

1 STATE OF NEW MEXICO
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3 OIL CONSERVATION DIVISION
4 STATE LAND OFFICE BUILDING
5 SANTA FE, NEW MEXICO

6 26 April 1989

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 In the matter of Case 9311 being reopen- CASE
10 ed pursuant to the provisions of Division 9311
11 Order No. R-8614, which promulgated temporary special rules and regulations for the Monument-Abo Pool, Lea County, New Mexico.

12 BEFORE: David R. Catanach, Examiner

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14
15 TRANSCRIPT OF HEARING

16
17 A P P E A R A N C E S

18 For the Division: Robert G. Stovall
19 Attorney at Law
20 Legal Counsel to the Division
State Land Office Building
Santa Fe, New Mexico

21 For Texaco Producing, Inc.: Scott Hall
22 Attorney at Law
23 CAMPBELL and BLACK, P. A.
24 P. O. Box 2208
25 Santa Fe, New Mexico 87501

I N D E X

DENNIS WEHMEYER

Direct Examination by Mr. Hall

4

E X H I B I T S

Texaco Exhibit One, Tabulation

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Texaco Exhibit Two, Tabulation

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1 MR. CATANACH: At this time
2 we're going to call Case 9311.

3 MR. STOVALL: In the matter of
4 Case 9311 being reopened pursuant to the provisions of
5 Division Order No. R-8614, which promulgated temporary
6 special pool rules and regulations for the Monument Abo
7 Pool, Lea County, New Mexico, establishing a limiting
8 gas/oil ratio of 10,000 cubic feet of gas per barrel of
9 oil.

10 MR. CATANACH: Are there ap-
11 pearances in this case?

12 MR. HALL: Mr. Examiner, Scott
13 Hall from the Campbell & Black law firm appearing on be-
14 half of Texaco.

15 I have one witness.

16 MR. CATANACH: Any other ap-
17 pearances?

18 Will the witness please stand
19 to be sworn in?

20

21 (Witness sworn.)

22

23 DENNIS WEHMEYER,
24 being called as a witness and being duly sworn upon his
25 oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. HALL:

Q Mr. Wehmeyer, would you please state your name, place of residence and place of employment?

A My name is Dennis Wehmeyer. I'm employed by Texaco. I reside in Hobbs, New Mexico.

Q And how are you employed by Texaco?

A I'm the District Operations Engineer.

Q And you've previously testified and had your credentials accepted by the examiner?

A Yes, I have.

Q Mr. Wehmeyer, if you would, please, what is it that Texaco appears here for today?

A We are here to make permanent the rules, the GOR limit of 10,000-to-1, for the Monument Abo Pool.

Q And there was an order previously entered in this case, Order R-8614, is that correct?

A That's correct.

Q And what basically did that order provide?

A The temporary rules for a GOR limit of 10,000-to-1 for the Monument Abo Pool.

Q And it also directed us to reappear in 12 months to offer additional proof to show why those lim-

1 itations should not be maintained in effect, is that
2 correct?

3 A That's correct.

4 Q All right. Let's look at Exhibit One,
5 if you would please, and if you would explain that to the
6 examiner.

7 A Exhibit One is a tabulation of all the
8 production curves of all the wells in the Monument Abo
9 Pool. There's only been one addition since the last
10 hearing. We have completed one well. We drilled the
11 Skelly D State No. 4, as a matter of fact. I can go
12 through them real quick to explain.

13 The first curve is the total pool pro-
14 duction for all wells in the pool. As you can see in the
15 past year, the gas production has markedly increased over
16 2-million a day and presently it's around 2-million a day
17 gas.

18 The second sheet just shows you the GOR
19 curve of the total pool. It again has increased in the
20 past year averaging approximately 60,000 cubic foot per
21 barrel.

22 The next sheet is our -- the Texaco
23 operated J. R. Phillips No. 6. Of course it was recom-
24 pleted in the beginning of '88 in the upper zones of the
25 Abo, and it just shows the current decline on it.

1 The next one is the GOR curve on the
2 Phillips No. 6 again. It's averaging over a million a day
3 GOR because it doesn't make very much oil.

4 The next one is the Texaco operated J.
5 R. Phillips No. 5. Here again nothing's been done on these
6 wells since they are just updated curves showing past and
7 current production.

8 Phillips No. 5 GOR curve again. Of
9 course the high GOR in this well also can be seen, over
10 300,000.

11 The next one is the Texaco operated New
12 Mexico E State NCT Warren No. 5; just the current produc-
13 tion on it. Again the gas has dropped off a little bit.

14 The next curve is the GOR curve on the
15 E State 5 again.

16 The next curve is the total Texaco oper-
17 ated wells in the pool. There's four wells. Of course
18 you can see by this curve that the majority of the produc-
19 tion in the pool is produced by the Texaco operated wells.

20 Again the GOR curve on the Texaco oper-
21 ated wells. You might note there in '88 the GOR has mar-
22 kedly increased again ranging 4-to-600,000 on the average.

23 The next curve is the Skelly B State No.
24 4. This is the newest well in the pool. This well was
25 drilled in July of 1988. It only potentialled for 2 barrels

1 of oil and about 300 MCF a day. We produced this well
2 throughout the rest of '88 until March of this -- of
3 this year, of '89. Production isn't reflected. We have
4 recompleted the well. I believe it was March 25th is when
5 we potential tested this well. Originally, upon initial
6 completion the well was completed from 6772 to 6997, which
7 from the old testimony was above Zone 1 in the upper parts
8 of the Abo. Of course, it did make all gas. I might note
9 at that time the well shut in at 1100 pounds tubing pres-
10 sure, which is fairly high. It lends credence to the fact
11 that these are lenticular zones, these are not homogeneous.
12 We're tapping pays that have not been produced before.

13 In March of this year we did perforate
14 all the additional pay on down to 7715, which includes the
15 upper pay, the upper pay is still open, too.

16 Upon completion of this well throughout
17 all zones, the well potentialled for 12 barrels of oil and
18 42 water and 836 MCF. Shut in tubing pressure at that time
19 was 1400 pounds. I'm trying to make a point that we are
20 tapping pays that haven't been -- been produced. They are
21 lenticular. They are very hard to correlate. I've looked
22 at this newest well myself and I -- I can't correlate it
23 with the other wells. It's very difficult. I've checked
24 with a geologist and it is extremely difficult to correlate
25 the pays. We are tapping various pays that have not been

1 produced. We feel like there are still gas caps in this
2 lenticular pay zone, one (unclear) three, as I recall (not
3 clearly understood) production out of there.

4 The following curve is the GOR curve on
5 the B State 4 and the following curves are the remaining
6 wells in the pool that are not operated by Texaco. The
7 Amerada Hess No. -- Phillips No. 7, nothing has been done
8 to this well. It is still the same.

9 Of course all the following wells do not
10 make any appreciable oil or gas. You can see by this curve
11 it's real low.

12 The next one is the Amerada Hess Abo
13 Unit No. 1. Of course, it again, it's -- it's only making,
14 what, 20 MCF a day and a few barrels of oil.

15 The next one is the GOR curve on the
16 Monument Abo No. 1, very low GOR.

17 The next one is the G. C. Matthews No.
18 5, operated by Chevron. This one makes 30-40 MCF a day,
19 approximately a barrel of condensate, barrel of oil a day.
20 Very low.

21 The next one is the GOR curve on the
22 Matthews No. 5 again.

23 The next one is the Graham State NCTF
24 No. 7, a Chevron Well, showing the low production on it
25 again.

1 And the GOR curve on the same well.

2 And the last well is the State F No. 5
3 operated by Amerada, Amerada Hess. This well has been re-
4 completed to the Grayburg-San Andres in December of '87.
5 It no longer is producing from the pool.

6 Q All right. Mr. Wehmeyer, I believe
7 testimony at the preceding hearing in this case established
8 that the drive mechanism for all these windows was gas cap
9 gas type drive mechanism, is that correct?

10 A That's correct.

11 Q Has the production information obtained
12 by Texaco over the last 12 months given you any indication
13 that that assessment should be changed at all?

14 A There's no new information to change
15 that opinion. I've checked with our geologists in Midland
16 prior -- about a month ago. They looked at the cross
17 sections and the wells again. They have no new information
18 to add, so we still believe it to be the same.

19 Q All right, let's look at Exhibit Two, if
20 you would, please. Would you identify that and explain
21 that to the examiner?

22 A Exhibit Two is a tabulation of four
23 Texaco operated wells in the Monument Abo Pool and what
24 they are is well tests. What we did recently was to go in
25 and test all the wells at their potential. As you can see

1 by the first well, the Skelly B State No. 4, it produced
2 18-1/2 oil, 25.6 water, 580 MCF a day, and what we tried to
3 do was we curtailed the (unclear) choked the wells back to
4 get to a psuedo-allowable of 374 which would be a 2000-to-1
5 GOR limitation.

6 Upon choking the wells back the wells
7 immediately dropped nearly all the oil and water out but it
8 cut about 250-300 MCF a day off the gas and we lost all the
9 oil and water.

10 Of course the Phillips No. 5, it's not
11 making any oil at this time, nor water. It was not making
12 the top allowable in the gas anyway.

13 The No. 6 Phillips, it's probably the
14 biggest gas producer out in the pool right now. It tested
15 5 oil, 932 gas. Upon choking the well back to 573 and 364
16 it dropped all the oil and water out again.

17 And the last well, the New Mexico E
18 State NCT 1 No. 5, same thing there. It made 17 oil, 1.9
19 water, 428 gas. Started choking the well back, we lost all
20 the oil. We picked up the water but we lost all the oil
21 when we started it back, too.

22 Q All right. Is it your opinion that
23 maintaining the 10,000-to-1 GOR limit will result in a
24 greater ultimate recovery of hydrocarbons?

25 A Yes, it will. As shown by the test, we

1 are losing all the oil production which we feel is -- the
2 gas is lifting the oil out plus it is being produced with
3 some solution gas also. As shown by the tests, we -- we're
4 losing all the oil. The only other alternative way to
5 recover it would be to put it on artificial lift, which in
6 turn will raise our economic limit by having to do that.

7 Q All right. Have you done any calculations
8 to determine preliminarily how much oil might go unrecovered
9 if the GOR limit of 2000-to-1 is reinstated?

10 A Well, by going off the current declines
11 in these well tests that we just ran, of the three wells
12 making oil here, reserves are in excess of 60,000, about
13 61,000 barrels of reserves left. Granted you would not
14 lose all of those, you could put it on artificial lift, but
15 conservatively, about 10 to 20 percent of your reserves
16 could be lost by not being able to open the wells up to
17 produce that, produce the oil with the gas, and consequently,
18 you would lose it.

19 Q All right. And who is the gas purchaser
20 for these wells?

21 A Warren Petroleum is.

22 Q Are you aware whether Warren has expressed
23 any sort of opposition to maintaining the 10,000-
24 to-1 GOR?

25 A No, they have not.

1 Q In your opinion, Mr. Wehmeyer, will
2 maintaining the 10,000-to-1 GOR limitation be in the best
3 interest of conservation, the prevention of waste, and
4 protection of correlative rights?

5 A Yes.

6 Q And were Exhibits One and Two prepared
7 by you or at your direction?

8 A Yes, they were.

9 MR. HALL: We move the admis-
10 sion of Exhibits One and Two and that concludes our direct.

11 MR. CATANACH: Exhibits One an
12 and Two will be admitted as evidence.

13 I have no questions of this
14 witness and he may be excused.

15 Anything further in this case?

16

17 If not, Case 9311 will be
18 taken under advisement.

19

20 (Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C. S. R. DO HEREBY
CERTIFY that the foregoing Transcript of Hearing before the
Oil Conservation Division (Commission) was reported by me;
that the said transcript is a full, true and correct record
of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 9311,
heard by me on April 26 1987.

David R. Catanach, Examiner
Oil Conservation Division