

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. 12,454

APPLICATION OF EOG RESOURCES, INC., FOR)
 COMPULSORY POOLING AND A NONSTANDARD)
 SPACING AND PRORATION UNIT, EDDY COUNTY,)
 NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

July 13th, 2000

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner on Thursday, July 13th, 2000, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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OIL CONSERVATION DIV.
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I N D E X

July 13th, 2000
 Examiner Hearing
 CASE NO. 12,454

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APPLICANT'S WITNESSES:	
<u>PATRICK J. TOWER</u> (Landman)	
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* * *

A P P E A R A N C E S

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* * *

1 WHEREUPON, the following proceedings were had at
2 1:48 p.m.:

3 EXAMINER ASHLEY: At this time the Division calls
4 Case 12,454, Application of EOG Resources, Inc., for
5 compulsory pooling and a nonstandard spacing and proration
6 unit, Eddy County, New Mexico. Call for appearances.

7 MR. CARR: May it please the Examiner, my name is
8 William F. Carr with the Santa Fe law firm Campbell, Carr,
9 Berge and Sheridan. We represent EOG Resources, Inc., in
10 this matter, and I have two witnesses.

11 EXAMINER ASHLEY: Additional appearances?

12 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
13 in association with Tom Kellahin of Kellahin and Kellahin
14 of Santa Fe, representing -- entering an appearance on
15 behalf of Phillips Petroleum Company. I have no witnesses.

16 EXAMINER ASHLEY: Additional appearances?

17 Will the witnesses please rise to be sworn in?

18 (Thereupon, the witnesses were sworn.)

19 EXAMINER ASHLEY: Mr. Carr?

20 PATRICK J. TOWER,

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

23 DIRECT EXAMINATION

24 BY MR. CARR:

25 Q. Would you state your name for the record, please?

1 A. Patrick J. Tower.

2 Q. Where do you reside?

3 A. Midland, Texas.

4 Q. By whom are you employed?

5 A. EOG Resources, Inc.

6 Q. Mr. Tower, what is your position with EOG
7 Resources, Inc.?

8 A. Project landman.

9 Q. Have you previously testified before this
10 Division?

11 A. Yes, I have.

12 Q. At the time of that testimony, were your
13 credentials as an expert in petroleum land matters accepted
14 and made a matter of record?

15 A. Yes.

16 Q. Are you familiar with the Application filed in
17 this case?

18 A. Yes.

19 Q. Are you familiar with the status of the lands in
20 the subject area?

21 A. Yes, I am.

22 MR. CARR: Are the witness's qualifications
23 acceptable?

24 EXAMINER ASHLEY: They are.

25 Q. (By Mr. Carr) Mr. Tower, would you briefly

1 summarize for the Examiner what it is that EOG Resources,
2 Inc., seeks with this Application?

3 A. Yes, EOG seeks an order pooling all minerals from
4 a depth of 3100 feet subsurface to the top hundred feet of
5 the Mississippian Chester formation under the north-half
6 equivalent of Section 7, Township 17 South, Range 29 East
7 in Eddy County, north half to form a 292.32-acre
8 nonstandard unit for all pools and formations developed on
9 320-acre spacing, which includes the Undesignated South
10 Empire-Morrow Gas Pool and the Undesignated North Empire
11 Atoka Gas Pool, and the northwest quarter for all pools and
12 formations developed 160-acre spacing, which would include
13 the Vandegriff Keyes-Queen Gas Pool.

14 MR. CARR: May it please the Examiner, both of
15 these are nonstandard units. Both of them are within the
16 tolerance provided for in Rule 104.D.(2)(a), and they are
17 the result of a variation in the US Public Land Survey.

18 Q. (By Mr. Carr) Mr. Tower, to what well do you
19 propose to dedicate these proposed spacing and proration
20 units?

21 A. To EOG's Warp Speed 7 Federal Com Number 1 well.

22 Q. And where will that well be drilled?

23 A. At a standard location, 1980 feet from the north
24 line and 800 feet from the west line in the southwest
25 quarter of the northwest quarter of Unit E of Section 7.

1 Q. Mr. Tower, let's go to what has been marked for
2 identification as EOG Exhibit Number 1. Would you identify
3 that and review the information thereon?

4 A. Exhibit Number 1 is a land plat depicting the
5 area for the Warp Speed. The red outline shows the spacing
6 unit, 320-acre spacing -- or 300 -- excuse me, 292.32-acre
7 spacing unit, to be dedicated to this well. And the red
8 dot shows the proposed location with the additional land
9 data behind it, showing the ownership in the area.

10 Q. And what is the primary objective in this well?

11 A. The primary objective is the Morrow formation.

12 Q. Let's go to Exhibit Number 2. Would you explain
13 what this is, please?

14 A. Exhibit Number 2 is depicts the interests that
15 are not voluntarily committed to this spacing unit at this
16 time, which as you will see is one party, being Phillips
17 Petroleum Company. And their working interest percentage
18 in this 320-acre spacing unit -- or, excuse me, the spacing
19 unit -- is roughly 58, 59 percent, with the decimal shown
20 there on the exhibit.

21 Q. And EOG owns the other 41, approximately?

22 A. EOG owns the remaining interest, yes.

23 Q. What is your understanding of the status of the
24 Phillips interest in this acreage?

25 A. Phillips' interest at this point, they are in the

1 process of trying to sell this interest to third parties.
2 They have no trades at hand, indicating they did not -- are
3 not ready to do anything -- or -- but they are in the
4 process of trying to trade this acreage.

5 Q. Has EOG Resources drilled other Morrow wells in
6 this area?

7 A. Yes, we have.

8 Q. Let's go to Exhibit Number 3. Would you identify
9 that and review the information on the exhibit?

10 A. Exhibit Number 3 is the well cost estimate or the
11 AFE for this Warp Speed well, showing it's to be drilled as
12 a 10,800-foot Morrow gas well, with the estimated dryhole
13 cost at \$454,100 and the completed well cost estimated to
14 be \$842,700.

15 Q. Are these costs in line with the costs actually
16 incurred by EOG in drilling similar wells in the area?

17 A. Yes, they are.

18 Q. In your opinion, have you made a good faith
19 effort to obtain the voluntary participation of Phillips in
20 this well?

21 A. Yes, we have.

22 Q. Would you summarize your efforts?

23 A. Yes. If we could go to Exhibit Number 4, it is a
24 grouping of the correspondence in dealing with Phillips.
25 The date of first contact, you'll notice, is on January

1 21st of the year 2000. And it's actually done through an
2 independent landman, Frank Nix, and at later dates EOG
3 stepped into his position.

4 And you will note subsequent to this the well
5 proposal in May 23rd, and in a subsequent correspondence,
6 July 6th, and there have been approximately -- oh, I would
7 say ten different conversations with Phillips, and actually
8 some meetings involving EOG personnel and Phillips
9 regarding not necessarily just this general well, but the
10 general area.

11 So there have been a substantial amount of
12 conversations concerning this.

13 Q. At this time in your opinion, is there any
14 possibility that Phillips will voluntarily participate in
15 this well?

16 A. They have advised us that's not likely to be the
17 case on Phillips' part.

18 Q. Is Exhibit Number 5 a copy of an affidavit with
19 attached letters confirming that notice of this Application
20 and hearing have been provided to Phillips in accordance
21 with the rules and regulations of the Oil Conservation
22 Division?

23 A. Yes, it is.

24 Q. Have you made an estimate of the overhead and
25 administrative costs to be incurred while drilling the well

1 and also while producing it, if it is successful?

2 A. Yes, we have.

3 Q. And what are those figures?

4 A. We're recommending, pursuant to the 2000 Ernst
5 and Young survey, to use a drilling well rate of \$5938 and
6 a producing well rate of \$650, and this is arrived at from
7 the third quartile of that survey.

8 Q. So you're looking at the new 2000 survey, Ernst
9 and Young 2000 survey?

10 A. Yes.

11 Q. And you're recommending the use of the third
12 quartile?

13 A. That is correct.

14 Q. Why are you recommending the use of the third
15 quartile?

16 A. This survey differing from past Ernst and Young
17 where they grouped it by well classification and by, I
18 believe, depth. This one is a culmination of all wells.
19 And if you'll -- For New Mexico it refers to all counties,
20 3140 wells.

21 And if you'll note, even if you go back to
22 Exhibit 1, this is an ideal case in point. The majority of
23 wells in the survey are going to be shallow. They don't
24 differentiate, even throwing injection wells into this
25 survey.

1 Therefore, if you notice even on our plat, most
2 of the wells depicted are shallow, Grayburg, Yates, San
3 Andres. There's not that many deep wells, which is
4 somewhat representative of the survey, where the costs in
5 that third quartile would be more representative of a deep
6 Morrow gas well.

7 Q. Do you recommend that these figures be
8 incorporated into any order which results from today's
9 hearing?

10 A. Yes, I do.

11 Q. Were Exhibits 1 through 5 either prepared by you
12 or compiled under your direction and supervision?

13 A. Yes, they were.

14 Q. Will EOG also be calling a geological witness to
15 review the risk portions of this case?

16 A. Yes.

17 MR. CARR: At this time, Mr. Examiner, we would
18 move the admission into evidence of EOG Exhibits 1 through
19 5.

20 EXAMINER ASHLEY: Exhibits 1 through 5 will be
21 admitted as evidence.

22 MR. CARR: And that concludes my direct
23 examination of Mr. Tower.

24 EXAMINER ASHLEY: Mr. Bruce?

25 MR. BRUCE: No questions.

EXAMINATION

BY EXAMINER ASHLEY:

Q. Mr. Tower, do you have a secondary target?

A. I'll tell you what, if it's all right, I might defer and let the geologist get into that.

Q. That sounds fine.

Is this an infill well on this 320?

A. No, it isn't. This is the initial well.

EXAMINER ASHLEY: Thank you, I have nothing further.

MR. CARR: Mr. Examiner, at this time we call Barry Zinz.

BARRY L. ZINZ,

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

DIRECT EXAMINATION

BY MR. CARR:

Q. Would you state your name for the record, please?

A. Barry L. Zinz.

Q. Where do you reside?

A. Midland, Texas.

Q. By whom are you employed?

A. EOG Resources, Inc.

Q. What is your position with EOG Resources, Inc.?

A. Geologist.

1 Q. Mr. Zinz, have you previously testified before
2 this Division and had your credentials as an expert witness
3 in petroleum geology accepted and made a matter of record?

4 A. Yes, I have.

5 Q. Have you made a geological study of the area
6 which is the subject of this Application?

7 A. Yes, sir.

8 Q. Are you prepared to share the results of that
9 work with Mr. Ashley?

10 A. Yes, sir.

11 MR. CARR: Are the witness's qualifications
12 acceptable?

13 EXAMINER ASHLEY: They are.

14 Q. (By Mr. Carr) Mr. Zinz, what is the primary
15 objective in this well?

16 A. The Morrow sands.

17 Q. Are there secondary objectives?

18 A. Referring back to the question you asked Pat, the
19 last exhibit that I'll show will cover that. It will show
20 the producing reservoirs within the area. The Atoka could
21 possibly be an objective, as well as the Strawn.

22 Q. Let's go to what has been marked for
23 identification as EOG Exhibit Number 6. Would you first
24 just identify what this exhibit is?

25 A. Exhibit 6 is a structure map on the lower Morrow

1 marker as we see it. Also it shows the proration unit
2 outlined in red, shows the Warp Speed location.

3 Note, if you would, there's an error there that
4 will show up on all these maps. It says 10,300 underneath
5 the location, and the depth that we're drilling the well to
6 is 10,800.

7 Also shown on the map is a line of cross-section,
8 stratigraphic cross-section A-A'. Again, the structure map
9 depicts regional dip to the southeast with some occasional
10 structural nosing in the area.

11 Q. All right, let's go to the cross-section A-A'.
12 The trace is on the preceding exhibit, and I'd ask you to
13 review the information on this exhibit.

14 A. The four-well cross-section, what I would like to
15 demonstrate with the cross-section starts up to the
16 northwest and works its way down to the southeast.

17 The latest well drilled in the area, by Mewbourne
18 Oil and Gas, is the third well on the cross-section from
19 the left. It's the Empire 7 Fed Number 1. They offset the
20 General American Green "B" well. And on the information
21 that I have, I know they completed it as a gas well in the
22 Morrow, but I have no information, really, relating to what
23 intervals they perforated. But I do know that it is a gas
24 well. That's the latest well that's been drilled in the
25 area. And our proposed location will be northwest of that

1 newest well.

2 Also on the cross-section what I'd like to point
3 out is the fact that in the wells up to the north,
4 northwest, you have a thin Morrow interval. The Morrow
5 interval would be represented on the cross-section from
6 middle Morrow down to that wavy line there, Barnett, which
7 is the erosional unconformity that we pick in the area.

8 Also the datum that the cross-section is hung on
9 is the lower Morrow, which is Exhibit 6. That's what that
10 structure map is on. And notice that when you get down to
11 the southwest -- excuse me, the southeast, the last well on
12 the cross-section, the Morrow is considerably thicker, and
13 there's where you developed your sands that are producing.
14 And the targets that we're after will be the both middle
15 and lower Morrow intervals that show up on the cross-
16 section.

17 As far as a secondary interval, if you go back to
18 the cross-section -- and it's the first well on the cross-
19 section, on the far left -- you can see that well was
20 actually perforated in the Atoka. There's a sand there,
21 and they made a little bit of gas out of that. So
22 therefore we consider that sand also an objective.

23 Q. Let's go to the Morrow gross isopach, Exhibit
24 Number 8.

25 A. Exhibit 8 is a gross isopach of the Morrow

1 interval. Again, on the cross-section it goes from that
2 marker called the middle Morrow down to the Barnett, and
3 you can see that the wells up to the north are thin, the
4 wells down to the south are thick.

5 The Green "B" well, which is the best producer
6 that our location is closest to, is 228 feet thick, and
7 I've postulated running through there one of these
8 erosional valleys. That's what we look for, the erosion of
9 the Mississippian Barnett, subsequently filled in with
10 Morrow sediments, and hopefully they'll be gas-bearing sand
11 reservoirs.

12 Q. What is Exhibit 9?

13 A. Exhibit 9 is a net Morrow sand isopach which is
14 based on a gamma-ray cutoff. I've also used picking sands
15 on the logs where I've had neutron density, newer logs with
16 P curves, crossover effect on the neutron density to arrive
17 at these values for each well. And you can see that the
18 newest well that was drilled in the area, that Empire 7 Fed
19 by Mewbourne, had 13 feet of sand, as opposed to the better
20 well in there that had 44 feet of total sand.

21 And again, I've postulated that within the
22 erosional thick, the sands will get thicker at our proposed
23 location, and as a result we'll find either the same sands
24 or new sands within that cut.

25 Q. When you find the same sands, those sands may

1 have been drained by the offsetting development, correct?

2 A. There's a good chance that it will be pressure-
3 affected. Like I say, I do not know the results of the
4 Mewbourne well, but if you look on the cross-section, they
5 do have similar intervals. Yet the sand quality appears to
6 be much poorer, don't meet my cutoffs that I used to map
7 with. As a result, the sand differences you see on the map
8 there.

9 Q. And you're really hoping to encounter not only
10 the old sands, but intercept new, undrained portions of the
11 reservoir?

12 A. That would be the ideal situation, get in the
13 deeper part of the cut and encounter new sands.

14 Q. Let's go to your EUR map. Can you explain to the
15 Examiner the purpose of this exhibit?

16 A. Just to show the Morrow production and other
17 producing zones within the area. You can see that we are
18 stepping out, away from where the major producing wells
19 are. There's not very much well control back up to the
20 north northwest at all, so the lack of well control there
21 and production adds to the risk of this location.

22 Q. And what do you estimate the risk to be? What
23 risk penalty do you recommend?

24 A. The 200 percent.

25 Q. In your opinion, could you drill a well at this

1 location that would not be an economic success?

2 A. Definitely.

3 Q. Does EOG Resources, Inc., seek to be designated
4 operator of the proposed well?

5 A. Yes, sir.

6 Q. In your opinion, will approval of this
7 Application and the drilling of the subject well be in the
8 best interest of conservation, the prevention of waste and
9 the protection of correlative rights?

10 A. I believe it will.

11 Q. Were Exhibits 6 through 10 prepared by you?

12 A. Yes, sir.

13 MR. CARR: At this time, Mr. Ashley, we move the
14 admission into evidence of EOG Resources, Inc., Exhibits 6
15 through 10.

16 EXAMINER ASHLEY: Exhibits 6 through 10 will be
17 admitted as evidence.

18 MR. CARR: And that concludes my direct
19 examination of Mr. Zinz.

20 EXAMINATION

21 BY EXAMINER ASHLEY:

22 Q. Mr. Zinz, the wells that you have on here are
23 spotted as oil wells?

24 A. They're workovers.

25 Q. Okay.

1 A. Plugged back.

2 Q. Plugged back from the Morrow?

3 A. Yes. All the wells you see on your maps in front
4 of you there penetrated the Morrow.

5 Q. Okay.

6 A. They're deep wells, as opposed -- If you look at
7 Exhibit 1, back at the land plat, you can see all the wells
8 that are actually in the area.

9 Q. Okay, for example in section -- I guess Section
10 18.

11 A. Okay.

12 Q. -- the 10 B --

13 A. Yes, sir.

14 Q. -- that shows that that did produce 3.2 B from
15 the Morrow?

16 A. Yes.

17 Q. And what's that currently completed in?

18 A. It's currently completed in Queen, Grayburg --

19 Q. Okay.

20 A. It's the shallow Permian stuff.

21 Q. Okay.

22 A. And the same goes for that 12 B down there.

23 Q. Okay.

24 A. Mewbourne also drilled -- they were able to drill
25 another gas well that shows that recent completion there in

1 the southeast of 18. They just offset a plugged-out Morrow
2 well there.

3 EXAMINER ASHLEY: I have nothing further. Thank
4 you.

5 MR. CARR: That concludes our presentation in
6 this case.

7 (Thereupon, these proceedings were concluded at
8 2:13 p.m.)

9 * * *

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12
13
14 I hereby certify that the foregoing is
15 a complete record of the proceedings in
the Examiner hearing of Case No. 12454,
16 heard by me on 7-1-00 19-
17 Mark R. H. [Signature], Examiner
Of Conservation Division
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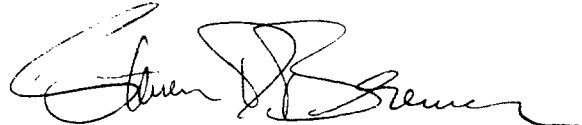
CERTIFICATE OF REPORTER

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 July 19th, 2000.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002