

1 NEW MEXICO OIL CONSERVATION DIVISION

2 STATE LAND OFFICE BUILDING

3 STATE OF NEW MEXICO

4 CASE NO. 10444

5
6 IN THE MATTER OF:

7
8 The Application of Amerada Hess
9 Corporation for Pool Contraction,
10 Pool Creation, and Promulgation
11 of Special Pool Rules, Lea County,
12 New Mexico

13 BEFORE:

14 MICHAEL E. STOGNER

15 Hearing Examiner

16 State Land Office Building

17 February 20, 1992

18
19
20
21 REPORTED BY:

22 CARLA DIANE RODRIGUEZ
23 Certified Shorthand Reporter
24 for the State of New Mexico
25

ORIGINAL

A P P E A R A N C E S

FOR THE NEW MEXICO OIL CONSERVATION DIVISION:

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BY: WILLIAM F. CARR, ESQ.

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1 EXAMINER STOGNER: Hearing will come to
2 order. Call next case, No. 10444.

3 MR. STOVALL: Application of Amerada
4 Hess Corporation for pool contraction, pool
5 creation and promulgation of special pool rules,
6 Lea County, New Mexico.

7 EXAMINER STOGNER: Call for
8 appearances.

9 MR. CARR: May it please the Examiner,
10 my name is William F. Carr with the law firm
11 Campbell, Carr, Berge & Sheridan of Santa Fe. I
12 represent Amerada Hess Corporation in this case,
13 and I have one witness.

14 EXAMINER STOGNER: Are there any other
15 appearances?

16 Will the witness please stand to be
17 sworn.

18 JOAN DENISE WARD-WANN

19 Having been first duly sworn upon his oath, was
20 examined and testified as follows:

21 EXAMINATION

22 BY MR. CARR:

23 Q. Would you state your full name for the
24 record, please.

25 A. Joan Denise Ward-Wann.

1 Q. Ms. Wann, where do you reside?

2 A. In Hobbs, New Mexico.

3 Q. By whom are you employed?

4 A. Amerada Hess Corporation.

5 Q. In what capacity?

6 A. Senior petroleum engineer.

7 Q. Have you previously testified before
8 the Oil Conservation Division?

9 A. No, sir.

10 Q. Could you briefly summarize your
11 educational background and then review your work
12 experience for Mr. Stogner?

13 A. Okay. I have a B.S. from Oklahoma
14 State in petroleum engineering. I graduated in
15 May of 1981.

16 Q. Since that time, for whom have you
17 worked?

18 A. Amerada Hess.

19 Q. At all times?

20 A. Yes, sir.

21 Q. Where have you been located?

22 A. There in Monument, New Mexico.

23 Q. The entire time of your employment with
24 Amerada?

25 A. Yes, sir.

1 Q. Are you familiar with the geographic
2 area which is involved in this application?

3 A. Yes, sir.

4 Q. Are you familiar with the application?

5 A. Yes, sir.

6 Q. Are you also familiar with Amerada
7 Hess's wells in this general area?

8 A. Yes, sir.

9 Q. Have you made a study of a portion of
10 the Blinebry formation which is involved in this
11 case?

12 A. Yes, sir.

13 MR. CARR: We would tender Ms. Wann as
14 an expert witness in petroleum engineering.

15 EXAMINER STOGNER: Ms. Wann is so
16 qualified.

17 Q. Would you briefly state what Amerada
18 Hess seeks with this application?

19 A. Contraction of the vertical limits of
20 the Hobbs-Blinebry Pool, designation of a new
21 pool for the Lower Blinebry formation, and
22 adoption of special pool rules, which would
23 include a GOR of 10,000 to 1 and an 80-acre
24 spacing proration unit.

25 Q. Could you briefly state why Amerada

1 Hess is bringing this application to the
2 Division?

3 A. Currently the pool rules for the
4 Hobbs-Blinebry are 2,000 to 1 GOR, and that
5 results in an allowable of 107 barrels of oil per
6 day and 214 Mcf per day. This allowable prevents
7 Amerada Hess from producing the State "A" #5 and
8 discourages further development of a portion of
9 the Blinebry formation. We're inhibited from
10 producing the 30 days per month due to the GOR
11 limit.

12 Q. The pool is currently developed on
13 40-acre oil well spacing?

14 A. Yes, sir.

15 Q. Could you identify and review for Mr.
16 Stogner what has been marked as Amerada Hess
17 Corporation Exhibit No. 1?

18 A. Yes, sir. The current Hobbs-Blinebry
19 pool is outlined in red, and then the Amerada
20 acreage is shaded with either the partial
21 interest or full interest. And then we have
22 highlighted in yellow the wells that have tested
23 the Lower Blinebry formation.

24 Currently the State "A" #5, the Amerada
25 Hess well, is the only well that is producing

1 from the Lower Blinebry interval.

2 Q. You have the test data on each of the
3 wells which has actually tested the interval?

4 A. Yes, sir.

5 Q. The only well producing from the
6 interval is the Amerada Hess #5 "A" well?

7 A. Yes, sir.

8 Q. Now, there are other well spots on this
9 exhibit. Are those wells that have penetrated
10 the zone?

11 A. Yes, sir.

12 Q. All leasehold ownership within a mile
13 of the pool and also in the pool is indicated on
14 this exhibit?

15 A. Yes, sir.

16 Q. What are the current vertical limits of
17 the Hobbs-Blinebry pool?

18 A. Currently it includes the entire
19 Blinebry formation.

20 Q. Let's go to what has been marked as
21 Exhibit No. 2.

22 A. Okay.

23 Q. Could you identify that and review it
24 for the Examiner?

25 A. Fine. Exhibit 2 is a type log of the

1 Amerada Hess State "A" #5, which is located in
2 Section 32, Township 18 South, Range 38 East.
3 I've highlighted the top of the Blinebry, the top
4 of the proposed Lower Blinebry interval, and the
5 top of the Tubb.

6 The way we've identified the top of the
7 Lower Blinebry is from a gamma ray marker which
8 is directly overlying the porosity stringer,
9 which we've perforated.

10 Q. That's been shown on this exhibit?

11 A. Yes, sir.

12 Q. Perforations are identified on this
13 exhibit, is that correct?

14 A. Yes, sir.

15 Q. What is the current status of this
16 well?

17 A. The test as of February 12, 1992 was 13
18 barrels of oil per day, two barrels of water, and
19 780 Mcf per day flowing.

20 Q. Ms. Wann, this was originally drilled
21 to what formation?

22 A. Originally it was completed in the
23 Drinkard.

24 Q. This was then recompleted back into the
25 Blinebry?

1 A. Right. Well, It was a dual well with
2 perforations in both the Drinkard and the top of
3 the Blinebry.

4 Q. Let's move on to what has been marked
5 as Amerada Hess Exhibit No. 3. Could you
6 identify that?

7 A. Yes, sir. Exhibit 3 is a structure map
8 of the Lower Blinebry formation across the
9 Hobbs-Blinebry pool. From this map you can
10 locate the highs which have a potential for
11 greatest development in the Lower Blinebry pool.

12 Q. Your #5 well is virtually as high,
13 structurally, as any well in the pool, is that
14 correct?

15 A. Yes, sir.

16 Q. Let's go back at this time to Exhibit
17 No. 1. If you could just review for Mr. Stogner
18 generally the test information on the wells that
19 have been drilled into and tested this particular
20 zone?

21 A. Okay. In Section 19, the Shell
22 McKinley "A" #11. It was perforated from 6375 to
23 6377 in April of 1970. After a small acid job,
24 it was swab-tested at 15 barrels of water per
25 hour, and then shortly thereafter it was

1 squeezed.

2 The Shell State "A" #7, which is
3 located in Section 32 south of Amerada's acreage,
4 it was DST'd from 6185 to 6226 in June of 1969.
5 The results of that test indicated an oil and gas
6 show.

7 The State "A" #5, directly north of the
8 Shell location, was perforated and tested in
9 February of 1985 from 6204 to 6275. The initial
10 test was 35 barrels of oil per day, zero barrels
11 of water, and 1125 Mcf per day.

12 The well to the north in Section 28 is
13 the Shell Grimes #10, and it was tested in
14 October of 1969 from 6284 to 6324. After an acid
15 job, it flowed 12 barrels of oil and 87 barrels
16 of water in nine hours.

17 Q. Has it been possible, with the
18 information you have available to you on this
19 zone, to pick an oil/water contact in this Lower
20 Blinebry zone?

21 A. We haven't directly indicated any
22 oil/water contact, but we feel it would be
23 between what is found in the Shell Grimes #10
24 which was a significant amount of water, and then
25 from the State "A" #5, which structurally tested

1 no water.

2 Q. On Exhibit No. 1 you have traces for
3 two cross-sections. Could you identify them and
4 just very generally review those for the
5 Examiner?

6 A. Yes, I can. The first one is A to A'.
7 We've located the top of the Blinebry, the top of
8 the Lower Blinebry, using the gamma ray marker
9 and the top of the Tubb. You can see that the
10 Amerada Hess well is the structurally highest
11 well. There have been some tests.

12 I've indicated the wells that are
13 perforated in the top of the Blinebry here,
14 here. This well has no Blinebry perforation.

15 EXAMINER STOGNER: And you're referring
16 to the Exxon Bowers "A" #38?

17 THE WITNESS: Yes, sir, it has no
18 Blinebry perforations in it. The Chevron "I" #5
19 has perforations in the upper. We had
20 perforations here that were squeezed currently in
21 this Lower Blinebry interval.

22 EXAMINER STOGNER: And you're referring
23 to the State "A" #5?

24 THE WITNESS: Yes, sir. This one is
25 also in the Upper Blinebry.

1 EXAMINER CATANACH: That's State "B"
2 #5?

3 THE WITNESS: Yes. Amoco State "G" #6,
4 Upper Blinebry, and the Pinrock Conoco State #2,
5 Upper Blinebry, and the Pinrock Conoco State
6 "A-1" #A is also in the Upper Blinebry. This
7 one has no Blinebry perfs.

8 EXAMINER STOGNER: And that's the last
9 one?

10 THE WITNESS: Yes, sir.

11 Q. (BY MR. CARR) If you go to the B-B',
12 basically your north/south cross-section, again
13 would you just show the perforated intervals and
14 identify the wells as depicted on this
15 cross-section?

16 A. Yes, sir. The Shell Grimes #10, which
17 is the well we've indicated that's been tested in
18 the Lower Blinebry, and the squeeze after the
19 test indicated all water.

20 The Shell Grimes #9 is Upper Blinebry,
21 the Chevron "I" #6 Upper Blinebry. The Amerada
22 State "A" #5 was in the Lower Blinebry. The
23 Shell State "A" #7, Upper Blinebry. Marathon
24 State "A" #32 in the Upper Blinebry.

25 Q. All of these show that the only well

1 currently perforated in the Lower Blinebry zone,
2 which is the subject of today's hearing, is the
3 Amerada Hess "A" #5 well?

4 A. Yes, sir.

5 Q. Let's go to what has been marked as
6 Amerada Hess Exhibit No. 6, your isopach map.
7 Generally, could you review that for Mr. Stogner?

8 A. Yes, sir. This map was constructed
9 using a porosity cutoff of six percent and a
10 clean gamma ray. From this you can see that the
11 Amerada State "A" #5 virtually has the greatest
12 net pay.

13 Q. This just shows generally, the highest
14 structural position corresponds with where you
15 find the thickest pay in this reservoir?

16 A. Yes, sir.

17 Q. Based on this isopach and the data you
18 have available to you on the reservoir, have you
19 been able to make any reserve estimates for the
20 Lower Blinebry?

21 A. Yes, sir, we've made some reserve
22 estimates using using volumetric analysis from
23 the isopach for the Hobbs-Blinebry field. From
24 those calculations, we estimate that there's
25 142,200 barrels of oil in place.

1 Q. I'm sorry. What was that again?

2 A. 142,200 barrels of oil in place, and
3 4.55 Bcf gas in place.

4 Q. Are these calculations set forth on
5 what has been marked as Amerada Hess Exhibit No.
6 7?

7 A. Yes, sir.

8 Q. Is there anything further you want to
9 say in regard to Exhibit No. 7?

10 A. No, sir.

11 Q. Exhibit No. 7 has your volumetric
12 figures for the pool as a whole, correct?

13 A. Yes.

14 Q. Let's go to Exhibit No. 8, and these
15 are your calculations for the reserves for the
16 "A" #5 well, is that right?

17 A. Yes, sir.

18 Q. What does this calculation show?

19 A. This is a volumetric calculation for
20 the State "A" #5. The data at the first is data
21 that we were able to arrive at from initial
22 testing and from the logs on porosity.

23 From this, we anticipate that the
24 initial oil in place is 37,200 barrels, and the
25 initial gas in place is 1.21 Bcf. And based on

1 an 85-percent recovery rate, we estimate that
2 recoverable oil is 32,200 barrels and 1.03 Bcf.

3 Q. Now, in making this analysis, you were
4 using 80-acre spacing, is that right?

5 A. Yes, sir.

6 Q. Let's move to Exhibit No. 9. Would you
7 identify and review that for Mr. Stogner?

8 A. Yes. Exhibit 9 is a plot of bottomhole
9 pressure versus cumulative production for the
10 State "A" #5. From this we had two points. We
11 had initial bottomhole pressure in February of
12 1985 and then a bottomhole pressure in March of
13 1991.

14 Based on this plot to abandonment
15 pressure of 500 pounds, we show 1.05 Bcf gas and
16 41,000 barrels of oil.

17 Q. Now, when you compare this figure, the
18 41,000 barrels, with the recoverable oil that you
19 got during your volumetric analysis in Exhibit
20 No. 8, of 32,200 barrels, what does this tell you
21 about 80-acre spacing?

22 A. It tells us that we should be able to
23 effectively drain 80 acres based on the
24 production--the cumulative production versus
25 bottomhole pressure.

1 Q. These are close enough so that you feel
2 comfortable with an 80-acre spacing pattern?

3 A. Yes, sir.

4 Q. Let's go now to what has been marked as
5 Amerada Hess Exhibit No. 10. Is this a copy of
6 an affidavit confirming that notice of this
7 application has been given as required by the
8 rules of the Oil Conservation Division?

9 A. Yes, sir.

10 Q. Attached to this affidavit is there a
11 copy of the letter that was provided to the
12 interest owners in this area and also a list
13 identifying the parties to whom notice was
14 actually given?

15 A. Yes, sir.

16 Q. And notice was given to all operators
17 in the pool and within a mile of the pool?

18 A. Yes, sir.

19 Q. Were there any working interest owners
20 in the pool that were not leased out or any
21 tracts that were not leased within that area?

22 A. No, sir.

23 Q. Could you identify what has been marked
24 as Amerada Hess Exhibit No. 11?

25 A. It is a letter from Paul Kautz in the

1 Hobbs District Office in support of the proposed
2 pool changes and pool rules.

3 Q. Have you reviewed the entire
4 presentation with the representative of the OCD
5 in Hobbs?

6 A. Yes, sir.

7 Q. In your opinion, will approval of this
8 application result in the recovery of
9 hydrocarbons from this Blinbry formation that
10 otherwise would not be recovered?

11 A. Yes, sir.

12 Q. Will, in fact, this result in more
13 efficient production practices for the Amerada
14 Hess "A" #5 well?

15 A. Yes, sir.

16 Q. If this application is granted, will it
17 provide incentive to other operators who are also
18 located structurally high in this lower zone to
19 develop this zone?

20 A. Yes, sir.

21 Q. In your opinion, will approval of the
22 application otherwise be in the best interest of
23 conservation, the prevention of waste and the
24 protection of correlative rights?

25 A. Yes, sir.

1 Q. Is Exhibit No. 12 a written summary of
2 your presentation here today in this case?

3 A. Yes, sir.

4 Q. Were Exhibit 1 through 12 either
5 prepared by you or compiled under your direction
6 and supervision?

7 A. Yes, sir.

8 MR. CARR: At this time, Mr. Stogner,
9 we would move the admission of Amerada Hess
10 Exhibits 1 through 12.

11 MR. STOVALL: Before we do that, I just
12 need to clarify something for the record. There
13 was submitted with your exhibit packet an Exhibit
14 10, which appears to be the same letter as is
15 attached to your affidavit. The record has the
16 potential of being confusing.

17 EXAMINER STOGNER: Let's mark one 10(a)
18 and 10(b).

19 MR. CARR: All right. Basically what
20 you have is, 10 is the letter. Let's mark the
21 affidavit 10(a). Also, in that exhibit packet,
22 it contains the same letter. The text is the
23 same. All right?

24 MR. STOVALL: Okay. Just didn't want
25 to get confused between the Exhibit 10s.

1 EXAMINER STOGNER: We can deal with
2 that.

3 MR. CARR: And, Mr. Stogner, we'll move
4 the admission of Exhibits 1 through 12, if I
5 didn't do that.

6 EXAMINER STOGNER: Exhibits 1 through
7 12 will be admitted into evidence, along with
8 10(a).

9 MR. CARR: Thank you, along with 10(a).
10 And at this time I would pass the witness for
11 cross-examination.

12 MR. STOVALL: Let me take care of a
13 notice issue, to make sure we're okay.

14 EXAMINER STOGNER: Go ahead, Mr.
15 Stovall.

16 EXAMINATION

17 BY MR. STOVALL:

18 Q. What is the current spacing in the
19 existing pool, the Hobbs-Blinebry pool?

20 A. 40-acre spacing.

21 Q. So this is an increase in spacing?

22 A. Yes, sir.

23 Q. Now, notice was given only to working
24 interest owners, is that correct?

25 A. Yes, sir.

1 MR. STOVALL: Mr. Carr, any concerns?

2 MR. CARR: Mr. Stogner, Mr. Stovall,
3 there is only the one well at this time completed
4 in the Lower zone, the Amerada Hess No. 5A. The
5 interest owners in that well are the only owners
6 who, at this time, could be affected by
7 increasing the spacing. It, in fact, is
8 100-percent owned by Amerada Hess.

9 We see no risk or exposure in going
10 forward with the change in spacing at this time
11 in the lower zone, because one, as to existing
12 production, there is no interest owner who will
13 be affected and furthermore, if there is
14 additional development in the pool, at the time
15 those wells are drilled, the spacing would be, if
16 this application is granted, 80-acre spacing,
17 Division orders would be executed based on
18 80-acre spacing, and we see, in that
19 circumstance, no problem similar to that which
20 was encountered in the Yuton (phonetic)
21 decision.

22 MR. STOVALL: That is also consistent
23 with my thinking on that. It's the conservative
24 approach, conservative from the standpoint of
25 having to give notice, but I think it's

1 realistic.

2 MR. CARR: The alternative would be
3 giving notice to numerous people in town lots,
4 basically, in and about the City of Hobbs. It
5 would, in our judgment, create confusion which
6 really would be unnecessary in this circumstance
7 where there is no production from the zone other
8 than this well, and the ownership in the well is
9 100 percent Amerada Hess.

10 MR. STOVALL: I concur, Mr. Carr,
11 because I believe that the only interest that is,
12 as you state, being changed, is the interest in
13 the existing well that is within the pool.

14 MR. CARR: That's correct.

15 MR. STOVALL: I'm comfortable with his
16 rationale satisfying the notice requirement.

17 EXAMINER STOGNER: Thank you, Mr.
18 Stovall.

19 EXAMINATION

20 BY EXAMINER STOGNER:

21 Q. Ms. Wann, referring to Exhibit No. 2,
22 your type log--

23 A. Yes, sir.

24 Q. --you talk about the marker lying
25 directly over the porosity interval. Can that be

1 described a little bit more? Is it a shale
2 marker?

3 A. Yes, sir, it's a shale bed, a small
4 shale bed that we found on both cross-sections,
5 from A-A' and B-B'. It's easily identified
6 across the pool.

7 Q. There appears to be some other
8 innerbedded shale zones, in looking at your
9 cross-section, between this marker and the
10 lowermost current perforations throughout the
11 Blinebry. Do you concur with that?

12 A. Yes, sir.

13 Q. Would that make that impermeable
14 naturally, and separation of any Blinebry
15 production from this upper producing area in the
16 Blinebry, as opposed to the Lower Blinebry, your
17 proposed new pool?

18 A. Yes, sir. In our State "A" #5, we had
19 the Upper Blinebry perforated at the time we
20 perforated the Lower Blinebry, and the difference
21 in pressure and production, we felt like we
22 needed to squeeze the Upper Blinebry perms so
23 that we would not have cross-flowing because of
24 the difference in pressure.

25 Q. Does your exhibit show those upper

1 perforations in that State "A" #5?

2 A. On this particular log.

3 Q. And that's Exhibit No.--

4 A. 5.

5 Q. What were the pressure differences?

6 A. Well, the upper zone, when it was
7 originally perforated, it had to be put on pump,
8 essentially, right after it was tested, which
9 indicates essentially no pressure to bring the
10 production to the surface; which was very unlike
11 what we found in the Lower Blinebry, which flowed
12 and is still flowing after seven years.

13 Q. That tends to suggest there's no
14 communication.

15 A. Yes, sir.

16 Q. Did you have an opportunity--I'm now
17 referring to Exhibit No. 1, that's the base
18 map--did you have an opportunity to look at the
19 completions in all the other wells that are not
20 on your cross-sections that's completed in the
21 Blinebry?

22 A. Yes, sir. The ones that are indicated
23 here have all been reviewed.

24 Q. What did you find on those?

25 A. We were able to identify the gamma ray

1 shale bed in, essentially, all of the wells.
2 That's why we feel so comfortable in being able
3 to locate the top of the Lower Blinebry.

4 Q. How about the perforations? Were they
5 similar to these up here on the wall, in Exhibits
6 4 and 5? Exhibit 4 being the A-A' cross-section
7 and 5 being the B-B' cross-section.

8 A. Yes. Essentially everyone has
9 perforated in the top part of the Blinebry. It's
10 approximately the same subsea depth. All of the
11 wells were reviewed for the isopach map to come
12 up with a net pay.

13 Q. The completion technique or the
14 completion mechanism, is cement required to be
15 brought back behind the casing through the whole
16 Blinebry interval?

17 A. I'm not sure on that. I would assume
18 that it would be because the San Andres zone is
19 being flooded in the Hobbs area, and I'm sure
20 that it's a requirement to have cement brought
21 up, at least across the San Andres.

22 Q. So you're not aware of any, say,
23 artificial cross-flow that might occur?

24 A. No, sir.

25 Q. What is the production casing size in

1 most of these wells in the Blinebry?

2 A. Either 5-1/2 or 6-5/8.

3 Q. I see the potential of a lot of,
4 perhaps, downhole commingling applications, and
5 like you said already, there's quite a
6 substantial difference. One is pumping and the
7 other is flowing quite a bit. I'm concerned
8 about possible completion techniques such as
9 that.

10 Do you see a problem, or how would you
11 propose these wells be completed in both zones
12 simultaneously?

13 A. Well, I think it would be a good idea
14 to have cement across the interval, from the
15 Lower Blinebry to the Upper Blinebry, to prevent
16 any type of cross-flow in between the zones.

17 I have an idea that most of the wells
18 that are completed in the top of the Blinebry
19 would be squeezed because of the low production.
20 Our well was making about five barrels of oil per
21 day at the time we squeezed it, and we,
22 essentially, thought that would be in the best
23 interest, since the well was already a dual with
24 the Drinkard zone, to squeeze the top of the
25 Blinebry and essentially just produce the Lower

1 Blinebry.

2 Q. Did you squeeze those top perforations
3 because Amerada Hess felt like the upper zone was
4 a thief zone?

5 A. Yes, sir, it could have been. It's my
6 opinion that you cannot produce the top of the
7 Blinebry and the Lower Blinebry up the same
8 string of tubing. You would have cross-flowing
9 if you had both zones open at this same time,
10 without a production packer separating them.

11 Q. Do you, perhaps, have a geological
12 description of that Lower Blinebry? In an order
13 such as this, I think it's always nice to have at
14 least a paragraph describing the geology and the
15 reservoir mechanics.

16 A. I don't have that with me, but I can
17 provide it at a later date.

18 EXAMINER STOGNER: If you would, I
19 would appreciate it.

20 Mr. Carr, if you would submit that
21 subsequent to today's hearing?

22 MR. CARR: Yes, sir.

23 EXAMINER STOGNER: Are there any other
24 questions of this witness?

25 MR. STOVALL: I have none.

1 EXAMINER STOGNER: Does anybody else
2 have any questions of Ms. Wann at this time?

3 If not, she may be excused.

4 Anything further, Mr. Carr?

5 MR. CARR: We have nothing further in
6 this case, Mr. Stogner, and we would be happy to
7 provide a geologic description of the Lower
8 Blinbry.

9 EXAMINER STOGNER: Does anybody else
10 have anything further in Case 10444? If not,
11 this case will be taken under advisement.

12 With that, hearing adjourned.

13 (And the proceedings concluded.)
14
15
16
17

18 I do hereby certify that the foregoing is
19 a complete record of the proceedings in
the Examiner hearing of Case No. 10444
20 heard by me on 2/20 1992.

21 Michael E. Stogner, Examiner
22 Oil Conservation Division
23
24
25

CERTIFICATE OF REPORTER

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

I, Carla Diane Rodriguez, Certified
Shorthand Reporter and Notary Public, HEREBY
CERTIFY that the foregoing transcript of
proceedings before the Oil Conservation Division
was reported by me; that I caused my notes to be
transcribed under my personal supervision; 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 February 26,
1992.


CARLA DIANE RODRIGUEZ, RPR
CSR No. 4