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MR. UTZ: Call Case 4502.

MR. HATCH: Call Case 4502. Application of Samedan Oil Corporation for special pool rules and pool extension, 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.

(Witness sworn)

MR. UTZ: Are there other appearances? Have you got some exhibits to mark, or are they all marked?

MR. KELLAHIN: They are all marked. Here they are. We put them up on the board here.

MR. UTZ: Now, is that all of them, both of them? Have you got more in here?

MR. KELLAHIN: Yes, sir.

MR. HATCH: These haven't been stamped.

MR. KELLAHIN: Yes, they have. Those you have got have been.

JOEL T. BLANKENSHIP

having been first duly sworn, testified upon his oath as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please, sir?

1 A My name is Joel T. Blankenship. I am employed as
2 a geologist by Samedan Oil Corporation in Midland,
3 Texas.

4 Q Have you ever testified before the Oil Conservation
5 Commission?

6 A No, I have not.

7 Q For the benefit of the Examiner, would you briefly
8 outline your education and experience as a
9 geologist?

10 A I graduated from Virginia Polytechnic Institute in
11 1960 with a B. S. in geology. I worked as a
12 petroleum geologist for eleven years, and I have
13 worked in New Mexico for the past seven years.

14 I was employed by Amarada Petroleum Corporation
15 for five years, and then with Samedan for the last
16 year and a half, two years.

17 Q In connection with your work for Samedan Oil
18 Corporation, have you done any work in what has been
19 designated as the east Morton Wolfcamp Pool area?

20 A Yes, I have.

21 MR. KELLAHIN: Are the witness' qualifications
22 acceptable?

23 MR. UTZ: Yes, they are.

24 Q (Mr. Kellahin continuing) Mr. Blankenship, would you
25 state briefly what is proposed by the applicant in

1 this case?

2 A We are proposing field rules be established for the
3 East Morton field with eighty acre well spacing and
4 vertical limits to be designated from 10,302 feet
5 as to 10,646, that is penetrated by the Samedan
6 Number 1 Gulf State Well.

7 Q Now, referring to what has been marked as the
8 Applicant's Exhibit Number 1, would you step over
9 to the board here and discuss the information shown
10 on that exhibit?

11 A Exhibit Number 1 is a structure map drawn on top
12 of the lower Wolfcamp Reef Zone, showing the
13 location of the Morton Field, and the lower left-
14 hand side of the map, the North Morton Field and
15 the East Morton Area.

16 All three of these area produced from the
17 lower Wolfcamp Reef, and there appears to be
18 adequate separation between this area and the other
19 two areas by virtue of dry holes drilled in between
20 here and here and here and here.

21 MR. UTZ: Now, what section is this "here and
22 here" in --

23 Q (Mr. Kellahin continuing) Would you designate
24 those locations, please?

25 A Well, there is -- let's see, okay. There is a dry

1 hole between the North Morton area and the East
2 Morton.

3 It is in -- southwest -- northwest of southwest
4 of Section 32, 14 South, 35 East.

5 There is a dry hole in Section -- northwest
6 of the northeast of Section 7, and 15 south, 35
7 east.

8 This well was structurally low and encountered
9 water in the reef zone.

10 MR. UTZ: You had one more in there, didn't
11 you? One other section?

12 THE WITNESS: This was a producer at one time.
13 It is abandoned. This well in Section 6 here, the Texas
14 Crude Well was at this time in the reef zone, no verocity.

15 Q (Mr. Kellahin continuing) Basically the three areas
16 are producing from the same formation?

17 A Yes. The same stratigraphic interval.

18 Q It is your opinion they are effectively separated?

19 A Yes, sir.

20 Q And the well which has been drilled by the
21 applicant in this case has been located in the East
22 Morton Pool; is that correct?

23 A The Union Oil Company drilled the Number 1 Owens,
24 Section 34, 14 South, 35 East, and it was originally
25 designated as the East Morton Pool.

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1 Q And a well which has subsequently been drilled by
2 Samedan?

3 A The Number 1 Gulf State in the northeast northeast
4 of Section 4, 15 South, 35 East, and also the Number
5 1 Carter, drilled by Samedan, and southwest of the
6 southeast quarter of Section 33, 14 South, 35 East.

7 Q Did the Commission put them into the East Morton
8 Pool?

9 A Not as yet.

10 Q In your opinion, are they a part of the East Morton
11 Pool?

12 A We feel that they may be. This Union Number One
13 Owens is possibly on a separate cumulation by virtue
14 of the different chlorides of the water, at least
15 in this well, and the water from the two Samedan
16 wells.

17 Q And you will give information on those chlorides?

18 A Yes, sir. The chlorides that is measured on it
19 produced water from the Union well is on the order
20 of 12.5 to 13.5 possible different chlorides, sir.

21 And the chlorides from the two Samedan wells
22 is on the order of thirty-five to forty thousand,
23 forty-five thousand.

24 Q And that would indicate they are at a separate
25 source of supply, in your opinion?

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- 1 A It doesn't prove conclusively, but it is a good
2 indication.
- 3 Q Does Samedan have any objection, however, to being
4 included in the East Morton Wolfcamp Pool?
- 5 A I don't believe so.
- 6 Q It's not a material point, as far as Samedan is
7 concerned?
- 8 A No, it is not.
- 9 Q Now, does that complete your testimony with Exhibit 1?
- 10 A Yes.
- 11 Q Would you turn now to what has been marked as
12 Exhibit Number 2, and would you identify that
13 exhibit?
- 14 A Exhibit Number 2 is a cross section from the two
15 wells labeled One and Two, located in the Morton
16 Field.
- 17 Wells Three and Four are located in the North
18 Morton Field.
- 19 Wells Five and Six are located -- that is --
20 Five is the Samedan Carter Well.
- 21 Six is the Samedan Gulf State Well right here,
22 and Seven, Eight and Nine are located -- Seven is
23 the Union Number 1 Owens.
- 24 The well designated as Eight is the side track
25 hole of the Union Number 1 Owens Eight Whipstock

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1 to the southeast 400 feet.

2 And Well Number 9 that is labeled on the cross
3 section is the Union Number 2 Owens, which was a
4 dry hole.

5 This cross section shows the -- it is hung on
6 a datum of minus 6,000 feet subsea, and it shows
7 the relative position of the producing zones in
8 the Morton area here, the North Morton area here,
9 and the East Morton area over here.

10 And this brown color indicates - the base of
11 the brown color is the approximate oil water contact.

12 The approximate oil water contact for the
13 Morton Field is a minus 6350 subsea.

14 The North Morton is approximately 6420 subsea.
15 The East Morton, the two Samedan wells, it's
16 approximately minus 6526 on the subsea.

17 And then the Union Number 1 Owens here, it is
18 a minus 6562 on a subsea.

19 And it appears that going from here in the
20 Morton area to the North Morton to the Samedan wells
21 to the East Morton Union well, your oil water contact,
22 it progressively lowers stepping down to the east,
23 and indicating that you do have some separation
24 between these various producing areas.

25 Now, earlier you mentioned the vertical limits of the

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1 proposed new pool or the East Morton Pool as it would
2 be designated here.

3 What would those limits be?

4 A We are proposing that the vertical limits for the
5 East Morton lower Wolfcamp Pool be designated --
6 refer to Exhibit 3, please. This is a log of the
7 Gulf State Number 1.

8 We are proposing the vertical limits be set
9 from stratigraphic equivalent to 10,302 feet on
10 this well to 10,646 feet.

11 This well did not penetrate that deep, but the
12 second well did, and we were still in the reef at
13 that depth.

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

16 A Number 4 is an electrical log of the Samedan Number
17 1 Carter Well. It gives dual stem test data.

18 It has the top of the reef marked, and it also
19 shows the perforations from 10,540 to 544.

20 And the two wells, the Number 1 Carter and the
21 Number 1 Gulf State are producing from the same zone.

22 Q Now, in general, what is the nature of this
23 formation you are producing from?

24 A In our area, in our two wells, the pay zone is a
25 medium to coarse lead crystem and dolomite.

1 Q Is it somewhat fractured or has cores in it?

2 A We cored above the pay, right above the pay zone,
3 in this Carter Well, and it was highly fractured.

4 Q All right. Just from the geological point of
5 view, Mr. Blankenship, is there any reason that you
6 know of that one well would not adequately drain in
7 excess of eighty acres?

8 A No, sir. It appears to have very good porosity and
9 permeability.

10 Q From the geological point of view, in your opinion,
11 does it make any difference how the wells are
12 located in this area?

13 Should you have flexible or fixed well locations?

14 A Well, we would, I believe, prefer flexible locations.

15 Q Is it the nature of this Wolfcamp formation in this
16 area to be rather small?

17 A Yes, sir, it is. I think they --

18 Q That is indicated by the other pools?

19 A The Morton and North Morton Pools are an example of
20 that.

21 Q And do you anticipate, say, from that information,
22 that the East Morton would also be quite small?

23 A Yes, we do.

24 Q Does that complete your discussion of the exhibit?

25 A Yes, sir, that completes my discussion.

1 Q Were Exhibits 1 through 4 prepared by you or under
2 your supervision?

3 A Yes, they were.

4 MR. KELLAHIN: At this time I would like to
5 offer in evidence Exhibits 1 through 4, inclusive.

6 MR. UTZ: Without objection, Exhibits 1 through
7 4 will be entered into the record.

8 MR. KELLAHIN: That completes the direct
9 examination of the witness.

10 CROSS EXAMINATION

11 BY MR. UTZ:

12 Q Mr. Blankenship, you are requesting here an
13 extension to the East Morton Pool; is that correct?

14 A That is correct, sir.

15 Q Now, the pool as it is now constitutes -- well, I
16 can't read my own hieroglyphics here.

17 Is it three-quarters of Section 4, or all of
18 Section 4, one or the other?

19 A Let's see --

20 Q Is that as it originally --

21 A You're talking about the original --

22 Q I think it is all of Section 4. Do you remember?

23 A This well right here was originally designated as
24 East Morton.

25 MR. KELLAHIN: What well are you pointing to?

1 THE WITNESS: The Owens, the Union Owens.

2 Q (Mr. Utz continuing) You are asking for 15 South,
3 35 East and northwest quarter of Three, south half of
4 the northwest quarter of Four.

5 So the pool limits I looked at was only the
6 northeast quarter of Four. Does that jibe with --
7 then in Section 34, which is the section directly
8 above Section 3, you are asking for the northwest
9 quarter?

10 MR. KELLAHIN: Southwest quarter --

11 THE WITNESS: Northwest.

12 MR. KELLAHIN: Northwest? Oh, yes.

13 Q (Mr. Utz continuing) And that leaves a gap. Do you
14 follow me?

15 A Are you asking me a question?

16 Q Yes. I'm asking you --

17 A I'm sorry.

18 Q -- what it is that you are asking to be put into
19 the East Morton Pool.

20 A It's on the --

21 Q When I sketched these out I didn't come out too good,
22 so --

23 A Well, let's see. We're asking the southeast quarter
24 of Section 33, Township 14 South, 35 East.

25 Q 33 Southeast, 33, that would be this in here?

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1 A Okay. The southwest quarter of Section 34, 14
2 South, 35 East, all of Section 4 except the
3 southwest quarter of 15 South, 35 East.
4 Q Except the southwest?
5 A Except the southwest quarter. The northwest quarter
6 of Section 33, 15, 35.
7 Q Well, then, this advertisement is wrong.
8 MR. HATCH: No. I think some of this that you
9 read is already in the pool; correct?
10 MR. KELLAHIN: Correct.
11 THE WITNESS: Yes.
12 MR. HATCH: And the part that is advertised here,
13 I think would be the part you are asking to be put into the
14 pool that is not presently in the pool; is that correct?
15 THE WITNESS: Yes, sir.
16 MR. KELLAHIN: That is correct. That's correct.
17 I would qualify this based on the witness' testimony. We
18 are not really concerned whether this is put in the East
19 Morton Pool or in a new pool composed of the acreage
20 outlined by the witness as -- created as a new pool. One
21 or the other.
22 But we're not concerned, really, how you do it.
23 MR. UTZ: Well, then, I looked at the wrong
24 nomenclature book. But if it's all contingent, why, it's
25 all right with me.

1 Are there other questions?

2 MR. HATCH: I would say the application is not
3 as it is here, so if we are wrong here, I'll have to take
4 it, but I think this would cover --

5 MR. KELLAHIN: I think it would.

6 MR. HATCH: -- the area.

7 MR. UTZ: Other questions? Witness may be
8 excused.

9 MR. KELLAHIN: I would like to call the next
10 witness, Mr. Glenn Cope.

11 (Witness sworn)

12 GLENN COPE

13 having been first duly sworn, testified upon his oath as
14 follows:

15 DIRECT EXAMINATION

16 BY MR. KELLAHIN:

17 Q Would you state your name, please?

18 A Glenn Cope.

19 Q By whom are you employed and in what position, Mr.
20 Cope?

21 A I am employed by Samedan Oil Corporation as an
22 engineer in the West Texas-New Mexico division.

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

1 A Yes, I have.

2 MR. KELLAHIN: Are the witness' qualifications
3 acceptable?

4 MR. UEZ: Yes, they are. I don't have his name.
5 We were both gabbing here.

6 THE WITNESS: I'm Glenn Cope, G-l-e-n-n C-o-p e.

7 Q (Mr. Kellahin continuing) Now, Mr. Cope, you are
8 familiar with the application of Samedan Oil
9 Corporation in the case before the Commission at
10 this time. I refer you first to Exhibit Number 1,
11 which has already been introduced.

12 Do you have any discussion of that exhibit?

13 A Exhibit 1 is a map of the area of interest, showing
14 the location of the Morton, the North Morton, and
15 the area which we are discussing today. the East
16 Morton Field, in which we have drilled and completed
17 two wells.

18 Q Do you have any information on the net feet of pay
19 on the two wells, the Number 1 Gulf State and the
20 Number 1 Carter?

21 A Yes, sir, I do. I would like to offer our Exhibit
22 Number 5, the porosity net pay and calculations
23 based upon the perimeters as we think they are at
24 this time.

25 Q Would you discuss the information that is shown on

1 Exhibit Number 5?

2 A The information shown on Exhibit Number 5 is data
 3 which we have acquired to analysis of logs on the
 4 wells that -- Gulf State Number 1 and the Carter
 5 Well Number 1.

6 This shows an average porosity of approximately
 7 twelve percent, net pay estimate of twenty-five
 8 feet, water saturation from log calculations of 44
 9 percent.

10 We assumed an initial formation volume factor
 11 of 1.24, based upon the performance of the North
 12 Morton Field to the Northwest and estimated a recovery
 13 factor of sixteen percent.

14 Our calculations using these above perimeters
 15 indicate that we should recover in the order of 67.27
 16 barrels per acre feet primary oil, and that for a net
 17 pay thickness of 25 feet, our ultimate primary oil
 18 recovery will be in the order of 1621.75 barrels per
 19 acre.

20 Q Now, referring to what has been marked as Exhibit
 21 Number 6, would you identify that exhibit?

22 A Exhibit Number 6 is an accumulation of the individual
 23 well data from the two wells which Samedan Oil
 24 Corporation has drilled in the East Morton Wolfcamp
 25 area, the Gulf State Well Number 1 and the Carter Well

1 Number 1.

2 This information is the elevation of the two
3 wells, the total depth, plug back total depth, the
4 casing, producing interval which shows that the
5 Gulf State Number 1 is producing from open hole, and
6 that the Carter Number 1 is producing from perforation
7 at 10,540 feet to 10,544 feet.

8 The asterisk is a footnote to show that the
9 Carter Number 1 was tested through perforation at
10 10,574 to 10,578.

11 And from these perforations we recovered 823
12 barrels of water and no oil.

13 These perforations were squeezed with a hundred
14 sacks of cement, and in the interval from 10,540 to
15 10,544 was perforated, and it is from these
16 perforations that the well is presently producing.

17 Q Now, referring to what has been marked as Exhibit
18 Number 7, would you identify that exhibit?

19 A Exhibit Number 7 is the bottom hole pressure data
20 which we have accured in the East Morton Wolfcamp
21 area.

22 The first bottom hole pressure information which
23 we have is from a drill stem test on the Gulf State
24 Well Number 1, at which we measured bottom hole
25 pressure of 4,041 pounds, corrected that to a datum

1 of minus 6550, which indicated a bottom hole pressure
2 at that depth of 4073 pounds.

3 On February the 13th, 1971, the two wells, the
4 Gulf State Well Number 1 and the Carter Well Number 1,
5 were both shut in, the bottom hole pressures allowed
6 to stabilize, and the bottom hole measured at the
7 pressures indicated, and corrected to a datum, showed
8 a bottom hole pressure of 4039 pounds on the Gulf
9 State Well Number 1 and 4,041 pounds on the Carter
10 Number 1, which has a weighted bottom hole average,
11 indicated a pressure drop of twenty-three pounds in
12 the reservoir.

13 Q Now, based on that information, is that caused by
14 cumulative production?

15 A Yes.

16 Q Would that indicate this is a rather small reservoir?

17 A Yes. This would indicate that the reservoir probably
18 would not cover a large areal extent.

19 Q Now, referring to what has been marked as Exhibit
20 Number 8, would you identify that, please?

21 A Exhibit Number 8 is a comparison of reservoir
22 properties in the Morton field, the North Morton
23 field, and the East Morton field, which we are
24 concerned with, showing the depth to the top of the
25 pay zone, average net feet of pay, the average porosity,

1 the average water saturation, the average permeability
2 in millidarcies, the original reservoir pressure, the
3 saturation pressure as measured from bottom hole sample
4 analyses, the original solution gas oil ratio, the
5 initial formation volume factor, et cetera.

6 The data was assembled to show the similarity
7 between the fields in the area.

8 We feel like that our area of interest will
9 more closely approximate the recoveries experienced
10 in the North Morton fields, due to the similarity
11 between the unsaturated nature of the crude and the
12 gas oil ratio.

13 Q The gravity of the crude is substantially the same
14 in all three, is it not?

15 A That is true.

16 Q Now, you show that the permeability is not available
17 for the East Morton field.

18 Would you anticipate it would be substantially
19 the same as the North Morton?

20 A We feel that the permeability in the East Morton
21 area will probably be higher than that average in the
22 North Morton field, due to the performance of the wells.

23 Q The present history of the reservoir to date would
24 indicate a higher permeability; is that correct?

25 A That is correct.

1 Q And is that permeability, in your opinion -- without
2 regard to any other factors, would one well adequately
3 drain eighty acres just on the permeability?

4 A I feel that one well would adequately drain in excess
5 of eighty acres.

6 Q Now, what is the producing mechanism in this pool?
7 Is it a solution gas drive?

8 A Well, in all of the fields of this nature in the area
9 we find that all of the fields have produced by a
10 solution gas drive mechanism, and that most of
11 these fields are closed systems, and produced by
12 this solution gas drive.

13 And this is the recovery mechanism which we
14 anticipate in the East Morton Wolfcamp Pool.

15 Q Now, referring to what has been marked as Exhibit
16 Number 9, would you identify that exhibit?

17 A Exhibit Number 9 is a comparison of the economics
18 for various well spacing patterns, which the field
19 could be developed on.

20 The data given shows the actual value that we
21 have received for the oil, three dollars and twenty
22 cents per barrel, after production taxes, the net
23 interest of the average working interest lease in the
24 area, the production tax, the estimated lifting cost
25 and the well investments.

1 Well investments that we list here is the average
2 of the two wells which we have drilled and equipped
3 so far, with an estimate of \$10,000 to replace the
4 well on artificial lift.

5 Q Now, based on the information shown on this exhibit,
6 would you recommend the development of this pool on
7 a forty acre spacing?

8 A No, sir, I would not.

9 Q Would it be profitable to do so?

10 A No. Placing the wells on forty acre spacing would
11 result in a dollar loss for the operator.

12 The three columns are calculated as the field
13 is presently developed. In the first column were only
14 two producing wells and one dry hole, or one hole that
15 was low and non productive in the reef zone, showing
16 the recoverable oil based upon the information that
17 we have at present, and showing the profit to
18 investment ratio under the present situation where
19 we have two wells in the field.

20 The second column is based upon a well spacing
21 of eighty acres, showing a profit to investment
22 ratio of .44 to one.

23 The third column, of course, shows the economics
24 for a forty acre location which results in a loss.

25 Q And your second and third columns are based on a

1 calculation of full development of the pool?

2 A That's correct.

3 Q Whereas, your first column is considered no more
4 wells would be drilled?

5 A That's true.

6 Q Now, referring to the next two exhibits together,
7 Exhibit 10 and Exhibit 11, would you discuss the
8 information that is shown on those two exhibits?

9 A Yes, sir. We have shown that to develop the field
10 on any less than eighty acre spacings would result
11 in a dollar loss, so the question arises, can we
12 adequately drain eighty acre tracts with one well.

13 The Exhibit Number 10 shows the distance between
14 the Carter Well Number 1 and the Gulf State Well
15 Number 1.

16 I believe that in order to show that one well
17 will drain 160 acres, it is necessary to show
18 pressure communication for a distance of 1320 feet
19 or so, and this plat is to illustrate that there is a
20 distance of 1600 feet between the Carter Number 1 and
21 the Gulf State Well Number 1.

22 Q Now, why did you put the Samedan Amarada State Number
23 1 on that exhibit? What is the significance of that?

24 A Since there were three wells in the area of interest,
25 in case anyone should be interested, we went ahead

- 1 and put it on for --
- 2 Q Just to show the distance?
- 3 A Yes.
- 4 Q Actually, the well was not produced; is that correct?
- 5 A That is correct. It was nonproductive in the reef
- 6 zone.
- 7 Q So it would have no effect on the other two wells?
- 8 A That's correct.
- 9 Q Now you have shown the distance between the two wells
- 10 as being 1600 feet.
- 11 Did you run a pressure survey, then, on those
- 12 two wells?
- 13 A Yes.
- 14 Q That is shown on Exhibit Number 11?
- 15 A That's correct. Number 11 is a graph of the results
- 16 of an interference test which we conducted on the
- 17 two wells.
- 18 Both wells, the Gulf State Well Number 1 and the
- 19 Carter Well Number 1 were shut in and allowed to
- 20 stabilize.
- 21 The Gulf State Well Number 1 was produced with
- 22 a bottom hole pressure, bombed on bottom, and the
- 23 Carter Well Number 1 was left shut in with a bottom
- 24 hole pressure bomb at the bottom of the well, and
- 25 after four hours, the graph illustrates that the bottom

1 hole pressure on the Carter Well Number 1, which was
2 shut in, began to decline, as the Gulf State Well
3 Number 1 was produced, thus showing direct communica-
4 tion between the two wells.

5 Q Over what period of time did you run this test, then?

6 A This test was run over a seventy hour period. However,
7 we picked up communication, pressure communication,
8 within four hours.

9 Q And what pressure drop was ultimately achieved on it?

10 A Well, the Gulf State Well Number 1 was produced.
11 The bottom hole pressure on the Carter Well Number 1
12 dropped to a total of eleven pounds.

13 Q And does that to you, as an engineer, indicate
14 there was adequate communication indicating that one
15 well would drain in excess of eighty acres?

16 A That is correct.

17 Q Would it be Samedan's position that eighty acre
18 spacing should be instituted in this pool?

19 A Yes.

20 Q Would you possibly want to come back at a later
21 date, based on further information, and apply for even
22 wider spacing, possibly?

23 A Yes, we possibly would.

24 Q That would be a possibility? So you don't want to
25 foreclose that; is that correct?

1 A That's correct.

2 Q Now, in the application filed with the Commission,
3 it was proposed that pool rules be adopted.

4 Does Samedan have a recommendation on those
5 pool rules?

6 A They recommend --

7 Q They recommend pool rules similar to those in the
8 North Morton, or the Morton pool, rather?

9 A Well, we recommend that we be granted eighty acre
10 spacings with the option to drill on either end of
11 the eighty acre tract.

12 Q Would you limit the direction in which the eighty
13 acres would lie? Would they run north, south, east
14 or west, or in any direction?

15 A At this time we are asking for flexibility.

16 Q Flexibility both as to the direction of the unit and
17 the well location?

18 A That is correct.

19 Q And drill to either end of the eighty?

20 A Yes.

21 Q And that is similar to the rules adopted in the
22 Morton pool?

23 A Yes.

24 MR. KELLAHAN: If the Examiner please, we have
25 drawn up some recommendations which are substantially

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1 similar to the Morton Pool rules, which we don't need to,
2 I believe, offer as an exhibit. However, we would like to
3 leave them with you.

4 Q (Mr. Kellahin continuing) Do you have anything to add,
5 Mr. Cope?

6 A No, sir, I do not.

7 MR. KELLAHIN: If the Examiner please, were
8 Exhibits 5 through 11 prepared by you or under your
9 supervision?

10 THE WITNESS: Yes, they were.

11 MR. KELLAHIN: At this time we would like to
12 offer in evidence Exhibits 5 through 11.

13 MR. UTZ: Without objection, Exhibits 5 through
14 11 will be entered into the record of this case.

15 MR. KELLAHIN: If the Examiner please, we do
16 have letters here from offset operators, the Perry P. Bass,
17 W. A. Moncrief, and the Ralph Lowe Estate. Copies of some
18 of these may already be in the Commissioner's files, but these
19 state positions in support of the application of Samedan Oil
20 Corporation, and we would like to leave them with the
21 Commission.

22 And that completes our direct testimony.

23 To correct my statement, Perry Bass and Moncrief
24 are joint owners with Samedan.

25

CROSS EXAMINATION

1
2 BY MR. UTZ:

3 Q Mr. Cope, referring to your Exhibit Number 11, let's
4 see if I understand this correctly. Was the Gulf
5 State stabilized at the time you turned it on and
6 started flowing it?

7 A Yes, sir. Both the Gulf State and the Carter were
8 stabilized at the time we opened the Gulf State up.

9 Q Now, how much time had the Gulf State been shut in?

10 A Let me -- Gulf State had been shut in for fifty-five
11 minutes.

12 Q And that is time enough to stabilize the well in
13 this pool?

14 A Yes, sir, it is. This pool has excellent permeability,
15 and the well stabilized within approximately ten
16 minutes at that pressure.

17 MR. MATTHEWS: It might be of interest to you,
18 just as -- we lost circulation in this reef zone in all
19 three wells, and what we would say a very bad loss
20 circulation condition in this reef zone in each well.

21 It was, as a matter of interest -- the bid actually
22 dropped three feet in the Gulf State, dropped or drilled
23 without weight for fourteen feet in the Anarada State,
24 and three different occasions it drilled less than half a
25 minute a foot for several feet through the Carter Number 1.

1 We had a real bad loss of circulation zones
2 through the reef.

3 MR. UTZ: Would you give the reporter your name?

4 MR. MATTHEWS: I'm Cliff Matthews with Samedan.

5 Q (Mr. Utz continuing) This communication test was run,
6 then, for a little over five hours?

7 A A total of seventy hours.

8 Q Seventy hours? Okay.

9 A The wells would stabilize before we could get the
10 bottom hole pressure bottom to top to shut them down.

11 We checked both wells for thirty minutes to
12 assure that the wells had stabilized.

13 Q You're not asking for a temporary order on this.

14 You're asking for a permanent order?

15 A That's correct.

16 MR. KELLAHIN: That's correct. We feel that
17 the evidence is sufficient to support a permanent order.

18 Any additional information, we feel, would
19 probably support wider spacing.

20 MR. MATCH: Do you want this temporarily, then,
21 til you come back?

22 MR. UTZ: Til you come back to show us? Are there
23 other questions of the witness? Witness may be excused.

24 Statements?

25 Let's take a coffee break.

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I N D E X

WITNESS

PAGE

JOEL T. BLANKENSHIP

Direct Examination by Mr. Kellahin

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Cross Examination by Mr. Utz

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GLENN COPE

Direct Examination by Mr. Kellahin

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Cross Examination by Mr. Utz

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E X H I B I T S

Applicant's Exhibits 1 through 11

