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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
OIL CONSERVATION COMMISSION CONFERENCE ROOM
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
November 29, 1972

IN THE MATTER OF:)
Application of the Wiser Oil Company)
for a waterflood project, Lea County,)
New Mexico)

Case No. 4869

BEFORE: Richard L. Stamets
Examiner

TRANSCRIPT OF HEARING

1 MR. STAMETS: Call the next case, No. 4868, being
2 application of the Wiser Oil Company for a waterflood project,
3 Lea County, New Mexico. Call for appearances.

4 MR. KELLAHIN: Tom Kellahin of Kellahin & Fox, Santa
5 Fe, New Mexico, appearing in behalf of applicant, Wiser Oil
6 Company; and I have one witness to be sworn.

7 BILL SINGLETARY

8 a Witness, having been first duly sworn according to law, upon
9 his oath, was examined and testified as follows:

10 DIRECT EXAMINATION

11 BY MR. KELLAHIN:

12 Q Will you please state your name, by whom you are employed,
13 and in what capacity?

14 A My name is Bill Singletary. I'm employed by the Wiser Oil
15 Company as District Superintendent of New Mexico.

16 Q Do you spell your name S-i-n-g-l-e-t-a-r-y?

17 A That's right.

18 Q Mr. Singletary, have you ever testified before this
19 Commission or one of its hearing examiners?

20 A No, I haven't.

21 Q How long have you been employed by Wiser Oil Company?

22 A 26 years.

23 Q Are you familiar with the Drinkard formation in the Drinkard
24 Pool in Lea County, New Mexico?

25 A Yes, I am.

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1 Q What is your experience in that area?

2 A We have four or three producing Drinkard wells in on the
3 lease in question here today, plus I have been in close
4 contact with the offset flood which effects this pro-
5 duction that we are talking about today.

6 Q Are you familiar with the facts surrounding this
7 application?

8 A Yes, I am.

9 MR. KELLAHIN: Mr. Examiner, are this witness'
10 qualifications acceptable?

11 MR. STAMETS: They certainly would appear to be
12 acceptable at this stage.

13 MR. KELLAHIN: Fine, thank you.

14 Q Will you please state briefly, Mr. Singletary, what the
15 applicant is seeking by this application?

16 A We are seeking to form a secondary waterflood recovery and
17 in Section 32-21-37 which involves the Southwest quarter
18 of that section, we hope to use the #1 well.

19 MR. STAMETS: Do you have some exhibits?

20 MR. KELLAHIN: Sure do.

21 Q Will you please refer to what has been marked as applicant's
22 Exhibit 1, identify it, and explain what information it
23 contains?

24 A All right. The Exhibit 1 is a plat showing Wiser Oil
25 Company acreage on the Downes list and also the acreage

1 which is essentially Drinkard's unit, the pilot unit, and
2 the extension unit of Gulf Oil Company. Also on the plat
3 it shows our injection well in relation to the pattern,
4 how the Gulf injection wells, which is an extension of
5 their Drinkard flood --

6 Q Will you identify for us your proposed injection well?

7 A The proposed injection well is the Downes No. 1 located
8 in Unit K, Section 32-21-37, which is identified by a
9 blue circle with a red surrounding on it.

10 Q Will you please refer to what has been marked as applicant's
11 Exhibit 2, identify it, and explain what information it
12 contains?

13 A Exhibit 2 is a schematic of our proposed injection well
14 which shows the setting of all our casing strings, amount
15 of cement, the proposed injection zone which is open-hole
16 zone from 6502 to 66-28, which is a Drinkard formation; and
17 it will be injected through PVC line cubic inch with a Model
18 D packer set near 64-70. We will plan to fill the annulus
19 with treated water.

20 Q Is this well completed in this manner at present?

21 A Yes. It has. It was originally completed as a producer
22 and a Drinkard formation in 1949, and there has been no
23 changes in the structure of the well since that time.

24 Q Will you please refer to what has been marked as
25 applicant's Exhibit #3. That's two pages. Please identify

1 it and explain what information it contains. Is that #3?

2 A No. 3 is one page showing the production graph of the
3 Downes D acreage of our Downes D Drinkard production from
4 1965 through October of this year; and you'll notice it
5 has been on a slow decline since about 1968; and we feel
6 like this is the time to start a secondary program.

7 Q Refer to what has been marked as Exhibit 4.

8 A No. 4, yes.

9 Q Explain what information this contains.

10 A This exhibit contains the production history of the Downes
11 D #1 well, which is a proposed injection well along with
12 a production history of the Downes D #2 well, which is
13 located in Unit L of 32-21-37, which would be a producing
14 well under this proposed secondary flood. It gives a
15 production history, oil, gas and water from 1969 through
16 October of this year. It also gives the average GOR per
17 year with accumulative production. You'll note to the #1
18 well, the accumulative production is 224,365 barrels with
19 #2 well at 206,367 barrels and also the Downes #3 well,
20 which was originally. It's located in the Southeast
21 quarter of the Southwest quarter of 32-21-37, which was
22 recently completed as a Drinkard producer, and in 1965 our
23 bridge plug was set, and it was re-completed in the tube
24 zone. It was a low producing well which only accumulated
25 71,131 barrels with a total accumulation of 3 Drinkard

1 wells at 501,863 barrels.

2 Q Is it your opinion that this proposed injection well has
3 reached the stripper stage of production?

4 A Yes. We feel like it has reached the stripper stage,
5 producing only an average of around 11 barrels a day, which
6 at this depth is close to stripper stage.

7 Q What do you contemplate as your secondary recovery if this
8 application is approved?

9 A We studied Gulf's Phase 1 or pilot flood, and the results
10 that they have had on their pilot flood, this is the only
11 Drinkard flood in that area and the only thing we had to
12 base our information on. They are getting good results,
13 and they expect, I believe, it's 70% secondary recovery.
14 We figured ours a little less with a 60% secondary, which
15 would be about 301,118 additional barrels that we could gain
16 through this waterflood system that we wouldn't be able to
17 produce under normal conditions.

18 Q Where do you propose to obtain your water that you use for
19 injection?

20 A We have signed a Water purchase Agreement. We have
21 negotiated a water Purchase Agreement with the Gulf Oil
22 Company which will deliver with our lease line which will
23 be the Northeast line on the quarter section of 32-21-37
24 coming from their central Drinkard order system under
25 pressure.

1 Q That's where you will obtain your water?

2 A That's where we will obtain our water.

3 Q What's the quantity of water you propose to inject?

4 A We propose to go along and continue with Gulf, which will
5 start out around 1,000 barrels a day and that will be
6 decreased at that time that we get a production take.

7 A Is Gulf's system currently in operation?

8 A Yes. Their pilot flood is presently in operation; and
9 on Case 4652, February 2, 1972, they got approval from the
10 Commission for their Phase 1 Expansion, which on Exhibit A
11 is marked. Their injection wells will be the blue marks
12 and they have this system presently just about ready to go.
13 They anticipate an injection December 1 of this year. I
14 think probably they may be running a week or two late, but
15 it should be by the middle of December under injection.

16 Q Do you propose to inject this water under pressure?

17 A Yes, we do. Probably for three or four months it will go
18 in a vacuum. The pressure will gradually build up. We
19 anticipate about 1500 pressure should get our secondary
20 oil cake and possibly the pressure will go on up, not
21 exceeding 2000 pounds.

22 Q Do you have a log on this well, Mr. Singletary?

23 A No. This well has never been logged, but I intend to log
24 this well when I pull the tube and in preparation for
25 injection, and at that time, I will have a copy available

1 if the Commission desires it.

2 Q Will you please refer to what has been marked as Exhibit
3 5?

4 A All right.

5 Q Identify it and explain what information it contains.

6 A Exhibit 5 is a graph of Gulf Oil Company's pilot waterflood
7 which shows on their oil cake there on the bottom of the
8 graph where they have indeed got a good secondary system
9 going there, and this is what give us the incentive to go
10 ahead and reach an agreement with them and get in this
11 secondary system at this time. They have recovered in
12 excess of over 150,000 barrels of secondary oil through the
13 pilot flood which consisted of six injection wells. The
14 graph also shows the water volumes and the injection
15 pressure, and it shows how the gas-oil ratio did take a
16 sharp decline when the increase in oil was experienced.

17 Q What is the unit area for this project, Mr. Singletary?

18 A You mean our unit?

19 Q Yes, sir.

20 A It will include the Southwest quarter of Section 32-21-37,
21 which is identified by the color green.

22 Q In your opinion, can this unit area be successful and
23 economical waterflood?

24 A Yes. No doubt it can be from the results that they have
25 accomplished with their pilot flood. We feel like it can

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1 be waterflooded successfully.

2 Q Your proposed waterflood project then is compatible with

3 Gulf's system?

4 A Yes. We also, along with the Water Purchase Agreement,

5 have a Lease Line Agreement which we worked out with them

6 in order to arrange the pattern that you see on this map

7 which will benefit both parties.

8 Q Do you have anything you'd like to add at this time?

9 A The only thing that I'd like to ask the Commissioner, we

10 are a little late with the hearing here since Gulf

11 anticipates this early injection and just wondered if it

12 will be in order with the Commission for maybe a verbal note

13 that I could go ahead and prepare this well as well as lay

14 the lines for this injection well prior to a written

15 official notice from the Commission.

16 Q In either regards, Mr. Singletary, you anticipate your

17 project being put into operation about the same time as

18 Gulf puts their extended plan in operation?

19 A Yes, we'd like to get started about the same time. Our

20 volumes injected would be the same. We will be working

21 together each month on the volume control.

22 Q Were Exhibits 1 through 5 prepared by you or under your

23 direction and supervision?

24 A Yes, they were.

25 MR. KELLAHIN: Mr. Examiner, I move the admission of

1 those.

2 MR. STAMETS: They will be admitted.

3 MR. KELLAHIN: That concludes our direct examination,
4 Mr. Examiner.

5 CROSS EXAMINATION

6 BY MR. STAMETS:

7 Q Mr. Singletary?

8 A Yes, sir.

9 Q In your capacity as the District Superintendent, everything
10 you testified to here comes under your jurisdiction and all
11 these things are handled by you each day with your staff?

12 A Yes, sir.

13 Q So you do have full knowledge of what you have testified to?

14 A Yes, sir.

15 Q Is the annulus you propose to load engage it or leave it
16 open in order to detect any leakage?

17 A Yes, it would be able to detect any leakage from the packer.

18 Q How many wells are to be producing wells in the Southwest
19 quarter of the section?

20 A At this time only our #2 located in Unit L. However, we do
21 plan to open up the #3 well, which is located down here in
22 the Southeast quarter of that quarter section and duly at
23 #4, a producing well from the Drinkard formation, and also
24 the other zone being our tubs gas zone which is producing
25 now.

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1 now.

2 Q How soon do you anticipate doing that work?

3 A Probably in 90 days after initial injection starts, we
4 will move our pumping equipment from our #1 well to our
5 #3.

6 Q What about the well in the Southwest to the Southwest?

7 A There is an open Drinkard location that hasn't been
8 drilled yet. We are studying now the possibility of
9 drilling this well sometime next year for the purpose of
10 another injection well. In a discussion with Gulf in
11 their Midland office last week, they are going ahead with
12 their Phase 2, which includes these yellow markers on the
13 Exhibit, and they feel certain this will go right along in
14 the near future. When we see this is going well, we will
15 probably go ahead and request permission to drill this third
16 injection well, and that would give us a perfect spot
17 pattern for our two producers and our two injections.

18 Q The injection is to be in the open-hole section, isn't it?

19 A Yes, sir. All these wells are open-hole completions.

20 Q When did you say Gulf anticipated starting injection on it?

21 A They anticipated December 1, but I don't believe they'll
22 make it. They will probably be around the 15th of December
23 when they get their injection under way.

24 MR. STAMETS: Are there other questions of the witness?

25 MR. KELLAHIN: No, sir.

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MR. STAMETS: You may be excused. Any statements in this case? Mr. Kellahin, I believe we can expedite this order and get it out in short order and not have to make any special dispensation.

MR. KELLAHIN: I'd appreciate it. Thank you.

MR. STAMETS: I'll take the case under advisement.

