

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:)
APPLICATION OF GOTHIC PRODUCTION)
CORPORATION FOR AN UNORTHODOX INFILL GAS)
WELL LOCATION, CHAVES COUNTY, NEW MEXICO)

CASE NO. 12,125

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS
EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

February 18th, 1999
Santa Fe, New Mexico

OIL CONSERVATION DIVISION
99 MAR -6 AM 8:03

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, February 18th, 1999, 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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I N D E X

February 18th, 1999
 Examiner Hearing
 CASE NO. 12,125

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GEORGE SCOTT, III (Geologist)

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E X H I B I T S

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A P P E A R A N C E S

FOR THE APPLICANT:

JAMES G. BRUCE, Attorney at Law
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 Santa Fe, New Mexico 87501
 P.O. Box 1056
 Santa Fe, New Mexico 87504

* * *

1 WHEREUPON, the following proceedings were had at
2 8:25 a.m.:

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7 EXAMINER ASHLEY: This hearing will come to order
8 now for Docket Number 6-99. Please note today's date,
9 February 18th, 1999. I'm Mark Ashley, appointed Hearing
10 Examiner for today's cases.

11 And before we begin the first case, I want to go
12 over the docket and mention the continuances and dismissals
13 at this time.

14 (Off the record)

15 EXAMINER ASHLEY: At this time the Division calls
16 Case 12,125, Application of Gothic Production Corporation
17 for an unorthodox infill gas well location, Chaves County,
18 New Mexico.

19 Call for appearances.

20 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
21 representing the Applicant. I have two witnesses to be
22 sworn.

23 EXAMINER ASHLEY: Any additional appearances?
24 Will the witnesses please stand to be sworn in?

25 (Thereupon, the witnesses were sworn.)

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JAMES L. SCHULTZ,

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

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. Jim Schultz.

Q. And where do you reside?

A. Roswell, New Mexico.

Q. What is your occupation?

A. I'm an independent petroleum landman.

Q. And what is your relationship to Gothic in this case?

A. I do contract land work for Gothic.

Q. Have you previously testified before the Division?

A. Yes, I have.

Q. And were your credentials as an expert petroleum landman accepted as a matter of record?

A. Yes, they were.

Q. And are you familiar with the land matters involved in this Application?

A. Yes, I am.

MR. BRUCE: Mr. Examiner, I tender Mr. Schultz as an expert petroleum landman.

1 EXAMINER ASHLEY: Mr. Schultz is so qualified.

2 Q. (By Mr. Bruce) Briefly, Mr. Schultz, what does
3 Gothic seek in this case?

4 A. They seek an unorthodox location for the "MOC"
5 Federal 17.

6 Q. Would you refer to Exhibit 1 and describe the
7 well's location?

8 A. Yes, the well is located 2475 feet from the south
9 line, 1495 feet from the east line of Section 35 South, 25
10 East.

11 The southeast quarter of Section 30 will be
12 dedicated to the proposed well, as well as Gothic's
13 existing well, the McClelland "MOC" Federal Number 2, which
14 is located in the southwest of the southeast quarter.

15 Q. In what pool is the well located?

16 A. It's located in the Pecos Slope-Abo Gas Pool,
17 which provides for 160-acre spacing. Two wells are allowed
18 per unit, with wells to be no closer than 660 feet to an
19 outside boundary line, and an unorthodox-location
20 application must be set for hearing.

21 Q. What is the reason for the unorthodox location?

22 A. It's based strictly on geological reasons, which
23 our geological expert will discuss.

24 Q. Now, referring to Exhibit 1, are there any
25 affected offset interest owners?

1 dedicated to the southeast quarter?

2 A. Yes.

3 EXAMINER ASHLEY: Okay. I have no further
4 questions.

5 THE WITNESS: Thank you.

6 GEORGE SCOTT, III,

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

9 DIRECT EXAMINATION

10 BY MR. BRUCE:

11 Q. Would you please state your name and city of
12 residence for the record?

13 A. George Scott, III, Roswell, New Mexico.

14 Q. And what is your occupation?

15 A. I'm a petroleum geologist.

16 Q. What is your relationship to Gothic in this case?

17 A. I'm working as a consultant.

18 Q. Have you previously testified before the
19 Division?

20 A. Yes, I have.

21 Q. And were your credentials as an expert petroleum
22 geologist accepted as a matter of record?

23 A. Yes.

24 Q. And are you familiar with the geology involved in
25 this Application?

1 A. Yes.

2 MR. BRUCE: Mr. Examiner, I would tender Mr.
3 Scott as an expert petroleum geologist.

4 EXAMINER ASHLEY: Mr. Scott is so qualified.

5 Q. (By Mr. Bruce) Mr. Scott, would you refer to
6 Exhibit 2, identify it for the Examiner, and tell him the
7 zones that we're looking for --

8 A. Yes.

9 Q. -- in this proposed well?

10 A. Exhibit 2 is an east-west cross-section, which is
11 using the available well control. It demonstrates the main
12 pay zones in that field area, being sandstones 1, 2, 3, 4
13 and 5.

14 The principal sandstones are sand zones are
15 sandstones 1, 2, 4 and 5. And this cross-section clearly
16 shows the lenticular nature of these reservoir sand pays.

17 Q. So these sands are discontinuous, and they come
18 and go, and you're never really quite sure what you're
19 going to get?

20 A. That's correct. They're typically laterally
21 discontinuous.

22 Q. Okay. Now, Mr. Scott, let's move on. Maybe it
23 would be best to go through the next three exhibits all at
24 once. They're all Abo sand maps. Could you identify them
25 for the Examiner --

1 A. Yes, Exhibit --

2 Q. -- and then just go through them maybe one at a
3 time and tell him what the objective is.

4 A. Okay, Exhibit 3 shows the Abo Sand Map Number 1,
5 Exhibit 4 shows the Abo Sand Map Number 4, and Exhibit 5
6 shows the Abo Sand Map Number 5. And these are based upon
7 calculations of net pay from the available well control.

8 Basically, all three maps show the elongate trend
9 of the net sand isopach, and we attribute this due to the
10 fluvial depositional environment for the Abo sand pays.

11 Q. Okay. Now, looking at Exhibit Number 1 -- Excuse
12 me --

13 A. Number 3?

14 Q. -- Exhibit Number 3, on the Number 1 sand, the
15 proposed well is moving what? West and north from a
16 standard location? Is that correct?

17 A. Yes.

18 Q. What is the purpose of moving the well in that
19 direction with respect to the Number 1 sand?

20 A. Well, that well location is to optimize the
21 occurrence of net thickness of pay, and that's in the Abo
22 Number 1 pay, but also in the -- as seen in the other
23 exhibits, for the Number 4 sand and the Number 5 sand.

24 Q. Okay. Now -- So moving to the west and the north
25 will maximize the sand. Are there any other reasons that

1 you would want to move in that direction, at least from
2 existing wells?

3 A. Yes. Well, based on our experience in the area,
4 you have a regional trend and fracture orientation which
5 runs from northwest to southeast, and we're trying -- in
6 particular, trying to avoid being directly northeast of the
7 well down in the southwest of the southeast of Section 30.

8 Q. The Number 2 well?

9 A. Yes, because even if natural fractures are not
10 present, the hydraulically induced fractures from when they
11 did their reservoir-stimulation treatments typically will
12 trend in the same direction. And so by locating our well
13 at the proposed location, we are doing this in an attempt
14 to avoid a drainage problem.

15 Q. Okay. Now, also, do you desire to move away
16 from, say, the Number 2 well and the Number 1 well, those
17 wells in the south half, south half, of Section 30?

18 A. Yes, and that's for -- Well, it's for drainage
19 purposes. It's also -- The next exhibit is a structure
20 map, which kind of corresponds with the stratigraphic
21 occurrence of the pay. I mean, the reason for doing so is
22 primarily stratigraphic and to avoid drainage. But also,
23 those wells in the south half of 30 were not as good of
24 wells as the wells, you know, that were in the thicker part
25 of the pay.

1 Q. Okay. So wells further to the north?

2 A. Further to the north and to the west.

3 Q. Also, I note on the exhibits, certain wells in
4 the Abo are marked in red. Those are wells that are
5 productive in that particular sand; is that correct?

6 A. Yes, I should point that out. Each -- Yes, the
7 wells colored in red for each different map are the ones
8 producing from that horizon.

9 Q. And at least as to the Number 4 and 5 sands, the
10 Number 2 well in the southern portion of this well unit is
11 not productive in those sands; is that correct?

12 A. That's correct.

13 Q. Okay. Now, before we get to the structure map,
14 looking at this location, will this well also help
15 determine where another well, infill well, could be drilled
16 to the north in the northeast-quarter unit?

17 A. Yes, it helps set up the next location to the
18 northeast.

19 Q. Well, let's move on to your Exhibit 6. If you
20 could, identify that for the Examiner and tell him what
21 that shows.

22 A. Exhibit 6 is a structure map on top of the Abo
23 formation, and it shows structural noses, which to some
24 degree correspond with the poorer production. But most
25 interestingly, it shows re-entrant features where the

1 accumulation of reservoir pay is typically a little bit
2 better, and those wells tend to be a little bit better as
3 well.

4 And our location with respect to the structure
5 map is located right in the trough of a structural re-
6 entrant, which we feel like is optimum for stratigraphic
7 occurrence of the reservoir pay.

8 Q. So although you're mainly looking at
9 stratigraphic reasons for drilling this well, it's also
10 favorable structurally; is that correct?

11 A. It's favorable structurally for stratigraphic
12 reasons.

13 Q. Okay, that's it -- Mr. Scott, who were Exhibits 2
14 and 5 prepared by?

15 A. They were prepared by Bob Snead with Gothic
16 Energy.

17 Q. Okay. I should say 2 through 5.

18 Have you reviewed the data which went into the
19 preparation of these?

20 A. Yes, in detail with Mr. Snead, and as well on my
21 own.

22 Q. And do you agree with the interpretation put
23 forth on Exhibits 2 through 5?

24 A. Yes, absolutely.

25 Q. And who prepared Exhibit 6?

1 the southeast of the northwest made almost a half BCF.

2 Q. What did you say the Number 2 well has produced?

3 A. The Number 2 well has produced 236 million.

4 Q. Okay. And how would this location set you up for
5 a location in the northeast quarter?

6 A. Well, by demonstrating good stratigraphic
7 accumulations of pay, we feel like that that would be a
8 good location to drill, there in the northeast of this
9 proposed location.

10 Q. Okay. So at this location, are you anticipating
11 to encounter all five sands?

12 A. We would hope to, but probably four out of five.

13 EXAMINER ASHLEY: Okay. Okay, I have no further
14 questions. Thank you.

15 THE WITNESS: Thanks.

16 MR. BRUCE: I have nothing further in this case,
17 Mr. Examiner.

18 EXAMINER ASHLEY: There being nothing further in
19 this case, Case 12,125 will be taken under advisement.

20 (Thereupon, these proceedings were concluded at
21 8:35 a.m.)

22 * * *

23 I do hereby certify that the foregoing
24 is a complete record of the proceedings in
the Examiner hearing of Case No. 12125,
heard by me on 2-18 1999.

25 Mark Ashley, Examiner

Oil Conservation Division

STEVEN T. BRENNER, CCR
(505) 989-9317

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 February 19th, 1999.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002