BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 24, 1966

Application of Kersey and Company for a waterflood project, Lea County, New Mexico.	CASE NUMBER 3445

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BEFORE:

ELVIS A. UTZ, Examiner.

TRANSCRIPT OF HEARING

HEARING EXAMINER ELVIS A. UTZ: Case 3445.

MR. GEORGE HATCH: Case 3445. Application of Kersey and Company for a waterflood project, Lea County, New Mexico.

MR. UTZ: All right, sir, you may proceed.

MR. KERSEY: My name is Harold Kersey. I represent Kersey and Company. I have appeared before the Commission on previous hearings and I live in Artesia, New Mexico.

MR. UTZ: You are representing yourself?

MR. KERSEY: I am representing myself.

MR. UTZ: Swear the witness.

(Whereupon, the witness was sworn.)

MR. UTZ: Are there any other appearances?

(No response.)

There are none.

MR. KERSEY: Continental Oil Company has received

authority to start a flood adjacent on the north side of our Hoover property in the Maljamar field in the Northeast Quarter of Section 32, Township 17 South, Range 32 East, and we propose to back their flood up and at the same time flood two of our wells. If you will refer to the plat which is the last exhibit.

MR. UTZ: That is Exhibit Number Six.

MR. KERSEY: Exhibit Number Six shows the locations of the wells and the location of Continental's well and the pattern that is proposed to use. The pattern you would more or less call a blind drive because of the absence of production on the west side of our lease.

The water for this project is to be furnished under pressure by Continental Oil Company, delivered to the lease line. The zones to be flooded are the lower Grayburg zones which are the same as flooded by Continental and the production on this property has declined to one to two barrels per day per well.

I will refer you to Exhibit Number Three which is the water injection pattern. It shows the water injection method, that is, the casing and tubing. The water will be injected through corrosion protected tubing with a tension packer, with a packer set approximately 100 feet from the bottom of the casing and it will be injected into the formation that way. There are two producing zones in the lower Grayburg that are presently being flooded and the water will go into those and whichever fills --

one will probably fill up first then the other one will take the water.

Exhibit Number Two and Three shows these wells, the two wells that are proposed for use.

MR. UTZ: Exhibits Three and Four?

MR. KERSEY: Three and Four. And, Exhibit Number Five is an excerpt of a nuclear log showing one of the zones to be flooded. When this log was run, there was tubing in the hole and the log didn't take in the zones that was under the tubing. I ran this in order to have a log here available for the hearing. There is no fresh water in this area. The produced water as it is produced will be returned to Continental for reinjection. All equipment, as I pointed out, will be corrosion protected and we anticipate to inject about 500 barrels of water per day per well.

The injection pressure, after fill up, will probably run in the neighborhood of 2,000 pounds per square inch. The injection will be started as soon as permission is obtained and then as soon as Continental completes its injection plant, that is to serve this area. I understand at the moment their injection plant is held up on account of a transformer so it will probably be two or three months before the well can be put on, but in the meantime, after approval is obtained, the well will be conditioned and made ready for injection.

Are there any questions?

MR. UTZ: How much pressure do these lines that come down into your lease carry?

MR. KERSEY: They will carry around 2,000 pounds and the agreement is that Continental will deliver its water to our lease line. It will be metered and picked up at the lease line.

MR. UTZ: Where is Continental getting this water from?

MR. KERSEY: Continental gets it from off of the Caprock. They have their own source of supply. It is fresh Caprock water.

MR. UTZ: You said your tubing in both instances would be internally coated?

MR. KERSEY: That is right. The tubing and the lines. There will be cement lines to the wells but I haven't decided whether I will use cement line tubing or tar set or some other corrosion inhibitor for the tubing in the wells.

There was one point that I did not ask for when I wrote for administrative approval on this request and that is if you will refer to Exhibit One, a letter. Since writing in, Anadarko Production Company has contacted me about putting our number four well, injecting into it in the Queen zone which would be on top of the packer but at the present time we haven't

determined if our two southern wells are productive in this zone. The driller's log did not show it and we are trying to run down the samples, but our lease seems to be on a dividing line between the Grayburg production and the Queen production to the south and it is problematically where the cut off is because our log, as I pointed out, the drilling logs show no production in the Queen, but if we discover that there is a possibility of producing our number five well from the Queen, then it would behoove us to inject into the number four well, which we will already have a packer set, and we could inject on top of the packer into the Queen zone which is between thirty-four and 500 feet.

I just brought this out because I would like permission for administrative approval if we should deem it feasible to attempt to produce this Queen zone. If it's there, why, we probably should use it.

MR. UTZ: That would most certainly present another problem to this current situation.

MR. KERSEY: That's right. I am not trying to run this in. I just wanted to point it out.

MR. UTZ: In the first place, I don't believe that the advertisement would cover this type approval. Would it Counsel?

MR. HATCH: No.

MR. KERSEY: We would have to have another hearing.

MR. UTZ: That would be out even if you didn't have other problems, such as questioning the size of the casing and injecting behind, so the cleanest way in my mind, would be just to work on what you have got and we will cross that bridge when we get to it.

MR. KERSEY: I just thought I would bring it up.

MR. UTZ: Do you intend to use any inhibiting fluid in your annulus?

MR. KERSEY: Ordinarily we usually put in some corrosion inhibitor, one of the console compounds and that is probably what we will use in this case in the water.

MR. UTZ: What is your surface water situation?

MR. KERSEY: There is no surface water there.

MR. UTZ: None in either case?

MR. KERSEY: None in either case.

MR. UTZ: And how about casing testing? Do you intend to test this casing or how old is it?

MR. KERSEY: The casing is approximately twenty-five years old and I think -- well, I will run the tension packer down into the bottom of the casing and pressure test it to the contemplated injection pressure on top of the packer and then I will move the packer up the hole, possibly a hundred feet.

MR. UTZ: You will test to 2,000 pounds then?

MR. KERSEY: Two thousand pounds.

MR. UTZ: The Anadarko injection well number one immediately to the south of your number five well, is that being injected into at the present time?

MR. KERSEY: Yes, I looked at the engineering report, the current engineering report and I think it showed 6,000 barrels had been injected into that well.

MR. UTZ: The zone that you intend to inject?

MR. KERSEY: No, it had been injected into the Queen. That Anadarko well is not drilled to the Grayburg zones.

MR. UTZ: If your number five well isn't already productive, it might be in view of this, mightn't it?

MR. KERSEY: Yes, however it is cased through so I would have to -- the way I could find out would be to perforate it and treat it with packers and hold the packers over the perforations and test it that way. That would be one method of testing whether there was production in the number five well.

MR. UTZ: Do you know whether or not -- what is the zone here, the Premier?

MR. KERSEY: It is the Premier and Metex. That is what I would call those zones. Lower Grayburg.

MR. UTZ: Do you know whether those zones are productive in the Anadarko lease just south of you?

MR. KERSEY: No, they're not. They are not productive at all. There has been a well or two drilled down but no

production. As I said, we are evidently on a dividing line. If you will refer to this plat and look at Continental's Number 233 well which is plugged directly east of our number five well. You will notice that it was produced from the Queen also.

MR. UTZ: Because of this, any back up on your number five to the south will probably not be necessary.

MR. KERSEY: That's right. Probably the formation has pinched out.

MR. UTZ: Are there any other questions of the witness?

MR. IRBY: Yes, sir. Frank Irby, State Engineer's Office.

Mr. Kersey, on your Number Four Exhibit, the Hoover Number Four, what formation is that surface casing set in at the 985?

MR. KERSEY: It is set in the top of the salt, is really what you call it.

MR. IRBY: And the other one?

MR. KERSEY: It is set in the Grayburg.

MR. IRBY: The surface casing?

MR. KERSEY: Oh, I mean both of them are set in the top of the salt.

MR. IRBY: The top of the salt. Thank you. That's all I have.

MR. UTZ: Any other questions?

MR. HATCH: Did you prepare these exhibits?

MR. KERSEY: Yes.

MR. HATCH: Would you like to have those exhibits submitted?

MR. KERSEY: Yes.

MR. UTZ: Exhibits One through Six will be entered into the record of this case.

The witness may be excused.

(Witness excused.)

Are there other statements to be made in this case?

(No response.)

The case will be taken under advisement.

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

I, W. DON MC INTYRE, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 24th day of August, 1966.

W. Don Mc Intyre
W. DON MC INTYRE

My Commission Expires:

July 14, 1970

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3445, heard by me on Aug. 24, 1966.

....., Examiner
New Mexico Oil Conservation Commission