BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 2, 1958

IN THE MATTER OF:

Case No. 1294

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
3-6691 5-9546

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IN THE MATTER OF:

Application of Ambassador Oil Corporation for an order amending Order No. R-1053. Applicant, in the above-styled cause, seeks an order amending Order No. R-1053 to approve a development pattern for the entire water flood project operated by the applicant in the Caprock-Queen Pool, Chaves and Lea Counties, New Mexico, and to permit administrative approval for the conversion of water injection wells in said project, which is within the limits of the North Caprock-Queen Unit No. 2, authorized by Commission Order R-1194. Case No. 1294

BEFORE:
Mr. Daniel S. Nutter

TRANSCRIPT OF HEARING

MR. NUTTER: We will take case No. 1294.

MR. CAMPBELL: Jack M. Campbell, Campbell and Russell, Roswell, New Mexico, appearing on behalf of the applicant. I have one witness, Mr. Vick to be sworn.

(Witness sworn)

(Exhibits 1 through 6 inclusive marked for identification.)

DIRECT EXAMINATION

BY MR. CAMPBELL:

Q Will you state your name, please?

A Robert H. Vick.

Q By whom are you employed, Mr. Vick?

A By Ambassador Oil Corporation.

Q What capacity?

A Chief Engineer.

Q How long have you been employed by Ambassador Oil Corporation?

A Approximately two weeks, Mr. Campbell.

Q Prior to your employment with Ambassador, by whom were you employed?

A By the Grayridge Corporation and the Ibex Company.

Q During the time you were employed by Grayridge and Ibex were you generally acquainted with the water flood operation which encompasses the area known as the North Caprock-Queen Unit No. 2?

A Yes, sir.

Q Did Grayridge and Ibex have an interest in that particular project?

A Yes, sir, they did.

Q Have you previously testified before this commission and this examiner?

A Yes.

MR. CAMPBELL: Are the witnesses' qualifications acceptable?

MR. NUTTER: Yes, sir, they are, please proceed.

Q Mr. Vick, are you generally acquainted with the application of Ambassador Oil Corporation in Case No. 1294 now before the examiner?

A Yes, sir.

Q I'm going to hand you what have been identified Ambassador Exhibits 1 through 6. For the purpose of bringing the record of the commission up to date on the status of the water flood project in the North Caprock-Queen Unit No. 2 and referring to those Exhibits as you see fit, would you recite to the examiner what they reflect as to the present status of that particular project?

A Yes, sir. Well, in a way of summary, the water injection was started into a six-well injection pilot flood approximately the last part of October, 1957, the cumulative injection to date has been approximately 875 barrels of water into those six wells, the cumulative secondary oil has been approximately 45,000 barrels, above normal decline; the May production figure was 22,400 barrels, the June production figure for the area was approximately 27,000 barrels, the daily average injection is approximately 4,000 barrels divided into the six wells or a total of approximately 650 barrels per well per day injection rate. The injection pressures are approximately five hundred pounds, surface pressure; the calculated voidage at the beginning of the water injection program was approximately 800,000 barrels and that leaves a net injection figure of somewhere in the neighborhood of 75,000 barrels above calculated voidage to begin with. The pilot flood as a whole is responding quite well; as indicated on Exhibit No. 1, the present production figures for the affected producers surrounding the six injection wells are indicated in the red underlined figures underneath each respective well location and

you can see that nine of the twelve wells surrounding the six injection wells and affected by them have responded to the water injection program in various stages or various states. The total production from the unit now is approximately 950 barrels per day and the Exhibit No. 1 indicates the present six injection wells, the present producing wells in the overall unit area which encompasses approximately 1800 acres and it also indicates the proposed injection pattern which will include a total of twenty-three injection wells and twenty-two producers eventually.

Q I note on Exhibit No. 1 that one well which appears to be designated as 12-1, top production rate as of June 30 was 415 barrels of oil per day. In your opinion, is that well approaching it's peak of production?

A Approximately, Mr. Campbell. We feel like it should come to the neighborhood of a peak production of five hundred barrels per day.

Q What is your estimate of the approximate length of time during which that maximum peak would be sustained? Do you have any way of knowing?

A Not definitely other than by reference back to the Grayridge Unit which the one center producer there that peaked out at approximately five hundred barrels per day maintained that peak for approximately a month and a half and then water production started in and and is now approximately fifteen percent water

cut of that total five hundred barrels of flood, fifteen percent, it's on the decline.

Q What about the present production, if any, from the wells that have not responded to the water flood, are those all at a depleted stage in the outer rim of the unit there?

A Yes, sir. The average production from the surrounding wells are from one to two barrels per day per well.

Q Referring to your Exhibit No. 2, what does that reflect with regard to the length of time approximately from the beginning of the injection to the response in the area?

A Well, it's an overall performance curve worked up for the forty-five, forty acre units in the Caprock-Queen Unit No. 2. It indicates the primary producing history, the cumulative oil approximately two million barrels and the number of producing wells and the date water injection was started, the average monthly water injection and the current response in oil production of the pilot flood area.

Q I note on Exhibit 2 there apparently was an increase in production in 1955 prior to the time of the commencement of water injection, how do you explain that?

A That was due entirely to some additional drilling carried on by the Graymidge Corporation; when they acquired the properties it was edge drilling on the west side of the field. I believe four or five new wells which gave that --

Q Reaction to the production of oil there?

A Yes, sir.

Q I refer to Exhibit 3, and state to the examiner what the figures you have inserted on there show, Mr. Vick.

A This is a May progress report on actually the pilot flood area. It includes the injection wells on the left hand side of the page and in the red penciled figures we have put in the new unit numbers for designation numbers for the injection wells and also on the right side, of course, that carries the cumulative volumes, the monthly injected volume and the daily average injection and the pressure and showing the approximate cumulative volumes after somewhere around one hundred fifty to one hundred sixty-four thousand barrels per well of water. On the right hand side of the page these figures were, the typed figures were the Ambassador operated properties only. As you know, the unit actually took effect June the first and this was a summary sheet of Ambassador's operations and we haven't had time to change it over. But it does give the new unit designation numbers there for the Ambassador properties and for the overall unit you can refer back to Exhibit No. 1 which gives the complete unit with the relative positions of each one of the wells and production data.

Q Now, refer to Exhibits 4 and 5 and state briefly to the examiner what those are intended to show.

Q Well, these are projections of the number 4, of the proposed injection pattern outlining our injection system to include future expansion of the injection system. Number 5 is the

proposed oil gathering system for the total unit which has been projected as four common tank battery locations. We're now under a study or completing a study for possibility of installing a lease automatic custody transfer unit which would be installed at the number 2 location to take care of the automatic gauging, sampling and metering of the oil production from the unit.

Q With regard to Exhibit 6, will you state what that is?

A This is, Exhibit 6 is a more or less area map of the, both the adjoining Grayridge unit and the proposed Great Western unit to the south in the manner of showing the relative positions of the two pilot floods and as they would eventually tie into together and I might add that we have completed all the verbal negotiations for lease line cooperation between the two units and are in the process of actually drawing up agreements to control the participation across the unit boundary lines.

Q Are you acquainted with the present status generally of the Great Western Unit, is that formed yet or is it in the process of being formed?

A It's in the process of being formed. There's still some points in the participation formula that haven't been, that each of the work interest owners haven't been satisfied on, but they feel that it will come around in time.

Q As a matter of fact of time, there is still considerable work to be done before any actual pilot project is underway in the Great Western area as designated on Exhibit 6, is that correct?

A Yes, sir.

Q Mr. Vick, what is it exactly that you are seeking in this particular application?

A Well, to actually present our total future projected injection pattern for the Caprock-Queen Unit No. 2 and to obtain approval of the same, with the procedure --

Q How do you propose to activate injection wells?

A By submitting a letter of application to the commission, to the engineer department of the commission for their approval of the expansion of the actual pilot flood to include additional injection wells and --

Q What would you propose to furnish to the commission with regard to such an application for the activation of additional wells?

A All the engineering data that we had at hand from our day to day operation and evaluation of the overall performance of the injection system and the producing system on the overall program, which would include volumetric balance figures, calculated voidages and performance curves, expected performance and discussion of any of the problems we are having in the area and how they affect overall performance.

Q Would you also include the reasons for the request for the addition of injection wells in such an application?

A Yes, sir, from an engineering standpoint, relative to preventing waste and loss of ultimate recoverable oil by not having

sufficient back-up and not being able to place injection wells on at the most desirable time.

Q Is this generally the procedure that is followed in the other states with which you are acquainted that are handling pilot flood programs?

A Yes, sir, I believe it is to a reasonable degree. In Texas I think it has been presented to the commission several times previously in different hearings that they have an initial hearing before the commission board and present the pilot or the overall program and then all subsequent expansion or actual operation of the subject floods are carried on by letter of application or direct correspondence.

Q Is it your idea that in presenting this application to the commission by letter that the commission, of course, would retain the right to call a hearing in any situation where they felt a hearing was required or should be held?

A Yes, sir.

Q But that there would be some mechanics for administrative approval in the routine addition of injection wells to protect the flood from loss of ultimate recovery, is that correct?

A Yes, sir.

Q Insofar as this particular unit is concerned, what is the present situation concerning the addition of injection wells? Are there presently injection wells that need to be activated?

A Yes, sir. We have what we feel like, right now approximately

eight wells that should go on injection. Of course, were those eight to be approved within the next month or the next week, it would still be quite sometime as far as their actually being put into operation. One point we might mention is the situation on the Grayridge-Caprock Unit No. 1, where we appeared and requested eight additional injection wells, four immediately and four at a future date and that's been approximately a month and a half ago, I believe, and to date they haven't been able to actually start injection into those wells. So, as far as any undue speed or putting the overall unit more or less on injection at one time, it reverts back to the testimony that has been presented before relative to the time necessary to complete the actual field operations and the amount of work that has to transpire before actual water injection can take place.

Q Do you have anything further that you should tell the examiner at this time in connection with this application?

A No, sir, I believe that's all.

MR. CAMPBELL: I would like to offer Applicant's Exhibits 1 through 6.

Q Did you prepare these Exhibits, Mr. Vick, or were they prepared under your supervision?

A Under my supervision, yes, sir.

MR. CAMPBELL: I would like to introduce Applicant's Exhibits, 1 through 6.

MR. NUTTER: I wonder if we could identify those Exhibits with a date on them so they wouldn't be confused with other Exhibits in the case.

MR. CAMPBELL: Yes, perhaps we should. Just let the record show that we are putting the date on Exhibits 1 through 6 and I offer them in evidence.

MR. NUTTER: Without objection, Ambassador Oil Corporation Exhibits 1 through 6, dated 7-2-58 will be entered in this case.

MR. CAMPBELL: I would like to make a statement if I could before you proceed with questioning.

MR. NUTTER: Yes, sir.

MR. CAMPBELL: It is the thought of the applicant in this case that in the interest of orderly development of these projects, as well as in the interest of avoiding the necessity for frequent emergency orders and subsequent hearings on a deadline, that perhaps is not the most orderly type of procedure, that some administrative rule should be set up which will adequately permit the orderly development of these projects, but which will not, of course, remove any of the basic authority the commission has or any other interested party may have in the subject matter. We feel that such a procedure can be set up and that it could be done generally in the manner that we propose that the hearing be held on the original pilot program, as is being done at the present time, that when the pilot has gone forward far enough to determine

whether or not it is feasible to have a project and particularly in instances where the area is unitized as it is here, that then a hearing be held on the overall project, at which the operator would explain the proposed injection pattern, the proposed arrangements for tankage for the oil, give the commission an idea of the rate at which the injection would be activated and that the overall project at that time be approved or disapproved, as the commission saw fit, and then that as the project proceeds that some administrative procedure by letter be set up for the activation of particular injection wells at the discretion of the operator, subject, however, to a satisfactory explanation to the commission of the necessity for the activation of particular injection wells in order to obtain the greatest ultimate recovery of the oil. If the situation was such that the commission felt that a fuller hearing was required even after trying to obtain additional information from the operator, of course, they would have that authority to call such a hearing. At the last hearing here in connection with this Ambassador flood, I think there is testimony that this is generally the procedure being used in the States of Texas and Oklahoma, which have, of course, proceeded for a number of years in the operation of these water flood projects. We are perfectly willing, of course, to abide by whatever rule the commission feels necessary to protect it's obligations, but we do feel that something could be worked out to make the procedure just a little bit more orderly than it is at the present time, both

from the point of view of the operator and the commission.

MR. NUTTER: Mr. Campbell, I'm sure that you will find that members of the industry as well as perhaps the commission staff, if not the commission, will concur in your thoughts there that a more orderly system can be worked out. One question that entered my mind though as you were talking, would this, you mentioned that the wells would be converted at the discretion of the operator, would your proposed system require the information to be submitted to the commission and the letter of authorization for the conversion of water wells, of water injection wells, be obtained prior to the time that the well was converted or water injected?

MR. CAMPBELL: Oh, yes. I didn't mean to imply they would just do it and then advise the commission. No, the extent of the discretion would be that they would decide when it was necessary to request the approval from the commission, not the discretion to put them on at will. I think the commission has not only the duty but the obligation to be kept fully abreast of any developments in these projects. I think it's a very basic question of prevention of waste by increasing ultimate recovery and that it's a very serious obligation of the commission to keep track of it. In no event should any well be activated without approval from the commission.

MR. NUTTER: I believe you stated that you felt at the present time that there were eight wells that should be converted to water

injection at the present time?

A Yes, there are eight wells as shown on the Exhibit No. 1, directly offsetting the proposed injection wells that are directly offsetting to the outside producing wells that have responded to the water flood. As has been testified to before by the various experts, the most ideal time would be to put the whole thing on at once, but actually the longer you wait, the more susceptible you are to loss of ultimate oil and definitely after a producing well to the outside backed up, we feel we are definitely losing considerable amount of oil.

MR. NUTTER: I recall testimony, Mr. Vick, at one of the previous hearings at which an expert on the subject of water flooding testified that he felt that within a reasonable length of time, I believe he stated thirty days or some such figure, you could convert a well to water injection well if it were offsetting a well that had experienced a kick in its production, do you concur in that theory?

A Well, generally, yes, that it depends on the area and the overall response of the characteristics of the reservoir, and such things as that, but generally speaking of the Caprock Field, I think that could be concurred with.

MR. NUTTER: What are the eight wells that you had in mind as being required for water injection now?

A It would be Unit No. 4-1, No. 10-2, No. 28-1 and 26-4, 25-2, 18-1, and 13-1, and 6-1.

MR. NUTTER: Would you go into the reasons why you feel it is necessary to convert the wells at the present time?

A Well, referring back to Exhibit No. 1 and starting down the northwest side of the pilot area, the well No. 9-1 has just begun to respond, it is producing fifteen barrels of oil per day.

MR. NUTTER: What was its previous production?

A Approximately one barrel per day. The No. 10-1 well is up to one hundred thirty-five barrels per day.

MR. NUTTER: Previous production?

A One to two barrels. The No. 25-1 is producing at present twenty-five barrels from approximately four barrels.

MR. PORTER: Was 25-1 one of the wells that you just designated?

A No, sir. 26-4 and 28-1, 25-2.

MR. PORTER: 25-2?

A Yes, sir. The No. 16-2, we feel like the response has just started there, it's up from a barrel to this six barrels. The same on the No. 17-1, and the 14-1, the fifty-seven barrel production there has just been within the last week, the response has started there. Of course --

MR. NUTTER: What was its production prior to its response?

A Six barrels. Well, the No. 7-3 is producing one hundred forty barrels. That has been for approximately two weeks up from two barrels.

MR. NUTTER: What does this indicate to you on these

producing wells that have experienced an increase, why the need for the water injection in the offsetting wells?

A I stated previously, it's definitely a question of economics and ultimate oil recovery. You are taking a separate five-spot pattern with, say the two lower injection wells placed on first and then with the center producer responding, you are pushed from these lower two injection wells or your water front is approaching the center injection well or would be the outside before the remaining two injection wells were put onto the outside. During the latter part of the flood life of that separate pattern you are going to have to carry a much higher water cut and therefore your economic limit on that separate pattern is going to be increased to a certain degree, whatever it actually comes out to be. The longer the two outside injection wells are delayed, actually the higher percentage of water cut that you are going to have to carry on the outside producer or the center producer, therefore, the loss of ultimate which would be recoverable oil under a balanced type of operation.

MR. NUTTER: You feel that the necessity of conversion to water injection of these eight wells then is predicated on the prevention of waste and the loss of ultimate recovery rather than for the sake of making the water flood bigger?

A Yes, sir, I definitely do.

MR. PAYNE: Mr. Vick, are you familiar with Order No. 972-A in the last Grayridge hearing?

A Yes, sir.

MR. PAYNE: That order lists four wells which may be converted in the future by administrative approval, isn't that correct?

A Yes, sir.

MR. PAYNE: So your application in this case seeks relief, so to speak, considerably broader than that granted in Order 972-A, does it not?

A Well, we don't consider it actually relief. Actually we are asking for an overall approval of the total projected injection system for the unit and then subject to the administrative approval by letter, letter of application and letter of approval from the commission when the wells are actually requested.

MR. PAYNE: You don't feel that it's necessary to list the wells in advance that you may ask for administrative approval to convert in the future?

A Well, in submitting this application for this hearing concerned with establishing a procedure whereby we could operate by the administratrive approval route as stated there, we definitely feel that several of these wells need to be put on injection right now and if the application is granted or approved, then we would immediately submit the letter of application for the wells that we thought should be placed on injection.

MR. CAMPBELL: In connection with your question, Mr. Payne, inasmuch as it involves the nature of the application, I think I can clarify that. I think you can say that the difference between

what we are requesting here and what the commission did in the Grayridge order would be that the wells that we would propose at this time would be all the wells in the unit around, that's the project injection wells.

MR. PAYNE: All twenty-three injection wells?

MR. CAMPBELL: All twenty-three of them if you followed that analogy, and then as the circumstances require, we would go through the procedure that you generally outline for those four wells in the Grayridge order. That would be the basic distinction. We will in an order on this case obtain approval of the project and the injection pattern for the project and then make it subject to the procedures that you might choose to set up, administrative procedures. I think the application is broad enough, I intended it to be so that the commission, whatever administrative requirements they felt were necessary could be incorporated in the procedures.

MR. PORTER: Would it be possible to identify all of the twenty-three of the injection wells at this time?

MR. CAMPBELL: They are identified on Exhibit 1.

MR. PORTER: Is there a possibility that there might be a deviation from that?

A No, sir.

MR. CAMPBELL: Would you anticipate any deviation from the present proposed pattern of injection wells?

A Not at this time, no, sir.

MR. CAMPBELL: I would presume under those circumstances it would necessitate a hearing to obtain a modification of the original order approving the overall injection pattern?

MR. PORTER: That was the point I was trying to bring out.

MR. PAYNE: One further question, Mr. Vick. Do you have any opinion as to what percentage of increase should be considered a substantial response?

A Well, I would say that there again it's going to depend on our overall evaluation which we would submit. Certainly there are special conditions of having an outside producer that hasn't responded, that your flood is far enough along that that well should have, and something is materially wrong with it, the well bore is damaged or something on that order, and we feel like that under some special case where we can justify that the outside injection well should be placed on, even though that well hadn't responded for some reason. why we could explain or actually couldn't explain, that we should be able to go ahead and continue the flood on out like that. It would be a special case, but as far as the actual response, anything above the primary production, I mean the present production on the producing wells, should be enough of an indication because it has been proven in the Grayridge Unit and also in this one that once the production starts up, unless there's something drastically wrong with the surrounding area or reservoir conditions locally in that area, the well should come right on up and continue to increase in oil production.

MR. PAYNE: As a practical matter then, you couldn't set any specific percentage of increase for the area as a whole?

A I don't believe you could, no, sir.

MR. PAYNE: That's all I have.

MR. NUTTER: When did your well No. 12-1 first respond to the water flood, Mr. Vick?

A Approximately two months ago. I'm not exactly familiar, Mr. Nutter, with the exact time, but it was approximately six months after injection started, which would be October, November, December, January, February, March, the last of March sometime.

MR. NUTTER: Is the productivity of this well still increasing?

A Yes, sir.

MR. NUTTER: When do you expect it to reach its peak?

A Sometime within the next month, Mr. Nutter.

MR. NUTTER: How long do you think that it will be before it starts decline or will it decline immediately following reaching its peak?

A Theoretically, it would come up and peak one day and start a decline the next, depending on the amount of water that's being injected into the four injection wells surrounding it in relation to the exact sand volume you have and the rate it's flooding on a barrel per day per acre foot.

MR. NUTTER: Have any of these eight injection wells experienced a response to the water flood?

A No, sir, the overall condition here is considerably different

than the Grayridge Unit where we actually had migration of oil outside of the theoretical unit, I mean the pilot area, which we don't appear to have here. It's much more balanced.

MR. NUTTER: You had a case of imbalance there, did you not?

A Yes, sir.

MR. NUTTER: Is this usual that it will take, or that one and a half months after authority has been granted for conversion of wells to water injection that they still haven't been converted?

A Yes, sir, that's quite normal, Mr. Nutter; under operations, of course, the budget, when it is unitized in a situation like this, the budgets are approved for the approximated work that is going to be done during the year, but until actual commission approval is obtained, you can't start setting a liner in a well or cleaning it out or working it over or laying your injection lines. That was one of our thoughts in presenting the overall projected pattern, that we could go ahead under those circumstances and lay our injection lines and such things as that and be in a more efficient state of operations than we are right now.

MR. NUTTER: In other words, this month and a half that it has taken in the other unit to get these wells on injection, may be resulting in additional waste?

A Yes, sir.

MR. NUTTER: Anyone else have any questions of Mr. Vick? Mr. Lamb.

MR. LAMB: Raymond Lamb with the Wilson Oil Company.

MR. LAMB: Could I be advised as to the status of this case 1294, are we still in a pilot arrangement or have we proceeded into the permanent project? I notice in the prior notice of the hearing it had been set as a pilot, and this particular notice, it doesn't mention the pilot project, but it mentioned the entire water flood project.

MR. CAMPBELL: This hearing we request the approval of the entire project as shown on Exhibit 1, within the unit area. Normally, as I said, if I may, since this is a procedural matter, my thought was that there should be two hearings, one on the pilot to start with and if the pilot responds satisfactorily, the applicant comes in as he is doing here, essentially asking for the approval of the area flood and the injection pattern, that would be the two hearings that you would have under the suggestion that we're making.

MR. NUTTER: I think in further response to your question, Mr. Lamb, this is an application of Ambassador for an order amending Order R-1053, and 1053 authorized a pilot water flood project.

MR. LAMB: Under the entire project has there been an allocation system established?

MR. CAMPBELL: There has not and this hearing does not encompass any allocation request. There had been capacity allowables granted to a number of the wells, that was the past hearing.

MR. LAMB: In the pilot?

MR. CAMPBELL: Within the area, yes, I guess they were in the pilot area.

A Yes.

MR. CAMPBELL: The call of this hearing did not encompass any additional requests at this time for allowable relief. The wells that are exceeding allowables at this time have already been granted a capacity.

A Theoretically, we actually still consider it a pilot flood and will until additional injection wells are started on it, Mr. Lamb, even though it is still, I mean it's actually a unit operating now, the eighteen hundred acres are operated as one unit.

MR. PORTER: You would have to have more than six original wells before you could call it a pilot type.

A Some type of expansion.

MR. LAMB: This is a request to go into the expansion, but we keep the allocation system on the pilot project?

MR. CAMPBELL: There is no request in this application for additional allocation, Mr. Lamb.

MR. PORTER: Does it follow the state wide formula?

MR. CAMPBELL: Except the relief that has been granted, any further relief will have to be granted by future applications. This involves the injection program and the activation of injection wells and does not seek relief at this hearing in regard to additional allowable.

MR. NUTTER: Are there any further questions of Mr. Vick? If not, he may be excused.

(Witness excused.)

MR. CAMPBELL: We have nothing further in this case, Mr. Examiner.

MR. NUTTER: Are there any statements or anything further to be observed in case 1294 today: If not, we will take the case under advisement and recess the hearing until 1:15.

(Recess.)

STATE OF NEW MEXICO, )
) ss.
COUNTY OF BERNALILLO. )

I, ADA DEARNLEY, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission in Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my notarial seal and hand this 15th day of July, 1958.

Ada Dearnley
Notary Public, Court Reporter

My commission expires:
June 19, 1959

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1194, heard by me on 7-2, 1958.

Examiner
New Mexico Oil Conservation Commission