

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
~~Santa Fe, New Mexico~~
Hobbs, New Mexico
April 13, 1966

REGULAR HEARING

IN THE MATTER OF:

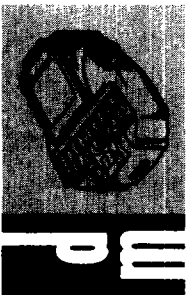
Application of the Atlantic Refining Company
for three waterflood projects, Eddy County,
New Mexico.

Case No. 3391

BEFORE:

Mac Easely, Lt. Governor
Guyton B. Hayes, Land Commissioner
A. L. (Pete) Porter, Secretary-Director

TRANSCRIPT OF HEARING



MR. PORTER: Call Case 3391.

(Whereupon, Applicant's
Exhibits 1 through 11
marked for identification.)

MR. PORTER: Are there any appearances in this
Case?

MR. HINKLE: Charles Hinkle, Roswell, appearing
on behalf of Atlantic Refining Company.

MR. PORTER: Any other appearances? You may
proceed.

MR. HINKLE: We have one witness, Mr. Bob
Baker, and 11 exhibits, and we've had the reporter mark
these from 1 to 11.

(Witness sworn.)

B O B B A K E R, a witness, having been first duly
sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HINKLE:

Q Your name is Bob Baker?

A Yes, sir.

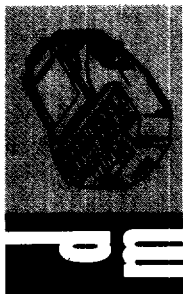
Q You're employed by Atlantic Refining Company?

A Yes, sir.

Q What is your position?

A I'm an an analytical engineer.

Q Have you previously testified before the



Commission?

A No, sir.

Q Are you a graduate petroleum engineer?

A Yes, sir.

Q What school?

A From the University of Oklahoma in 1957.

Q Since your graduation have you practiced your profession?

A Yes, sir, I came under the employ of the Atlantic Refining Company in June of 1957 and have been continuously employed by them until present.

Q Where have you been located during your term of employment with Atlantic?

A Since employment, at least since August of 1957 I have been located in Roswell, New Mexico.

Q You are familiar with Atlantic's operations in the Southeastern New Mexico?

A Yes, sir.

Q Are you familiar with the Shugart, Queen, Yates Pool in Eddy County?

A Yes, sir, I am.

Q Have you made a study of the wells in that pool?

A Yes, sir.

Q And examined the logs of the wells?

A Yes, sir, I have.

Q Are you familiar with the application which has been made by Atlantic in this case?

A Yes, sir, I am.

Q What is the purpose of Atlantic's application?

A Atlantic is requesting permission to instigate basically three pilot waterfloods in a portion of the Southeastern portion of the Shugart, Yates, 7 Rivers, Queen Grayburg Pool. We are also requesting that administrative procedures be established if necessary, and as desired, to have administrative procedures set up to place other wells other than those we proposed, under injection at some future date.

Q Does your application include three separate waterflood projects?

A Basically it does. I think as advertised it just said that we requested to inject water into a portion of the Shugart Pool, however we do have three separate projects that we desire to inject water into, they're all contiguous.

Q Refer to Exhibit 1 and explain to the Commission what this shows?

A Exhibit Number 1 is a plat of the general area in the Shugart Pool. It shows all wells within a two-mile

radius of Sections 34 and 35, Township 18 South, Range 31 East, shows the completions what they're producing from. It also shows the three project areas as cross-hatched areas.

Q Projects "A", "B" and "C"?

A Yes, sir, Project areas "A", "B" and "C" as shown by designations in the legend. It also shows the 5 injection wells that we propose to inject water into in these three different project areas, and I have added in red pencil, a cross section trace which will come up in later exhibits.

Q That's an index to another exhibit?

A Yes, sir, it is.

Q Does this also show the ownership of the oil and gas leases in this area?

A Yes, sir, to my knowledge this is part of a takeoff of a land map, and is as up to date as I know. I would like to apologize that in the South half of the Southeast Quarter of Section 34 it's not very legible, and that should be Cities Service.

Q Does this also show the characteristics of the land, that is whether it is Federal land or State land?

A Yes, sir, it does. All these lands that we are proposing to inject water into at the present time are Federal lands.

Q Is Atlantic a lease owner of the three project areas shown on Exhibit "A"?

A Yes, sir, we are.

Q Now, refer to Exhibit 2 and explain what that is?

A This is a letter to -- from the Atlantic Refining Company to the United States Geological Survey requesting permission to inject water into the three project areas. It shows that we submitted to them a plat showing the proposed project area with locations of the wells, zones of completion, ownership, and the location of the proposed injection wells, a table showing the U.S.G.S. Royalty Scale, and table of initial potential tests, current production, and North, South, East, West cross section.

Q Is there a difference in the overriding royalty ownership in connection with these three leases that are designated as projects "A", "B" and "C"?

A Yes, sir.

Q Refer to Atlantic's Exhibit 3 and explain what that is?

A Atlantic's Exhibit 3 is a letter from Mr. James A. Knauf of the U.S.G.S., granting Atlantic permission, or not objecting at any rate, to the injection of water into this project area. It also -- with this permission they establish certain requirements, one of which this will

be operated in compliance with the New Mexico Oil Conservation Commission Regulations concerning waterflood operations; and 2, that duplicate copies of a monthly progress report showing the volume of water injected and average pressure for each injection well. It does not preclude as item 3 of their requirement, this approval does not preclude the necessity for further approval when the project is expanded, to include other wells and leases or the necessity to submit the usual notices and reports on wells involved. When this project is expanded to involve other operators and interests, the correlative rights of all concerned should be protected.

Q Mr. Baker, have all of the wells in the Shugart Pool, as shown on Exhibit 1, reached the ~~advanced~~ stage of depletion?

A Yes, sir, they have.

Q That is from primary production?

A Yes, sir, they have.

Q What is the average production of the wells in the area?

A On these -- for these combined, three producing, the average production is 5.6 barrels of oil per day per well, based on February 1966 production figures. For the individual projects it differs slightly, and Project "A", as

shown on Exhibit 1, the average production is 5.7 barrels of oil per day per well; and Project area "B", the average production is 3.8 barrels of oil per day per well; and in Project area "C", the average production is 8.4 barrels of oil per day per well.

MR. PORTER: Mr. Baker, at this point may I ask when did this development take place, mostly the drilling in the area?

A The original development started in about 1938. The predominate portion of it came about in about 1957, '58 and '59, and there was small amounts of development as the years passed. I think that in the Mask Lease, which is to the Southeast of the project area, there was 1 well completed early last year or the year before that.

MR. PORTER: Thank you.

Q (By Mr. Hinkle) I believe you have testified that there are three proposed injection wells on Project "A", and two on "B"?

A No, sir, there are three on "A", one on "B", and one on "C".

Q Have you prepared schematic sketches or diagrammatic sketches of each of these injection wells?

A Yes, sir, I have.

Q Refer to Exhibits 4 through 8 and explain what

these exhibits are?

A Exhibits 4 through 8 are diagrammatic sketches of the proposed injection wells. They show the present and proposed perforations; the casing strings; casing setting points; the number of sacks of cement used to set these casing strings; the proposed injection equipment. As shown on Exhibit Number 4 we plan in this well, because of the small size of the oil string, to inject into the casing tubing annulus and through the tubing itself to separate the injected water into two separate zones. On the Exhibits 5 through 8 the equipment is very similar. All of these exhibits also show proposed packer points, the total depth of the wells.

Q You have tried to show a portrayal of the information which is required by the Rules of the Oil Conservation Commission?

A Yes, sir, I have.

MR. HINKLE: If the Commission please, in this connection, just as I arrived this morning I had a phone call from my office stating that we had received a letter from the State Engineer which my secretary read to me over the telephone, and in checking with your secretary I find that you have not received a copy of the letter as yet. And I made a brief notation of what the letter contained, which I

would like to indicate to the Commission.

MR. PORTER: We would like to have that.

MR. HINKLE: The State Engineer stated that they had no objection to injection wells "A3", "A12", and "B5". Now, with respect to the injection well "A8", it's stated that the diagrammatic sketch, which was submitted, did not show cement behind the 7" O.D. casing from 815 feet to 3,183 feet. Now, as to well "A13", it says, "The sketch does not give the top for the 200 sacks of cement placed at 4,117 feet behind the 7" O.D. casing". Furthermore, that no top and bottom limit is indicated for the squeeze job on the 7" casing, which was made at 2,794 feet. The letter further stated that there was no basis for the calculation on the top of the cement, which is listed at 2,067 feet behind the 7" O.D. casing. He said, "Because of these matters mentioned", that in his opinion it does not appear to provide adequate protection in these two particular wells. I would like for Mr. Baker to explain these matters which the engineer has brought out.

MR. PORTER: That will be fine.

A Will you please refer to our Exhibit Number 5 which is a diagrammatic sketch of the Atlantic Refining Company Hinkle "A" Number 8 Well; I calculated, personally calculated and prepared these diagrams and found that the

cement top was not adequate to protect zones, especially in the Yates, which is at about twenty-seven to twenty-nine hundred feet. The Atlantic Refining Company, in our plans for this project, propose to squeeze cement behind the 7" O.D. casing to protect this formation and to provide insurance that the water will go where we wish it to.

Q In your opinion that will comply to the State Engineer on this injection well?

A Yes, sir. Will you please refer to Exhibit Number 8 which is a diagrammatic sketch of the Hinkle "A" Number 13 Well. This well was originally drilled and completed in the Queen at a later date, I believe it was about 1961. The operator at that time, it was Koehane and Saunders, perforated the Yates Zone and found that the cement job was not adequate so they squeezed through perforations at 2794 with 75 sacks of cement. They returned to the Yates, perforated it for production and treated it with a rather high sand-oil fracture job. Since the well was perforated, squeezed, reperforated and treated in this Yates Zone, there has been no appearance of any trouble with the well. No water has come in with the oil and because of the pressures involved I believe that this well is adequately protected behind the casing string because of this squeeze job.

Now, part of the objection of the State Engineer was

there was no top and bottom to indicate top or bottom to this squeeze job. There was really no way that I know of other than a temperature survey to determine that. However, the producing performance of this well had indicated that it has been adequate and I believe it will be adequate for the waterflood as an injection well because of this.

Q If it should develop that it appears that it is not adequate or water is lost or something else happens, what would you propose to do with the well?

A I would recommend as an engineer that we go in and squeeze the well and make sure that there was adequate protection behind the pipe. Our prime interest is to make the water go where we want it to go and nowhere else, it's cheaper that way.

Q Now, Mr. Baker, refer again to Exhibit 1 which indicates the cross sections that you have prepared. Now, refer to Exhibit 9, which I believe is a North and South cross section, and explain to the Commission what that shows.

A Exhibit 9 -- pardon me, is a West to East cross section, and it is shown on the trace in red on Exhibit Number 1. This cross section shows the different wells entirely across the project area from West to East. It also shows present perforations in the wells; it shows continuous sand bodies from each. There has been production someplace

in the area at sometime. The zones that we plan through this application to flood are the Yates. If you will please refer to the well directly in the middle of the Exhibit 9, which is an Atlantic Hinkle "A" Number 8, we plan to inject water into the Yates from about 2820 to 2840 feet, or any other place in the Yates that the shows of oil have been evident.

We also plan to inject water into the Queen Zone from about 3430 to 3480. This particular well is one of the injection wells.

Q Now, refer to Exhibit Number 10 and explain that please?

A Exhibit Number 10 is a North South cross section across these project areas. The trace of this cross section is shown in red on our Exhibit Number 1. The information on this North South cross section is the same as that basically was on our Exhibit Number 9.

Q Do these two exhibits, 9 and 10, show a continuity of the formation through this area?

A Yes, sir, they do.

Q And the section is easily identifiable on the electrical log on these exhibits?

A Yes, sir.

Q Do you have any further comments with respect to these exhibits?

A The only comment I have is that in the Yates Section near the top there is an identifiable stringer that it shows a continuity across the area. However, there are also through close examination of this cross section, you can see that there are some sand lenses. Now, I have examined the old cable tool driller's logs and found there are shows of oil in some of these other sand lense bodies and we intend to go after it through perforating and flooding those. They are not necessarily continuous over the entire area, however.

Q Do you have any information as to the cumulative production from each of these project areas?

A Yes, sir, I do. The project area "A" has a cumulative production as of March 1, 1966, 664,795 barrels of oil; the cumulative production for project area "B" as of March 1, 1966 is 178,259 barrels of oil; and for project area "C" the cumulative production as of March 1, 1966 is 100,072 barrels of oil.

Q Have you made a reservoir study and tried to determine approximately the amount of oil which will be recovered through this secondary recovery operation?

A Yes, sir, I have.

Q What figures have you arrived at?

A I, through my studies, have found that we expect to get at least a 1 to 1 secondary to primary ratio. Now,

the figures I have given as of cumulative primary production are not the figures that we expect to recover because there is a small amount of remaining primary in each project area. If you take a decline curve down to 53 barrels a day economic limit, there is still a small amount of primary remaining in the project area "A". We expect to obtain at least 766,000 barrels of secondary oil, which is my prediction of ultimate economic primary.

In project area "B" we expect to obtain at least 187,000 barrels of secondary oil, and in project area "C" we expect to obtain at least 145,000 barrels of secondary oil.

Q At what rate do you intend to inject water in connection with each of these projects?

A We intend to inject 400 barrels of water per day into each injection well. This water will be divided, 200 barrels a day into the Yates and 200 barrels a day into the upper Queen Section.

Q Where do you intend to obtain the water for injection purposes?

A We have commitments from the Double Eagle Corporation to deliver fresh water to this project.

Q Where does that water come from there, a pipeline?

A I believe their source is on the Caprock, and

their pipeline is delivering to the "A" Atlantic Project, about three miles North of this proposed project.

Q That is fresh water?

A Yes, sir, we have taken coupons on the Swaringer Project and there have been little or no corrosion indicated.

Q You have furnished the State Engineer with copies of the application of all of the exhibits in this case?

A Yes, sir, we have.

Q How long do you estimate it will be before you get a response from the injection of water in these five injection wells?

A We believe that it will probably take at least a year to obtain a significant response; a significant oil response, at any rate.

Q During that period of time is it your intention to make an effort to unitize this area, these three leases that are involved in Projects "A", "B" and "C", and other lands and areas?

A Yes, it is.

Q Do you anticipate any particular difficulty in unitizing this area?

A No, sir, we don't. The basic royalty for most of it is Federal Royalty. There are various small overriding royalty interests. We don't really expect to obtain any

objection if we can find an equitable basis to unitize on.

Q What was the object of going ahead with this application at this time to start injection of water in these three leases without waiting for unitization?

A About a year ago at this time, Atlantic Refining Company purchased the Coehane and Saunders Hinkle "A" and Hinkle "B" Leases with the object of waterflooding. Part of the terms of this agreement were that the Hinkle "A" and "B" Leases would be under flood by June 1st, 1966. This left us just a year to get everything together, make a full-fledged reservoir study, contact the operators and unitize, if possible. However, we have found that it's been impossible to progress with our plans as fast as we would wish. As a result we are requesting permission to inject waters into these project areas to satisfy the conditions of the purchase.

Q Have you progressed with the unitization far enough to know at this time about whether or not the leases can be included?

A Yes, sir, I believe we have a pretty good idea of the people that would be willing to go along and join in this unit. A close examination of Exhibit 1 shows that there would be the Cities Service Tract, which is the South half of the Southeast Quarter of this Section 34, and they have indicated an interest in joining the flooding if their interests can be protected,

and get what they consider their fare share. The Texaco Oil Company is flood-minded. They normally will go along. There are other leases here that Atlantic has purchased which includes the Northeast Quarter of Section 35, the West Half of the Southeast Quarter of Section 35, and the South half of the Southwest Quarter of 35, the Southeast Quarter of the Southeast Quarter of Section 27, all in Township 18 South, Range 31 East, and in addition to this we have purchased what was the Koehane and Saunders McFadden Lease which is the West half of the Northeast Quarter, and the East half of the Northwest Quarter of Section 3 in Township 18 South -- pardon me, Township 19 South, Range 31 East, in Eddy County.

Q You feel that there will be considerable additional acreage that can be added under these projects?

A Yes, sir, there have been at least two operators that have indicated orally that they don't wish to join, and these are Mr. Boyd, which has the property to the North end of Section 26 and Section 25; and one of the working interest owners in the John Mask Lease in Section 2 has indicated that he doesn't wish to go along with the project. However, we have not received any oral objection at this time for these other surrounding leases.

Q You spoke of the Cities Service being interested in

the project?

A Yes, sir.

Q Refer to Exhibit 11 and state what that shows?

A Exhibit 11 is a copy of a letter from the Atlantic Refining Company to the Cities Service Oil Company in regard to injecting water into these project areas, specifically into Atlantic's Hinkle "A" Number 3 Well, which offsets the Cities Service Hinkle "A" property in Section 34. This letter indicates our injection rates and where we are obtaining the water, and it is signed in concurrence by Mr. J. E. Embry, which indicates no objection.

Q Would it be helpful if a procedure could be set up whereby the Commission could approve additional injection wells on these leases?

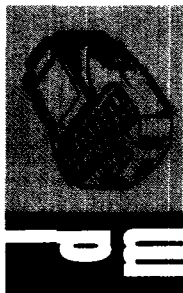
A Yes, sir.

Q Would it be helpful if the Commission could approve, administratively, additions or expansions of these project areas before they're actually unitized, if you thought it was necessary?

A Yes, sir.

Q State whether or not, in your opinion, these three proposed waterflood projects are in the interest of conservation and the prevention of waste?

A Yes, sir. If we do not inject water into these, or



some secondary method, there will be a considerable amount of oil left in the ground. It will ultimately take a full extent of waterflood under a unitized project to obtain these reserves. However, as I previously testified, we hope to get these projects started in order to save these leases or satisfy the term of our purchase.

Q By the location of the injection wells on the three project areas, locating them as you have, state whether or not, in your opinion, Correlative Rights will be protected until such time as the area is unitized?

A Yes, sir, I believe -- I know they will be protected. If you will please refer to our Exhibit Number 1, the project area "B", which is located in the West half of Section 34, has one injection well on it. This base lease is not the entire amount of the lease, which the entire lease also includes the West half of the Southeast Quarter of Section 35, which you can see is offset by an injection well on project area "A". As a result, you're producing in one case and injecting in another. In project area "C" there is one injection well, and this project area "C" is part of the same base lease which includes the South half of the Southwest Quarter of Section 35. Also in this case, as in the first case, there is protection where you have one injection well pushing oil off your lease and an injection well on an adjoining project pushing

water onto your lease. Of course, this is all -- all of these project areas are tied in together, so the overriding royalty and working interests are adequately protected.

Q Did you prepare or was there prepared under your direction, the diagrams which are included in the exhibits, other than the letters?

A Yes, sir.

MR. HINKLE: We would like to offer in evidence Atlantic's Exhibits 1 through 11.

(Whereupon, Applicant's Exhibits 1 through 11 offered into evidence.)

MR. PORTER: If there are no objections the exhibits will be admitted to the record.

(Whereupon, Applicant's Exhibits 1 through 11 admitted into evidence.)

MR. PORTER: Anyone have a question of the witness?

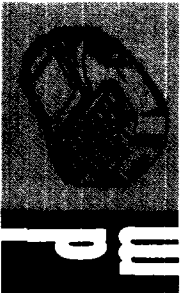
CROSS-EXAMINATION

BY MR. NUTTER:

Q What is the expected recovery of the "A" project?

A 766,000 barrels of oil.

Q Thank you. Now, as I understood Mr. Hinkle's statements regarding the telephone call and the letter from the State Engineer, his objection to the Well Number 8 was that there was no cement from opposite the Yates perforations or



above, is that correct?

MR. HINKLE: No cement behind the 7" O.D. from 915 to 3181.

Q (By Mr. Nutter) You propose to perforate opposite the Yates and squeeze?

A Yes, sir.

Q How many sacks will that be, do you have any idea?

A No, sir. Normally with our squeeze jobs, say with a high pressure squeeze job, we squeeze it in stages until we obtain an adequate pressure to where no further cement will go in.

Q Your proposal on the squeeze will go into the annulus above and below your proposed Yates perforated interval?

A Yes, sir.

Q 3183 is a calculated top based on a hundred sacks on the 7" which will set at 4,000?

A Yes, sir.

Q On your 13, his objection there was that it had been squeezed but he didn't know what the top or bottom of the squeeze job was?

A Yes, sir.

Q Now, the calculated top of the 7" had been 2067?

A Yes, sir.

Q Which I presume was based on the 200 sack job at 7" on 4117?

A Yes, sir.

Q Why was it necessary to squeeze?

A I believe Mr. Koehane and Saunders tried to complete in the Yates perforations or were going to try to treat this zone. They found that the cement was not adequate, they found it was spongy or something like that, and they had to squeeze it to make the treatment go where they wished it to.

Q Is it a possibility that some of these other calculated tops may not be allowable?

A Yes, sir. I have applied a 75 percent efficiency factor to these.

Q I believe only one of the injection wells presently has Yates perforations or maybe none of them have Yates perforations. Would it be unreasonable to squeeze opposite the Yates in each and every case before injection is made?

A I believe it would be unreasonable to assume that all require it. Now, if they do require it, Atlantic, as I said before, desires this water to go where they wish it to and they will squeeze these wells to make it go.

Q You won't know until you have perforated?

A That's right, sir.

Q If it fails to maintain a proper pressure you will

squeeze?

A Yes, sir.

Q On Exhibit 1 I notice that some of the wells are shown as having Yates perforations, some are shown as being Queen, and some are Yates and Queen both. Is it your proposal to open up all of these proposing wells in both zones?

A Yes, sir.

Q So you'll have a Yates and a Queen waterflood for all of the entire area, then?

A Yes, sir.

Q In both zones?

A At such time that we feel that the wells will be responding we'll perforate them so we can produce the oil.

Q Have you made any computations as to what the allowable would be for each of the three projects or how many wells you have in each project?

A In the project area "A" there are 11 wells, however according to the rules established, Rule 701, there are only 10 forty acre tracts in project area "A" and one extra which would be a third, so it would be 420 plus a third.

Q That's what I had counted on this. This project "B", I believe you have three wells?

A Actually, there are three producing wells, however

according to the Commission's Rules, that Southeast Quarter Southwest Quarter would not legitimately receive it.

Q This project area would have 3 forties and 3 wells?

A Yes, sir.

Q And project "C" has 3 forties and 2 wells?

A Yes, sir.

MR. NUTTER: That's all I have.

CROSS EXAMINATION

BY MR. BOYD:

Q Tom Boyd, and I would like to ask Mr. Baker a question I didn't understand. Did he made the statement that I did object to joining this unit? Would you please state that again?

A Mr. Rick Trimble of our office has been in contact with you, I believe, and from talking to Mr. Trimble myself, he indicated that you probably would not be able to because of some desire of your working interest owners, would not be able to join a unit in the future. However, we are going to offer to all people in the area, equal opportunity to join the unit.

Q I just wanted you to state that over. I didn't get it whether you said I did object or did you say that I objected, had objection to going in the unit?

A Not objection, probably that you would not, it was



my understanding, sir.

Q That I probably would not?

A Yes, sir.

Q Did you state that I objected?

A If I did it was a wrong word.

MR. BOYD: I want it to be known to the Commission that I have no objections for going into this unit and there is negotiations in process at this time with Atlantic, and being so many different working interest owners in this area that I operate for, I have been unable to get all these people in a meeting and get some kind of a commitment out of them whereby we might join in this unit. I just wanted the Commissioners to know that I have no objections going into the unit if it can be worked out.

THE WITNESS: We are proposing to offer the equal opportunity to join it. If they are now unable to, that's their internal problems.

MR. PORTER: I appreciate your clarifying that point.

MR. HINKLE: That's all we have.

MR. PORTER: Anyone else have a question of the witness? He may be excused. Anyone have anything further to offer in this case? The Commission will take the case under advisement and proceed to Case 3392.

I N D E XWITNESS:PAGE

BOB BAKER

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Cross-Examination by Mr. Boyd 25

E X H I B I T S

| <u>NUMBER</u> | <u>MARKED FOR IDENTIFICATION</u> | <u>OFFERED</u> | <u>ADMITTED</u> |
|---------------|--------------------------------------|----------------|-----------------|
| Applt's 1. | 2 | 21 | 21 |
| Applt's 2. | 2 | 21 | 21 |
| Applt's 3. | 2 | 21 | 21 |
| Applt's 4. | 2 | 21 | 21 |
| Applt's 5. | 2 | 21 | 21 |
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| Applt's 9. | 2 | 21 | 21 |
| Applt's 10. | 2 | 21 | 21 |
| Applt's 11. | 2 | 21 | 21 |

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, BOBBY J. DAVIS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that for 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 5th day of May, 1966.

Bobby J. Davis
NOTARY PUBLIC

My Commission Expires:

March 13, 1969.

dearnley-meier
gibson
sawicki

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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