BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 28, 1966

EXAMINER HEARING

IN THE MATTER OF:

Application of Continental Oil Company for a unit agreement, Lea County, New Mexico. Case No. 3463

Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Case No. 3464

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3463.

MR. HATCH: Application of Continental Oil Company for a unit agreement, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, we propose that Case 3463 and 3464 be consolidated for the purpose of making a record, with separate orders to be entered.

MR. UTZ: Case 3463 and 64 will be consolidated for the purposes of hearing. Separate orders will be written.

MR. KELLAHIN: We have two witnesses I would like to have sworn, please.

(Witnesses sworn.)

MR. KELLAHIN: I call as our first witness Mr. Victor T. Lyon.

(Whereupon, Continental's Exhibits 1 through 9 were marked for identification.)

VICTOR T. LYON

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

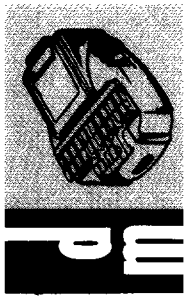
DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Victor T. Lyon.

Q By whom are you employed and in what position, Mr. Lyon?



A I am employed by Continental Oil Company as supervising engineer in the Hobbs District Office, Hobbs, New Mexico.

Q Have you testified before the Oil Conservation Commission and made your qualifications a matter of record?

A Yes, sir.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. UTZ: He is qualified.

Q (By Mr. Kellahin) Are you familiar with the application of Continental Oil Company in Cases 3463 and 3464?

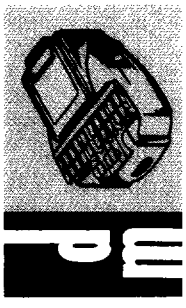
A I am.

Q Briefly, what's proposed by these applications?

A Consolidated Cases 3463 and 3464 are the application of Continental Oil Company for the approval of Reed-Sanderson Unit Agreement and for a waterflood project for that unit.

Q Referring to what has been marked as Exhibit No. 1, would you identify that exhibit, please?

A Yes, sir. Exhibit No. 1 is the Unit Agreement which we propose to use for this unit. It is of a modified federal form and has attached to it two exhibits; one is Exhibit A, being a plat showing the unit area in a brown line and the location of wells, the identification of leases,



by the usual symbols. It also shows the designation of the tracts and their numbers for cross reference with Exhibit B, which is a list of the leases and a description of the ownership in each lease.

Q What does the unit area consist of?

A The unit area, as shown on Exhibit A, and as described in Section 2, is as follows: In Township 20 South, Range 36 East, Section 3, the West Half and West Half of the East Half; in Section 4 the East Half of the East Half; in Section 9 the East Half of the Northeast Quarter, and in Section 10, Northwest Quarter, West Half of the Northeast Quarter, Northeast Quarter of the Southwest Quarter and Northwest Quarter of the Southeast Quarter, being a total of 1040.83 acres, more or less.

Q What percentage of the unit area is Federal and what percentage State and what percentage Fee?

A There are five Federal tracts containing 680.83 acres, which is 65.41% of the unit area. There are five Fee tracts containing 360 acres, or 34.59% of the unit area.

Q Then there is no State acreage in the unit, is that correct?

A That is correct.

Q What is the unitized formation?

A The unitized formation is the Queen formation,

which is defined in Section 2, Paragraph (g) of the Unit Agreement and is shown on the radioactivity log of Continental Oil Company's Reed A-3 Well No. 15 located 1980 feet from the South Line and 2310 feet from the East Line of Section 3, between the depth of 3557 and 3968. This log is shown as Exhibit 3 in the little booklet here.

Q Now, what is the basis for tract participation in the unit?

A The participation formula is based 40% on production between the dates of January 1st, 1964 and November 1st, 1964, 30% on remaining primary reserves after November 1st, 1964, and 30% on the estimated ultimate recovery for each tract.

Q Do you have an exhibit which shows these parameters for each of the tracts?

A Yes. Exhibit 1-1 which immediately follows Exhibit B, attached to Exhibit 1, shows tabulated the information which provides the participation and the total participation of each tract.

Q Would you describe the salient points that are covered by this Unit Agreement?

A Yes, sir. Section 4 provides the procedure for expanding the unit area; Section 6 designates Continental Oil Company as the operator; Sections 7 and 8 provide the

procedure for resignation or removal of operator and election of a successor operator. Section 13 describes the basis of participation. Section 14 provides the manner of qualifying a tract for unit participation. Section 16 provides for the settlement of royalties. Section 24 provides for the effective date and term; the effective date is the first day of the month following the commitment of 85% of the unit area by working interest owners, the approval of the Director of the U.S.G.S. and the Oil Conservation Commission and the filing of a counterpart of this agreement for record in the office of the County Clerk of Lea County, New Mexico.

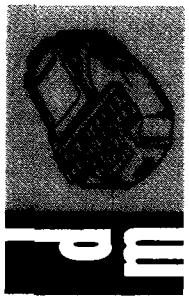
Q Has this Unit Agreement been submitted to the Department of Interior?

A Yes. Preliminary approval was received by a letter from the U.S.G.S. dated April 29th, 1966.

Q What percentage of the owners have executed the agreement at this time?

A As of this date, 87.3% of the working interest ownership, 60% of the royalty ownership, and 99 plus percent of the overriding royalty ownership have executed or ratified the agreement.

I might add at this point that the U.S.G.S., on this particular unit, has required that the lessees of record



under Federal tracts be treated the same as royalty owners, and because these are old leases, we have had some difficulty in reaching the original lessees or their heirs, and if you include the lessees of record under the Federal tracts with the royalty owners, then our ratification by royalty owners is reduced to about 30%.

Q Do you anticipate you will get the other royalty owners signed, or a substantial portion of them?

A Yes, I think we should have very little problem.

Q Do you anticipate any difficulty in getting the hundred percent of the working interest ownership signed up?

A We have been told at least tentatively by Two States Oil Company, which is the operator of Tract 8, that they do not intend to commit their lease to the unit at this time.

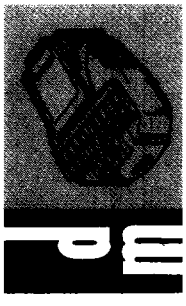
Q Do you have a provision in the Unit Agreement for subsequent joinder?

A Yes, sir.

Q So they could joint at a later date if they elect to do so?

A That is correct.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibit No. 1, being a copy of the proposed Unit Agreement.



MR. UTZ: Without objection, Exhibit No. 1 will be entered into the record.

(Whereupon, Continental's Exhibit No. 1 was offered and admitted in evidence.)

MR. KELLAHIN: That's all I have on direct examination of this witness.

MR. UTZ: Questions? No questions. Statements?

MR. KELLAHIN: I have another witness.

MR. UTZ: The witness may be excused.

(Witness excused.)

MR. KELLAHIN: I would like to call Mr. J. P. Boylan.

MR. UTZ: Did Two States say anything about flooding, are they going to flood the two wells they have down in the 80 acres or are they going to let them sit there?

MR. LYON: They are just going to let them sit there.

MR. UTZ: They'll be coming in for capacity allowables, won't they?

MR. LYON: I might point out that their wells have a high gas-oil ratio and they don't want to jeopardize their gas revenue.

MR. UTZ: I see. You may proceed.

J. P. BOYLAN

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A J. P. Boylan.

Q By whom are you employed and in what position, Mr. Boylan?

A I am employed by Continental Oil Company as a senior engineer in the Hobbs District Office, Hobbs, New Mexico.

Q Have you ever testified before the Oil Conservation Commission or its Examiner and made your qualifications a matter of record?

A Yes, I have.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. UTZ: Yes, sir, he's qualified.

Q (By Mr. Kellahin) You heard the testimony of Mr. V. T. Lyon in regard to the Reed-Sanderson Unit Agreement. What is the purpose of this proposed unit?

A This unit is being formed for the purpose of conducting waterflood operations in the unit area.

Q Now, referring to what has been marked as Exhibit No. 2, would you identify that exhibit and discuss the information shown?

A Exhibit No. 2 is identified as Exhibit No. 2 in the exhibit package. This exhibit is a plat of the Reed-Sanderson Unit area and an area two miles in each direction from the unit boundary. Lease ownership and location and identification of wells are shown in the usual manner. The formation from which each well is producing is shown by letter and color symbol which is explained in the legend. The unit area is shown within the broken line which depicts the unit boundary. The boundary of the Northwest Eumont Unit, operated by Gulf Oil Corporation, and which joins the proposed Reed-Sanderson Unit to the north, is shown by a dashed line.

Q Now, referring to what has been marked as Exhibit No. 3, would you describe the information shown on that exhibit?

A Exhibit No. 3 is a copy of the radioactivity log run on Continental's Reed A-3 No. 15. As stated by Mr. Lyon, this is the type log identifying the unitized formation. The log shows by a horizontal red line the top of the Queen Formation at a depth of 3557. In a similar manner, the top of the Grayburg, which is also the base of the Queen Formation, is shown at 3968 feet. The vertical interval between these

two depths is the unitized formation. The pay in this area is the unitized formation, namely the Queen and Lower Queen-Penrose Formation. The Yates and Seven Rivers Formations are not considered to be oil-production and are cased off in all of the unit wells.

Q Now, referring to the group of exhibits designated as 4 through 4-13, would you comment on these?

A Exhibit 4 and Exhibits 4-1 through 4-13 were attached to the application as required by Rule 701, and consequently have been designated in that sequence. For the purpose of my testimony I would prefer to discuss them later in the hearing.

Q Would you give a brief history of the Reed-Sanderson Unit Area?

A During the late 1930's the Queen pay in the unit area was developed by two wells on the Two States' Etcheverry lease, and by Continental's Reed A-3 No. 5. These wells were classified as Monument Grayburg-San Andres Pool wells until 1953 when the Etcheverry wells were reclassified as Eumong wells with the creation of the Eumont Gas Pool.

The H. L. Moss, Reed No. 1 was drilled and completed in 1953. Continental's development on the Argo, Argo-Leonard, Hewes, Leonard, Reed A-3, Sanderson B-1, Sanderson B-4, Sanderson B-9 and Walker leases did not

commence until 1955. The three older wells were completed open-hole and were either acidized or shot. The more recently drilled wells were cased through the pay section, perforated and sand fraced with treatments averaging approximately 20,000 gallons. The unit area contains 26 wells which have produced from the Eumont Oil Pool. Twenty-four of the wells are currently producing and two are abandoned. The Continental Leonard Well No. 1 was temporarily abandoned without pulling the casing. The Continental Reed A-3 Well No. 5 is permanently abandoned.

Q What is the current average daily production in the unit area?

A During the month of June 1966 the unit area averaged 124 barrels of oil per day with 70 barrels of water per day and 2.7 million cubic feet of gas per day, for an average gas-oil ratio of 21,800 cubic feet per barrel. This is an average of 5.2 barrels of oil per day per well. Maximum daily oil production from any one well during June 1966 was 14.2 barrels per day. The above producing rates indicate the reservoir is at or very near the economic limit of production.

Q By that, you mean primary production?

A That is correct.

Q What is the cumulative production within the

unit area?

A Production as of 7-1-66 for the unit area totaled 1,483,403 barrels of oil.

Q What was the reservoir drive mechanism during primary production?

A The mechanism for the Reed-Sanderson Unit is a combination of gas cap expansion and solution gas drive.

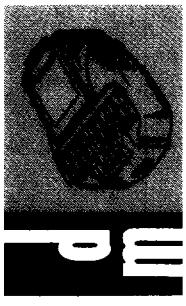
Q Now, referring to what has been marked as Exhibit No. 5, would you identify that exhibit, please?

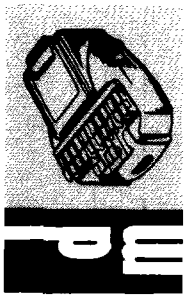
A Exhibit No. 5, in the exhibit package under that number, is a map showing the structural configuration on the top of the Lower Queen Penrose member of the Queen Formation with a contour interval of 50 feet. Oil accumulation in the Eumont Pool is a down structure oil rim on the large Eumont Gas Pool. The Queen Formation is oil-productive below an approximate sub-sea datum of 150 feet. Wells completed near this datum have high gas-oil ratios and indicate that the gas cap is associated with the oil-bearing formation.

Q Now, does the gas-oil contact in the Queen Formation, in your opinion, limit the oil production to the east of the unit boundary?

A In my opinion, it does.

Q You stated that the Reed-Sanderson Unit is adjacent to Gulf's Northwest Eumont Unit. What limits





production to the west and south of the proposed unit area?

A The productive limit to the west is determined by a permeability pinchout in the Queen Formation on the down-dip flank of the structure. This was confirmed by a dry hole located in Unit B of Section 9, 20 South, 36 East. The productive limit to the south is also defined by two dry holes, one in Unit I of Section 9 and one in Unit O of Section 10, 20 South, 36 East.

Q Now, skipping Exhibit 6 for the moment, would you refer to Exhibit No. 7 and describe the information shown on it?

A Exhibit No. 7 is a cross section showing the logs, reading from left to right, of Continental Oil Company's Reed A-3 No. 15, Continental Oil Company Reed A-3 No. 5, and H. S. Moss, J. L. Reed No. 1. Lines have been drawn from well to well showing the correlations of the tops of the Yates, Seven Rivers, Queen, Lower Queen Penrose and Grayburg Formations. The perforations are shown on Reed A-3 No. 13 and the open-hole interval on the other two wells is shown to be within the Lower Queen Penrose section, except for a very small interval approximately 15 feet in the Reed A-3 No. 5, which appears to have penetrated the Grayburg Formation. In my opinion a very high percentage, if not all, of the production from this well was produced from that

section, which we propose to unitize in the Reed-Sanderson Unit.

Q Are all of these wells presently classified as producing or having produced from the Eumont Pool?

A No, sir. Continental Oil Company Reed A-3 No. 5 and H. S. Moss, J. L. Reed No. 1 are both presently classified in the Monument Grayburg-San Andres Pool.

Q In your opinion, is this classification correct?

A In my opinion this well would be more correctly classified as a Eumont Pool well since the bulk of its production was undoubtedly produced from that interval. In regard to the H. S. Moss well, I believe that the Commission was in error in continuing its classification as a Monument Grayburg-San Andres well.

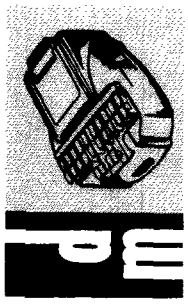
Q Has this information and your recommendation been communicated to the Oil Conservation Commission?

A Not at this time, however, it will be when we return to Hobbs.

Q The information has already been given to the geologist at Hobbs, has it not, Mr. Boylan?

A The information is prepared but it has not yet been submitted to the geologist.

Q What is your recommendation in regard to these two wells?



A It is my recommendation that for record purposes the Reed A-3 No. 5 be reclassified to the Eumont Pool and its cumulative production transferred from the Monument Pool to the Eumont Pool. In regard to the H. S. Moss, Reed No. 1, it is my recommendation that well be transferred to the Eumont Pool from the Monument Pool, both as to record purposes and as to current regulation purposes.

Q Now, referring back to what has been marked as Exhibit No. 6, would you identify that exhibit and discuss it?

A Exhibit No. 6 is in the exhibit package under the same number, and it is a tabulation of data in regard to the reservoir rock, fluid characteristics and estimated waterflood performance.

Q Now, in your opinion, is waterflooding feasible in the Reed-Sanderson Unit?

A Yes. After reviewing the available data in regard to porosity, permeability, oil saturation, oil recovery under primary operations, and calculations by accepted methods as to anticipated performance under waterflooding, my opinion is that the unit area can be successfully and economically waterflooded.

Q Will waterflooding of the unit area result in the recovery of oil that would not otherwise be recovered?

A Yes, sir. It is estimated that approximately

970,000 barrels of oil will be recovered by waterflooding, which would not be recovered otherwise.

Q A while ago we passed up a discussion of Exhibit 4 and 4-1 through 13. Would you refer to those exhibits and discuss them, please?

A Exhibit No. 4 is a tabulation of the wells which are proposed to be converted for water injection. The size and setting depth of each casing string, the amount of cement used and the interval open to the formation is shown for each well. The footage location of each well is also shown.

Exhibits 4-1 through 4-13 are schematic diagrams for each well showing the same information as that tabulated on Exhibit No. 4.

Q Now, in each case, Mr. Boylan, do you propose to inject through tubing under a packer?

A That is correct.

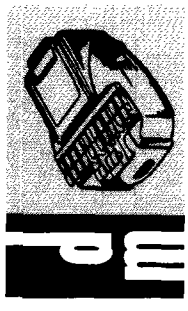
Q Will the tubing be coated?

A Yes, sir, it will be.

Q Will you use an inert fluid of any kind in the annulus, or do you know at this time?

A The annulus will be filled with fresh water to the best of my knowledge.

Q Now, referring to what has been marked as Exhibit No. 8, would you describe what is shown on that



exhibit?

A Exhibit 8 is a map of the unit area showing the proposed waterflood pattern. The injection wells are shown by the usual triangular symbol. The injection wells are located on a normal 80-acre five-spot pattern. Exhibit No. 8 also shows the proposed location of the central tank battery and the location of the water injection plant. Continental's Reed A-3 Well No. 7 and Sanderson B-4 Well No. 1 will offset injection wells across the lease line in the Northwest Eumont Unit. Since Continental's Reed A-3 No. 5 was permanently plugged and abandoned, it is proposed to drill a replacement water injection well, Reed A-3 Well No. 16, to be located 1980 feet from the North and East Lines of Section 3, 20 South, 36 East.

Q Now, in the operation of this waterflood, do you anticipate any interference with the up-dip gas completions as a result of injecting water into the adjacent injection wells?

A I do not anticipate water breakthrough into the gas well completions. You will note that the Queen Formation in the type well is 411 feet thick. The Reed A-3 Well No. 2 gas well completion occurs in the top 210 feet of the Queen Formation, while the proposed completion in Reed A-3 Well No. 16 will be in the bottom 70 feet of the Queen

Formation. This leaves a vertical stratigraphic interval of approximately 130 feet between the two completions as well as 1320 feet of horizontal separation. The other injection wells are more than a quarter-mile distance from the gas wells in a steeply dipping area. The bottom 70 feet of the Queen Formation is open in three unit wells offsetting the proposed Reed A-3 Well No. 16. This should cause injected fluid movement away from the gas well completion.

Q Now, you will have a central tank battery for the unit, is that correct?

A Yes, sir.

Q Will that have adequate testing facilities?

A A test facility in the central battery will permit at least one test per month of each producing well in the unit area.

Q Will the injection plant have metering facilities?

A Yes, sir. Metering facilities will permit continuous metering of the total water injected and monitoring meters will provide accurate estimates of the water injected into each individual well.

Q How much water do you anticipate will be injected in this project?

A Initially we expect to inject approximately 4500 barrels of water per day into the 13 injection wells.

Q What is the source of your water?

A The water will be purchased from the E-M-E Salt Water Disposal System. The unit will take delivery of water from the system at a point located in the Northeast Quarter, Southeast Quarter, Section 1, 20 South, 36 East, approximately 2.1 miles to the east of the unit. Produced water from the unit area will be reinjected when the volumes are sufficient to justify its use.

Q You state that the source of the water is the E-M-E Salt Water Disposal System. Do you have an analysis of this water?

A Yes, sir. Exhibit 9 is an analysis of a representative sample of that water.

Q Is the proposed injection water supply compatible with the Queen Formation water?

A The two waters are reported to be compatible.

Q How do you propose to protect the water injection well casing against corrosion?

A As shown on Exhibits 4-1 through 4-13, water will be injected under a packer set on two-inch tubing. The tubing and surface facilities will be given a protective coating to guard against corrosion. Corrosion-resistant materials will be used where it is not practical to apply protective coating.

Q The unit flood will be operated under the provisions of 701-E?

A Yes.

Q What do you anticipate your allowable will be?

A There are 26 wells which will be in operation, each on a 40-acre tract or lot. This number multiplied by 47 provides a current waterflood allowable of 1,222 barrels of oil per day. A higher normal unit allowable would, of course, make the allowable proportionately higher.

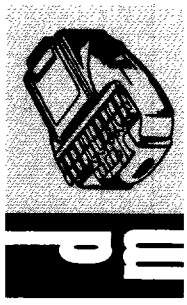
Q This would indicate you don't propose to set up a pilot project here, is that correct?

A No, sir. The unit area is producing at approximately the economic limit at this time. There appears to be no useful information which can be gained by installing a pilot. In the interest of efficiently flooding the unitized area, we propose to install a full scale flood.

Q In your opinion, will the granting of the application result in the protection of correlative rights and the prevention of waste?

A Yes, sir. It is well recognized that unit operations protect correlative rights and that secondary recovery operations recover additional oil which otherwise would be wasted.

Q Were Exhibits 2 through 8 prepared by you or



under your supervision?

A Yes, sir, they were.

Q And Exhibit No. 9, I believe you stated was a water analysis prepared for Continental Oil Company, is that correct?

A Prepared for and by Continental Oil Company.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 2 through 9.

MR. UTZ: Without objection, Exhibits 2 through 9 will be entered into the record of this case.

(Whereupon, Continental's Exhibits 2 through 9 were offered and admitted in evidence.)

Q (By Mr. Kellahin) Do you have any other comments, Mr. Boylan?

A Yes, sir. The lease line agreement with Gulf Oil Corporation, operator of the Northwest Eumont Unit, has not yet been negotiated. Also, it is not certain that all tracts within the unit area will be committed to the unit agreement. Under these circumstances, it may be necessary to modify our injection pattern from that which is proposed at this hearing. In view of this fact, it is requested that the order contain provisions which will permit administrative approval of injection wells other than those which are proposed at this time. Such a procedure would permit modifications without

the necessity of additional hearings.

MR. KELLAHIN: That's all I have on direct examination, Mr. Utz.

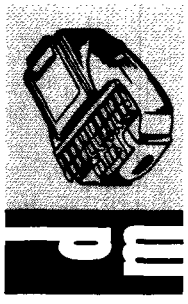
CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Boylan, in view of the fact that Two States is not coming into the unit, do we still want approval on the Two States' Well No. 1, that Etcheverry No. 1?

A Mr. Lyon, correct me if I am in error, but I believe at this time their final decision is not made. In other words, we have written the plan assuming that they will come into the unit. If they do not come into the unit, it doesn't modify the over-all plan appreciably. We merely did not convert that well to injection.

MR. LYON: Mr. Utz, may I answer that question, please? Two States has told us that they do not intend to join the unit. However, since those wells are Eumont wells, we thought that it was proper to leave the tract in the unit area, and it has happened before that people have changed their minds, and rather than come back here for another hearing in the event they do commit their tract to the Unit Agreement, we would like to have it included in the order at this time so that should that eventually come to pass, that we could proceed.



A If I may add, if we had administrative approval to convert it to injection, I don't believe it would be necessary to include it in the order at this time.

Q (By Mr. Utz) Well, that's what I thought. I don't know that it makes too much difference either way. What were the two Eumont gas wells that were reclassified?

A I was not referring to Eumong gas wells. I was referring to H. L. Moss, Reed No. 1.

Q What's the location?

A It's located in the Northwest Quarter of the Northeast Quarter of Section 3, 20 South, 36 East. It's presently designated as a Monument Grayburg-San Andres Pool well, and as shown on Exhibit No. 7, the cross section, in my opinion it is currently producing from the Eumont-Queen Pool.

Q You had one more in that category.

A The other well is Continental's Reed A-3 No. 5, located in the Southwest Quarter, Northeast Quarter, Section 3, 20 South, 36 East. However, this well has been permanently plugged and abandoned at this time.

Q That's the one that's marked in ink on your Exhibit No. 2, right?

A Yes, sir, that is correct.

Q But the Reed No. 1 is still producing?

A I don't understand your question.

Q The Reed No. 1, the H. L. Moss, Reed No. 1, is still producing?

A Yes, it is currently still producing.

Q And you intend to make an injection well out of it?

A No, sir. In the pattern shown on Exhibit 8, the Moss, Reed No. 1 will be a producing well.

Q Well, I was looking at Exhibit No. 2, and the red circles mean different things there. But it's your recommendation that that well be considered as a Eumont gas well?

A No, sir, that is not correct, it's a Eumont oil well. Let me refer again to --

Q It's less than a hundred thousand to one GOR?

A I can't answer that exactly, but I believe it is, yes, sir. It had an initial completion ratio of 4,350 cubic feet per barrel, as noted on Exhibit 7, the cross section. This was an initial gas-oil ratio.

Q Then there are no gas wells in this unit?

A There are no gas wells within the unit boundary, no, sir. As shown on Exhibit No. 8, there are gas wells adjacent to the unit boundary in Section 3, they're indicated by numbers two and three on the right side of the section adjacent to the unit boundary.

MR. UTZ: Are there any other questions of the witness? The locations as shown on your Exhibit No. 4 are accurate to the best of your knowledge?

A Yes, sir, they are.

MR. UTZ: The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements?

MR. KELLAHIN: If the Examiner please, Mr. Frank Irby called me prior to the hearing and said he would be unable to be here, but he asked that I put in the record a copy of a letter addressed to me from Mr. V. T. Lyon. I have a copy of that letter here.

MR. HATCH: There is a letter from the State Engineer's Office concerning the application. It says: "Having reviewed the application and exhibits attached thereto, and Lyon's letter, this office does not object to the application providing a copy of Mr. Lyon's letter is made a part of the record.

MR. UTZ: Both this letter referred to and the letter from V. T. Lyon to Jason Kellahin will be made a part of the record. Any other statements? The case will be taken under advisement and we will take a ten-minute break.

I N D E X

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 24th day of October, 1966.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:

June 19, 1967.

I do hereby certify that ... 3463-64

Sept. 26

... Oil Conservation Commission