. Yes, sir, 7" casing.

MANKIN: And the well in question also has 7" casing. Is there question of the witness in this case, Mr. Folmar?

FOLMAR: Mr. Anderson, you are familiar with the Commission's delineation of the Eumont Gas Pool in this area, are you not?

A. Yes, sir.

FOLMAR: The zone that you have open presently, I believe is in the lower Queen and is producing oil. Is that within the delineated Eumont Gas Pool as defined by the Commission's Rules and Regulations?

A. Yes, sir, I believe it is. It is classified in that manner.

FOLMAR: The zones that you propose to open are in the Yates, Seven Rivers and upper Queen. Is that within the Commission's defined limits of the Eumont Gas Pool?

A. Yes, sir.

FOLMAR: Then the zone that you presently have open plus what you intend to open are all within one pool as defined by the Oil Conservation Commission?

A. That is correct.

FOLMAR: And you are proposing that an 80-acre proration unit be assigned to the perforation which you proposed to make in the Yates, Seven Rivers and upper Queen?

A. Thats correct.

FOLMAR: And that a gas allowable be assigned. A full gas allowable for 80 acres?

A. Yes.

FOLMAR: And you are also proposing that you continue to produce the lower perforation in the lower Queen as an oil well, is that correct?

A. That is correct.

FOLMAR: And the 40-acres surrounding this well be assigned for the purpose of oil allowable. Would you consider that that would be double assignment of acreage in a common source of supply?

That question has been debated by this Commission for the last year and I know of and considerable testimony has been put on by men that have gone much deeper into it than I have and as to the vertical communication within the Eumont Gas Pool I can not say to what extent it exists. However, it is a problem which does exist in this area and our application is not based upon the fact that we think - - or that we are certain that they are separate reservoirs but it is based on the fact that we will be deprived of our full use of our lease and lands if we do not get a gas allowable for that acreage in addition to the oil allowable that we now have. And this is true because of operators to the North, and East, and South of us have done just exactly the thing that you have asked me about and they have not considered it, evidently, as a dual assignment of acreage because they have requested to the Commission for the double assignment, that you call it, and the Commission has seen fit to grant it and so I imagine that until it is definitely established that it is double assignment why we are just going to have to go along with the other operators and protect

ourselves from being drained in the Yates Seven Rivers and upper Queen zones.

FOLMAR: I believe you answered the portion concerning the common source of supply and I understand from your answer that you are not certain that this is a common source of supply.

A. That is correct.

FOLMAR: However, you are acquainted with the rules of the Commission which established the Eumont Gas Pool and according to the rules of the Commission it is defined as a single pool, is that right?

A. That is correct. By definition it is a single gas pool.

FOLMAR: Therefore in accord with the present rules under which we are operating, forgetting what may be working in the future, then you are asking for assignment of 40 acres to an oil zone and 80 acres to a gas zone all within the present recognized Eumont Gas Pool?

A. That is correct.

MANKIN: Any further question of the witness? Do you wish to enter your exhibit 1 in evidence in this case?

A. Yes, sir.

MANKIN: And you did not of course have a separate exhibit for the schematic diagram, but was a portion of the application so we will let that be considered as a portion of the application, rather than separate exhibit.

WEBB: I ask that Exhibit No. 1 be introduced as evidence in this case.

Is there objection to entering of Exhibit 1 in evidence in this case. If not, it will be so entered. Before we take any statements in this case, I would like to read a wire that the Commission has received dated April 23, 1956 to the New Mexico Oil Conservation Commission, attention Mr. A. L. Porter in Santa Fe. "Stanolind Oil and Gas Company respectfully requests that Sinclair Oil and Gas Company's application in Case No. 1062 be denied. Although Stanolind is not an offset operator, we are operators in other areas of the Eumont Pool and have consistently opposed dual completions within the vertical limits of the Eumont Pool. It is our position that simultaneous dedication of acreage for the production of oil and gas from the Eumont Pay does not result in equitable withdrawals from the pool. Furthermore, the granting of such dual completions results in a violation of correlative rights of those operators who do not have such comple-It is further requested that this telegram be read into the record at the hearing on Case 1062." Stanolind Oil and Gas Company and it is signed C. L. Kelley, Roswell, New Mexico. We will now take statements.

FOLMAR: I am L. W. Folmar of the Texas Company. We have no property adjacent to Sinclair property involved in this application. And we will be effected by the Commission's action here only as

far as the Commission's policy applies on an overall basis. We do oppose this application in principal as we consider it to be in direct violation of the Commission's Order R-520, the Commission's definition on the pool or a common source of supply, and the Commission's definition of dual completion. We urge the Commission to consider its policy for handling applications for dual completions in common sources of supply on this and other application of this type on today's docket, as well as any previous approval the Commission may have granted to applications of this type. We will have some more to say on this later on in Case 1063 which involves an area of direct interest to the Texas Company.

MANKIN: Is there further statements to be made in this case?

WEBB: Sinclair Oil and Gas Company feels that in this case where the Commission has in the past and in this area and actually surrounding Sinclair's Ida White lease, have actually assigned gas and oil allowables to the same acreage. I don't have any particular dual completion in mind but our Exhibit 1, Sinclair's Exhibit 1, will reflect that there does exist a number of gas proration units in what is known as the oil corridor of the Eumont Gas Pool. As a consequence, Sinclair feels that unless they are allowed to produce the gas from the Seven Rivers, the Yates and the upper Queen sand as it is being produced by

surrounding operators that it will be deprived of its right to receive its fair share of the recoverable oil and other hydrocarbon minerals, including gas, from the Eumont Gas Pool. We don't think that this is something new which has come up in this area. As the Commission is aware, there has been considerable testimony on this area here and the Eumont Gas Pool and of course the Eunice-Monument Oil Pool. And this area does fall within what has now been determined to be an oil corridor of the Eumont Gas Pool. We feel that certainly the dualling is mechanically feasible and that we will certainly assure the Commission that any dualling attempt we make, as a proved operator, would be handled in a manner which we believe would be satisfactory to the Commission as far as dualling is concerned and certainly we would try to prevent any communication between the oil zone and the gas zone, between the two producing zones. We feel that dualling is just an additional feature of this application for a proration unit, a non-standard proration unit. We feel that we are entitled to at lease some type of well to produce our fair share of gas from the Eumont Gas Pool from the Yates and the Seven Rivers and upper Queen sands. So we respectfully urge that the Commission give serious consideration to this and the surrounding gas units which surround our acreage and that our application be granted.

MANKIN: Is there further statement in this case? If not the witness may be excused and we will take the case under advisement.

STATE OF NEW MEXICO)
COUNTY OF SANTA FE)

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

Dated this 24th day of May, 1956.

- Jaan skaley