BEFORE THE

OIL CONSERVATION COMMISSION Santa Fe, New Mexico October 28, 1959

EXAMINER HEARING

IN THE MATTER OF:

Application of Graridge Corporation for a capacity allowable for one well in a water flood project. Applicant, in the abovestyled cause, seeks an order authorizing a capacity allowable for its Ventures State Well No. 306, located in the NE/4 NE/4 of Section 28, Township 18 South, Range 28 East, Artesia Water Flood Project No. 2, Eddy County, New Mexico.

Case 1796

BEFORE:

Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order, please. We will take next Case 1796.

MR. PAYNE: Application of Graridge Corporation for a capacity allowable for one well in a water flood project.

MR. CAMPBELL: Jacks M. Campbell, Campbell and Russell, Roswell, New Mexico appearing on behalf of the Applicant. I have one witness. Mr. Ford.

(Witness sworn.)

TOM FORD

called as a witness, having been previously duly sworn, testified as follows:



BUQUERQUE, NEW MEXICO

DIRECT EXAMINATION

BY MR. CAMPBELL:

- Q Will you state your name, please?
- A I am Tom Ford.
- Q Where do you live, Mr. Ford?
- A Breckenridge, Texas.
- Q By whom are you employed and in what capacity?
- A Graridge Corporation, Manager of Production.
- Q Are you an engineer? A Yes, sir.
- Q Have you previously qualified as an engineer before this Commission or one of its Examiners?
 - A I have.

MR. CAMPBELL: Are the witness qualifications acceptable?

MR. NUTTER: Yes, sir.

Q Are you acquainted with the application of Graridge Corporation in Case No. 1796 relating to capacity allowable for one well in the Artesia Water Flord Project No. 2?

A I am.

(Marked Graridge's Exhibit No. 1, for identification.)

- Q I refer you to what has been identified as Exhibit No.

 1 in this case and ask you to state what that is, please.
 - A That is a plat showing a portion of the Artesia Field in



Eddy County, New Mexico. Specifically shown is Section 28,

Township 18 South, Range 28 East on which is located the Ventures

State No. 306 well in the Northeast of the Northeast of that section.

Q Mr. Ford, is that well presently surrounded by water injection wells?

A It has three injection wells offsetting it, and we have applied for permission to put No. 5 on injection.

Q Have all of the wells which are already on water injection been placed on water injection under appropriate administrative orders of the Oil Conservation Commission?

A They have.

Q Has Ventures State Well No. 306 experienced stimulation as a result of the injection of water in the injection wells?

A It has.

(Marked Graridge's Exhibit No. 2, for identification.)

Q I refer you, Mr. Ford, to what has been identified as Exhibit No. 2 in this case and ask you to state what that is.

A This is a curve showing the production from this Well No. 306, Ventures State No. 306, showing the oil and water as shown by well test in each of three months.

Q Do you know what the production of this well, if any, was prior to stimulation?



A This well was a new well drilled knowing that the water flood pressure was building up on potential test on August 18, it made 8 oil and 5.77 water.

- Q What is it making on the latest test?
- A On the 10th and 24th it made 19.35 oil and 20.74 water.
- Q Do you believe this well will continue to produce increasing amounts of oil as the water front moves toward it and past it?
 - A I do.
- Q Do you believe that unless this well is granted a capacity allowable and permitted to produce at capacity that waste might result?

A I do.

MR. CAMPBELL: That's all.

MR. NUTTER: Does anyone have any questions of Mr.

Ford?

MR. PAYNE: Yes, sir.

MR. NUTTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Ford, in the order, or orders, approving this water flood project, do any of them set out a project area? As you know, some of our orders authorizing water floods establish a project area and others don't. I was wondering if this particular order,



or orders, do establish a project water flood area.

A I cannot answer that question.

MR. CAMPBELL: It's Order R-966 and supplements thereto. I don't have the copies with me. I do not believe that this sets out a project area as such. I think it was before the Commission started using that procedure. The pilot area was approved and then we came in and showed what was anticipated on both Artesia Flood No. 1 and No. 2 on an overall project basis. I don't think the order specifically approved it as such, but it did set up administrative procedures in each flood for expansion, but not for capacity allowable.

MR. PAYNE: It does make reference to the water flood project area?

MR. CAMPBELL: Yes, sir, I'm sure it does.

MR. PAYNE: In the administrative procedure.

BY MR. NUTTER:

- Q Mr. Ford, at the time this well was initially completed, I think you said August 18?
 - A Yes, that was the first potential test on it.
 - Q It made 8 barrels of oil and 5.77 ---
 - A 5.77 water.
- Q -- barrels of water. According to Graridge's calculations had the water front advanced to the point that this potential here represented an effect of the water flood or do you think



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that prior to the water flooding in the area you could have drilled a well at the location of 306 and gotten this same potential on the well?

I really don't know. I would think that possibly there had been a slight result, in other words, 8 barrels I would think in that reservoir as it was before flooding. I think that would be more than you could expect. Most of the wells in the reservoir were producing two, three and four barrels a day.

- But they weren't new wells?
- No. that's right.
- But new wells you don't think would have come in with even the 8 barrels that you made on this initial potential?
 - A No. I do not.
- You certainly don't feel that the potential would keep going up on a new well without the benefit --

Oh, no, I'm positive it would not. We had drilled one or two wells in the area before water flood, before our water flooding got under way, and I believe specifically the No. 17 well. Duke State, and it made about a barrel or two a day.

I notice that the water production is also going up. Do you think that this water production will continue to go up or will this water production level off and oil production go up?

That is very difficult to tell. As best we can find out from talking to people who have operated in the area for years



there is water on the east flank of this thing. We haven't been able to pin it down. We are logging every well as we're going along trying to get information, but we don't know the answer to that, whether that is kind of a finger up in that thing or whether possibly because No. 51 had more water in it than the other two wells, due to the nature of our expansion we might have a finger coming through from 51.

So, in other words, you are not sure whether the water Q you are producing is injected water or formation water that is present on the east flank there?

- That's correct.
- Were both of these tests taken over a similar interval of time?
 - Yes, those were twenty-four hour tests. A
 - Full twenty-four hours?
- I also had one in, on September 25 which was 17.31 A oil and 11.45 water.

MR. NUTTER: Does anyone have any further questions of Mr. Ford?

MR. CAMPBELL: I would like to offer Exhibits 1 and 2 in evidence.

MR. NUTTER: Graridge's Exhibits 1 and 2 will be admitted in evidence. Mr. Ford will be excused.

(Witness excused.)



MR. NUTTER: Does anyone else have anything further they wish to offer in Case 1796? We will take that case under advisement and take Case 1797.

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 4 day of November, 1959.

Notary Public-Court Reporter

My commission expires:
June 19, 1963.

I do hereby certify that the foregoing is a complete reachd of the proceedings in the Exemptor hearing of Case No. 1966, heard by me on 10-28 1957.

New Mexico Oil Conservation Commission

