

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. 12,748

APPLICATION OF BTA OIL PRODUCERS FOR)
 SIMULTANEOUS DEDICATION, LEA COUNTY,)
 NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGSEXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

November 1st, 2001

Santa Fe, New Mexico

 OIL CONSERVATION DIVISION
 NOV 15 11:20 AM

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, November 11th, 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.

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November 1st, 2001
Examiner Hearing
CASE NO. 12,748

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<u>JIM BROTEN</u> (Geologist)	
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A P P E A R A N C E S

FOR THE DIVISION:

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FOR THE APPLICANT:

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 Santa Fe, New Mexico 87504-2208
 By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 8:21 a.m.:

3 EXAMINER CATANACH: At this time we'll call Case
4 12,748, the Application of BTA Oil Producers for
5 simultaneous dedication, Lea County, New Mexico.

6 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, and we represent BTA Oil Producers, and
10 I have one witness.

11 EXAMINER CATANACH: Any additional appearances?
12 Will the please be -- Can you swear in the
13 witness, please?

14 (Thereupon, the witness was sworn.)

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

18 DIRECT EXAMINATION

19 BY MR. CARR:

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

21 A. My name is Jim Broten.

22 Q. Could you spell your last name?

23 A. B-r-o-t-e-n.

24 Q. Mr. Broten, where do you reside?

25 A. Midland, Texas.

1 Q. And by whom are you employed?

2 A. BTA Oil Producers.

3 Q. And what is your current position with BTA Oil
4 Producers?

5 A. I'm a petroleum geologist.

6 Q. Have you previously testified before the New
7 Mexico Oil Conservation Division?

8 A. Yes, I have.

9 Q. At the time of that testimony were your
10 credentials as an expert witness in petroleum geology
11 accepted and made a matter of record?

12 A. Yes, they were.

13 Q. Are you familiar with the Application filed in
14 this case on behalf of BTA Oil Producers?

15 A. Yes, I am.

16 Q. And are you familiar with BTA's proposal to
17 simultaneously dedicate two Atoka gas wells to the
18 northwest quarter of Section 35, Township 22 South, Range
19 34 East?

20 A. Yes, I am.

21 Q. Have you made a geological study of the area
22 which is involved in this Application?

23 A. Yes, I have.

24 Q. And are you prepared to share the results of that
25 work with Mr. Catanach?

1 A. Yes, I am.

2 MR. CARR: Mr. Catanach, we tender Mr. Broten as
3 an expert witness in petroleum geology.

4 EXAMINER CATANACH: Mr. Broten is so qualified.

5 Q. (By Mr. Carr) Mr. Broten, would you initially
6 summarize for the Examiner what it is that BTA seeks with
7 this Application?

8 A. We seek authorization to recomplete our Maddox
9 Federal "B" Well Number 1, which is located 1980 from the
10 north and west lines of Section 35 of Township 22 South,
11 Range 34 East, in Lea County. It's currently in the Morrow
12 formation under the Antelope-Morrow Gas Pool, and we want
13 to recomplete back to the "B", Atoka "B" interval in the
14 Antelope Ridge-Atoka Gas Pool.

15 Q. Does BTA also seek authorization to
16 simultaneously dedicate the north-half Atoka spacing unit
17 to two Atoka wells?

18 A. Yes, we do.

19 Q. And would you identify the second well which
20 you're seeking to dedicate?

21 A. Yes, this well is also located in the north half
22 of Section 35. It's the Maddox Federal "B" Well Number 2.
23 It's located 1980 from the north line and 660 from the west
24 line of Section 35, and it's currently producing from the
25 Atoka "A" and "C" intervals of the Antelope Ridge-Atoka Gas

1 Pool.

2 Q. The current well is producing from the "A" and
3 "C", and the new well would be from the "B" interval; is
4 that correct?

5 A. That is correct.

6 Q. What rules govern the development of these lands?

7 A. There are special pool rules for the Antelope
8 Ridge-Atoka Gas Pool, and that was adopted by Order Number
9 R-3050, Case Number 3384, on March 17th of 1966. These
10 rules provide that the pool should be governed by the
11 acreage and well-location requirements of Rule 104.C, and
12 that is a well to be located 660 from the outer boundaries
13 of the quarter sections, and what we're seeking exception
14 to is an infill well authorized in another quarter section
15 of 104.C, and we're seeking exception to this provision.

16 Q. So you don't intend to go to a greater density on
17 the total spacing unit, but you're seeking to locate both
18 Atoka wells in one quarter section; is that right?

19 A. That's correct, yes.

20 Q. Have you prepared exhibits for presentation here
21 today?

22 A. Yes, I have.

23 Q. Let's go to what has been marked as BTA Exhibit
24 Number 1, and I would ask you to first identify that
25 exhibit and review it for Mr. Catanach.

1 A. Before you, you have a land plat that identifies
2 well locations. Also it has areas marked off in yellow and
3 in red. The red boundary area identifies the north half of
4 Section 35, and that is the area that we're concerned with.

5 The yellow area indicates an area of where we've
6 notified offsetting operators, and those said operators are
7 identified on the attached sheets. And you'll notice that
8 there are numbers in parentheses, and that correlates to
9 the attached sheets, to further identify who operates in
10 each one of those areas.

11 Significant is that BTA operates the properties
12 in the south half of Section 35 and in the east half of
13 Section 34.

14 Q. Now, Mr. Broten, we have provided notice to all
15 offsetting operators; is that correct?

16 A. That is correct.

17 Q. And in those two tracts, being the south half of
18 35 and the east half of 34, since BTA also operates those,
19 all other working interest owners were notified of this
20 Application; is that correct?

21 A. That is correct.

22 Q. Let's go to Exhibit Number 2. Is this an
23 affidavit that confirms that notice of today's hearing was
24 provided to each of these owners as required by the rules
25 of the Oil Conservation Division?

1 A. Yes, sorry.

2 Q. Let's go now to Exhibit Number 3, cross-section
3 A-A'. Would you identify this and then review it for Mr.
4 Catanach?

5 A. Yes, cross-section A-A' is a stratigraphic cross-
6 section. It's hung on the top of the Atoka, and if you
7 note, we've identified the Atoka, the Atoka pay zone "A"
8 which we've highlighted in blue, Atoka pay zone "B" which
9 we've highlighted in pink, Atoka pay zone "C" which we've
10 highlighted in green, and then we've also identified the
11 lower Atoka lime.

12 Crossplot porosity is indicated -- it's shaded in
13 red on the logs, and these logs are gamma-ray in the left
14 column and neutron density in the right portion of the
15 logs, and they're standard .1 to .3 porosity units.
16 Underneath each log is an API number and a locator and also
17 a brief well history. And you'll notice green bars on the
18 right margins of each log, and that indicates mud-log shows
19 observed during drilling.

20 We also have a small little plat that highlights
21 where the wells are in relation to each other. As this
22 shows A-A', these wells are both located in the same 160.

23 Q. These are the two wells for which you seek
24 authority to simultaneously dedicate the Atoka; is that
25 right?

1 A. That's correct.

2 Q. Let's look at the Maddox Federal "B" Well Number
3 2. That's the well on the left of the cross-section?

4 A. That is correct.

5 Q. Is that the current producer from this spacing
6 unit?

7 A. Yes.

8 Q. It's producing from -- the perforations are
9 shown, and it's producing from what, just the "A" and the
10 "C" interval?

11 A. That's correct.

12 Q. And how much has it produced to date, do you know
13 approximately?

14 A. Yes, cumulative production is 8.98 BCF, 313,000
15 barrels of oil and 12,000 barrels of water.

16 Q. Have you been able to estimate the remaining
17 producing life for this well?

18 A. We estimate ten years.

19 Q. Now, in this well you also have the Atoka pay
20 zone "B" indicated with the pink; is that correct?

21 A. That is correct.

22 Q. So the zone is present in the existing well?

23 A. Yes.

24 Q. Is it producible in this well?

25 A. No.

1 Q. And why not?

2 A. As you can see from the logs indications there,
3 it's a tight reservoir, dirty, the gamma ray shows that it
4 is a dirty zone, and does not have any -- did not have any
5 shows when we drilled it.

6 Q. So is it fair to say that the "B" zone can never
7 be produced with the existing well on this north-half
8 spacing unit?

9 A. That is correct.

10 Q. Let's go now to the Maddox Federal "B" Well
11 Number 1 on the right-hand side of the cross-section. What
12 is the current status of that well in the Morrow formation?

13 A. It is an inactive well, temporarily abandoned.

14 Q. And it was abandoned when?

15 A. It was abandoned in June of 1996.

16 Q. Is there any potential to return that well to
17 production in the Morrow formation?

18 A. There's no future potential in the Morrow.

19 Q. Now, this is a well you propose to recomplete in
20 the Atoka in the "B" zone?

21 A. That is correct.

22 Q. And the "B" zone is indicated on the log, and
23 also there's a mud log on this?

24 A. Yes.

25 Q. Does this appear to be a reasonable target to

1 complete this particular Atoka interval?

2 A. Yes.

3 Q. If you were required to wait to go in and
4 recomplete this until the Number 2 well was depleted in the
5 Atoka, you'd have to wait ten years, would you not?

6 A. That's correct.

7 Q. And if you were to use this wellbore, you would
8 have to ask the OCD if you could keep it temporarily
9 abandoned for that period of time; is that right?

10 A. That is correct.

11 Q. Let's go to Exhibit Number 4. Would you identify
12 and review that?

13 A. This exhibit is a stratigraphic cross-section
14 B-B', and the first thing that should be noted is which
15 wells are included. Again, we're including the subject
16 well, the Maddox "B" Federal 1, but we're also
17 incorporating wells north and south of this location.
18 Again, this cross-section is hung on the top of the Atoka.
19 The Atoka "A" zone is again blue, Atoka "B" zone is pink,
20 Atoka "C" zone is green, and we also have identified the
21 lower Atoka lime marker.

22 The green bars on the right margin of the logs
23 also indicate mud-log shows, and perforations are indicated
24 purple highlights within the depth tracks. And again under
25 each well there's an API identifier, location and a brief

1 well history, plus a small, little land plat in the corner
2 to identify where these wells fall in relationship to each
3 other.

4 Q. Mr. Broten, this exhibit again shows that the
5 Atoka "B" interval is present across the area?

6 A. Yes, it does.

7 Q. And you've looked at the logs of all the Atoka
8 wells in this area, have you not?

9 A. Yes, I have.

10 Q. Is there any other Atoka well in the area where
11 the "B" zone appears to have sufficient porosity to be
12 capable of commercial production?

13 A. There is no other wells.

14 Q. Based on the information you have on the well,
15 would it be economically feasible to drill an additional
16 well in the north half of this section to access the
17 reserves in the "B" interval?

18 A. No.

19 Q. Would it be economically prohibitive?

20 A. Yes.

21 Q. And do you have geological information that would
22 suggest to you that a well in the northeast quarter of this
23 section, in fact, could effectively access these minerals
24 if, in fact, you had the wellbore?

25 A. No, the geologic risk is too high. As the cross-

1 section demonstrates, all these surrounding wells do not
2 exhibit any reservoir characteristics within this
3 particular interval, with the exception being the Maddox
4 "B" Federal Number 1 wellbore.

5 Q. What conclusions have you been able to reach from
6 your geological study of this area?

7 A. There are three separate producing intervals
8 within this Atoka formation. There's no communication
9 between these zones. The Maddox Federal "B" Well Number 1
10 is needed to produce these Atoka reserves in the north half
11 of the section from the Zone "B", and we seek only -- BTA
12 seeks only two Atoka wells in the north half of the
13 section, due to geologic risks.

14 Q. In your opinion, would approval of this
15 Application and the recompletion of the Maddox "B" Federal
16 Well Number 1 in the "B" interval result in the recovery of
17 hydrocarbons that otherwise would be left in the ground?

18 A. Yes, this will result in additional recovery.
19 Without this recompletion the "B" interval reserves will
20 not be produced.

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

24 A. Yes.

25 Q. Were Exhibits 1 through 4 prepared by you or

1 prepared at your direction?

2 A. Yes.

3 MR. CARR: Mr. Catanach, at this time we'd move
4 the admission into evidence of BTA Oil Producers Exhibits 1
5 through 4.

6 EXAMINER CATANACH: Exhibits 1 through 4 will be
7 admitted as evidence.

8 MR. CARR: And that concludes my direct
9 examination of Mr. Broten. Thank you.

10 EXAMINATION

11 BY EXAMINER CATANACH:

12 Q. Mr. Broten, is there offset production in this
13 Atoka pool?

14 A. Just what's marked on -- if you're referring to
15 the cross-sections, the perforations, there is the Maddox
16 Federal Number 1 in the south half of Section 35. That
17 produces from the Atoka "A" zone. The Oryx Energy, which
18 is now operated -- originally drilled by Oryx, is now
19 operated by Samson Energy in Section 26. That well is 990
20 from the south and 2030 from the east. It is producing
21 from the Atoka "A" zone and several zones above there that
22 are not even a matter of this hearing.

23 Q. The well to the west of that Oryx well is not
24 producing?

25 A. That is a BTA-operated Morrow well that is

1 abandoned in the Morrow. It's not producing out of the
2 Atoka.

3 Q. Okay, there's nothing at this point and to the
4 west to in Section 34?

5 A. No.

6 Q. The well that you show in the northeast quarter
7 of 34, is that a Morrow well? The one you show as
8 temporarily abandoned?

9 A. Yes.

10 Q. Is there Atoka potential in that well?

11 A. I don't have that wellbore in front of me to
12 accurately answer that question right at the present.

13 Q. Okay. As I understand from your land testimony,
14 BTA operates all of Section 35?

15 A. Yes, sir.

16 Q. And the east half of Section 34?

17 A. Yes.

18 Q. Do you know, by chance, if that interest is the
19 same in those two sections?

20 A. I don't have the percentages in front of me. We
21 just identified who the individuals were as far as --

22 (Off the record at 8:40 a.m.)

23 (The following proceedings had at 8:48 p.m.)

24 EXAMINER CATANACH: Call the hearing back to
25 order.

1 Q. (By Examiner Catanach) I believe it was your
2 testimony that you did not know if the interest was the
3 same in Section 34 and 35?

4 A. That's correct.

5 Q. The Number 1 well, was it deemed uneconomic in
6 the Morrow? Is that why it was TA'd?

7 A. It produced 3.482 BCF and 103,000 barrels of oil
8 and 11,000 barrels of water and depleted, and there's no
9 additional potential.

10 Q. Mr. Broten, what about the northeast quarter of
11 Section 35? Is there any potential for Atoka production
12 from that quarter section?

13 A. We feel that's extreme geologic risk due to the
14 nature of the "B" zone. We wouldn't drill another well for
15 it. We have an existing wellbore in the "B" zone. It
16 seems like it's a unique opportunity, only existing within
17 that wellbore. We're just asking to take advantage of it.

18 Q. So there's no additional plans, any future plans
19 to drill a well in the northeast quarter?

20 A. There are none.

21 Q. For the Morrow or the Atoka?

22 A. No.

23 Q. Do you know at this point what kind of reserves
24 you're talking about in the "B" interval at that location?

25 A. It would be speculation on my part, but we're

1 hoping at least several BCF.

2 Q. And it's your opinion that's the only wellbore in
3 this area that can produce the "B" reserves?

4 A. Yes, sir.

5 Q. What's the separation between the "A" and "B" and
6 "C"? Is there...

7 A. We see what we call -- it would be an impermeable
8 barrier, either shaly or pure shales, between these units.

9 Q. On one of your -- on your cross-sections, on the
10 Number 1 well -- I'm looking specifically at Exhibit Number
11 3 -- what do the green bars signify on the right-hand side
12 of the graph?

13 A. The green bars indicate mud-log shows that
14 occurred while we were drilling.

15 Q. And perforations you're showing as red squares?

16 A. They're somewhat purplish-red, in the depth-track
17 interval in the center of the wellbore sketch.

18 Q. Do you know what depth the pay -- the "B" zone
19 will be perforated in the Number 1 well?

20 A. Yes, we would perforate the porosity interval,
21 and I'd have to get a large-scale, my eyes can hardly read
22 that.

23 Q. I understand.

24 A. I have that precise interval here, if you'll
25 allow me to pull that out. The upper perf would start at

1 12,374, and we would perf the apparent porosity down to
2 12,384.

3 Q. So a ten-foot interval, basically?

4 A. Yes, uh-huh.

5 Q. And that's the only interval you plan to perf in
6 that well, is just that "B" zone?

7 A. That's correct.

8 EXAMINER CATANACH: That's all I have.

9 MR. CARR: That concludes our presentation in
10 this case, Mr. Catanach.

11 EXAMINER CATANACH: Okay, there being nothing
12 further in this case, Case 12,748 will be taken under
13 advisement.

14 (Thereupon, these proceedings were concluded at
15 8:54 a.m.)

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Examiner
Oil Conservation Division

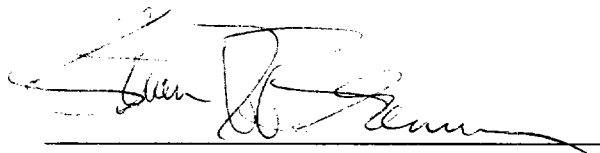
CERTIFICATE OF REPORTER

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 November 2nd, 2001.

A handwritten signature in cursive script, appearing to read 'Steven T. Brenner', written over a horizontal line.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002