SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATE MENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico July 1, 1970 EXAMINER HEARING 209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO IN THE MATTER OF: Application of Hal M. Stierwalt for Case No. 4379 an exception to Order No. R-3221, as amended, Eddy County, New Mexico. BEFORE: Elvis A. Utz, Examiner. **APPEARANCES:** For the Applicant: Hal M. Stierwalt, Pro se For the Oil Commission: George N. Hatch, Esq. TRANSCRIPT OF HEARING

dearnley-meier reporting service, inc.

HAL M. STIERWALT

being duly sworn according to law, upon his oath, testified as follows:

MR. HATCH: Will you state your name?

MR. STIERWALT: Hal M. Stierwalt.

MR. HATCH: And you are representing yourself in this case?

MR. STIERWALT: Right, and in a left-handed way, Southern Union. We have a private agreement which is not a public agreement whereby I am operating Southern Union's property in this particular area and this is the reason that I am representing them as an agent. Dan called me about that and said that since there was no official papers to the effect that I was the operator that we have to handle it in this respect.

MR. HATCH: In other words, those words are still being carried under the name of Southern Union?

THE WITNESS: Right, they are still handling the paperwork, but I am handling the physical operation. They kind of leave me alone to do what I feel is necessary to keep the thing running.

MR. HATCH: All right. Would you continue?

THE WITNESS: I am here today, as stated in the Application, to apply for an exception to the Commission Order

No. R-3221 for the right to dispose of salt water in unlined pits in Eddy County, New Mexico, Sections 1 and 2, Township 16 North, Range 30 East. The Exhibit which I present at this time marked Exhibit 1 shows the leases in question. There are actually four leases involved here. The pink labeled leases are the Southern Union federal lease which I operate. The green lease, the north section is the State BC Lease and the south lease is the State BN Lease. The white remainder of the Section 1 which is in white is the Southern Union Taylor Federal This Exhibit shows the proposed plots where the pits Lease. are located, where it will be necessary to dump the salt water. You will see that one of these spots in the southwest corner of Section 2 is actually owned by the Mobil Western Shell Unit, but the tank battery that serves the well, both BC and BN Lease wells, is located there and therefore we would dispose of the water at the tank battery rather than at each individual well.

This Exhibit shows two-water windmills ; one of them approximately three miles south of us. This well is completed. 350 feet in a red-sand section. I am not certain exactly what this would be -- this would be probably a member of the Rustler, I would guess. Nobody seems to know whether it's part of the upper red bed which in not down to the Rustler yet or whether it is the Rustler, but we will guess it is Rustler because it

has a fairly high phosphate water and kind of a funny taste to it.

The other well which is located some five and a half miles as the crow flies is clear over in Township 31, Section 14, which is Range 31, Section 14 -- I beg your pardon -- it is a very good water well. It is only 150 feet deep and it has a real fine clear water. The other edge of it is a basin and I think it is probably just a trap of surface waters actually. Most of this area is covered by sand dunes and underlay. In the vicinity of my two sections there, the sections I am on, underlay with a pretty heavy layer of caliche like material. In these two sections is kind of a little draw and I would imagaine that this is where all of your surface drainage goes down into this little draw and stops because as you come down south of surface elevation it goes back up through the sand dunes and hills and from where they have dug the leaching pits you can get an idea of how the surface underlies this sand area there, that permanent surface, I guess you would call it. It is really difficult to tell. I have scouted this area all around here and these are the only two windmills I could find.

There is a windmill over to the east of us there several miles that is broken down. It is clear back over on the County road. That cuts through there to Haggerman Highway, maybe about seven and a half miles from us, and it is completely broken down -- I mean, there is no way it could be producing.

This well to the south is producing into a tank and the well to the east is producing.

The yellow spot up in Section 3 is the exception granted to Kersey in Order No. R-3773 where he is disposing of his salt water produced out of the well up there.

MR. HATCH: Mr. Stierwalt, what is the writing over here?

THE WITNESS: That was -- I swiped this map and that was where somebody had checked that other well over there and had made a notation that, I guess, Dick down there at Artesia went out and looked at it. Five or six years ago the well went dry, it says. If you can't read it, I can read it on this copy.

MR. HATCH: I think I can make it out, but I can't make out the three hundred and --

THE WITNESS: It is about 300 feet deep. It says, "Abandoned". "ABD" is what somebody has written on it.

MR. HATCH: But this is not your writing on here?

THE WITNESS: No, no. The only writing I have done on there is with colored pencil. The rest of that was on this map when I got it which I cannot --

MR. UTZ: What is the word below "Dick" there?

THE WITNESS: "Inspection". Dick Stamets went out there probably and made an inspection of these things, I guess, at your request.

MR. UTZ: Okay. You may continue.

THE WITNESS: Well, basically our problem boils down Out there these wells are receiving quite a bit of to this: water from the Mobil flood to the east and probably from the Shell flood -- I mean, the Mobil flood to the west and the Shell flood to the east, because we have had water show up in these previously non-producing wells. The water is not as salty as it used to be. That used to be about one hundred sixty thousand parts chlorides in there and it is down now to around 135, so I feel like this water has to be some of the fresh water being injected in the two floods. We are far enough away from any disposal systems that the truckers want quite a little bit of money to haul water out. It is something like thirty-seven cents a barrel.was the best quote or bid. whatever you want to call it, that I have been able to see, which makes it fairly uneconomical to produce these low-volume wells if you have to pay this much to haul the water away. Another thing is that we are down to the point on production if we can't do something inexpensive with the water we are going to have to abandon the wells, so I feel like it is good conservation practice to do it this way since the land does not have

any shallow surface waters which would be contaminated by this activity and it certainly won't affect any other operator's correlative rights in there.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Stierwalt, what water is Shell using for injection?

A Oppalatta water which they are purchasing from -- I am not sure what the name of it is now -- it used to be the Double Eagle Corporation, but I think it belongs to Kiwana now. A pipeline comes off from a cap about seven miles east of there and comes right across into the Mobil waterflood plant there.

Q Is that fresh water?

A Yes, sir. Very good fresh water. In fact, the ranchers have made a deal, apparently, with the water company of some type because they have some little-metal tanks set along this line with a little-float valve and they keep those with water for the stock in that area, and right south of this proposed disposal point there is a tap in the line where anyone can come in with a truck and pick up fresh water if they need it, just south of that battery in Section 2, the point noted as a proposed-disposal point. This is, I believe, an eight-inchwater line they have layed through there, but the water rights that are supplying it are all back on the cap. The bottom of the well probably would be higher than the surface down here. Q Is all the surface drainage to the west?

A Generally southwest. It is hard to say because it is so rough there. There is ridges all through there and, like I say, right south of this section is kind of a little sink, I'd call it, just a kind of low place and there is not much drainage out there because we don't have much rain and when it does rain it doesn't run off where you can follow it very well because it is soft sand and it just seeps right in.

Q Does it eventually drain into the Pecos River or some draw?

A I would imagine it would eventually get into that major draw that comes down, oh, about ten miles south of there. I don't know the name of it. You cross it on the road just after you leave Loco Hills there. I don't know -- we just call it the first draw. It is kind of a way it is referred locally. It may have another name. There is another small draw up above that, but it comes in from the other direction.

Q I was wondering why these people couldn't use that water for waterflooding.

A I have talked to Mobil about that and they are not too desirous of taking on any more produced water. If we had some more of that good Oppalatta water, they'd probably jump at the chance, but they are not soliciting business on the produced water because they do have to treat it and it costs them

additional money.

Q Are they treating their own produced water?

A Yes, sir. They are treating their own produced water. They have chemical tanks set and pumps. They are treating it. The extent of the treatment I couldn't say. I just know they are treating it.

My original attempt was to get this property, when we got some water from them to put into the Unit, but it seems like we got quite a little bit of real estate there that is not developed between the two and it makes it a little bit tough to step across that far and pick up some other property without getting into --

Q How much water is this producing?

A Currently that is shown as the Southern Union Federal, which is the white portion of Section 1 -- about twenty barrels of water a day, but the well No. 6, the water there is flowing water right now. The pumping unit has broken, but that is -it is not functioning, but it is actually flowing water out through the tubing and until we get the unit fixed and get the well back on production I imagine at first it will make quite a bit of water which we hope eventually it will start cutting oil again and the water would decrease. When we first started off, probably 40, 50 barrels a day of just water. We do have a big water producer on that Lease, also and we are full of

water when everything is shut in right at this time because we have no place to go with the water. The green lease over there are commingling into the single battery and they are making about -- with the exception of -- well, I'd say the wells are producing, making about 18 to 20 barrels a day. The No. 5 well will make about 60 barrels of water a day.

We took a tank truck out there one day and pumped it two days until it filled up a 120 barrel tank truck with about two barrels of oil, so it has received a good shot from the flood, but we are not being very efficient because we haven't got any oil into these things.

Q Do you know how much total water the green area is making?

A Maybe about 20 barrels a day. We can't economically produce No. 5 because it doesn't make enough oil to pay the electric bill. There is three wells producing, BN -- excuse me -- that is BV4 and 6 and the BN No. 1.

MR. HATCH: The other large water producers would be produced if this were approved?

THE WITNESS: No, sir. I wouldn't produce them unless we can get them around to an economic ratio. In other words, we have got to cut less than 75 percent to afford to run the pump again because they crowd our separation equipment. These leases originally were virtually no water at all in the formation. In fact, we put fresh water into the wells in order to get the salt out of the perforation so they would produce and with the advent of this situation our separation equipment is so small, we are just -- the ability to separate our own water is so small that we can't tolerate the 60 or 70 barrels of water a day. We just don't have the facilities for it.

Q (By Mr. Utz) Is that water coming from the Mobil operation or the Shell operation?

A I think we are getting it from both sides. My hope is that one of the wells will pick up and make a real good run at producing some oil.

Q You would require a pit at each one of these fourtank batteries?

A There are pits there now. They are not being used. The pit location shown just below the Southern Union Taylor ℓ , which is on the west side of Section 1, about the center, there is no pit there at the present time. However, that well does not have a flow line to the battery and we would possibly put a temporary tank there and try that well out. That is the one I was saying about flowing water out the tubing and if in a couple of three days we didn't start cutting some oil, we'd more than likely abandon that operation.

Q Let's get this lease business straightened out. You say the white lease is the Southern Union Taylor? A Right. Section 1, the white Section, is Southern Union Taylor. Taylor Federal Lease would be the proper name. It is the Southern Union Taylor Federal Lease. The pink is the Southern Union Federal Lease. That is my Lease. The green is the Humble BC Lease. That is all except that which is in the southeast quarter and the southeast quarter is the BN Lease. Those two are commingled into a single-tank battery. I just kind of think it is one lease because it all goes to the same place.

Q Do you know how much it costs to treat this water for injection?

A No, sir. I don't.

Q Evidently it costs more than buying fresh water.

A Right. They are paying, to my knowledge, or at least the contract was offered to me when we anticipated flooding in this area ourselves -- it was two and threequarter cents a barrel for the fresh water, so I would assume, since they are not interested in taking my produced water, that they feel that they can treat the water -- it costs more to treat the water.

MR. HATCH: You don't have negotiations with Shell. You only have those with Mobil?

THE WITNESS: I am not going to say. I was going to say something off the record.

(Whereupon, there was a discussion off the record.)

Q (By Mr. Utz) Then all of these leases together are producing somewhere between 125 and 200 barrels of water and probably will produce more?

A Yes, sir.

- Q How much oil are you getting from them?
- A We are getting about 25 barrels a day.
- Q From all of them?
- A The whole group.
- Q It looks like a pretty good water field.

A Yes, sir. We have some wells that haven't made any water yet that we have hopes of picking up an oil bank before we make water, I mean, it is just one of these salvage operations -- you hang on as long as you can and eventually you have to go down.

Q So far as you know there is no fresh water in the area that is being used for domestic or stock purposes?

A No, sir.

Q Any further questions of the witness?

MR. HATCH: I have one. Have you discussed your surface disposal with the USGS?

> THE WITNESS: No. I have not. MR. UTZ: The witness may be excused. Statements in the case?

The case will be taken under advisement. The Hearing is adjourned.

INDEX

WITNESS	PAGE
HAL M. STIERWALT	
Direct Examination	2
Cross Examination by Mr. Utz	7

STATE OF NEW MEXICO) COUNTY OF BERNALILLO)

I, PETER A. LUMIA, Certified Shorthand 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.

tha I

CERTIFIED SHORTHAND REPORTER

I do hereby martify that the foregring is e complete reported at the paraded t? Star Ma of Cass To 3.5 3 Chi. 140 $\mathcal{D} \bigcirc$ 26 New Morico 011 Conservation 0 iouion