

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. 11,865
)
APPLICATION OF THOMPSON ENGINEERING AND)
PRODUCTION CORPORATION FOR AN UNORTHODOX)
GAS WELL LOCATION AND DOWNHOLE)
COMMINGLING, SAN JUAN COUNTY, NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

December 4th, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, December 4th, 1997, 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.

* * *

I N D E X

December 4th, 1997
 Examiner Hearing
 CASE NO. 11,865

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<u>ALAN P. EMMENDORFER</u> (Geologist)	
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A P P E A R A N C E S

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A.
 Suite 1 - 110 N. Guadalupe
 P.O. Box 2208
 Santa Fe, New Mexico 87504-2208
 By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 9:52 a.m.:

3 EXAMINER CATANACH: Okay, I'll call the hearing
4 back to order at this time and call Case 11,865, the
5 Application of Thompson Engineering and Production
6 Corporation for an unorthodox gas well location and
7 downhole commingling, San Juan County, New Mexico.

8 Call for appearances.

9 MR. CARR: May it please the Examiner, my name is
10 William F. Carr with the Santa Fe law firm Campbell, Carr,
11 Berge and Sheridan. We represent Thompson Engineering and
12 Production Company, and I have one witness.

13 EXAMINER CATANACH: Call for additional
14 appearances?

15 Okay, will the witness please stand and be sworn
16 in at this time?

17 (Thereupon, the witness was sworn.)

18 ALAN P. EMMENDORFER,
19 the witness herein, after having been first duly sworn upon
20 his oath, was examined and testified as follows:

21 DIRECT EXAMINATION

22 BY MR. CARR:

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

24 A. My name is Alan P. Emmendorfer.

25 Q. Mr. Emmendorfer, where do you reside?

1 A. Farmington, New Mexico.

2 Q. By whom are you employed?

3 A. Coleman Oil and Gas, as a petroleum geologist.

4 Q. What is the relationship between Coleman Oil and
5 Gas and Thompson Engineering and Production Company?

6 A. Thompson Engineering and Production Company
7 serves as our operator for all the wells that we drill and
8 produce throughout the country, and typically we own the
9 majority interest in the wells that Thompson has a minority
10 interest or no interest at all and serves as operator.

11 Q. Does Coleman Oil and Gas own the majority
12 interest in the well which is the subject of today's
13 hearing?

14 A. Yes, it does.

15 Q. Have you previously testified before this
16 Division?

17 A. Yes, I have.

18 Q. At the time of that testimony were your
19 credentials as an expert in petroleum geology accepted and
20 made a matter of record?

21 A. Yes, they were.

22 Q. Are you familiar with the Application filed in
23 this case for Thompson Engineering and Production Company?

24 A. Yes, I am.

25 Q. Have you worked in the area which is the subject

1 of this Application?

2 A. Yes, I have.

3 Q. And have you made a study of the area --

4 A. Yes.

5 Q. -- that is the subject of this case?

6 A. Yes.

7 Q. Are you prepared to share the results of your
8 work with Mr. Catanach?

9 A. Yes, I am.

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

12 EXAMINER CATANACH: They are.

13 Q. (By Mr. Carr) Mr. Emmendorfer, would you briefly
14 state what Thompson Engineering and Production Company
15 seeks with this Application?

16 A. Okay, what Thompson seeks is actually twofold.
17 First is to complete an off-pattern gas -- coal gas well
18 location for our existing Blancett Number 2 R well, to be
19 completed in the Basin Fruitland Coal Gas Pool. It's
20 currently located -- The well is located at 790 feet from
21 the south line and 830 feet from the east line of Section
22 13, Township 30 North, Range 12 west, San Juan County, New
23 Mexico. The east half of Section 13 is to be dedicated to
24 the Basin Fruitland Coal Gas Pool.

25 In addition, we are seeking authority to downhole

1 commingle production from the Pictured Cliffs formation,
2 producing from the Aztec Pictured Cliffs Gas Pool and the
3 Fruitland formation, from the base of the Fruitland Coal
4 Gas Pool in this wellbore.

5 Q. What are the spacing rules which govern the
6 development of the Fruitland Coal in this area?

7 A. The current rules are 320-acre spacing and 790-
8 foot setbacks from the proration unit. Our proposed
9 location is a standard setback. The wells are supposed to
10 be drilled in the northeast quarter or the southwest
11 quarter of the section. Our well would be in the southeast
12 quarter section, making it an unorthodox location.

13 Q. I think initially, by way of background, I'd ask
14 you to summarize for Mr. Catanach how this Application
15 actually has come before him for hearing.

16 A. Okay...

17 Q. Why don't you go to Exhibit Number 1 and identify
18 that?

19 A. Okay. Exhibit Number 1 is a copy of the
20 Application for the unorthodox location and downhole
21 commingling that was filed for administrative approval on
22 August 1st, 1997.

23 Q. Was notice of this Application provided in
24 accordance with Oil Conservation Division rules and
25 regulations?

1 A. Yes, they were.

2 Q. Were all offset operators notified?

3 A. Yes, they were.

4 Q. Was notice also provided to all working, royalty
5 and overriding royalty interest owners in the subject
6 acreage?

7 A. Yes.

8 Q. Now, in Exhibit Number 1 we have an affidavit
9 from Mr. Thompson affirming that all offset operators have
10 been notified; is that right?

11 A. That's correct.

12 Q. And the behind that we have a large stack of
13 letters advising all the royalty and overriding royalty
14 interest owners and working interest owners in the tract of
15 this proposed Application?

16 A. Correct.

17 Q. Why was the case not approved administratively?

18 A. Maralex, which is an offset operator, opposed to
19 the -- sent a letter opposing the administrative approval
20 of this location.

21 Q. And were you advised by the Division that the
22 case would be set for hearing on October the 9th?

23 A. Yes, on a letter dated by Mr. Catanach August
24 29th of 1997 that there had been an objection received from
25 Maralex and that the case would have to be set for hearing.

1 Q. Was a copy of that letter notifying us of the
2 hearing provided to Maralex?

3 A. Yes.

4 Q. Let's go to the downhole commingling portion of
5 this Application, Mr. Emmendorfer, and I'd ask you to first
6 refer to what has been marked as Thompson Exhibit Number 2.

7 A. Okay, the -- Exhibit Number 2 is a decline curve
8 for the Blancett Number 2 R. The Blancett Number 2 R is a
9 redrill of the original Number 2 well. The original well
10 was a Pictured Cliff well that had produced marginal
11 amounts of gas, and we thought a redrill would succeed in
12 producing commercial quantities of gas.

13 However, production has been less than expected.
14 The Pictured Cliff is producing at approximately 50 MCF a
15 day with five barrels of water and has been declining at
16 approximately 35 percent. At this rate, this well will
17 soon become uneconomic and the well will never pay out.

18 Q. Are there other economic ways to continue to
19 produce the Pictured Cliff zone in this well?

20 A. Yes, if we could recomplete within the wellbore
21 another zone and, in particular, the Fruitland Coal
22 interval, either from a dual-completion standpoint or a
23 commingling standpoint, economics should have proved that
24 we will continue to produce -- be able to produce reserves
25 from the Pictured Cliff formation.

1 Q. Let's go to Exhibit Number 3. Would you identify
2 that?

3 A. Exhibit Number 3 is an AFE for this recompletion.

4 Q. If you look at the AFE, what is the size of the
5 casing that exists in the well?

6 A. The production casing is 4-1/2-inch, and it was
7 set through the Pictured Cliff formation.

8 Q. With this size casing, is it possible to dually
9 complete the well?

10 A. It would be possible if neither zone had to be
11 pumped. If it was a -- just a standard flowing gas well,
12 we could dual-complete both zones. But we anticipate
13 having to pump both zones.

14 Q. Both zones need to be pumped?

15 A. Yes.

16 Q. Okay. Do zones produce water?

17 A. The Pictured Cliff formation in the original well
18 produced water, and in our redrill also produces water.
19 We've tried to produce it without pumping, but it's
20 necessary to pump off the approximately five barrels a day
21 to produce the well.

22 And we anticipate that we will have to pump the
23 Fruitland Coal zone also to get the water off the well,
24 that most of the wells in this area of the Basin, in the
25 subpressured area of the Basin, needs to be pumped, or

1 producing.

2 Q. If you're able to downhole commingle the Pictured
3 Cliffs and Fruitland Coal in this well, will that enable
4 you to produce -- continue to produce the Pictured Cliffs
5 after you would otherwise have to abandon that zone?

6 A. Yes, the -- we would be able to produce the
7 Pictured Cliffs, because our operating costs would
8 essentially stay the same or a little bit more because of
9 the disposal costs of the water from the Fruitland Coal,
10 but we would anticipate that we would enjoy a little bit
11 better operating margin, and therefore the reserves of the
12 Pictured Cliffs could be produced to a lower rate.

13 Q. Will approval of this Application for downhole
14 commingling result in the recover of hydrocarbons that
15 otherwise would be wasted?

16 A. Yes, it would.

17 Q. Is there a potential for crossflow between the
18 zones that you propose to commingle?

19 A. I don't think so. The pressures of both zones,
20 we feel, will be approximately the same amount, and this
21 seems to be the case in a large area of the subpressure
22 Coal portion of the Basin.

23 And with the existing perforations at the
24 Fruitland formation and the proposed formation -- Fruitland
25 Coal perforations, there's only -- it would only be two

1 foot of difference between the two zones. And we feel that
2 the pressures of both zones are fairly close to each other
3 because of this.

4 Q. Do you anticipate any compatibility problems with
5 the production?

6 A. No, I do not.

7 Q. Could you identify what has been marked as
8 Thompson Exhibit Number 4?

9 A. Okay. Exhibit Number 4 is an AFE to drill a new
10 well to produce the Basin Fruitland Coal from the east half
11 of Section 13, and the total cost of that would be
12 \$163,000. And it would be basically the same type of setup
13 that we have now with the 4-1/2-inch production casing.

14 The cost of drilling a new well, as you can
15 compare it to the last exhibit, Number 3, is a little over
16 three times what it would cost to recomplete to the
17 Fruitland Coal in the existing well.

18 Q. How do you propose to allocate production between
19 the commingled zones?

20 A. Okay, well, that was originally proposed in the
21 administrative application, which is Exhibit 1. And what
22 we would do is subtract the anticipated Pictured Cliff
23 production based on its 35-percent decline rate, from the
24 actual production of the wellbore, considering that
25 difference to be the production from the Basin Fruitland

1 Coal formation.

2 Q. Mr. Emmendorfer, let's look at the off-pattern
3 portion of this Application, and I'd ask you first just to
4 identify Thompson Exhibits 5 and 6.

5 A. Okay, Exhibit Number 5 is a C-102 for the
6 existing Aztec-Pictured Cliff Pool well under the Blancett
7 Number 2 R, showing that the southeast quarter of Section
8 13 was dedicated to the well located 790 feet from the
9 south line and 830 feet from the east line.

10 Okay, Exhibit Number 6 is the submitted C-102 for
11 the Basin Fruitland Coal zone for the Blancett Number 2 R
12 with the east half of Section 13 being dedicated to the
13 well. And again, it is at -- Since it's already drilled,
14 it's located at 790 from the south line, 830 feet from the
15 east line, well within the offsets of a 320 Coal well, as
16 the rules currently apply.

17 Q. Let's go to Exhibit Number 7. Would you identify
18 and review that?

19 A. Number 7 is a plat of all the Pictured Cliff and
20 Fruitland Coal wells that currently exist, surrounding the
21 Blancett Number 2 R. The simple gas well symbols are the
22 Pictured Cliff wells, and the solid triangles are the
23 existing Fruitland Coal wells.

24 The only existing coal wells that exist and
25 produce to date are the two wells in Section 18 of 30

1 North, 11 West, and the well in the southwest of Section
2 19.

3 An additional Fruitland Coal well was drilled at
4 about the same time in the northeast of Section 19. It has
5 been unsuccessful and is currently shut in due to lack of
6 production.

7 I would also like to point out that a dashed
8 triangle in the southeast of Section 11 of 30 North, 12
9 West, is a proposed off-pattern coal well that is currently
10 on file with the OCD. This well is operated by Conoco as a
11 Dakota well, and they have submitted plans -- a sundry
12 notice, to recompleate the well in the Basin Fruitland Coal.
13 It would also be an off-pattern well, but to date no
14 activity has been done in regard to this recompletion.

15 Q. At this point in time is it fair to say there's
16 been fairly limited development in the area?

17 A. Yes, both in the Pictured Cliffs and Fruitland
18 Coal that's correct.

19 Q. And the results of that development are varied?

20 A. Yes. You have a well that is noncommercial, shut
21 in, and you have wells that are currently producing.

22 Q. Let's go to your topographic map, Thompson
23 Exhibit Number 8. Would you review that?

24 A. Okay. Exhibit Number 8 is a topographic map with
25 the east half of Section 13 highlighted. As you can see,

1 the Animas River runs through the southeast quarter of the
2 section, and that all -- almost all of the east half of 13
3 lies within the floodplain of the Animas River. As you're
4 well aware, Mr. Examiner, that the arable land in the State
5 of New Mexico lies in these floodplain areas.

6 One of the interest -- One of the royalty owners
7 and surface owners that's currently in the Blancett well is
8 Mr. Elliott Riggs of Farmington, New Mexico, and he owns a
9 200-plus-acre farm north of the river in the east half of
10 Section 13. And he has -- Even though he owns 200-plus
11 minerals in that 320, he has stated to us that he will not
12 allow a well to be drilled on his farm, and that could
13 possibly create a problem in trying to get a Coal well
14 permitted at a legal location in the northeast quarter
15 section.

16 Q. So even if you tried to drill in the northeast,
17 you're probably looking at having to find an unorthodox
18 location; is that correct?

19 A. That's correct.

20 Q. What conclusions have you reached from your study
21 of this area?

22 A. I've concluded that there is gas reserves to be
23 produced from the Basin Fruitland Coal Reservoir in the
24 east half of 13 and that Pictured Cliff reserves in the
25 current Blancett Number 2 R, located in the southeast

1 quarter of Section 13, is in danger of being abandoned
2 prematurely due to economic limits, and that if a Fruitland
3 Coal well could be completed and commingled with the
4 Fruitland -- or the Pictured Cliff reserves in the existing
5 well, reserves that would otherwise not be recovered could
6 be produced.

7 Q. In your opinion, will approval of this
8 Application for downhole commingling of the Fruitland Coal
9 and Pictured Cliff formation in the subject wellbore be in
10 the best interests of conservation, the prevention of waste
11 and the protection of correlative rights?

12 A. Yes, I do.

13 Q. Were Exhibits 1 through 7 prepared by you, or can
14 you testify as to their accuracy?

15 A. Yes, I can.

16 MR. CARR: Mr. Catanach, at this time we would
17 move the admission into evidence of Thompson Exhibits 1
18 through 7.

19 EXAMINER CATANACH: Exhibits 1 through 7 will be
20 admitted as evidence.

21 MR. CARR: And that concludes my direct
22 examination of Mr. Emmendorfer.

23 EXAMINATION

24 BY EXAMINER CATANACH:

25 Q. Mr. Emmendorfer, what is the status of Maralex's

1 objection in this case?

2 A. Status of it?

3 Q. I mean, have you -- has that been resolved, as
4 far as you know?

5 A. No, they have not contacted us.

6 EXAMINER CATANACH: Mr. Carr, we didn't -- Did
7 you do any additional notice for this hearing?

8 MR. CARR: No, we did not. They objected, and
9 then we got the letter from you showing that it was going
10 to hearing, and a copy went to Maralex.

11 EXAMINER CATANACH: A copy did go to Maralex?

12 MR. CARR: Yes, of your letter.

13 Q. (By Examiner Catanach) Is Maralex the only
14 affected offset operator?

15 A. Yes, of the direct 320s.

16 Q. What about -- Who's Gilbreath in Section 24?
17 They don't have any coal gas wells in 24.

18 A. No, they do not.

19 Q. But do they operate in that section?

20 A. Pictured Cliff wells or Dakota wells or --

21 Q. Well, I think you show a Pictured Cliffs well in
22 the northeast quarter.

23 A. Yes, actually, that well has been -- Yeah, I do
24 believe they operate a Pictured Cliff well there.

25 MR. CARR: Mr. Catanach, they were provided the

1 administrative application by certified mail on the 20th of
2 August and did not object.

3 EXAMINER CATANACH: Mr. Carr, do you have a copy
4 of my letter?

5 MR. CARR: Yes, sir.

6 EXAMINER CATANACH: I've got it, never mind.

7 MR. CARR: Okay, I think I do.

8 EXAMINER CATANACH: I can't see where Maralex was
9 -- actually had knowledge of when this hearing was going to
10 take place, Mr. Carr. I don't know what --

11 MR. CARR: Well, Mr. Catanach, you know, this is
12 an area that I think has come up before. I mean, they did
13 object, they got a copy of a letter saying it was going to
14 hearing, and at that point in time they pursued it no
15 further.

16 EXAMINER CATANACH: I don't know whether Maralex
17 would have shown up here or not. I just -- I can only
18 assume that they did not know when this hearing was going
19 to take place. It sounds -- In their letter it sounds that
20 they're strongly against this Application, so I can only
21 assume that they would like to have participated in this.
22 I --

23 MR. CARR: And I don't want to argue with you,
24 but it does seem to me that when you notify somebody of an
25 Application, they object and they're the reason you're

1 coming to hearing, you have a letter from the Division
2 saying they're coming to hearing, that at some point in
3 time they need to follow it up and not just let you go
4 forward to hearing and ignore it.

5 EXAMINER CATANACH: Well, I think it's
6 appropriate that we provide notice to these people and to
7 any other affected offset operator.

8 In their letter they state that they plan on
9 drilling a well in the northeast quarter of Section 24,
10 which is an offset.

11 THE WITNESS: They did -- Back in 1994 or 1995,
12 they submitted plans to re-enter an old Pictured Cliff well
13 that had been plugged and abandoned in the northeast of 24,
14 and that application expired well over two or three years
15 ago, and to this date they have not done anything else.

16 EXAMINER CATANACH: Well, I would suggest that we
17 continue this case for two weeks and that you contact
18 Maralex and maybe -- and the other offset operators who are
19 affected by this Application, and ascertain whether or not
20 they want to appear and present any evidence in opposition.

21 Once you determine that, we can either go -- We
22 can hear additional evidence on the 18th, or if you
23 ascertain that they don't wish to come in we can --

24 MR. CARR: -- take it under advisement --

25 EXAMINER CATANACH: -- take it under advisement

1 at that time. But I really feel uncomfortable that they
2 don't know -- that they weren't provided notice.

3 MR. CARR: Will you be available to hear it on
4 the 18th, or do you want to take it back four weeks?

5 EXAMINER CATANACH: As far as I know, I will be
6 here on the 18th, and I will be available. But I'd suggest
7 that's what we do.

8 MR. CARR: Okay. Do you have other questions of
9 the witness at this time, or do you want to --

10 EXAMINER CATANACH: Yeah, I do.

11 Q. (By Examiner Catanach) Mr. Emmendorfer, what --
12 do you know what the producing capabilities of the wells in
13 Section 18 and 19 are, the coal wells?

14 A. I think they're 400 to 500 MCF a day, and I don't
15 know how much water they're producing.

16 Q. Okay. So would you consider this a pretty good
17 area for coal development?

18 A. I think there is some risk. As I've testified
19 before, the coal well that was drilled in the northeast of
20 19 was not successful, and actually all four of those wells
21 were drilled by S&G interest, and Maralex did purchase them
22 from them.

23 I think there are some risks in that it's not an
24 area where you can just blanket the coal and -- you know,
25 with a well on every 320 and get a producing well.

1 I think the area has been developed from other,
2 you know, horizons for many years, and if it was a good
3 such area, I think the operators would have drilled in
4 there a long time ago.

5 Q. Does Coleman control the west half of this
6 section?

7 A. No, we do not.

8 Q. Who is that, do you know.

9 A. I don't know.

10 Q. So it's possible we could have two coal wells in
11 the south half of Section 13?

12 A. Yes, it could be possible.

13 Q. At this point you have no plans to drill in the
14 northeast quarter?

15 A. No, we do not.

16 Q. Is that an economic venture, do you think, to
17 drill a coal well in the northeast quarter?

18 A. I think it's got a chance to be an economic
19 venture, if we could place the well within legal limits.

20 Q. Do you see this off-pattern coal gas well as --
21 or how do you see it affecting offset proration units? Do
22 you think it will have a big effect on them?

23 A. I don't. There are a number of off-pattern wells
24 completed, and a lot of them -- as new drills, but also a
25 lot of them as downhole commingling with existing old

1 Pictured Cliff producing wells in the general area of the
2 underpressured portion of the coal.

3 Q. Do you have any idea what the Coal might produce
4 in your wellbore?

5 A. We'd like to be able to produce what the offset
6 operators have been producing, but those are the only wells
7 and we have nothing to the north, south or west of us, and
8 so we don't know exactly what it will produce.

9 Q. To the north and the west, are we moving out of
10 the potentially productive coal area?

11 A. I think so, yes.

12 EXAMINER CATANACH: Well, I think that's all I
13 have, Mr. Carr.

14 MR. CARR: We'll make contact with Maralex, and
15 we'll advise you as soon as we know whether or not we have
16 an additional hearing on the 18th.

17 EXAMINER CATANACH: Yeah. You might try and
18 ascertain who the other affected offset operators are.

19 MR. CARR: We've also notified Burlington, I mean
20 of the original Application. They didn't object. But
21 we'll check on the west half of 13 as well.

22 EXAMINER CATANACH: You might verify with
23 Burlington and maybe the other ones --

24 MR. CARR: We can.

25 EXAMINER CATANACH: -- that they don't --

1 MR. CARR: We can.

2 EXAMINER CATANACH: -- or get a waiver if you
3 can.

4 With that, we'll continue the case to the 18th of
5 December.

6 (Thereupon, these proceedings were concluded at
7 10:22 a.m.)

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I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of 1/8/65,
heard by me on 12/11 1967.
David R. Catnach, Examiner
Oil Conservation Division

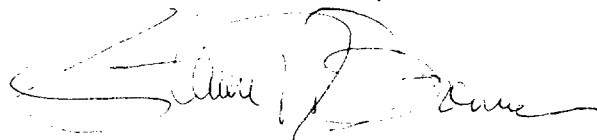
CERTIFICATE OF REPORTER

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 December 7th, 1997.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998