BEFORE THE

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

June 25, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Jack L. McClellan for an exception to Order No. R-3221, as amended, Chaves County, New Mexico.

Case No. 4156

BEFORE: ELVIS A. UTZ, Examiner

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TRANSCRIPT OF HEARING

MR. UTZ: Case 4156.

MR. HATCH: Case 4156, application of Jack L. McClellan for an exception to Order No. R-3221, as amended, Chaves County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for the Applicant. I have one witness.

(Thereupon, Applicant's Exhibits A and B were marked for identification.)

JACK L. McCLELLAN

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Would you state your name, please?
- A Jack L. McClellan.
- Q Are you the Applicant in Case 4156 presently before the Commission?
 - A Yes, sir.
- Q Have you testified before the Oil Conservation Commission before, and made your qualifications a matter of record?
 - A Yes, sir.
- MR. KELLAHIN: Are the witness's qualifications acceptable?
 - MR. UTZ: Yes, they are. Let me ask for other

appearances. You may proceed.

Q (By Mr. Kellahin) Mr. McClellan, what is proposed in your application in Case 4156?

A We have recently or are in the process of developing a Queen oil field, as shown on Exhibit A. We have encountered some water. We would like to be able to dispose of this water on the surface, inasmuch as we have drilled all the wells circled in red there with cable tool rigs.

Q You are referring to Exhibit A?

A Exhibit A, right. We have not encountered any water above the Queen formation. We do not feel that there is any fresh water present out there, nor anywhere within several miles within the proposed disposal site.

O Your source of water is from the Queen formation?

A Our water is being produced in conjunction with the Queen, particularly in one well.

O Which well is that?

A The 3-C, the well located in the southeast of the northeast of Section 24 is primarily the well that is producing a large amount of water.

O What volume of water?

A It is producing approximately 85 barrels of water, and 85 barrels of oil per day.

What other wells are producing water?

A The rest in there are. They vary. It is difficult to tell. We completed the wells by virtue of a water frac of 25,000 gallons. All the wells you see depicted in Section 24 on the east half go to a common tank battery. We have tested them separately, and there is small amount of water, five barrels, I think probably the No. 4-C will make. Most of the wells in there are water-free.

- Q Are you the operator of all the wells in this pool?
- A No, sir, there is one well in there, Pan American has one well in the northwest quarter of the northeast quarter of Section 24.
- Q Is this pool under a program of continuous development?
- A Yes. The well currently drilling is 4-A, which is in the northeast of the southwest of 24.
 - O Do you plan other wells in the future?
 - A Yes, we have a continuous development program.
- Q Is it the intent of your application for an exception to the entire area?
 - A Yes, sir.
- Q As I understand it from your previous testimony, the 3-C is the chief water producer in the pool at this time?
 - A Right.
 - O What has been your experience in connection with

water as to volumes? Has it been increasing or decreasing, or stable?

A In Section 18, in the southwest quarter southwest quarter, this well was completed in the Queen formation, produced quite a large amount of water in conjunction with a small amount of oil. This well was pumped approximately four months, and toward the end the water was decreasing, the oil increasing. The well was subsequently drilled with a rotary rig to the San Andres formation, and we are now preparing to install a pump jack and again produce the well from the Queen formation.

Q As I understand, you said you completed this well with rotary tools?

A No, sir, it was with cable tool to the Queen, but on to the San Andres. What I am trying to say is, it is my opinion that the water is depletable, at least in that area. Whether it would apply to the 3-C down there, I don't know. It varies, the amount of water produced each day varies.

- Q But you haven't found it to increase substantially?
- A No, it doesn't increase. If anything, it decreases.
- Q Were the wells drilled by you drilled to the Queen with cable tools?
 - A All of them.

- Q Did you encounter any fresh water zones in the drilling of those wells?
 - A No. sir.
- Q In the drilling of wells with cable tools, would you know when you encountered water, if you did?
- A Yes, you would. Any fluid whatsoever is immediately detectable during the drilling of a cable tool hole.
- Q And you encountered no fluids until you got to the Oueen?
 - A That's correct.
- Q Referring to Exhibit B, would you discuss the information shown on that exhibit?

A In an attempt to -- I was just going to refer to the Ground Water Report No. 3, which does not cover the area under consideration. It stops at a Township to the south of us. But, based on projecting that information on the north, which I assume would be true, it appears that the waterflow as depicted in that Report is to the southwest. I have made an inspection of this area up there. The only produced water in this vicinity is depicted by the red circle on Exhibit B, and is labeled the Little Lucky well, which is a windmill. Right due north of that, there are two windmills, but they are not producing subsurface water. They are pumping out of an earthen tank. Rain water drains in there, and they pump the water from that tank with two

windmills. I have discussed this with the rancher to make sure this is the case.

- O Whose ranch is that?
- A I believe it is the Bogle.
- Q Did you talk with the foreman of the Bogle ranch?
- A I don't know if he was the foreman, the man that runs that particular portion of the ranch.
- Q What did he tell you with regard to the presence of fresh water in that area?
- A He said they had attempted to drill some wells for water, and were unsuccessful. There are certain areas, I believe, to the north of here that they did have some surface water, except that it was so highly gyppy, that the cattle wouldn't drink it.
- You have marked on Exhibit B a proposed disposal
 area.
- A These are two pits that I proposed to dispose of salt water in.
 - Q Are they presently there?
 - A Yes, they are both presently there.
- Q How far would this Little Lucky well be from those pits?
 - A Approximately three miles to the northwest.
- Q Did you examine the area in other directions from your disposal pits?

- A Yes, there are no other tanks. As indicated on Exhibit B, they rely strictly on rain water.
 - O And that would be to the west and to the southwest?
- A Yes, that's correct. There are no other windmills or water wells in that area.
- Q In your opinion, is there any fresh water in the area that could be damaged by continued use of the surface pits?
- A No, sir, there is not. There is evidence by the 13 wells that we drilled by cable tools.
- Q Did you contact the Office of the New Mexico
 State Engineer in Roswell in connection with this application?
- A Well, I did through my Secretary to inquire if there was any literature available on this area, and was told there was not.
- Q Were Exhibits A and B prepared by you or under your supervision?
 - A Yes, sir.
- MR. KELLAHIN: At this time, I would like to offer in evidence Exhibits A and B.
- MR. UZ : Without objection, Exhibits A and B will be entered into the record of this Case.

(Thereupon, Applicant's Exhibits A and B were admitted in evidence.)

Q (By Mr. Kellahin) Mr. McClellan, you stated that this area is in a state of continuous development. Would you use the same disposal pits in the event further surface disposal is required?

A Up to the economic factor where if the well was too far away to lay a pipeline to that tank battery, then, of course, we could construct another tank battery, but at the present time the way the lease is currently being developed, the two tanks as shown on Exhibit B would be the two places where the water would be exposed.

- Q And that is at the site of your tank battery?
- A That's right.
- Q Would you continue to use those unless you found it necessary to build another tank battery?
 - A Yes.
- Q In that event, would you be willing to advise the Commission of any pits that would be placed in the area?
 - A Yes, sir.
- Q And the amount of water to be placed in those pits?
 - A Yes.
- Q But at the present time you are asking for continued use of the present pits?
 - A Right.

- O What volume of water are you putting in those pits?
- A We have measured on several occasions, and I would say the average production is about 100 barrels total. Some is less than that. And very infrequently, of course, we produce them sufficient to get the allowable, but with all of them turning on twenty-four hours, we measured a volume of 100 barrels.
- Q Based on your experience, you anticipate that will decline from the present wells?
- A The indication we had on the 2-B, it appears the water is a depletable water.

MR. KELLAHIN: That completes the direct examination of the witness.

CROSS EXAMINATION

BY MR. UTZ:

- O Now, this 100 barrels is from all wells?
- A Yes. As I stated earlier, the one that makes almost all the water is the 3-C.
- Q How does the rancher water his stock, from water tanks, from rain water?
- A The only tank -- in fact, I made a personal examination of the area. It is that tank, the Little Lucky has one tank with the windmill, and then apparently the major watering source is up to the north where I have

indicated the windmills pumping from tanks, seems to be the main watering source for the cattle. There aren't a great many cattle in there that I have seen. There isn't any grass, it is just big regular sand hills.

Q What is the location that you want to put the pits in?

A One pit is presently in the northeast-northeast of 24, and then in the southeast-southeast of 13. The one in the southeast-southeast of 13, there probably is no water. It is within the limits of -- what is it, one barrel per day of 40 in this lease. The one we are making the water is in the northeast-northeast of 24.

Q What section is that Little Lucky well?

A It is in Section 28, in northwest-northwest. They are injecting there -- wait, you mean the windmill?

Q Yes.

A It is in Section 3, in the northwest-northwest.

This is the best I can tell. I just had to judge by looking at the other wells, because there is no marker, of course.

- O What kind of water is there in the area?
- A It is fresh water.
- O And stock uses it?

A Yes. Now, it is my understanding, also, that they have tried to establish other fresh water wells in other vicinities from this **same** zone, and it is not present or

it is fairly gyppy. The man that I talked to owned the ranch and said this was unique, it is the only water well they have out there.

Q And you have pretty good evidence that the drainage is to the south-southwest?

A I am relying primarily on the Report, Ground
Water Report 3 which I am projecting. In that whole area.
it appears that the water drainage is to the southwest.
The topography of the area, we are on a high ridge there,
and the relief is to the south.

Q And you would have no idea as to how much water you might eventually produce in this?

A Well, of course, we are going to try to stay away from the area. It appears to the east of our present production is going to be water. We, of course, will not drill over in that area. The other wells are not producing any water. I have no idea of this Queen, I compared it to the Caprock Queen, I don't know what their situation is up there.

- Q Did they encounter very much water in their wells?

 Do you know?
 - A I don't anticipate any water. I just don't know.
- Q They did have some water, but you just don't know how much?
 - A I just kind of feel like the eastside of where they

are now is probably going to be water bearing in the Queen, but as we move west it will become more updip. The two gas wells depicted in 12 in the east-southwest of 12, and in the northwest-northwest of 13 are gas wells.

MR. UTZ: Any other questions of the witness?

MR. PORTER: The water well to which you refer in the area, do you know how deep it is?

THE WITNESS: No, I didn't ask. From the conversation, I didn't ask. I just don't know.

MR. HATCH: I don't understand why do they have windmills pumping out of tanks?

THE WITNESS: Bill Gasset went out there. We were both wondering, and I thought there were two windmills out there, so Bill went out there and checked himself, and told me those weren't water wells, they are producing out of tanks. And I was there the day before yesterday, and I had some time, and I drove out there, and there was a rancher working on the fence. There are two windmills, and the pipe instead of going into the ground, it angles out, and I asked him, and he said that is a tank the rain water drains into, and these windmills pumped it out over the hump and the cattle use it. I thought it was subsurface water, but he said it is rain water. The only water well in that whole area that he knew of and that I could find was the Little Lucky well.

MR. PORTER: You say that is three miles north of your disposal pit?

THE WITNESS: Three miles northwest, right. It is in the northwest-northeast of Section 3.

MR. HATCH: Your disposal pits are in --

THE WITNESS: In the northeast-northeast of 24, and in the southeast-southeast of 13. They are offsetting wells there.

MR. HATCH: And that water well would be in what section there?

THE WITNESS: The windmill?

MR. HATCH: Yes.

THE WITNESS: I thought I had marked it on the Exhibit.

MR. HATCH: Here it is, it is Section 3.

THE WITNESS: That is an estimated location. I took a compass out there and tried to determine the best I could where it was.

MR. UTZ: Does he have this Water pit fenced?

THE WITNESS: It is in the process of being fenced. It is not fenced at the present time.

MR. UTZ: That is probably the idea, to keep the cows out of the water.

THE WITNESS: Are you talking about my pits or his pits?

MR. UTZ: No, the water pits.

THE WITNESS: Up north?

MR. UTZ: Yes.

THE WITNESS: It is fenced. In fact, they were putting a new fence in there now. I don't know why they are fencing it.

MR. UTZ: Any other questions?

MR. HATCH: On your Exhibit B, even though it shows on some maps what would be a windmill symbol on these circles, you have identified these as, say, rock tank below, that would be just a surface tank?

THE WITNESS: There are several of those out there.

It is a small depression that apparently when they get a pretty good rain, the water accumulates. I believe the one that we call here the rock tank -- no, it is not, either. It is not labeled.

MR. HATCH: There is no windmill there?

THE WITNESS: No, the only windmill which you can see from any direction for miles is the Little Lucky well.

Now, they have explored in there for water, because I imagine he is pretty short on water, and have been unsuccessful.

When they do find it south of that windmill, it is highly gyppy. There is no aquifer in there, that is the problem.

We have hit pockets of air in there, and almost all those wells in that area were cable tooled and drilled several years ago, and did not encounter water.

MR. PORTER: Did you drill, yourself, with cable tools?

THE WITNESS: All of them.

MR. UTZ: What is your analysis of the water?

THE WITNESS: My salt water?

MR. UTZ: Yes.

THE WITNESS: I believe it is about 155,000 parts per million, pretty salty.

MR. UTZ: Any other questions? You may be excused. Any statements? The Case will be taken under advisement. At this time, we will adjourn until 1:30 this afternoon.

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STATE OF NEW MEXICO)

SS.

COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter 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.

anuel R. Mortelle

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