BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
May 8, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of S.P. Yates for an exception to Order No. R-3221, as amended, Eddy County, New Mexico.

Case No. 5208

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Conservation Commission: Thomas Derryberry, Esq.
Legal Counsel for the Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant: A.J. Losee, Esq.
LOSEE & CARSON
Artesia, New Mexico

I N D E X

E X H I B I T S

	Marked	Admitted
Applicant's Exhibits Nos. 1 and 2	--	9

MR. STAMETS: We'll call the next case, Case 5208.

MR. DERRYBERRY: Case 5208. Application of S.P. Yates for an exception to Order No. R-3221, as amended, Eddy County, New Mexico.

MR. LOSEE: A.J. Losee, Artesia, New Mexico, appearing on behalf of the Applicant. I have one witness, Mr. Peyton Yates.

MR. STAMETS: Mr. Yates was sworn in the second previous case and is still under oath.

(Witness previously sworn.)

PEYTON YATES

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

DIRECT EXAMINATION

BY MR. LOSEE:

Q State your name, residence and occupation?

A My name is Peyton Yates, I live in Artesia, New Mexico, and I am a Petroleum Engineer.

Q Would you state the purpose of the Application in this Case No. 5208, please?

A The purpose of the Application is to obtain permission to dispose of produced water in unlined surface

pits in two producing wells.

Q I want to correct my reference to case number; it's 5239, I believe, is that right?

A 5208.

Q Please refer to what has been marked as Exhibit 1 and explain what is shown by this Exhibit?

A Exhibit 1 is a land-ownership map of the general area of the lease in question. The lease is located, as shown in yellow on the map, in the northeast quarter of Section 5 of 17-30 and in the southwest of the southwest in Section 4, 17-30. The map also shows, as indicated b red arrows, previous areas of previous exemptions granted in the area to parties who wish to dispose of water in unlined surface pits.

Q Mr. Yates, before you talk about those exemptions, you have one producing well and one temporarily abandoned well on your lease?

A That is correct. The Evans No. 3, which is in Unit B of Section 5, 17-30, is a producing well presently capable of producing two barrels of oil per day and 40 barrels of water per day. It is producing from the Lovington sand down through what is commonly called the Sub-Keeley or lower San Andres pay. The producing interval

is approximately 2900 down to 3800. The Evans No. 1 is a temporarily abandoned well, which was abandoned about four years ago because of excess water production, 2, 3 or 4 years ago, I'm not sure of the exact date, because of excess water production. The well, we believe, is capable of approximately 3 barrels of oil per day and an estimated 200 barrels of water per day. We wish to emphasize the estimated nature of these numbers. One of the reasons we would like to obtain this exception is in order to put the well on production and to experiment with it; see what it will make and also see if we can solve water producing problems. The well is producing from two premier sands which, either one or both of which, achieved water break-through, and we are not, at this point, sure which if either or both of the zones are producing water and we need to put the well on, experiment with it and try to increase its production.

Q Now, Mr. Yates, there are five arrows shown here, and I guess part of a sixth. Do these arrows indicate that there were six prior orders or five orders entering exceptions?

A That is correct. There were in this general area, and to my knowledge, and there may be some more

recent exemptions there, but I was able to find out about five previous cases in which exemptions were granted for disposal of water in unlined surface pits.

Q Do you know the order numbers in those cases?

A Yes: Order No. 3812, Order 3734, 4030, 3945 and 4295.

MR. LOSEE: Mr. Examiner, we would like for you to take administrative note of the testimony and exhibits in these five previous cases.

MR. STAMETS: We'll take note of the testimony and exhibits.

BY MR. LOSEE:

Q Please refer to what has been marked as Exhibit 2 and explain what is shown on this map?

A This is a topographic map of the same general area; it shows in yellow again a lease in question upon which the two wells, Evans No. 1 and No. 3, are marked in red, as is the section number, Section 5, circled in red; it shows portions of Township 16-29, 16-30, 17-29, and 17-30. I have indicated the town of Loco Hills circled in red, also I have indicated two windmills with a small sketch in red of a semblance of a windmill, one of which is located in Barnsville Draw, or on the map,

referred to as Bear Grass Draw. It is in the northwest, northwest of 22 of 17-29, approximately 5 miles away from the lease in question. It is also the High Lonesome Windmill in the northwest, northwest of 18, 16-30, approximately 4-and-a-half miles away. To my knowledge, these are the nearest windmills and nearest sources of producing fresh water in the area.

Q The last time you looked at the High Lonesome it wasn't producing?

A That is correct. It has been approximately a year since I've been out to the High Lonesome. I have been to the Barnsville Draw Well as recently as last Friday and it was producing approximately a quart of water every 25 seconds.

Q Where does Loco Hills get its water?

A Loco Hills Community buys its water from one of the pipelines, fresh water pipelines that comes from the Caprock. They do not produce any of their own water.

Q What do the ranchers use for water in this area?

A A very common practice now with the advent of many water floods throughout the area is to take water, rather than relying on surface drainage or windmills, to

take water from the fresh-water lines that are criss-crossing the area for injection purposes. In fact, I came upon several while driving about the area, and they just take a small quantity of water off and put it into a small tank for cattle.

Q From your going on the ground, did you see any evidence of any other fresh water within four-and-a-half miles of your lease?

A No, not on the ground.

Q What would be the normal method of disposing of this produced water?

A The normal method in a lease situation such as this would be to truck the water at a cost of approximately 30 cents a barrel.

Q For your producing Evans No. 3, at 40 barrels of water per day, it would cost you $12 to dispose of the water. How much could you expect to receive as a working-interest owner from the oil?

A The working-interest owner lease, I think, is approximately 75 percent working-interest lease, and also has a sliding scale written in on the lease, and if we produce 2 barrels a day at $10 a barrel, we might realize three-quarters of $20 a day, $15, and of course have to take that

net difference and pay our pumper salaries and overhead out of that.

Q So that isn't economical?

A That's correct, it is not economical.

Q Were Exhibits 1 and 2 prepared by you?

A That is correct.

MR. LOSEE: Move their introduction.

MR. STAMETS: Exhibits 1 and 2 will be admitted.

(Whereupon, Applicant's Exhibits Nos. 1 and 2 were admitted into evidence.)

MR. LOSEE: No further questions on direct.

CROSS EXAMINATION

BY MR. STAMETS:

Q I believe you stated the anticipated No. 3 would produce 40 barrels of water a day. How about No. 1; is that a couple of hundred a day?

A That's correct, and that is what I believe to be a maximum based on what we would be willing to invest in pump capacity, and if we were not able to make an economic amount of oil, handling that amount of water we probably wouldn't be concerned with handling that much more water.

Q No. 3 will make a couple barrels of oil you anticipate; how about No. 1?

A Anticipate about 3 barrels a day based on its performance prior to the time it was shut-in, and if we are able to draw the well down. If we are able to solve the riddle of where the water's coming from, of course,we might be able to increase that even more.

Q These floods, or wells, located off-setting some water floods in the area?

A There is a flood in a squarelike pool in the premiere sand which would only affect the No. 1 well as far as production, to the northeast, immediate northeast offset; I believe it is operated by Eumont.

Q So possibly you might be able to shut that water off and reduce your overall volume?

A It is hopeful, yes. We, of course, will have to put it on and check its points and then attempt to locate the water.

Q What's the quality of the water you seek to dispose of here?

A I do not have analysis on the premiere water; the water is quite salty, I can tell you that; it runs over 100,000 parts per million on the San Andres water. It is typical San Andres water. It comes out of the No. 3 Well.

Q If necessary you could submit water analysis at a later date?

A That is correct. In fact "later" might be just a few minutes here.

Q Have you made any studies to determine what the drainage of the water from this area would be, in which direction?

A Only by glancing at the topo map. It appears that there is a ridge of common elevation of about 3700 feet that goes northwest southeast. I would anticipate, if there were a drainage, of course this is a very sandy area and water is immediately absorbed into the pit, there is hardly any run-off to speak of at all in the area, but if there were drainage it would be first of all to the southwest off of this general ridge area and then probably the trend down to the southeast. I'm not much of a hydrologist.

Q What do you suppose the ranchers will use for water when the oil fields are gone?

A I don't know. If they realized that they would all be in Congress fighting for us, I hope.

Q That could be a problem for the ranchers if in the future they might have to go back and look at some

sources that they hadn't looked at before.

A That is correct. Of course the water in the area is very gypy and what was water is located in wells and of course the systems will still be in the ground and I'm sure the ranchers might be able to get together and try the systems and continue the operations, of the fresh-water systems.

Q If an order authorizing the service disposal were predicated on a temporary basis waiting for final determination of the actual volume of water to be going onto the surface, would this be acceptable to Yates?

MR. LOSEE: Rather than doing that, could you put a maximum on it?

BY MR. STAMETS:

A The maximum, I can understand the problems involved, certainly we could work within a maximum number and if that maximum number became something we would like to exceed we could come and request permission to exceed it. If we could do it administratively it would help.

Q Okay, a maximum volume and administrative procedure of some sort, or even a temporary order would all be preferable to a denial?

A Yes, sir. I would like to also point out if we are successful in solving this premiere production problem, of course,we may want to drill additional wells in the area too, which could encounter more water problems, in additional wells on that piece.

Q If additional wells were drilled you could be possibly looking at the institution of some sort of disposal program or secondary recovery program which would solve this system?

A If the economics could be made to be such that we drill additional wells, possibly at that time we could have justified economics to take care of it.

Q How long is it going to be before you are able to reach that determination?

A Well, the critical factor is materials and we could probably reach determination in three months time, but a very practical matter just to get the casing to drill the well, nine months to a year.

MR. STAMETS: Are there any other questions of the Witness? He may be excused. Anything further in this Case? We will take the case under advisement, and adjourn.

STATE OF NEW MEXICO)
) SS.
COUNTY OF SANTA FE)

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported b me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5208, heard by me on 6-5, 1974.

Richard L. Stamets, Examiner
New Mexico Oil Conservation Commission

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