3-6691

PHONE CH

BEFORE THE OIL CONSERVATION COMMISSION

Santa Fe, New Mexico November 30, 1959 EXAMINER HEARING

IN THE MATTER OF:

Application of The Ohio Oil Company for approval of a unit agreement. Applicant, in the above-styled cause, seeks an order approving its Lea Unit Agreement, comprising 2560 acres, more or less, in Township 20 South, Ranges 34 and 35 East, Lea County, New Mexico.

Case 1823

BEFORE:

Mr. A. L. Porter, Jr.

TRANSCRIPT OF HEARING

MR. PORTER: The meeting will come to order, please.

Let the record show that this application was heard before A. L.

Porter, Secretary-Director of the Oil Conservation Commission,
as Examiner. Mr. Payne, would you read the style of the application.

MR. PAYNE: Application of The Ohio Oil Company for approval of a unit agreement.

MR. PORTER: Mr. Couch.

MR. COOTER: Paul Cooter of Atwood and Malone, appearing for the Applicant. The Ohio Oil Company would like to introduce
Mr. J. O. Terrell Gouch, a member of the Texas Bar.

MR. PORTER: Mr. Couch.

MR. COUCH: Mr. Examiner, just a brief preliminary statement. The Ohio as operator of this proposed unit has made this



application, in effect acting for and on behalf of all the working interest owners of acreage within the unit area.

We will have one witness who will testify with respect to this unit area and the designation of the unit area is Lea Unit Area, that terminology being suggested by the U. S. G. S., and I might say here that the acreage included in the unit is 2,559.68 acres, more or less, in Township 20 South, Ranges 34 and 35 East, N.M.P.M., Lea County, New Mexico.

Of that acreage, 160 acres is State land; the remainder is Federal land. Our witness, in presenting the case, will go into greater detail with respect to the acreage included. We will have only the one witness unless it's necessary for me to be sworn in connection with some of the aspects of it dealing with the legal matters.

MR. PORTER: Have the witness stand, please.

(Witness sworn.)

JOHN W. HIGGINS

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

DIRECT EXAMINATION

BY MR. COUCH:

- Q Will you please state your name?
- A My name is John W. Higgins.
- Q By whom are you employed, and in what capacity, Mr.

Higgins?



A I am employed by The Ohio Oil Company. My present capacity is as Acting District Geologist in charge of the West Texas-New Mexico District. My permanent job or rating is that of Area Geologist in charge of Area Office Headquarters at Roswell, New Mexico, and supervising approximately the southern two-thirds of the State of New Mexico.

- Q That includes the Lea County Area and the area in which this proposed unit is located?
 - A Yes, sir, it does.
- Q Your assignment in Midland is a temporary one, but is also in a supervisory capacity over the Roswell Area?
- A Yes, the Roswell area is subordinate to the Midland District Office.
- Q Have you previously testified before the New Mexico
 Oil Conservation Commission or any of its Examiners?
 - A No. sir, I haven't.
- Q Would you state briefly your qualifications as a Petroleum Geologist?
- A Yes, sir. I completed a Bachelor of Science Degree at the University of Houston, majoring in Geology, in 1949. Prior to that time I worked for approximately four years in field work on geophysical crews, and as a geophysical draftsman for The Ohio Oil Company. Since my graduation in 1949, I have been working as a geologist for The Ohio. The past nine and a half years have been spent working on the geology of Southern New Mexico. I have



been working in my present permanent capacity as Area Geologist for the past five and a half years. My total tenure of employment for The Ohio is approximately twelve and a half years.

- Q Mr. Higgins, in your position as Area Geologist in Roswell before you went to this temporary assignment in Midland, was the actual geological work in connection with this Lea Unit Area done under your supervision and direction?
 - A Yes, sir, it was.
- Q And you have knowledge of the geology in that area, do you not?
 - A Yes, sir, I do.
- Q Mr. Higgins, you are generally aware of the proposed unit which The Ohio is designated operator of, known as the Lea Unit Area, are you not?
 - A Yes, I am.
- Q Have you examined a copy of the Unit Agreement, a fully signed copy of the Unit Agreement dated November 10, 1959?
 - A Yes, I have.
- Q Will you please examine this instrument labelled "Conformed Copy" and state whether you have looked at that instrument and state whether it is a true conformed copy of the original signed instrument?
- A Yes, sir, I'm satisfied that this is a true conformed copy of the original which I have examined.
 - Q Now I hand you a photostat copy of a Consent and



Ratification of the Lea Unit Agreement signed by Harvey E. Roelofs, Trustee for Olen F. Featherstone, II; and a photostat copy of the same instrument, or the same form of instrument, executed by L. N. Hagood and Mary C. Hagood. Will you look at those instruments and see if you have seen the original signed copy and state if they are correct copies?

A Yes, sir, I have seen the original signed copies and these are exact copies of those.

MR. COUCH: Mr. Examiner, for identification and future reference, we would like to have the Unit Agreement marked The Ohio's Exhibit 1; and the Roelofs Ratification photostat marked Exhibit 1-A, and the Ratification, photostat of the Ratification executed by the Hagoods marked Exhibit 1-B.

(Applicant's Exhibits Nos. 1, 1-A. & 1-B marked for identification.)

- Q (By Mr. Couch) According to your information, has
 The Ohio investigated generally the status of ownership of all the
 acreage within the Lea Unit Area?
 - A Yes, sir, they have.
- Q Will you state for the record the lands which are included in the Lea Unit Area?
 - A The lands which are included in the Lea Area --
 - Q That's the Lea Unit Area?
- A -- The Lea Unit Area are described as follows: In
 Township 20 South, Range 34 East, N.M.P.M., Section 11, East Half;
 Section 12, All: Section 13, All: Section 14, Northeast Quarter:



MONE CH 3.6691

Section 24, North One-Half; in Township 20 South, Range 35 East, N.M.P.M., Section 18, Lots 1, 2, 3, and 4, and the East One-Half of the West Half; Section 19, Lots 1 and 2, and the East One-Half of the Northwest Quarter.

- That's the acreage that is shown in Exhibit A to the Unit Agreement, the Unit Agreement having been previously identified as The Ohio No. 1?
 - A Yes.
 - Q Exhibit A is a plat of the Unit Area, is it not?
 - A Yes, it is.
- Q Mr. Higgins, the plat shows ownership of the various tracts written on the plat, with respect to each of the different tracts in the Unit, is that correct?
 - A Yes, that's correct.
- Q Exhibit B of Ohio Exhibit 1, being the Unit Agreement, is the schedule showing percentage and kind of ownership of all land in the Lea Unit Area, is that right?
 - A Yes, that is correct.
- Q Will you state, having examined the original signed copy and The Ohio Exhibit 1, whether all of the working interest owners shown on Exhibit 1, and all the lessees of record shown on Exhibit 1 have executed the Unit Agreement?
 - A Yes, sir, they have.
- Q And all of those working interest owners and lessees of record have also executed the operating agreement, have they not?



- A Yes, sir, that is correct.
- Q With respect to the overriding royalty owners shown in Exhibit B, have all of those executed the Unit Agreement or a ratification of it?
- A No, sir, there's one exception. All have signed but Mr. Allison of Las Cruces.
 - Q That's Dwight Allison and his wife have not signed?
 - A Yes, sir.
- Q Mr. W. G. Ross has been acting on behalf of The Ohio in attempting to assist us in putting this unit together, has he not?
 - A Yes, he has been.
- Q Please examine this carbon copy of a letter directed from Mr. Ross to Mr. Dwight Allison, showing it to be sent by Certified Mail No. 200467, dated November 24, 1959, and state whether that letter is a copy of the letter Mr. Ross sent?
 - A Yes, sir, it is.
 - Q That's your understanding about it?
 - A That is my understanding.
- Q This letter, in the first paragraph of it, will you just read that for the record and benefit of the Examiner and participants here?
- A The letter is addressed to Dwight Allison, Box 9,
 Las Cruces, New Mexico. "Confirming my telephone conversation with
 you on the morning of November 15 while I was in Roswell, New



Mexico, and just as a matter of record for the file, when I talked with you on this date at your home, you advised that you had received a copy of the Unit Agreement for the development and operation of the above-captioned Unit."

- Q Will you proceed with the first part of the second paragraph?
- A "In my conversation with you, you advised that you would not sign the Unit Agreement, and gave as your reason that you had talked to various people in Las Cruces, and that it seemed to you as though you would be giving something to other people and would not gain anything in return. In this conversation you also advised that you held various Federal leases and that you were well and personally acquainted with Federal leases as well as with Federal units..." and so on.
- Q So that this letter actually confirms a conversation in which Mr. Allison said he would not sign the Unit Agreement?
 - A Yes, sir.
- Q Although he had a copy of it and was aware of the circumstances.

MR. COUCH: I would like to ask that this copy of the letter be marked as Ohio Exhibit 1-C which will complete a showing with respect to the execution or non-execution of the Unit Agreement by all interested parties.

(Applicant's Exhibit No. 1-C marked for identification.)



- Q Mr. Higgins, again referring to Exhibit B of the Unit Agreement, being The Ohio Exhibit 1, that Exhibit B with respect to Tract 1 shows Sinclair Oil and Gas Company as lessee of record; and with respect to Tract 5 it shows Sinclair Oil and Gas Company as lessee of record?
 - A Yes, sir.
- Q Mr. Higgins, is it your understanding that actually Mr. W. G. Ross is presently lessee of record of each of those two lesses?
 - A Yes, that is my understanding.
- Q Have you seen photostatic copies of the assignment from Mr. Ross to Sinclair?
 - A Yes, I have.
- Q And copies of letters transmitting those assignments to the Bureau of Land Management for approval?
 - A Yes, I have.
- Q But so far as we have been able to ascertain, the approval has not yet been granted, is that correct?
 - A That is correct.
- Q Is it your understanding that it is just a matter of the Bureau of Land Management getting to it, and getting the approval made?
 - A Yes.
- Q No qualification has been made, as to the qualification of Sinclair to be an assignee of this lease?



- A No.
- Q As a matter of fact, Mr. Ross has executed the working agreement both as a working interest owner and as an overriding royalty owner, is that correct?
 - A Yes, that is correct.
- Q With respect to other land he is listed in those two different capacities?
 - A Yes.
- Q In Tract 11, The Ohio Oil Company is listed in Exhibit B of the Unit Agreement as the lessee of record. Is it your understanding that E. F. Howell and wife are actually the lessees of record in that case?
 - A Yes.
 - Q With respect to Tract 11?
 - A Yes.
- Q Have you seen a photostat of assignment from Mr. and Mrs. Howell to The Ohio Oil Company covering that tract?
 - A Yes.
 - Q That, too, is a Federal lease, is it not?
 - A Yes, it is.
- Q And have you seen a transmittal letter submitting that assignment for approval by the Bureau of Land Management?
 - A Yes.
- Q But so far as you have been able to ascertain, that approval has not yet been granted?



- A No. to my knowledge it hasn't.
- Q Do you anticipate or know of any reason it should not be granted without any difficulty?
- A I know of no reason. It would seem to be just a matter of formality.
- Q As a matter of fact, Mr. and Mrs. Howell have also executed the Unit Agreement in their capacity as overriding royalty owners on this very lease, have they not?
 - A Yes.
- Q Thereby recognizing that The Ohio is the assignee of record?
 - A Yes.
- Q A while ago you described the acreage that is included in this Unit. What part of that acreage is State acreage, Mr. Higgins?
- A The State acreage is composed of the Northwest Quarter of Section 19, Township 20 South, Range 35 East.
- A That 160-acre tract, well, it's slightly--yes, it is 160 acres, is the only State acreage included in the Unit?
 - A That is correct.
- Q Now there's one other tract in the Unit designated

 Tract 12 in Exhibit B, which is listed as unleased land, and that
 is Federal land, is it not?
 - A Yes.
 - Q And that is 120 acres of land, and what is the



description of that land, please?

- A The description of that land is Township 20 South,
 Range 34 East, Section 14, West One-Half of the Northeast Quarter,
 and the Southeast Quarter Northeast Quarter.
- Q Is it your understanding that that unlessed land is Federal land, that that 120-acre tract is to be offered for sale, for lease, by competitive bids; and that it will be sold provided this Unit Agreement is promptly approved, that it will be sold subject to this Unit Agreement?
 - A Yes, that is my understanding.
- Q Is it also your understanding that that particular 120-acre tract was included in the Unit Area at the request of the U. S. G. S. in Roswell?
 - A Yes.
- Q Is it true that the State lease we were talking about designated Tract 13 in the Exhibit B of the Unit Agreement is common school land?
 - A Yes, that is true.
- Q Is it part of the same base lease which also covers the Southwest Quarter of Section 19?
 - A Yes.
- Q That West Half of Section 19 being the only land covered by that lease?
 - A Yes.
 - Q For the record, that lease bears State Certificate



ALBUQUERQUE, NEW MEXICO

OG-5588 dated June 16, 1959, is that right?

- Yes.
- What percentage of the Unit Area does the State tract Q include?
 - 6.251 percent.
- The unlessed Federal tract of 120 acres comprises what Q percentage of the Unit Area?
 - 4.688 percent.
- The remaining eleven tracts comprising 2,279.66 acres represent what part of the Unit Area?
 - 89.061 percent.
- Mr. Higgins, have you prepared or had prepared under your supervision a map showing the geological information in this area?
 - Yes, I have.
- Will you state, before referring directly to the map, according to the Unit Agreement, what is the proposed objective of the initial test well in this Unit?
- The proposed objective of the initial test well in this Unit is the Devonian formation.
- All right, in this exhibit which you have had prepared under your supervision and direction, will you describe --
- MR. COUCH: Let's have it marked Ohio Exhibit 2 for identification.

(Applicant's Exhibit No. 2 marked for identification



- Q Now on this Ohio Exhibit 2, have you outlined the Unit Area both in sort of a hatched line and also in a red pencil line?
 - A Yes, I have.
 - Q Is the State acreage shaded in a blue stipple?
 - A Yes, it is.
- Q Have you shown the proposed location of the initial test well on the map?
 - A Yes, I have.
 - Q What is that location, please?
- A That location of the initial test well is 1980 feet from the South line, and 660 feet from the West line, Section 12, Township 20 South, Range 34 East, N.M.P.M.
- Q That then is in the Northwest Quarter of the Southwest Quarter of Section 12, is it not?
 - A That is correct.
 - Q Is that shown by a red dot with a circle around it?
 - A Yes, it is.
- Q -- on Exhibit 2. Mr. Higgins, referring now to The Ohio's Exhibit 2, please state for us briefly what that exhibit represents and what it purports to show with respect to the geology in this area.
- A This exhibit represents a seismograph map of the Lea Unit, a reflection seismograph which is contoured on a reflection believed to indicate the structural attitude of the Devonian



formation. The contour interval is 100 feet.

- Q Mr. Higgins, do you have any sub-surface data in this area with respect to these deeper formations at all?
- A Deep sub-surface geological information in this general area is very sparse; consequently, little can be said about deep sub-surface structural conditions. It can be said, however, that a very attractive marine sedimentary section does exist in the prospect area.
- Q With respect to shallower formations, since all formations are being unitized here, with respect to shallower formations you have no seismograph work that would be of assistance there, do you?
 - A No. sir, we do not.
- Q Is it true that the structural configuration of the shallower formations is not really the controlling thing, geologically speaking, in this area?
- A That is correct. We would not expect and we haven't observed in this area that the shallower formations would accurately reflect the configuration of the Devonian, such as the Yates sand.
- Q As to the possibility of production from those, it depends on the porosity and permeability in the sand section?
- A Yes, that is true, the production is stratigraphically controlled and dependent on those factors in the reservoir.
- Q So that this information was developed by seismograph work done for The Ohio Oil Company to get the best information we



could get with respect to the deeper formations in this area, is that right?

- Yes, sir, it is the only way we know to attempt to map the deeper formations.
- It's possible that some of the things shown on here will prove to be somewhat different when development has taken place, is that not right?
 - Yes, that has been our experience in other areas.
- Is it true that the Unit Agreement provides for expansion or contraction as it is established that certain areas are productive or non-productive?
 - Yes, it does provide that.
- That additional information can be obtained as development progresses under the Unit Agreement?
 - Yes.
- What is the general trend of the Devonian structure in this area?
- The general trend of the Devonian structure in this area is northwest-southeast; it is based on observation of subsurface structure on the Devonian in the South Vacuum-Devonian Pool and several structures on the Central Basin platform.
- This would be what you would refer to as regional Q geology?
 - Yes, that is correct.
 - Now as far as the contours on top of the Devonian, Q



- A It indicates that there are two localized structural highs separated by what I would refer to as a weak low area or a saddle, using geological terminology.
- Q It's possible that those two structural highs may be connected as the same reservoir, or they may turn out to be two separate smaller Devonian reservoirs?
- A Yes, that is true. I think the former is more likely, that it would turn out to be one reservoir.
- Q Mr. Higgins, considering the study that you have given to this area, will you state whether in your opinion this agreement will tend to promote conservation of oil and gas?
 - A Yes.
- Q And tend to promote the better utilization of reservoir energy in the area?
- A It is my opinion that the Unit Agreement will promote better utilization of reservoir energy and the conservation of oil and gas.
- Q And that reservoir energy can best be utilized through the development of this area as a Unit, rather than through uncontrolled development by the different operators involved?
- A Yes, as a Unit, all parties concerned will have a mutual purpose on which to base a development program on sound engineering principles.



Q Now in your opinion under this proposed agreement will the State of New Mexico receive its fair share of the recoverable oil or gas in place under its lands in the area?

A Yes, it is my opinion that they will receive their fair share in this manner, when the State land has been reasonably proved to be underlain by oil or gas, it will become embraced in a participating area and will begin to share in the royalty from the participating area on a pro-rate acreage basis with the other types of land.

- Q Now you have previously testified that the State land included is common school land. Is any other beneficiary institution of the State involved in this unit?
 - A No. sir.
- Q Therefore it's clear that the beneficiary institution that is involved will receive its fair and equitable share of the recoverable oil and gas in its lands within this area, is that your opinion, also?
 - A That is my opinion.
- Q Now then, in other respects is this agreement in your opinion for the best interest of the State with respect to the State lands?

A Yes, I would say it is, based on the following reasoning: The State lesse is a relatively new lesse and will receive
benefit of early development. The initial test and the formation
of the Unit should further, or at least encourage exploratory



drilling in the general area. I say that because of the information derived from the initial test well, and/or subsequent wells. and because of the expected discovery of production in paying quantities. Thus I think the initial test well and the formation of this Unit could create additional exploratory drilling outside of the proposed Unit Area and in the general area.

- Mr. Higgins, in your work with The Chio and in the oil business generally, you of course are aware of the large expenditures required to drill a Devonian wildcat well, are you not?
 - Yes, sir, particularly in this area.
- In the formation of this Unit where the cost of such Q a well can be shared by interested operators, will that in turn create or cause earlier development of this area than would otherwise be the case?
- Yes, it definitely will, because of the diversified lease ownership, the risk for one party to explore this area, the depths and costs involved, I believe the Unit approach is by far the best method.
- At least it's much more encouraging to an operator to participate in drilling such a well, when he does not have to carry the entire financial load himself, is it not?
- Yes, sir, it is a matter of sharing the financial risks.
- Q This State lease is a new lease, I mean dated in June of this year?



- A Yes.
- Q This well that is to be drilled here, and future development if this well is a discovery well, will therefore result in development of this State lease in its early stages, will it not?
 - A Yes, it will.
 - Q It should, at any rate?
 - A Yes.
- Q It certainly would indicate whether development would or would not be feasible within the earlier periods of the life of that lease?
 - A Yes, definitely.
- Q Well, as a geologist, then, Mr. Higgins, in your opinion will this Unit Agreement generally promote conservation of oil or gas and tend to prevent the possibility of underground waste through leaving this oil undiscovered there?
 - A Yes, I believe it will.
- Q Do you have any further comment or statement that you would care to make at this time with respect to the geology in the area or any other aspect of this Unit Agreement?
- make pertains to the geology of the area, and that is to recognize that this is believed to be a multi-pay area, the Devonian being the most attractive reservoir, and consequently, our primary objective; assuming production in the Devonian, it is likely that we would encounter another pay or possibly pays above that zone.



- Q Those also in your opinion are more likely to be deep pay in the Pennsylvanian, or something of that nature, than in the shallow?
- A Yes, they would most likely be pre-Permian, or certainly below depths of 10,500 feet.
 - Q This test well is projected to 15,000 feet?
 - A That is correct.
- Q Will that be of sufficient depth to adequately test the Devonian in this area?
- A Yes, it should. I would expect to encounter Devonian formations between depths of 14,300 and 14,500. We have allowed an extra depth to take into consideration penetration and error in our estimates.
- Q All right, now, those depths you are speaking of, there, are actual depths from ground level, are they not?
 - A Yes, they are.
- Q And the depths shown on the contours in The Ohio Exhibit 2 are sub-sea elevations, is that right?
 - A They are sub-sea elevations, correct.
 - Q All right, sir.

MR. COUCH: We introduce Chio Exhibits 1, 1-A, 1-B, and 1-C, and The Ohio Exhibit 2, and offer them in evidence.

MR. PORTER: Without objection the exhibits will be admitted. Were you through with your Direct?

MR. COUCH: Yes, that concludes our direct presentation



ALBUQUERQUE, NEW MEXICO

CROSS EXAMINATION

BY MR. PORTER:

- Q With regard to the location of this particular area, you mentioned the South-Vacuum Pool, which is presently defined as a Devonian Pool. About how far is this area from the existing South Vacuum Pool?
- A It's approximately fifteen miles in a southwesterly direction.
 - Q Southwesterly direction?
 - A Yes.sir.
- Q That is west of the Central Basin platform as it's generally referred to?
 - A Yes, sir.
- Q Just one other question which you may or may not be prepared to answer, and that is, you anticipate that this well will be drilled to something below 14,000 feet. What would you figure the cost of such a well would be, a wildcat effort?
- A I can give you an approximate cost; of course, any calculated cost is nothing but an estimate.
 - Q Sure.
- A In that sense, I would say that the dry hole cost to drill a 15,000 feet test at this location would be between 350 and \$375,000.00, barring unusual conditions during the drilling of the well, such as long fishing jobs, blow-outs, unusual conditions in general which would delay the drilling of the well.



- Q Well, in a well of that depth, you usually encounter unusual conditions, don't you?
 - A Yes, it is common.
 - MR. PORTER: Does anyone have a question?
 - MR. PAYNE: Yes, sir.

BY MR. PAYNE:

- Q Mr. Higgins, you say that the formula for participation in the participating area will be on a straight acreage basis, pro-rata?
 - A On a pro-rata basis, yes.
- Q I believe you testified that all the working interests have approved this Unit Agreement, is that right?
 - A Yes, sir.
- Q Now, what percentage, acreage-wise, of the overriding royalty interests have approved, what percentage does this Mr. Allison have?
- MR. COUCH: Mr. Payne, if I may refer to the Unit

MR. PAYNE: Yes, sir.

MR. COUCH: In Exhibit B, it would clarify that issue.

Mr. Allison and wife, according to our best information, own a

five percent everriding royalty interest applicable only to

Tracts 2 and 3. Tract 2 comprises 39.91 acres, and Tract 3 is

40 acres. I am not sure that I have a percentage calculation on

that as to what percentage of the total override is involved there.



No. sir, I haven't calculated it.

MR. PAYNE: But acreage-wise, it would be fairly small?

MR. COUCH: Acreage-wise, it would be slightly less
than eighty acres out of the total. That acreage would be 3.126
percent, or very close to that, eighty acres of the total would
be approximately that percentage.

MR. PAYNE: Now the only two royalty owners are the State and the U. S. G. S., is that right?

MR. HIGGINS: That is correct. The State and Federal government.

MR. PAYNE: You anticipate approval from both of those parties?

MR. COUCH: If the Commission, as a result of this hearing, approves the Unit Agreement and the Unit Area, then we do anticipate, Mr. Payne, that the State Land Commissioner will approve it; and if I may state for the record, in fact, let me introduce as Ohio Exhibit 3 a photostat of a letter received from the U.S.G.S. designating the area and giving preliminary approval to the Unit Agreement with certain requested changes; and then let me state that we have complied with each of those requested changes except one, and that was a request from them that we not describe the land by regular land description in the body of the instrument, but that we rely on Exhibit A only. We have left the land description in the body of the Agreement, and I understand they accept them in that form.



ALBUQUERQUE, NEW MEXICO

(Applicant's Exhibit No. 3 marked for identification.)

MR. COUCH: The Ohio's Exhibit 3 is a photostat copy of a letter from the United States Department of Interior, Geological Survey, Washington, D. C., dated October 14, 1959, directed to The Ohio Oil Company in Houston, Attention of Mr. J. D. Wheeler. I personally have seen the original of this letter, and this is a true and correct photostatic copy of it, granting preliminary approval of the Unit Agreement, subject to the changes. I personally made the changes to conform to the request of the U.S.G.S. We are anticipating prompt approval, and hopeful of starting the well before the middle of December.

MR. PAYNE: Thank you.

MR. COUCH: I offer in evidence Ohio's Exhibit 3 in connection with the other exhibits previously offered.

MR. PORTER: Without objection Ohio's Exhibit 3 will be admitted.

MR. PAYNE: I have no further questions.

MR. PORTER: Anybody else have a question? Mrs.

Rhea, do you have a question?

MRS. RHEA: No.

MR. PORTER: If nothing further to be taken up at this time, we will take the case under advisement and adjourn the hearing. I want to say I will submit a recommendation to the other members of the Commission as promptly as possible.



STATE OF NEW MEXICO)

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 was reported by me in Stenotype, and that the same was reduced to typewritten transcript under my personal supervision, and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

DATED this 10th day of December, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

NOTARY PUBLIC

My Commission Expires: June 19, 1963.

I do hereby certify that the foregoing is a complete record of the foregoing in the land of the foregoing in the land of the foregoing is in the land of the foregoing is in the foregoing in the foregoing is in the foregoing is in the foregoing in the foregoing is in



HEW REXICO ON COMSERVATION COMMISSION

Breedmer Bearing

Per 102

Santa fo . YEV MEXICO

RECISTER

BEARING DATE

Brember 20 . 1959

TIME: 9 a.m.

REPRESENTING: NAME: The Shaper of the objective. Middend, type for the objective. Howards Fern our Payme of Payme of Payme of the objective. Janta 72.

LOCATION: