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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
August 6, 1969

EXAMINER HEARING

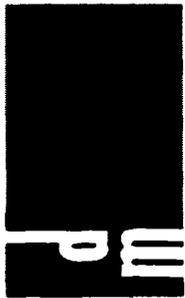
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IN THE MATTER OF: )  
)  
)

Application of Franklin, Aston )  
and Fair, Inc., for an exception )  
to Order No. R-3221, as amended, )  
Eddy County, New Mexico. )  
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Case No. 4182

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING



I N D E X

	<u>Page</u>
<u>GRANT M. SMITH</u>	
Direct Examination by Mr. Kellahin	3
Cross Examination by Mr. Nutter	13
Redirect Examination by Mr. Kellahin	16
Recross Examination by Mr. Nutter	18

E X H I B I T S

	<u>Marked</u>	<u>Offered and Admitted</u>
Applicant's Exhibits Nos. 1 through 4	3	13

MR. NUTTER: Case No. 4182.

MR. HATCH: Case No. 4182. Application of Franklin, Aston and Fair, Incorporated for an exception to Order No. R-3221, as amended, Eddy County, New Mexico.

MR. KELLAHIN: If the Examiner please, this is Jason Kellahin of Kellahin and Fox, Santa Fe, appearing for the Applicant. We have one witness I would like to have sworn.

(Whereupon, Applicant's Exhibits Nos. 1 through 4 were marked for identification.)

(Witness sworn)

GRANT M. SMITH

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A I am Grant M. Smith.

Q By whom are you employed and in what position, Mr. Smith?

A I am a geologist for Franklin, Aston and Fair, Incorporated, Roswell, New Mexico.

Q Now, you have testified before the New Mexico Oil

Conservation Commission and made your qualifications as a geologist a matter of record?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

BY MR. KELLAHIN:

Q Mr. Smith, are you familiar with the Application of Franklin, Aston and Fair in Case No. 4182?

A Yes, sir.

Q Briefly, what is proposed by the Applicant in this case?

A It is an Application to dispose of produced water from oil wells in the Loco Hills area in surface pits.

Q In connection with the Application, the McIntyre "A" Well, No. 4 was erroneous in its designation?

A It is 4.

Q It is 4 and it should be McIntyre "A" No. 4 and McIntyre "A" Well, No. 5, is that correct?

A Right.

Q And not No. 1 as appears on the Application.

Now, Mr. Smith, in connection with this Application, have you made an examination of the area in which these wells

are located?

A Yes, sir.

Q Now, referring to what has been marked as Applicant's Exhibit No. 1, would you identify that Exhibit and discuss the information shown on it?

A This is a land map showing the location of oil wells in the Loco Hills area. Ownership and also colored in yellow are the Franklin, Aston and Fair leases involved in the Application.

Q Now, in connection with each one of these leases there appears an arrow and the well designation and information on the water production, is that correct?

A That's right.

Q Was that the actual production for the month of May, 1969?

A Yes, sir.

Q On each one of these leases?

A Yes, sir.

Q Where are the disposal pits that you propose to use located?

A It doesn't show up very well on this exhibit, but the wells are shown and the disposal pits are usually 150 feet or so from the well, and they are marked in blue on

these exhibits. I would like to draw attention to the Masteller "B" No. 1 Well in Section 17 of 18 South, 30 East. The disposal pit for this well would be across the section line in Unit "O" of Section 8.

Q Unit "O" of Section 8?

A Yes.

Q Can you give the Unit location and Section number for the other disposal pits?

A For the Nelson No. 3 in Section 4 of 18-30, the disposal pit would be in Unit "E".

Q Of that same section?

A Yes. For the McIntyre wells, it would be in Unit "P" of Section 20 of 17-30, and I would like to point out that the road as shown on that map is wrong. It wouldn't be going across. In reality, this road goes right along the east side of this location. For the State 1-A in Section 36 of 17-29, the disposal pit would be in that Unit, Unit "O".

Q On the McIntyre wells, you are using only one pit for 2 wells?

A Yes, sir.

Q And each of the other wells has a separate pit?

A Yes, sir.

Q Now, on the extreme righthand side of the exhibit there appears a small red triangle. What does that signify?

A On the right or the left?

Q On the left.

A This represents windmills or water wells in this general area.

Q There is only one shown on this particular exhibit. Are you familiar with this area personally, Mr. Smith?

A Yes, I have been going through it for some time.

Q Do you know whether it is in operation at the present time?

A I think that this well in Section 35 is in operation. The one in Section 24, I believe, is in operation. Some of these may be ~~gyped-up~~ and I don't know for sure whether they are operating.

Q I show you what has been marked as Exhibit No. 2. Would you identify that exhibit, please?

A This was taken from the ground water report No. 3 showing the outcrop of geologic formations at the surface in this general area. It also shows the windmills marked with red triangles. It shows the oil wells

producing water that are concerned in this Application.

Q What formation would those wells be producing from?

A The water wells?

Q Yes, sir, the water wells?

A I don't have the exact information as to their depth, but I would imagine it is probably from the Rustler.

Q There is no Ogalala present in this area, is there?

A The only Ogalala that I am aware of is shown in the extreme upper righthand corner in Section 16 South, 31 East, which would be above the area involved and beyond contamination.

Q I refer you to what has been marked as Exhibit No. 3. Can you identify that Exhibit?

A This is a reproduction of the ground water report N<sup>o</sup>. 3 showing wells and springs and the availability of ground water in this general area.

Q Again, there appears some small red triangles on this exhibit. Is that --

A (Interrupting) These still represent the wells previously mentioned.

Q What is the closest well to any of your pits?

A It appears that the well northwest of our

State "A" No. 1 in Section 36 of 17-30. This windmill is in the NW NW of Section 35 of 17-30, a mile and a half or two miles away.

Q All the other wells are two or more miles away, are they not?

A Yes, sir.

Q From any disposal pit. Now, referring to what has been marked as Exhibit No. 4, would you identify that exhibit?

A This is also a reproduction of the ground water report No. 3 showing some of the surface features in this area, their names, and it also shows the general direction of movement of ground water. It also shows the previously mentioned windmills and wells that are producing water.

Q How long have these wells been producing, Mr. Smith, just generally?

A I don't know.

Q They have been producing for many years, have they not?

A Yes, sir.

Q Has there been any increase in the amount of water being produced?

A Are you referring to the water wells or the oil wells?

Q The oil wells.

A Well, the oil wells, I will have to correct that statement if you are referring to the oil wells. The water production in the Nelson Well has remained quite constant. This is the well in Section 4 of 18-30. The Masteller No. 1 in Section 17 of 18-30 has remained constant. The State "A" No. 1 in Section 36 of 17-29 is a re-entry of an old injection in the Neumont Water Flood. We carried it on through the Metex and Premier. Its water is holding constant, about 20 barrels per day. This well was just completed last year.

Q That well has been abandoned as a water injection well?

A That's right.

Q But has been re-completed in a zone other than that in which water was being injected?

A That's right.

Q What zone is it completed in now?

A It is completed in the Premier and it has some perforations in the Metex. We are a little undecided right now just exactly how much is coming from which zone. We had a terrible problem fighting the water from the Loco Hills water flood and we carried this well on deeper

and we shut it off until we ran a casing in this re-entry.

Q So the State 1-A is producing from the Premier and the Metex or the Metex. The Nelson No. 3, is that San Andres?

A San Andres well.

Q Would you anticipate there would be an increase in the water production from that well?

A Not from the way it has behaved, I don't believe it will be. McIntyre 4-A and 5A -- to refer to your previous question -- we originally water free on completion. Water has increased, however, at the present time, we are producing it just about pump capacity, and I don't anticipate an increase in the water from them, only as this would relate to a decrease in the oil. We have no plans of installing larger pumps at this stage. They are too near the stripper stage.

Q And the Masteller well is producing from the Loco Hills?

A Loco Hills, correct.

Q Would you anticipate that the water production there would increase?

A No, sir. It doesn't show any indication of it.

Q Now, on the basis of your examination of this

area and your familiarity with the presence of water wells, in your opinion would the continued use of surface pits for water disposal as applied for here, cause any damage to any fresh water supplies either on the surface or underground?

A No, sir. I looked through many of these old records that I could find. Reports of fresh water were very scarce. In talking with people in this area, we have found or I have found no instance where water wells in this area that the water is being used for domestic purposes. What ground water is used, is for stock use only.

Q Now the closest disposal pit to any water well is your disposal pit for the State A No. 1. In reference to Exhibit No. 4, would that indicate that the water movement, if there were any drainage from that pit, would be toward this water well?

A No, sir, I don't believe that it would show that there would be contamination from this well.

Q In your opinion, would it be physically possible for any contamination to reach that well from this pit?

A I don't believe so.

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

A Yes, sir.

MR. KELLAHIN: I now offer in evidence, Exhibits 1 through 4, inclusive.

MR. NUTTER: Applicant's Exhibits 1 through 4 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1 through 4 were offered and admitted in evidence.)

MR. KELLAHIN: That's all I have, Mr. Examiner.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Smith, referring to your Exhibit No. 3 here, the well which is down here in Section 24 has a figure beside that triangle and part of that number has been obliterated by the triangle on this particular exhibit. Could you tell me what that number is? That would represent the depth to the water?

A The depth to the water? That would be, I think, 158. 158, correct.

Q You don't happen to know the depth of this well?

A No, sir.

Q What about the well up here just west of your State No.1, what is the depth of this, do you know?

A No, sir, I don't know. I checked with the Bureau

of Land Management in Roswell on some of these wells and some of them have pencil notes beside them that were rather hard to make out. I notice in one or two cases in wells in this general area, they have just the word "out" written beside it. I don't know whether this meant the well was no longer producing or what it did mean, really.

Q You may have presented those figures and I missed them, Mr. Smith, but what is the oil production per day from each of these various wells?

A No, I didn't present these figures. The Nelson No. 3 is making approximately 100 barrels a month. The Masteller No. 1 is producing about the same amount. The State "A" No. 1 is producing about 300 barrels a month. The McIntyre wells are producing in the neighborhood of 50 barrels a day -- 1000 barrels a month. It will vary some.

Q The McIntyre wells are the only ones that are making substantial quantities of water then?

A That is correct.

MR. NUTTER: Are there any further questions of Mr. Smith?

You may be excused.

(Witness excused.)

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

MR. KELLAHIN: No, sir, Mr. Examiner. Thank you.

MR. NUTTER: Does anyone have anything they  
wish to offer in Case No. 4182?

We will take the case under advisement.

CASE NO. 4182 REOPENED

MR. NUTTER: At the request of the Applicant, we are going to re-open Case No. 4182 for a few minutes.

(Discussion held off the record.)

MR. KELLAHIN: If the Examiner please, the reason for re-opening the case is that it appears that there was a salt water disposal well approved for disposal of water in the vicinity of the McIntyre wells and I wanted to recall the witness to give some explanation as to the situation in regard to that disposal well.

MR. NUTTER: The record will show that Mr. Smith is still under oath in this case.

GRANT M. SMITH

recalled as a witness, having been previously sworn, was examined and testified as follows:

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Smith, in connection with the disposal of water from the McIntyre wells, what disposal has been made in the past of this water?

A We had approval for disposing the salt water from the McIntyre 4-A and 5-A into the Brigham 2-H which

is an east offset of the McIntyre 4-A. This was into the Abbo Reef.

Q What is the situation in regard to that disposal at the present time?

A This well started out very well taking the water on vacuum, but pressure has continued to mount in this well and it will now not dispose of the water produced from the 4 and 5-A.

Q Would it be possible to install additional equipment and continue to use the disposal well?

A It would be possible, but expensive and possibly uneconomical at this point.

Q In your opinion, would the cost be prohibitive?

A Yes, sir.

Q It is essential that you be granted an exception to the provisions of R-3221 for surface disposal of the McIntyre wells?

A Yes, sir.

Q If this is granted, would it be possible to continue producing the wells?

A It will now only take the water produced from the McIntyre 4-A which is about 60 barrels of water per day. We will have to go to the expensive pumping

equipment to dispose of the rest of the water.

Q Do you have anything to add?

A No, sir.

REGROSS EXAMINATION

BY MR. NUTTER:

Q What was the name of the well again, Mr. Smith?

A Brigham 2-H.

Q And being in an east offset to your McIntyre No. 4, that would probably be covered up by your arrow then?

A That's right.

Q What zone is the disposal authorized for?

A Abbo.

Q How much water has been put into that well?

A The total volume -- I don't have the figure -- they would be pretty much what we are showing per day here for the past -- probably since about February.

Q Running close to 200 barrels a day for 5 months?

A Right.

Q And it took water on a vacuum at first. What pressure is necessary now to get the 60 barrels?

A Well, it will still take it at a vacuum, but it won't take the water that we are producing. It will take the water from the 4-A.

Q On a vacuum?

A Yes.

Q You haven't put any pressure on the disposal well then?

A No, sir. It would require an expensive pump to do this. One problem we have run into in our other water disposals is not knowing what pressure it is going to take to dispose of the water, and by the time you get a pump big enough to do it, sometimes you have bought two pumps.

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

You may be excused.

(Witness excused.)

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

MR. KELLAHIN: No, sir. Thank you.

MR. NUTTER: Does anyone have anything to offer in Case No. 4182 recalled?

It will be taken under re-advisement and call a 15 minute coffee recess.

