BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 24, 1963

EXAMINER HEARING

CASE 2865

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IN THE MATTER OF:

Application of Humble Oil & Refining Company for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the Gallup formation underlying its Navajo "G" lease in Sections 1, 2, 11 and 12, Township 31 North, Range 17 West, San Juan County, New Mexico. Initial injection will be through applicant's Well No. 16 located in Unit G of said Section 1. Applicant further seeks the promulgation of special rules governing the operation of said project. CASE 2865

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 2865.

MR. DURRETT: Application of Humble Oil & Refining Company for a pressure maintenance project, San Juan County, New Mexico.

MR. BRATTON: Howard Bratton, appearing on behalf of the Applicant, John Knodell appearing with me as co-counsel, and we have two witnesses, if they'll both be sworn.

(Witnesses sworn.)

MR. BRATTON: If the Examiner please, I would like to make a brief preliminary statement. This is an application for a

pressure maintenance project in another little Gallup Pool in the Basin. In our application we outlined a project area and tentative wells to be converted. If the Commission would rather pull in the area, we have a suggested outline that they can pull it into. We have no strong feelings, and I'll give that to you at the end of the hearing.

Also, I believe the rules that we have applied for are the exact Horseshoe-Gallup rules, except we have by amendment -- and I don't have a copy of it, but I believe it was sent to the Commission. Do you have that, Mr. Durrett?

MR. DURRETT: We have a copy of a letter from Mr. John Knodell from Humble requesting the application be amended.

MR. BRATTON: Right. Now the rule amendment there, as I understand it, is to this effect: That none of the wells directly offsetting acreage outside of the unit will produce more than a single allowable prior to January 1 of 1964. Then from there on they may produce any amount; the idea, of course, being that the offset operators want to get their floods into operation, so that is the reason for that suggested amendment, and as I understand it, that is the only change from the Horseshoe-Gallup proposed rules.

MR. NUTTER: As I understand it, the amendment is self-restricting, in effect?

MR. BRATTON: That's right. It means you couldn't start producing the wells directly offsetting the acreage at double allowable right now. You produce them at single allowable until

January 1, 1964, the Commission retaining jurisdiction of the case; and of course, if the offset operators and we don't have cooperative matters worked out by then, we might see; but that's the purpose of that at this time.

MR. NUTTER: The application is admitted as hereby amended in accordance with the letter of July 15.

MR. BRATTON: All right.

T. W. FAUTIN

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

DIRECT EXAMINATION

BY MR. BRATTON:

Q Will you state your name, by whom you are employed and in what capacity?

A My name is T. W. Fautin. I'm employed by Humble Oil and Refining Company in the Durango District as a production geologist.

Q Have you previously testified before the Commission?

A No, I have not.

Q State briefly your professional and educational background.

A I received a Bachelor of Science degree in Geology from Brigham Young University in 1950. I have worked as a geologist for the past eleven years, the last six years of which has been in Durango, Colorado, as a production geologist.

Q Are you familiar with the Many Rocks Field and the matters contained in this application?

A Yes, I am.

MR. BRATTON: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, sir.

(Whereupon, Humble's Exhibit No. 4 marked for identification.)

A For orientation purposes, I would like to refer you to Exhibit No. 4 in the handout. The Many Rocks Field is a stratigraphic trap trending northwest-southeast, typical of the Gallup offshore sandbar developments. The discovery well on the northeast-northwest end of the Field was completed by Curtis Little on December 17, 1962; on the southeast edge of the field Atlantic completed their No. 1 Well December 25, 1962. Since the completion of those two wells, approximately 36 additional wells have been drilled in the area on 40-acre spacing. If you'll refer to Exhibit No. 1 --

(Whereupon Humble's Exhibits Nos. 1, 2, 3, and 5, 6, 7 marked for identification.)

Q Now on your Exhibit 4 the red outline is the project area as contained in the application originally submitted?

A That's correct.

Q The green outline is the Many Rocks Field as currently defined by the Commission, is that correct?

A That is correct.

Q And just for purposes of orientation, the producing wells and the proposed injection wells are indicated in accordance with the schedule on there?

A Yes.

Q Now let's go back to Exhibit No. 1, please.

A Exhibit No. 1 is a structure map of the Many Rocks and Horseshoe-Gallup Field. The contour horizon is the top of the Gallup pay sand and the contour interval is 25 feet. Humble acreage is outlined as shown in the legend. The scale of the map is one inch equals 4000 feet. The Many Rocks Field is located on the northeast flank of the Horseshoe-Gallup Field. It is also in the northeast part of the Humble acreage block. The dip in the project area is to the northeast at approximately two degrees. There is no evidence of a gascap, or an underlying water, and therefore structure should have little effect on performance of the field.

Q Is that all that's indicated on your structure map?

A That's right.

Q Let's go then to your cross-section, that's your Exhibit No. 2. The way the cross-sections run are indicated in your index map, your A-A' being northwest-southeast, the length of the pool; and B-B' is southwest-northeast across the pool, is that correct?

A That is correct.

Q What's indicated on your cross-section A-A'?

A Cross-section A-A' is a structural cross-section paralleling the Gallup sandbar trend, and it is located near the center of the sand trend, as you can see from the index map. The mechanical logs used in preparing this cross-section are gamma ray density logs, with the exception of Humble's G-8 Well, and that is a sonic log.

The vertical scale is one inch equals 80 feet, and the horizontal is one inch equals 600 feet. The datum is a plus 4150 feet. The correlation point above the Gallup pay sand is the Gallup "T" point, and this point is easily followed throughout the area. Below the Gallup pay sand is the sonosity. The sand itself is shown on the cross-section as a stippled area and through this line of section, the sand averages about 10-1/2 feet thick. It is my opinion that this is a continuous sand lens.

Q Now turn to your B-B'.

A Section B-B' trends southwest-northeast across the sand trend; the scale and datum are the same as Section A-A'. This section shows the Gallup sandbar thinning in a southwest and northeast direction. It is my opinion that the sand in a southwest direction becomes impermeable and is not connected to the main producing sand in the Horseshoe Field.

Q This is based on the datum from your G-13 Well, is that correct?

A Yes. Production tests on the G-13 Well failed to recover all the load oil, and we can see from the log that this

sand is very thin. We do not have core analyses on this well; however, production tests would indicate that it is very prolific.

Q You just have the one lens in this area, is that correct? You don't have an upper and a lower?

A There is an upper lens that is developed just to the east of the area. It is present in Mobil's 14-6 Well. But in the project area, this sand is either non-developed or very poorly developed.

Q Is there anything else you care to bring out in connection with your cross-sections?

A No, I don't believe so.

Q Let's go then to your Exhibit No. 3.

A Exhibit No. 3 is a formation density log, the same type of log that was used in the construction of the cross-section. This is of Humble's Navajo Tract G-16 Well, and it is a typical well in the Many Rocks Field. The Gallup "T" correlation point is shown at a depth of 1081, the sonosity at a depth of 1252, and the Gallup pay sand is shown as a stippled area.

Based on twelve cored wells in the Many Rocks Field, the average porosity is 15.4 percent and the average permeability is 135 millidarcies. The Gallup sand is a medium-grained light grey to green, slightly calcareous sand. It is approximately 950 feet above the Morrison formation. The Morrison formation is a water source for the flood in the Horseshoe-Gallup Field. This 950 feet is composed of primarily impermeable shales and sands.

Q What other water is there in the area?

A We have a slight surface water in the alluvium that is found in this old river channel that cuts through the area.

Q What depths are you talking about there?

A It varies in depth from, oh, less than 30 feet to approximately 70 feet. In some areas we spud directly on the Mancus shale and there is no surface waters there.

Q So between that surface water and your Morrison, there are no other fresh waters in the area?

A No, there is not.

Q How does this formation correlate as to your porosities and permeabilities with the Horseshoe and as to your other characteristics?

A The porosity and permeability and sand characteristics are almost identical with the Horseshoe-Gallup Field.

Q You just have the pinching out between the two fields; that is, it becomes impervious in between the two fields so there's no connection between them, otherwise, it's the same sand, same formation?

A Same general character, yes, sir.

Q Is there anything else you care to state about the geological characteristics of this area?

A No, not at this time.

Q From your study of the geological characteristics, would this formation be susceptible to a pressure maintenance

project?

A Yes, it would.

Q Is there anything in the area that would make it react to pressure maintenance any different than the Horseshoe?

A Not to my knowledge.

Q Were these Exhibits 1 through 4 prepared by you or under your supervision?

A 1 and 2 were prepared by me and 3 was prepared in our Denver area office.

MR. BRATTON: That's all the questions we have of this witness at this time.

MR. NUTTER: Are there any questions of Mr. Fautin?

CROSS EXAMINATION

BY MR. NUTTER:

Q This sand is continuous across to the Horseshoe-Gallup but pinched out of porosity and permeability?

A We don't have the control to say it's continuous. It thins very rapidly, as we see on the G-13 Well that is shown on the left side of Section B-B'. All there is is just a very slight remnant of the sand, approximately three feet left, as indicated from the log it is very tight and impermeable; and we also see this thinning happening in a northeast direction from the Horseshoe-Gallup Field. The sand becomes very thin and shaly and impermeable.

Q Well, this "CH" Well of yours up in Section 3, which

would be about midway between the two pools, did it encounter no sand at all, or what?

A I would say it encountered no effective sand. Quite often it's very shaly and it's difficult to tell whether you want to call this a sandy shale or shaly sand, but there would be no effectiveness in that well.

Q Your Exhibit No. 1 is a structure map of the Gallup pay sand, and it would indicate it's a continuous sand from one pool to the other dipping to the northeast. Is this the pay in the Horseshoe, one of the pays?

A Yes, it is.

Q Which is this, the lower or the upper?

A This is the lower pay. The upper pay in the Horseshoe Field is not present on Humble acreage. It is present to the southeast.

Q So in this area of the Horseshoe, you only have the one pay, anyway?

A That is correct.

Q You stated that a second sand was developing in the Mobil 14-6 well?

A That is right. That is an upper sand. It is about 130 feet above the main Gallup pay.

Q Has it been encountered in any of the other wells to the southeast there, or is that the only one --

A It has been encountered in some wells to the southeast

that are not shown on the map. It's the Atlantic, I believe 2-17.

MR. NUTTER: Are there any other questions of Mr. Fautin? He may be excused.

(Witness excused.)

DONALD V. EMERY

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

DIRECT EXAMINATION

BY MR. BRATTON:

Q Would you state your name, by whom you are employed and in what capacity?

A Donald V. Emery, Humble Oil and Refining Company. I am District Engineer of the Durango District.

Q State briefly your professional and educational qualifications, Mr. Emery.

A I have a Bachelor of Science degree in Petroleum Engineering from the University of Tulsa. I have a total of ten years experience, three years as a Petroleum Production Engineer, two years as a Reservoir Engineer, and three years as a section head in Reservoir and Production Engineering.

Q Have you studied the Many Rocks Field, are you familiar with the matters contained in this application?

A Yes, I am.

MR. BRATTON: Are the witness' qualifications acceptable?

MR. NUTTER: Yes.

Q (By Mr. Bratton) Mr. Emery, let's go then to your Exhibit No. 4 and referring back to it, explain what it reflects and what you propose to do in the way of injection wells, producing wells and so forth.

A The outlined area indicates the proposed project area and the wells with the red arrows through them indicate the injection wells as proposed initially. We anticipate further expansion upon the completion of cooperative agreements with offset operators on either side.

Q Those would be in the northwest there, after you finalize a cooperative agreement with, I believe, Skelly and Cities Service?

A Yes.

Q In the southeast, as soon as you firm up with Mobil and Atlantic and those people owning theirs?

A Yes.

Q That's the reason they haven't progressed further, and that's the reason we have proposed this amendment about a single allowable offsetting them until January of '64, is that correct?

A That's correct.

Q What is the status of these various proposed injection wells?

A Going on the row of wells with the No. 18 there in the southeast northeast of Section 2, that well is currently being tested after being treated, and I do not have the results. We

encountered approximately five feet of sand in that well. The next location in the diagonal has not been drilled or completed as of this date. The No. 20 Well has been tested and has not recovered completely the load oil. We anticipate it will recover approximately 20 barrels of oil per day on test.

The next well on the diagonal has not been drilled nor completed. Going to the next row to the northeast, Well No. 16 has been completed as an injector. However, we perforated and fractured that well and currently, with our allowable are currently flowing the well at top allowable. The next well following that diagonal has not been drilled but is planned to be drilled.

Q So the three proposed wells will be drilled as injection wells which would formulate roughly an 80-acre five-spot?

A An 80-acre five-spot. We do have one exception on that matter, that we may leave 20 or 18 as a producer, dependent upon determinations of the injection tests.

Q You might produce them for a while and then convert them?

A Or if not necessary, we would not convert them.

Q All right. Is there anything else you care to point out in connection with this map?

A No, sir.

Q Let's turn then to your next exhibit.

A Exhibit 5 shows a proposed method of water injection into the wells as described. This particular exhibit shows a schematic of the Humble's Navajo G-16. This well, a 7-inch surface

casing was set to depth of 33 feet, and in other cases we set two joints or three joints to protect against these sub-surface water flows as described by the geologic testimony. We drilled that well to a total depth and in the G-16 have set 2-7/8ths inch O.D. casing. This was conditioned two casing, however, the grade is high grade and there were no leaks or anything like that. The casing is then cemented to approximately 800 foot calculated, The well was perforated two holes per foot and fracture-treated. We anticipate that the future injection wells would be so developed.

Q Now, the injection wells that you've been talking about so far, I believe we haven't had the information on all of them as yet to give to Mr. Irby as to the casing and cementing program, but we're going to submit that information?

A Similar schematics.

Q In your judgment is that sufficient to protect any fresh surface waters in the area?

A Yes, sir, and we can recognize this as we are drilling these with air and it becomes obvious when the water comes in drilling with air; and then we set the casing to protect through any of those alluvial beds.

Q Likewise, as testified, the only other water is down in the Morrison way down below this, is that correct?

A That is correct.

Q Is there anything else you care to testify in connection with this?

A We anticipate that the surface injection pressure will be approximately 600 pounds, placing a sub-surface pressure at the Gallup of approximately 1200 pounds or less.

Q Turn then to your next exhibit. What information does this exhibit reflect?

A Exhibit 6 reflects the well status and the production data of Humble Oil wells in the project area drilled to date. There are a total of 14 wells drilled at this present time. From left to right, the lease and well number is given, the total depth, the production casing, size and depth set, the estimated top of cement, the perforated interval, the completion date, the initial potential in barrels of oil per day, and gas-oil ratio in cubic feet per barrel.

The production for June by individual wells is tabulated along with the gas-oil ratio, and the cumulative oil production to July 1 is shown for each well. The total production to date is 19,000 barrels to July 1, 1963. The current allowable is 608 barrels of oil per day. We have a total of eight top allowable wells.

The last column on the right shows the waterflood well status as we see it at the present time and anticipate it, showing those which are producers, those which we probably will convert, and those which we will definitely use as injectors, as we see the project at this time.

Q In addition, you have your proposed wells to be drilled

as injection wells?

A That is correct.

Q What further information do you care to put in in connection with this exhibit?

A I would like to give an engineering opinion on the reservoir characteristics.

Q All right.

A The Gallup reservoir in the Many Rocks Field is, in my opinion, distinctly similar to the Horseshoe area to the west, as shown by Exhibit 4. The porosity is 15.4 percent, an average of twelve wells cored in the area. The permeability is 135 millidarcies. We have estimated the connate water saturation at 35 percent. We have not taken a sub-surface fluid sample; however, by direct analogy of their Gallup fluid samples, we estimate the solution gas-oil ratio at 250 standard cubic feet per barrel, the formation volume factor at 1.1, the reservoir viscosity at reservoir temperature is 1.4 centipoises, and the reservoir temperature we estimate is 92 degrees Fahrenheit.

The surface crude as produced has an API gravity of 41 degrees at 60 degrees Fahrenheit. In the completion of the Humble G-7 Well in May of '63, Humble took a bottom hole pressure of that well. It was determined that the pressure was 465 pounds per square inch absolute at a datum of plus 4123.feet.

It is my opinion that this is very close to the original reservoir pressure of this Gallup sand trend as there were only

minor withdrawals to that date.

Q What are your calculations, Mr. Emery, on primary and pressure maintenance recovery out of this pool?

A Well, from known production performance and the absence of water production, and from an analogy of the other Gallup reservoirs, I conclude that the primary producing mechanism is a solution gas drive, and that primary recovery will be 15 percent of the original oil in place. The expected results of the proposed pressure maintenance project will be to increase ultimate recovery -- pardon me, to increase recovery to an ultimate of 33 percent of oil in place, or approximately 120 percent increased oil over primary production.

Q What are we talking about in terms of total barrels?

A In terms of total barrels, the increased oil due to pressure maintenance is expected to be 760,000 barrels of oil in the project area.

Q So that would mean, oh, approximately 700,000 barrels of primary by the primary mechanism?

A Yes, sir.

Q Doubling, to a total of a little over a million and a half barrels with a pressure maintenance project?

A Right.

Q Turn to your next exhibit.

A Exhibit No. 7?

Q Yes, go ahead.

A Humble has every reason, and I have every reason to believe that this will be a successful pressure maintenance project. I think an outstanding point is Exhibit 7, showing our performance of the Horseshoe-Gallup pressure maintenance project number 2. Exhibit 4 shows that area outlined. It will be noted that peak primary production occurred in late '59 at approximately 1400 barrels of oil per day. The next principal point is the rapid production decline indicating a very rapid pressure depletion of the reservoir. Then in October of '60, upon approval, water injection was commenced. The conversion of wells had caused a great drop there through '61. Water was injected, project received definite gains in late 1961.

At this current time we are producing 1250 barrels of oil per day, just 150 barrels less than peak primary. I think this is highly illustrative of the success of a Gallup flood and we have distinctly similar characteristics indicated to us in this Gallup sand in the Many Rocks Field.

Q What volumes are you contemplating injecting, Mr. Emery?

A We contemplate injecting approximately 1,000 barrels a day upon ultimate completion of the project. A round number would be 100 barrels of water per day per well.

Q What's your source of water?

A The source of water is the Morrison, in the pressure maintenance project, too, we have developed a Morrison water supply which has a capacity in excess of our demand of approximately twelve

to fifteen hundred barrels of water. We will utilize this water, these facilities, to carry out the flood of this small project.

Q That's the same water that you are using in your Horseshoe flood?

A Yes.

Q The same well?

A Yes.

Q What's your royalty situation here, is this all Navajo acreage?

A It is.

Q And you've submitted an application for approval of this to the U.S.G.S., of course?

A Yes.

Q Is there anything further you care to state in connection with any of your exhibits?

A No.

Q I think it's self-evident, but from your engineering opinion, the institution of this pressure maintenance project will result in increased ultimate recovery and result in the prevention of waste, is that correct?

A It will.

Q With the proposed rules leading up to cooperative agreements along the line, is it your opinion that correlative rights will be protected?

A It is my opinion they will be protected.

Q Is there anything further you care to state in connection with any of these exhibits?

A No, sir.

MR. BRATTON: We would offer in evidence Applicant's Exhibits 1 through 7.

MR. NUTTER: Humble's Exhibits 1 through 7 will be admitted in evidence.

(Whereupon, Humble's Exhibits Nos. 1 through 7 admitted in evidence.)

MR. NUTTER: Any questions of Mr. Emery? Mr. Irby.

MR. IRBY: Frank Irby, State Engineer's Office.

CROSS EXAMINATION

BY MR. IRBY:

Q Mr. Emery, as I interpreted your testimony, the surface casing will be set and cemented below all of the shallow water into an impermeable zone?

A That is correct.

Q Then I won't need these other additional diagrammatic sketches of the individual wells. Are you going to ~~recircle~~ re-cycle all of your produced water?

A Yes, we are.

Q Is it going to be necessary to treat this water?

A Very small amount of treatment. Our process would be to try to keep the water oxygen-free, filter the water, treat it with a bactericide, keep it all totally closed, excluding oxygen,

and reinject it into the formation.

MR. IRBY: Thank you. That's all I have, Mr. Nutter.

BY MR. NUTTER:

Q I wanted to run through the completion status of the wells. In the project area as depicted on Exhibit 4, there are indicated six injection wells and quite a number of producing wells. All the wells that are shown as producing wells have been completed, is that correct?

A Yes, sir. 18 is shown as a producing well. Are you referring to 18 in this case?

Q Well, 18 is indicated as an injection well.

A That is correct. We are making a completion effort on it to see what type of oil production we could get out of this well, however. We are asking for it to be our option whether to make it a producer or an injector as a result of the test.

Q You are not firm, then, on this actual pattern that you have shown here for injection wells?

A That is correct, with regards to 18 and 20.

Q And they may or may not be injection wells or producers, you don't know which?

A That is correct.

Q Are the remainder of the producing wells all completed?

A Yes, they are.

Q 16 is definitely going to be an injection well, is it?

A It falls in the same classification as 18.

Q So it might not be an injection well?

A That is correct. May I clarify?

Q Yes, sir.

A It is my opinion that we will convert each well as shown. However, we would like the opportunity to test and see the injectivity rate into the injector wells which we're asking for permission to inject.

Q Normally, Mr. Emergy, in an order of this type, the Commission designates the wells that will be injection wells. It looks like here we might have to designate some maybe injection wells. How about the location in the Northwest of the Northeast of Section 12? That well has not been drilled, has it?

A No, it has not.

Q Will that definitely be an injection well?

A Yes, sir, to the best of my knowledge at this time.

Q The location in the Northwest of the Southeast of Section 1, that hasn't been drilled has it?

A No, it has not.

Q Will i t be an injection well?

A Yes.

MR. BRATTON: If the Examiner please, I know what the problem is. I would like to suggest if the Commission would designate what we have designated here as the injection pattern, with the provision that if we propose to do anything else we come back and advise the Commission and ask for administrative order.

MR. NUTTER: I am sure that the project rules provide for additional injection wells, don't they?

MR. BRATTON: Yes, standard.

MR. NUTTER: In other words, it would be your proposal here to authorize these six wells and then if any change is made from that injection pattern --

MR. BRATTON: It would be normal application.

MR. NUTTER: Normal administrative routine with notification to offset operators?

MR. BRATTON: Yes, sir.

Q (By Mr. Nutter) Now,Mr. Emery, with all this reservoir data, what calculates to be the original oil in place per 40-acre tract or per 80-acre tract?

A I would have to make a calculation.

Q You don't have that?

A 706 barrels per acre foot.

Q 706 per acre foot?

A 706 per acre foot.

Q And the average thickness here, I believe, was given as 10.5 or something like that, is that correct?

A Within the project area the average is approximately eight feet, over-all.

Q In your project area, you calculated approximately 700,000 barrels on primary, or 760,000 primary and pressure maintenance?

A 700,000 on primary, 760,000 additional.

Q Additional?

A Yes, sir.

Q For a total of 1,400,000 for this area?

A Yes, sir.

MR. NUTTER: Are there any other questions of Mr. Emery?

MR. DURRETT: Yes, sir, I have one or two.

MR. NUTTER: Mr. Durrett.

BY MR. DURRETT:

Q Do I understand correctly that you do have a permit from the State Engineer's Office to use your Morrison well in your Horseshoe-Gallup project as an injection -- for injection purposes?

A Yes.

Q And what type of water is this, just briefly?

A It is a brackish water and not fit for man nor beast.

MR. DURRETT: Thank you.

MR. NUTTER: Any other questions? The witness may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Bratton?

MR. BRATTON: No, sir. If the Examiner please, we would just as soon go ahead and designate what's in the red as the project area, although, as indicated, subsequent development has indicated that we're not going to get out as far out on the flanks

as we possibly hoped to, and if the Examiner wants to pull it in, we have a proposed outline. We don't think it makes much difference one way or the other.

MR. NUTTER: The proposed rules provide for the further development of the project area and further development on the flanks, I presume?

MR. BRATTON: Yes.

MR. NUTTER: Does anyone else have anything to offer in this case?

MR. DURRETT: The Commission has received a communication in the form of a telegram from Tidewater Oil. This telegram states that they support the amendment to the application that Mr. Bratton offered earlier that no top allowable production will be permitted until January 1, 1964, on the wells on the fringes of the unit, unless there is an offsetting pressure maintenance project. They also request an opportunity to come before the Commission for an extension of time on the January 1, 1964, if they feel it's necessary, which would automatically be their right if they want to file an application. This telegram will be placed in the file if anyone would like to read it in its entirety.

MR. NUTTER: I believe the provision of the telegram should be that no production in excess of top allowable on the fringes.

MR. DURRETT: Yes, that's correct. I may have misstated it.

MR. NUTTER: Is there anything further?

MR. MOTTER: Yes. Motter with Cities Service. We have an interest in the Skelly operated leases to the north. We are at present looking over a line agreement submitted by Humble, and we urge the approval of this request.

MR. NUTTER: Thank you.

MR. SPERLING: Mr. Examiner, Jim Sperling on behalf of Mobil Oil Company. Mobil supports the application of Humble as amended, feeling that the application as amended is in the best interest of conservation and prevention of waste and the protection of correlative rights. It is anticipated that a similar project will be instituted to the southeast where there is diverse ownership, as shown by the exhibits offered by Humble. Because of the diverse ownership, efforts to form the project have not proceeded as rapidly as the Humble project, in view of their single ownership. It is anticipated that the owners within the project will have a plan formulated for presentation to the Commission prior to January 1, 1964.

Recognizing, of course, that the Commission retains jurisdiction in the event unanticipated difficulties are encountered, we would expect to make a showing of those to the Commission with a view toward obtaining an extension, if necessary, and if the Commission felt that we were justified in so doing. With these remarks, we support the application.

MR. NUTTER: Thank you, Mr. Sperling. Anyone else?

If there is nothing further in this case, we will take it under advisement and take a 15-minute recess.

(Whereupon, a short recess was taken.)

* * *

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 13th day of August, 1963.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2866, heard by me on 7/24, 1963.

..... Examiner
New Mexico Oil Conservation Commission