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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
EXAMINER HEARING

May 24, 1967

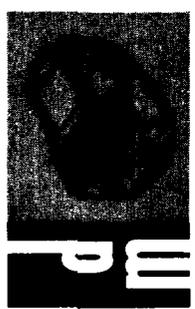
IN THE MATTER OF:)

Application of Cima Capitan, Inc.)
for a waterflood project, Lea)
County, New Mexico.)

) Case No. 3574
)
)
)
)

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING



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MR. UTZ: We will take care of the dismissals and continuances first. We have four continuances and one dismissal. Case 3574.

MR. HATCH: Application of Cima Capitan, Inc. for a waterflood project, Lea County, New Mexico.

If the Examiner please, the applicant has requested that this case be continued to June 6, 1967.

MR. UTZ: Without objection the Case 3574 will be continued to the June 6th hearing.

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MR. NUTTER: Case 3574.

MR. HATCH: Case 3574, continued from May 24th Examiner Hearing. Application of Cima-Capitan, Inc. for a water-flood project, Lea County, New Mexico.

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

(Witness sworn.)

HAL PORTER, called as a witness on behalf of the Applicant, first having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A My name is Hal Porter.

Q Mr. Porter, what business are you engaged in?

A I am an Engineer for Cima-Capitan, Incorporated, Artesia.

Q Are you employed by Cima-Capitan, Incorporated?

A I am an officer of Cima-Capitan, yes, sir.

Q Have you testified before the Oil Conservation Commission and made your qualifications a matter of record?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, sir, they are.

(Whereupon, Applicant's Exhibit Number 1 was marked for identification.)

Q (By Mr. Kellahin) Mr. Porter, are you familiar with the application of Cima-Capitan in Case 3574?

A Yes, sir.

Q Briefly, what is proposed by Cima-Capitan in this application?

A We propose to convert one producing well to an injector. Shown on Exhibit 1, it is the Harrison Federal Number 3. This well is located in the center of the North-east Quarter, Northwest Quarter, Section 3,17 South, 32 East, and this will be an expansion of an existing flood operated by Standard Oil Company of Texas and in conjunction with our conversion of this well, Standard of Texas will convert two of their wells and we have entered into a lease line cooperative agreement for this purpose.

Q Now, you say it is an expansion of the Standard of Texas flood, actually this acreage is not a part of the Standard of Texas flood, is it?

A No, sir, this is a Cima-Capitan lease.

Q And, you are offsetting the existing floods presently operated by Standard of Texas?

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A Yes, that's correct.

Q Now, referring to what has been marked as Exhibit Number 1, would you identify that exhibit, please?

A Exhibit 1 is a plat of the area showing the lease and the well to be converted as a red triangle. The solid triangles are existing water injection wells and the two dashed triangles are the wells that Standard of Texas will convert.

Q They are located in the northern portion of the section, is that correct?

A Yes, sir, under the lease line agreement that we have with them, they will convert their Jackson Federal Number 1 in the Northeast Quarter, Northeast Quarter, Section 3 and their Atlantic Federal Number 2 which is in the Southeast of the Northeast of Section 4.

Q Now, on the acreage designated as Cima-Capitan are all the wells completed in the Grayburg-San Andres formation?

A Yes, they are.

(Whereupon, Applicant's Exhibit Number 2 was marked for identification.)

Q Referring to what has been marked as Exhibit Number 2, would you identify that exhibit?

A Exhibit Number 2 is a plot of the production of Well Number 1. Now, Well Number 1 was drilled in 1949 and had

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produced a little more than forty thousand barrels of oil when we bought the lease in 1964. As a matter of fact, it was producing less than five barrels per and then, we drilled Wells 2 and 3 in 1964 and drilled Number 4 in December of 1966. The reason for that plat was, when I applied for administrative approval, I wanted to show that this well had, in fact, responded from the flood to the south.

Q In other words, you attribute the increase in production on that well shown during 1965-66 to the waterflood project carried on by Standard of Texas?

A Yes, sir, I do. This well was what you would call a marginal well, making less than five barrels per day and the well to the west of us, the Number 2 Well mentioned before, was drilled in about 1961, and it had declined down to where it was in a stripper stage, also. We feel that the whole area that we have developed up there was pressured up from the flood. The Roberts field flood, before it was put in the Maljamar field was begun in 1958 and lots and lots of water had been injected.

Q Mr. Porter, is the Number 3 well making any appreciable volume of water at the present time?

A The last test we had on it, which was last month, it made nine barrels of water and nine barrels of oil.

Q And, in your opinion, is it ready for conversion

to an injection well and continuing the flood which was initiated by Standard of Texas?

A Yes, sir, it is. Standard of Texas has asked us to cooperate with them by offset injection. They have agreed to this pattern.

Q And, prior to the response received from this flood, the well was, in your opinion, at a stripper stage, was it?

A Well, sir, the well was not drilled until 1964.

Q I say prior to the response received from the flood, though, was the well a stripper well, in affect, in making five barrels a day.

A Well Number 1 was, yes, sir.

Q Well Number 1?

A Yes, sir.

Q So, the lease was at a stripper stage in your opinion?

A At that time, there was only one well on it and it was, yes, sir.

(Whereupon, Applicant's Exhibit Number 3 was marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 3, would you identify that exhibit?

A Exhibit Number 3 is a gamma ray neutron log of the proposed well to be converted, showing the perforations

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in the Grayburg and the perforations in the Lovington-Sand.

(Whereupon, Applicant's Exhibit Number 4 was marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 4, would you identify that exhibit, please?

A Exhibit Number 4 is a schematic drawing of the proposed injection well completion and we would propose that a packer be set on two inch tubing between the Grayburg and the Lovington zones with injection down the casing into the Grayburg and down to the tubing into the Lovington zone, where this practice is being done offsetting us by Standard of Texas. We have checked this with the State Engineer and sent him all of the exhibits and we have stipulated that we would not inject anything but fresh water down the casing.

Q Injection, then, will be through the casing tubing annulus, is that correct?

A That's right, yes, sir.

Q And, this is a type of completion you say that is being used by Standard of Texas at the present time?

A That is correct and the only exception there, in most of their wells, they are dually injecting into the Grayburg zones and they don't have any Lovington in most of their wells. Now, we do have this Lovington Sand, which we want to inject into also. It is very limited throughout the field.

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We have three wells that do have Lovington Sand.

Q And, you will be injecting into the Lovington through the tubing?

A Yes, sir.

Q Now, will you also use fresh water in that zone?

A Yes, sir. Fresh water is all we have available right now.

Q Now, what is your source of water, Mr. Porter?

A Our source of water will be from the Standard of Texas plant. They have offered to sell us pressurized, treated water from their plant, the same water they are injecting and I understand they get their water from the Double Eagle Corporation pipeline. It is Ogallala fresh water.

Q And, what volume of water do you anticipate you will inject?

A I would think we would probably have a total injection of around three-hundred barrels per day, at about twenty-five hundred pounds surface pressure.

Q Is that comparable to the injection rates in the other wells in the Standard of Texas flood?

A Yes, sir, it is. That is where I draw my conclusions from what they have been doing.

(Whereupon, Applicant's Exhibits Number 5 and 6 were marked for identification.)

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Q Now, referring to what has been marked as Exhibits Numbers 5 and 6, would you identify those exhibits, please?

A Exhibit 5 is a letter from Standard Oil Company of Texas, stating that they have no objection to the conversion of this well.

Q And Number 6?

A Number 6 is a letter from Mr. Irby, to Mr. Irby stating that I am sending him a copy of the application and all of the exhibits.

Q Did you receive any answer from Mr. Irby in connection with this?

A Yes, sir, I had a copy of the letter to the Secretary-Director of the Oil Conservation Commission --

Q Now, I assume that that answer appears in the case files in this case?

MR. NUTTER: Your assumption is wrong. I don't know where it is. Maybe we have got it, though.

THE WITNESS: Do you want me to read it into the record?

MR. NUTTER: Why don't you read it into the record in the event that we cannot find our copy.

THE WITNESS: It is a letter from Mr. Frank Irby, State Engineer, to Mr. A. L. Porter, with the Oil Commission, "Reference is made to the application of Cima-Capitan Incorporated,

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which seeks to convert their Harrison Well Number 3, located 1980 feet from the west line, 660 from the north line, Section 3,17 South, 32 East, to a water injection well. It is noted that the well is planned as a dual injector and that injection into the Grayburg will be through the annulus between the tubing and casing and that there is no cement behind the casing above 1910 feet depth.

Also, it is noted that the application implies that only fresh water will be injected. I respectfully call your attention to the above points and to your letters referring to Orders R-3132 and RA-3178 in March, 1967. Very truly yours,
S. E. Reynolds by Frank E. Irby."

Q (By Mr. Kellahin) Were Exhibits 1 through 4 prepared by you or under your supervision?

A Yes, sir.

Q And, Exhibits 5 and 6 were letters identified by you in your testimony?

A Yes, sir.

MR. KELLAHIN: At this time, I would like to offer in evidence Exhibits 1 through 6 inclusive.

MR. NUTTER: Cima-Capitan's Exhibits 1 through 6 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 6 were admitted in evidence.)

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MR. KELLAHIN: That's all I have on direct examination.

MR. NUTTER: Are there any questions of Mr. Porter?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Porter, first of all I want to know what this letter creature is up at the top of Exhibit Number 4?

A Mr. Nutter, that is some of my artistic achievements in showing that to be the surface of the ground.

Q And, what is that?

A That is a jackrabbit and a cactus.

Q Very good. Mr. Porter, in the event that you should receive produced water from Standard of Texas, that water in all likelihood would be salt water, would it not?

A Yes, sir. If we have to take produced water, I would like to have the right, or the opportunity to inject it through the tubing beneath the packer and, of course, we would protect the tubing with plastic or cement, but, we have agreed that we will inject only fresh water in the annulus.

Q In no event would produced water go down the annulus, then?

A Yes, sir.

Q Now, if you are using fresh water only, you don't plan any plastic coating or any treatment of the tubing?

A No, sir, I don't see where it would be necessary. We have had lots of experience with corrosion in that fresh water and it is not corrosive at all.

MR. NUTTER: Are there any other questions of Mr. Porter? He may be excused.

(Witness excused.)

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

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

MR. NUTTER: We will take the case under advisement.

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