

NEW MEXICO OIL CONSERVATION DIVISION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date JUNE 28, 2001 Time 8:15 A.M.

NAME	REPRESENTING	LOCATION
W. Kellam	Kellam & Kellam	Santa Fe
DAVE BONEAU	YATES PETROLEUM	ARTESIA
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SCOTT HALL	ENERCON	SF
DONNIE MICHAEL	CHESAPEAKE	MIDLAND, TX
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James B. Miller	Arrington Oil & Gas	Midland
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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY)
THE OIL CONSERVATION DIVISION FOR THE)
PURPOSE OF CONSIDERING:) CASE NO. 12,680
)
APPLICATION OF ENERGEN RESOURCES)
CORPORATION TO AMEND ORDER NOS. R-9722-C)
AND R-10,448-A TO REINSTATE THE PROJECT)
ALLOWABLE FOR THE WEST LOVINGTON-STRAWN)
UNIT AREA UNDER THE SPECIAL RULES AND)
REGULATIONS FOR THE WEST LOVINGTON-)
STRAWN POOL, LEA COUNTY, NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

June 28th, 2001

Santa Fe, New Mexico

OIL CONSERVATION DIV.
01 JUL 12 AM 7:55

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, June 28th, 2001, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

STEVEN T. BRENNER, CCR
(505) 989-9317

I N D E X

June 28th, 2001
 Examiner Hearing
 CASE NO. 12,680

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* * *

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A P P E A R A N C E S

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By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 9:02 a.m.:

3 EXAMINER STOGNER: Okay, at this time I'll call
4 Case Number 12,680, which is the Application of Energen
5 Resources Corporation to amend Order Numbers R-9722-C and
6 R-10,448-A. This is to reinstate the project allowable for
7 the West Lovington-Strawn Unit area under the special rules
8 and regulations for the West Lovington-Strawn Pool, Lea
9 County, New Mexico.

10 Call for appearances.

11 MR. HALL: Mr. Examiner, Scott Hall, Miller
12 Stratvert and Torgerson Law Firm, Santa Fe, on behalf of
13 Energen Resources Corporation, with one witness this
14 morning.

15 EXAMINER STOGNER: Any other appearances?

16 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe
17 representing Devon Energy Production Company, L.P. I have
18 no witnesses.

19 EXAMINER STOGNER: Others?

20 MR. CARR: May it please the Examiner, my name is
21 William F. Carr with the law firm Holland and Hart, L.L.P.
22 We're appearing on behalf of Hanley OAD III. Hanley is a
23 working interest owner in the unit owner and appears in
24 support of Energen. We have no witnesses.

25 EXAMINER STOGNER: Any other appearances?

1 Will the witnesses please stand to be sworn?

2 (Thereupon, the witnesses were sworn.)

3 BARNEY I. KAHN,

4 the witness herein, after having been first duly sworn upon
5 his oath, was examined and testified as follows:

6 DIRECT EXAMINATION

7 BY MR. HALL:

8 Q. For the record, sir, please state your name.

9 A. Barney Kahn.

10 Q. Mr. Kahn, where do you live and by whom are you
11 employed?

12 A. I'm employed by Energen Resources Corporation in
13 Birmingham, Alabama.

14 Q. What do you do for Energen?

15 A. I'm the chief engineer with Energen.

16 Q. And are you familiar with the Application that's
17 been filed in this case?

18 A. Yes.

19 Q. And are you familiar with the lands that are the
20 subject of this Application?

21 A. Yes.

22 Q. And you previously testified before the Division
23 and had your credentials as an expert petroleum engineer
24 accepted as a matter of record; is that correct?

25 A. Yes.

1 MR. HALL: At this time, Mr. Examiner, we'd offer
2 Mr. Kahn as a qualified expert petroleum engineer.

3 EXAMINER STOGNER: Any objections?

4 MR. BRUCE: No, sir.

5 EXAMINER STOGNER: Mr. Kahn is so qualified.

6 Q. (By Mr. Hall) Mr. Kahn, if you would, please,
7 tell us what your specific involvement has been with the
8 West Lovington-Strawn Unit.

9 A. I became the project engineer on the West
10 Lovington-Strawn Pool after Energen acquired it from
11 Enserch in late 1998.

12 Q. And is Energen now operator of the West
13 Lovington-Strawn Unit?

14 A. Energen became the operator in May of this year.

15 Q. All right. Would you explain to the Hearing
16 Examiner what it is that Energen seeks by this Application?

17 A. Well, we're seeking to reinstate the project
18 allowable, which would equal the top proration unit
19 allowable times the number of developed wells in the pool
20 and allow a transfer of those allowables within the project
21 area. That allowable would then become 4629 barrels of oil
22 per day for the project.

23 EXAMINER STOGNER: Hold it, what was that number
24 again?

25 THE WITNESS: 4629 barrels of oil per day for the

1 project.

2 Q. (By Mr. Hall) All right, let's orient everyone
3 to the acreage. If you would refer to Exhibits 1 and 2,
4 please, identify those and explain what those are intended
5 to reflect.

6 A. Exhibit 1 is the hydrocarbon pore volume map that
7 has been presented in previous hearings and which the
8 participation in the unit is based upon.

9 Exhibit Number 2 is a top-of-the-Strawn porosity
10 structure map, with the purple line representing the zero
11 porosity line, which conforms with the zero line on the net
12 hydrocarbon map in Exhibit 1.

13 Q. All right. Now, the unit itself has undergone
14 several iterations, has it not?

15 A. Yes, there was an original unit, then there was a
16 first expansion, which included the tract in Section 28,
17 and the Snyder "S" Com well, and then there was a second
18 expansion which included the Snyder "EC" 1, the Snyder "C"
19 4, the Snyder "F" 3 and the Beadle 1. Those are all in the
20 southwest portion of the pool.

21 Q. You mean to say the southeast portion?

22 A. I'm sorry the southeast, you're correct.

23 Q. Now, is it your understanding that -- Let me ask
24 you, Exhibits 1 and 2 reflect the current boundaries of the
25 unit as expanded, correct?

1 A. Within the -- What's colored yellow on the
2 exhibits is the current outline of the unit, yes.

3 Q. Now, is it your understanding that the unit
4 boundaries encompass the entirety of the West Lovington-
5 Strawn Pool?

6 A. Yes.

7 MR. HALL: Mr. Examiner, I would point out to you
8 that on examination of the pool rules for the West
9 Lovington-Strawn Pool, the acreage in Section 5 within the
10 unit -- the pool itself has not been expanded formally to
11 include that acreage, and I've had some discussions with
12 Mr. Brooks about that, just so you know about that.

13 EXAMINER BROOKS: Right, it was my understanding
14 from those discussions that notice had nevertheless been
15 given of this Application to all persons within one mile of
16 the entire unit area.

17 MR. HALL: That's correct.

18 EXAMINER BROOKS: Okay, you may continue.

19 EXAMINER STOGNER: Just for clarification, over
20 there in Section 5, does it just include an 80 acres or a
21 40-acre portion within the nomenclature of the pool
22 boundaries? What's the difference, in other words?

23 MR. HALL: None of the acreage in Section 5 is
24 included within the pool. The Snyder "F" 3 well you see
25 drilled in that Tract 22 there, the C-102s for that report

1 completion in West Lovington-Strawn Pool. I assume that
2 the Division treats that as Undesignated West Lovington-
3 Strawn Pool for the time being.

4 EXAMINER STOGNER: Just a suggestion, you might
5 want to, after the proceedings today, is, maybe go over to
6 Hobbs and talk to Mr. Kautz about putting that in the
7 nomenclature.

8 MR. HALL: All right.

9 EXAMINER STOGNER: Thank you.

10 Q. (By Mr. Hall) Mr. Kahn, if you would, please,
11 I'd like you to refer to Exhibit 3, and that's Order Number
12 9722 from Case Number 10,530. Do you have that before you?

13 A. Yes, I do.

14 Q. Would you briefly explain to us your
15 understanding of what was accomplished by Order R-9722?

16 A. It established the East Big Dog-Strawn Pool,
17 which has now become the West Lovington-Strawn Pool, and it
18 established Rule 6, providing for an 80-acre proration
19 unit, produce at a depth-bracket allowable of 445 barrels
20 of oil per day.

21 Q. All right. This pool was originally known as the
22 East Big Dog-Strawn Pool?

23 A. Yes.

24 Q. And it subsequently underwent a name change to
25 West Lovington-Strawn Pool?

1 A. Yes.

2 Q. What was the discovery well for the pool?

3 A. It was the Hamilton Federal Number 1, in Section
4 33. And its location is 330 feet from the south line and
5 2145 from the east line.

6 Q. All right. And as you say, it established
7 special pool rules for operations in the pool, did it not?

8 A. Yes.

9 Q. Briefly explain what the drive mechanism is for
10 this reservoir.

11 A. Originally it was a gas expansion, and then in
12 October of 1995 they began gas injection to maintain the
13 pressure.

14 Q. All right. And is this a volatile oil reservoir?

15 A. Yes.

16 Q. And what does that mean exactly?

17 A. It's a very high initial solution ratio and a
18 very high formation volume factor. The original solution
19 ratio was 2250 cubic feet per barrel, and the original oil
20 volume factor was 2.3.

21 Q. All right. Let's refer to Exhibit 4 now, if you
22 would, please, sir, and Exhibit 4 is a copy of Order Number
23 R-10,448 from Case Number 11,194. Tell us your
24 understanding of what was accomplished by this order.

25 A. That order authorized the gas injection for

1 pressure maintenance, and it adopted Rule 6, providing for
2 the 445-barrel-of-oil-per-day rate, and it allowed for the
3 transfer of the allowable among the wells, including the
4 injection well.

5 Q. And are those provisions reflected at paragraphs
6 14 and 15 of the decretal portions of the Order on page 7?

7 A. Yes.

8 Q. All right, let's refer to Exhibit 5, please,
9 sir. That is a copy of Consolidated Order R-9722-C and
10 R-10,448-A. Do you have that in front of you?

11 A. Yes.

12 Q. And what did the Division do in that particular
13 case? Why don't you tell us what the Applicant was --

14 A. Well, the Applicant was requesting to revise the
15 boundaries of the pool and to create the South Big Dog-
16 Strawn Pool and establish a 250-barrel-of-oil-a-day
17 allowable to be applied inside the pressure unit, the
18 pressure-maintenance project area. And they proposed a
19 double allowable standard, basically 250 barrels of oil per
20 day for some wells and 445-barrel-of-oil for other wells.

21 Q. Now, at the time were their wells completed
22 within the Strawn Pool --

23 A. Yes.

24 Q. -- that were not included in the unit?

25 A. Yes, there were wells that were in the pool but

1 not included in the unit at that time.

2 Q. And was it established in that case that those
3 wells were in communication with the unit reservoir?

4 A. Yes.

5 Q. And the unit pressure maintenance project as
6 well?

7 A. Yes.

8 Q. And did the Division express some concern that
9 there would be some difficulty in administrating dual
10 allowables in a situation like that?

11 A. Yes, in fact that was the reason for not allowing
12 the double-standard allowable, because it would cause
13 confusion.

14 Q. All right. Now, in that order did the Division
15 find that there was a need to maintain adequate reservoir
16 pressure by virtue of the pressure-maintenance project?

17 A. Yes.

18 Q. And was there also a concern that the operator --
19 who was Gillespie-Crow at the time, correct?

20 A. Gillespie was the operator at that time.

21 Q. And was the purpose of the pressure maintenance
22 project to manage a secondary gas cap; is that right?

23 A. Yes.

24 Q. And did the Division express a need that the
25 operator needed to be able to do that efficiently?

1 A. Yes.

2 Q. Based on those findings and the concerns
3 expressed by the Division in that Order, what did the
4 Division end up doing with respect to a project allowable?

5 A. Well, basically they eliminated the project
6 allowable for the Strawn project and because of the
7 differing allowables that was requested, so we went from a
8 project allowable to a well allowable.

9 Q. All right. And was that a 250- --

10 A. At 250 barrels of oil per day.

11 Q. All right. And under the Division's order, was
12 it possible to transfer allowables --

13 A. No, that was not possible under that order.

14 Q. All right. Did it also eliminate the assignment
15 of an allowable to the injection well?

16 A. Yes.

17 Q. Now, does the circumstance where you had wells
18 completed both -- in the West Lovington-Strawn Pool, both
19 inside the unit and outside the unit boundaries still exist
20 today?

21 A. No, that does not exist, not since the second
22 expansion has taken place.

23 Q. All right. Let's look at Exhibit 6 briefly.
24 Would you identify that, please sir?

25 A. Yes, this is a tabulation of the unit wells 1

1 through 18, with their API number, the locations, both in
2 the unit part of the section and the township and range.
3 This is all of the wells in the pool.

4 Q. All right. So all unit wells are 100 percent of
5 the wells in the pool?

6 A. 100 percent of the wells are in the pool now --
7 are in the unit now, I'm sorry.

8 Q. Or vice-versa?

9 A. Yes.

10 Q. Now, in your opinion is there any reason why the
11 project allowable provisions under paragraphs (14) and (15)
12 of Order Number R-10,448 should not be reinstated?

13 A. I know of no reason.

14 Q. All right. Let's look at the production history
15 for the pool, Mr. Kahn. If you would refer to Exhibits 7
16 and 8, explain those to the Hearing Examiner.

17 A. Exhibit 7 is a tabulation of the monthly
18 production beginning in June of 1992 through May of 2001.
19 What is shown is the monthly oil production and the
20 cumulative column next to it. It shows the monthly gas
21 production at the pressure base and the cumulative gas
22 production. It also shows the injected gas, beginning in
23 October of 1995, and the column next to that is the net
24 cum, which is basically the produced cum minus the
25 reinjected volumes to come up with a net cum.

1 And then the column to the right, then, is the
2 water that was produced and the cumulative water. And then
3 the last column is the bottomhole pressure tests that are
4 taken semiannually. And these are field average bottomhole
5 pressure tests; the pressures usually are within a pretty
6 close range of about 20 or 30 pounds. And the last
7 fieldwide bottomhole pressure test that was taken was in
8 May of this year and indicated in that column.

9 Q. So this is a historic tabulation of reservoir
10 pressures from most recent tests in May of this year --

11 A. Yes.

12 Q. -- back to --

13 A. Initial --

14 Q. -- June of 1992. All right, let's look at
15 Exhibit 8. What does that exhibit show?

16 A. Exhibit 8 is a plot of pressure versus cum oil
17 production. This is a pressure plot that had always been
18 maintained by Gillespie, and what I have done is updated it
19 with the most recent May, 2001, pressure test that was just
20 completed at the end of May. And you can see where it's at
21 about 4,760,000 barrels, approximately, which is the cum.

22 What Gillespie was showing on this plot with the
23 triangle symbols was what the pressure cumulative
24 performance would have been without gas injection for
25 pressure maintenance. Gas injection began in 1995 and has

1 maintained the pressure between a 3160 and a 3300-pound
2 range.

3 Q. All right. Let's look at Exhibit 9 now. Would
4 you identify that and explain what it's intended to
5 reflect?

6 A. Exhibit 9 is a tabulation starting in October of
7 1995, showing the volumes of gas purchased and reinjected
8 and the associated cost with that.

9 Beginning at the far left on a monthly basis,
10 there is those columns referring to the purchase of
11 extraneous gas. This is gas that's purchased to make up
12 for the withdrawals from the reservoir to maintain
13 pressure, both in -- It's tabulated in MMBTU and MCF at the
14 New Mexico pressure base, and MCF of 1465.

15 The next column is what the actual cost of that
16 purchased gas was during those months, in dollars per
17 MMBTU.

18 And the column to the right of that shows the
19 total cost each month of the purchase of extraneous gas, a
20 total there through April of \$12,388,000.

21 The next group of columns is the total injected
22 gas. That includes the purchased extraneous gas, plus the
23 reinjected reservoir gas. It's tabulated in MMBTU and in
24 MCF, and the cost associated with the reinjected gas. That
25 cost represents the fact that the gas could have been sold,

1 but instead of being sold it was reinjected. And that
2 cumulative cost of postponed sales is \$14,571,000.

3 The column next to the "Reinjected" headings is
4 the produced gas. The column to the right of that is used
5 gas, and what I've defined there as used gas is gas that
6 was either product shrinkage in the natural gas recovery
7 plant, natural gas liquid recovery plant, fuel and sales.
8 So it's all gas that could not be reinjected.

9 Then there's a column that just shows what the
10 fraction is, another column which shows produced oil
11 barrels, which conforms with the previous tabulation in
12 Exhibit 7. It shows a produced GOR, a net GOR, net being
13 after reinjected gas.

14 Going further to the right, the column heading
15 showing "Project", it shows the project allowable in MCF a
16 day and the project allowable in barrels per day. That's
17 if the project allowable had been reinstated so that it was
18 the total allowable for all 18 existing wells that we
19 currently have.

20 The column to the right of that shows the actual
21 production in MCF per day. The net production in MCF per
22 day is after subtracting out the reinjected gas. So it's
23 just a tabulation basically showing what the cost of a
24 pressure maintenance project is and the cost of make-up gas
25 purchased from extraneous sources and reinjected gas from

1 the reservoir.

2 Q. Now, what will reinstatement of the project
3 allowable permit Energen to do that it can't do now?

4 A. Okay, we have referred to Exhibit 10, and Exhibit
5 10 tabulates some recent maximum tests for all of the wells
6 except the injection well, which is number 7, which is not
7 shown on this table, but it shows what the maximum recent
8 test is in barrels per day, MCF per day and what the GOR
9 was.

10 You can barely make it out, but there is a
11 portion there that was originally highlighted in yellow for
12 Well Number 5 and Well Number 6, and then there's a note
13 down at the bottom which says "2 hour test". So on Well 5
14 and 6, which are very high GOR, those wells are not
15 produced; they're shut in. And there was just a two-hour
16 test that recorded the 5 barrels per day and the 206 MCF a
17 day, resulting in a GOR of 41,200, and also for Well Number
18 6. But those are just two-hour tests, whereas the rest are
19 full 24-hour tests.

20 Then in June of this year, it shows what the
21 status of the wells are. Wells Number 1 and 2 are shut in
22 because of high GOR. Well Number 3 was producing 58
23 barrels at a GOR of 6500. Well Number 4, 5 and 6 were shut
24 in. Of course Well Number 7 is the injection well.

25 Well Number 9 and 10 were shut in due to high

1 GORs. Well Number 11, 171 barrels a day and a 5800 GOR.
2 Well Number 13 is on pump, 95 barrels a day. Well 14 is
3 218 barrels a day with a ratio of 2800. Well Number 15 is
4 on pump, 58 barrels a day, the ratio 2228. 16 is shut in
5 due to high GOR. 17 is 149 barrels, 6500 GOR. 18 is 124
6 barrels a day and a GOR of 7100.

7 The headings to the right of that are the well
8 allowables in barrels per day and MCF per day at a limiting
9 GOR ratio of 2000 to 1. Most of the wells in the unit are
10 80-acre proration units, except for Wells 15 and 16, which
11 are a 90-acre proration unit. Therefore it's ratio'd up to
12 281 barrels a day, would be the allowable. And Well Number
13 18 is 101 acres, so its ratio'd up from 250 barrels a day
14 up to 317 barrels a day. So that that would be a -- and if
15 you put in the Number 7 well for 250 barrels a day, that's
16 where you get the 4629 as the project allowable in barrels
17 per day.

18 The project allowable in MCF a day, of course, is
19 just two times that, so it would be the 500 MCF and the --
20 562 and 634.

21 And then on the column headings to the right of
22 that project allowable you've got barrels per day, MCF per
23 day and GOR.

24 Underneath that I have some headings called the
25 allowable cases for the existing wells, and the first row

1 under the heading says "Well", which would be basically the
2 well allowable as it currently exists at basically 250
3 barrels of oil per day per well. It would show that the
4 maximum allowed production due to the limiting GOR limit of
5 2000 to 1 would be 1091 barrels a day. That -- You can go
6 back to the upper headings where it shows what the limiting
7 GOR would cause the actual production to be 1091.

8 The maximum -- The gas under the current
9 allowable would be 7,696 MCF a day. The gross income from
10 the oil would be \$28,911, the gross income from the natural
11 gas liquids would be \$15,000, for a total of 44,000.

12 To maintain pressure, it would require 2697 MCF a
13 day of gas to be reinjected to make up for the barrels
14 produced, and it would require 2957 MCF a day to be
15 reinjected a day to maintain pressure, for a total of 5654
16 MCF a day to maintain the pressure based on the withdrawals
17 under the well allowable. The cost of that at current gas
18 prices would be \$22,000.

19 Then the next column heading, which says "Gross
20 Revenue" should be -- an additional nomenclature on that
21 should be "oil only, gross revenue". And basically what
22 that is, is the gross income from oil minus the cost of
23 maintaining the pressure due to the oil withdrawals, would
24 be \$6566 of gross revenue.

25 Then going back to the left again, the second row

1 under those headings is the project allowable, which would
2 be the 4629.

3 Having a project allowable would allow the
4 operator to shut in all the high gas-oil ratio wells. And
5 you can see that in the "Project Allowable", the upper
6 headings up to the right, where it shows all of the wells
7 are shut in that have high GORs. And what is happening is
8 that the lower-GOR wells are produced at higher than 2000
9 GOR limit.

10 For instance, 17 and 18 are good examples. 17
11 would be produced at 1300 MCF a day, rather than its
12 limiting GOR of 500 a day. Well Number 18 would be
13 produced at 1590 MCF a day, rather than its limiting GOR of
14 634.

15 So what is accomplished under a project allowable
16 versus a well allowable is that you get to shut in the
17 high-GOR wells, transfer the allowables to the lower-GOR
18 wells, produce them at rates higher than currently allowed
19 under GOR limit, and in effect produce 200 barrels a day
20 more oil and 500 MCF a day less gas.

21 By doing that, you have increased your oil
22 revenue, decreased your cost of gas to maintain the
23 pressure, and have resulted in a gross revenue from the oil
24 production of \$10,000, which gives you a difference in
25 dollars per day -- this is gross, including royalties and

1 working interest -- of \$4270 a day difference.

2 That economic difference right there allows the
3 operator to continue pressure maintenance and gas injection
4 longer than he would if we were under the current
5 allowable, which would cause more gas to be produced and
6 therefore more gas to be purchased and reinjected to
7 maintain pressure.

8 This is just an example of the economic of a well
9 allowable versus a project allowable and the fact that
10 pressure maintenance could be continued longer and
11 therefore recover more oil than if it was under the current
12 well allowable.

13 Underneath that it just shows for a new well. We
14 are proposing three new wells downdip. What we are
15 attempting to do is locate three wells lower structurally,
16 so that they will produce at a lower GOR, and the
17 difference per well on that is a difference of about \$980 a
18 day, by being able to transfer allowables. And that's
19 based on the fact that there's been three wells drilled
20 recently that are structurally low wells, and they were
21 capable of producing 344 barrels a day at a less than 2000
22 GOR. So by drilling the three wells that we have proposed
23 structurally lower than where the expanded secondary cap
24 is, we would have a lower GOR and be able to produce those
25 at higher than the 250-barrel-a-day limit.

1 So that's basically what -- I know Exhibit Number
2 10 looks like it's a very complicated arrangement, but
3 basically what it's showing is the economic difference
4 between the current well allowable and a reinstated project
5 allowable.

6 Q. So in sum, by reinstatement of the project
7 allowable, the unit will be able to recover additional
8 reserves that would otherwise go unproduced?

9 A. Yes.

10 Q. By virtue of economics, for one, and then
11 secondly because you're able to more efficiently manage the
12 property from an engineering and operations perspective?

13 A. Right, by being able to transfer allowables
14 between wells when a well has a high GOR, we could then
15 shut that well in and produce a well at a lower GOR, at a
16 higher oil rate.

17 Q. Now, do you believe that the current 250-barrel-
18 per-day allowable rate is sufficient?

19 A. Well, yes, you can see on Exhibit 9 that with the
20 current -- with the allowable at 250 barrels a day for the
21 18 wells, that production has never exceeded that and
22 hasn't really come close.

23 We're currently producing -- As you can see, if
24 you go back to Exhibit 9, if you look at the last several
25 months, which would be January, February, March and April,

1 you can see that the oil production in the very right-hand
2 column is less than it has been previously.

3 The reason that we've cut back production for
4 those four months is because the makeup gas was -- in
5 January was \$9.90, in February was \$6.14 per MMBTU. Then
6 it dropped to \$4.95 and \$5.26.

7 But at those high cost of makeup gas, in order to
8 maintain pressure what we did was, we shut in the high-GOR
9 wells and only produced the low-GOR wells, so that we
10 wouldn't have to buy so much makeup gas. We were actually
11 able to have a net revenue higher with these low production
12 rates for those four months than we would have been under
13 the previous rates of around 1200 barrels a day, because we
14 would have had to produce so much more gas. But by being
15 able to transfer allowables, we can accomplish a higher oil
16 rate and reduce the gas volumes produced and therefore
17 reduce the gas amount -- the purchase to make up for the
18 gas.

19 Q. Is there any risk that you're going to reach
20 premature gas saturation by shifting around the allowables
21 among project wells?

22 A. Well, no, the concept is to be able to shift
23 allowables so that we can maintain pressure. And by
24 maintaining pressure, we will delay the reduction of
25 pressure, which would then cause the additional gas

1 saturation to occur in the reservoir.

2 Q. All right. Now, what date did the Division issue
3 the order approving the third expansion of the unit?

4 A. The order was issued on March 20th of the year
5 2000.

6 Q. And is Energen requesting that the reinstated
7 project allowable be made effective that same date?

8 A. Yes.

9 Q. Now, Mr. Kahn, in your opinion will the granting
10 of this Application serve the interests of conservation and
11 result in the protection of correlative rights and the
12 prevention of waste?

13 A. Yes.

14 Q. And did you direct Energen's geologist to prepare
15 Exhibits 1 and 2?

16 A. Yes, basically these were prepared in the past,
17 and our geologist did prepare these Exhibits 1 and 2.

18 Q. All right, so Exhibits 1 and 2 were based on
19 exhibits previously admitted into evidence in the numerous
20 other cases on the West Lovington-Strawn Unit?

21 A. Yes. And as I stated before, Exhibit Number 8
22 was actually prepared by Gillespie when they were the
23 operator, and what I did was, when we had our fieldwide
24 bottomhole pressure test in May, I added the May pressure
25 point to Exhibit 8. All of the other remaining exhibits

1 were prepared by myself.

2 MR. HALL: All right. At this time, Mr.
3 Examiner, I would move the admission of Exhibits 1 and 2
4 and Exhibits 6 through 9. Exhibits 3, 4 and 5, I believe
5 you can take administrative notice of those order exhibits.

6 EXAMINER STOGNER: Exhibits 1 and 2 and -- what,
7 5 through 9 did you say?

8 MR. HALL: It's 3 -- I'm sorry, 6 through 9.

9 EXAMINER STOGNER: 6 through 9 and 1 and 2 will
10 be accepted at this time, and I'll take administrative
11 notice on what is Exhibits 3 and 4.

12 MR. HALL: 3, 4 and 5.

13 EXAMINER STOGNER: 3, 4 and 5, and incorporate
14 the record in the previous cases in this matter at this
15 time.

16 MR. HALL: I'll provide you with two sets of
17 Exhibit 11, which are the notice affidavit. What we did
18 for notice in this case, Mr. Examiner, is provided notice
19 to all the unit working interest owners and royalty
20 interest owners, I believe, as well as to every operator,
21 working interest owner and unleased mineral interest owner
22 within a mile of the pool boundaries, West Lovington-Strawn
23 Pool. We weren't able to efficiently extract out ownership
24 within the other surrounding Strawn pool, so everybody got
25 notice, more people than should have.

1 EXAMINER STOGNER: And we want to admit Exhibit
2 11 at this point.

3 MR. HALL: Move its admission, that concludes my
4 direct, Mr. Examiner.

5 EXAMINER STOGNER: Exhibit Number 11 will be
6 admitted into evidence.

7 Thank you, Mr. Hall.

8 Mr. Bruce, your witness.

9 MR. BRUCE: Unfamiliar as I am with this unit,
10 I'll pass on questioning Mr. Kahn.

11 EXAMINER STOGNER: Okay, Mr. Carr has left the
12 building.

13 EXAMINATION

14 BY EXAMINER STOGNER:

15 Q. How far from blowdown are we, in your estimation,
16 in this project?

17 A. If we have three successful downdip wells, this
18 will forestall blowdown for a time. I think -- Right now,
19 in fact, we do have -- we've had an AFE approved by all of
20 the working interest owners for the three wells. We
21 already have a location prepared, all three have been
22 permitted, and we have a location for prepared for Number
23 19, which is in Section 33. And rigs are very difficult to
24 obtain right now, but I think we can possibly have a rig
25 moved on location sometime in July.

1 And with these -- with successful downdip
2 production at a lower GOR than was currently being produced
3 by the wells in the field, I believe we can forestall
4 blowdown until 2003.

5 Q. And the Unit Well Number 7, that is still the
6 only injection well?

7 A. Yes, sir. That's in Section 1.

8 Q. Kind of thinking ahead here, when blowdown
9 occurs, will we need to then come in and do away with that
10 GOR limit or increase it, or --

11 A. Yes, sir, I would feel that the most appropriate
12 means would be to increase the GOR limit from 2000 to 4000,
13 and I think that would cover us, because we don't intend to
14 blow down at a higher rate than the 4000 project allowable
15 would be.

16 Q. And even once blowdown is well on its way and
17 reaching its maturity, one would still need to control the
18 withdrawal of the extrenuous gas or the gases within the
19 reservoir, and would that be accomplished through that -- ?

20 A. Yes, sir, at blowdown, of course, extraneous gas
21 would be produced at that time.

22 Q. But would it need to be limited as far as its
23 producing capabilities? Would it need to be limited to,
24 say, 4000 MCF a day or something?

25 A. 4000 a day would give us a project allowable for

1 gas production of 18 million a day, and we don't intend to,
2 at this time, produce at over that rate.

3 Q. So it would still need to limit the gas
4 production, even once the blowdown was well in --

5 A. Yes, in fact, the intention for blowdown is to
6 produce the gas out of the low-structure wells to recover
7 as much additional oil as possible, and only at the very
8 end when the pressure gets real low, is to open up the
9 wells at the very top of the structure, which would be Well
10 Number 7 and Number 5 and 6, which are the highest
11 structural wells in the pool.

12 Q. Okay. You had mentioned a March 20th of year
13 2000 date. What was that again?

14 A. That's when the order was issued for the second
15 expansion, which included the acreage that was outside --
16 the acreage that was in communication with the pool that
17 was outside the unit.

18 Q. Was there a meeting with the working interest in
19 this unit before you came here today, or did you just
20 notify everybody, or was there an actual meeting with the
21 participants?

22 A. No, sir, we did not have a meeting specifically
23 on this. The prior meeting that we had, a month or so ago,
24 or two months ago, I believe, was when we were elected as
25 the operator of the unit, and we presented the AFEs for the

1 three wells. But there was not a meeting to discuss this.

2 Q. So essentially the conflict that created the 250
3 has been removed; is that correct?

4 A. Yes, sir, at that time there were wells outside
5 the unit that were within the pool and in communication
6 with the pool. Since the second expansion, that situation
7 doesn't exist.

8 EXAMINER STOGNER: Mr. Carr, I had called for
9 cross-examination, but you had left the room. Do you have
10 any questions of this witness?

11 MR. CARR: No, Mr. Examiner, we do not. We're
12 appearing in support of the Applicant and the operator.

13 EXAMINER STOGNER: Mr. Bruce, are you appearing
14 in support or --

15 MR. BRUCE: Mr. Examiner, I'm just representing
16 an offset operator. They're just interested in what is
17 happening in the unit, West Lovington-Strawn Unit.

18 EXAMINER STOGNER: I've never seen such a calm
19 hearing in this area before. I'm a little taken aback
20 today.

21 THE WITNESS: This is different to last year I
22 believe.

23 EXAMINER STOGNER: And the years previous. So
24 I'm a little speechless today.

25 MR. BRUCE: Mr. Examiner, on one note, the

1 initial pool rules in this matter were -- the expert
 2 witness on that was Daniel S. Nutter, one of the prior
 3 Commission Hearing Examiners, and so, you know, perhaps Mr.
 4 Nutter started this all for us.

5 EXAMINER STOGNER: He did, and I even got
 6 crosswise with him on that. Just looking at Order Number
 7 9722, that brought back a lot of memories.

8 I don't have any questions of this witness at
 9 this time.

10 Are there any questions?

11 EXAMINER BROOKS: No.

12 EXAMINER STOGNER: Okay.

13 MR. HALL: Mr. Examiner, I have a draft order in
 14 the works. I'll get that off to you as soon as I can.

15 EXAMINER STOGNER: You read my mind. And out of
 16 courtesy, would you provide it to these two gentlemen, Mr.
 17 Carr and Mr. Bruce?

18 MR. HALL: Will do.

19 EXAMINER STOGNER: You may be seated, and if
 20 there's nothing further in Case Number 12,680, then this
 21 matter will be taken under advisement.

22 MR. HALL: Thank you.

23 (Thereupon, these proceedings were concluded at
 24 9:52 a.m.)

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 * * the Examiner hearing of Case No. 12680,
 heard by me on 28 June 2001 at 9:52 a.m.

STEVEN T. BRENNER, Examiner
 (505) 989-9314,
 Off Conservation Division

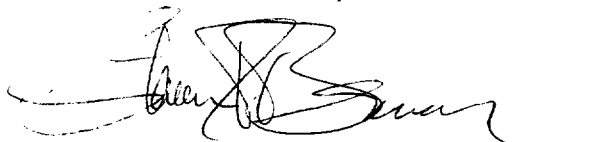
CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) SS.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL June 29th, 2001.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002