

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

99 SEP 2 11:51 AM '99

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. 12,230

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

August 19th, 1999

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, August 19th, 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

August 19th, 1999  
 Examiner Hearing  
 CASE NO. 12,230

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APPLICANT'S WITNESSES:	
<u>JAMES L. SCHULTZ</u> (Landman)	
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<u>GEORGE SCOTT, III</u> (Geologist)	
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\* \* \*

## A P P E A R A N C E S

## FOR THE DIVISION:

RAND L. CARROLL  
Attorney at Law  
Legal Counsel to the Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

## 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           8:17 a.m.:

3  
4  
5           EXAMINER STOGNER: Second page, I will call Case  
6           12,230.

7           MR. CARROLL: Application of Gothic Production  
8           Corporation for an unorthodox infill gas well location,  
9           Chaves County, New Mexico.

10          EXAMINER STOGNER: Call for appearances.

11          MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,  
12          representing the Applicant. I have two witnesses to be  
13          sworn.

14          EXAMINER STOGNER: Any other appearances in this  
15          matter?

16          Will the witnesses please stand to be sworn?

17          (Thereupon, the witnesses were sworn.)

18                         JAMES L. SCHULTZ,

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. BRUCE:

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

24                 A.    My name is Jim Schultz.

25                 Q.    Where do you reside?

1 A. Roswell, New Mexico.

2 Q. What is your occupation?

3 A. I'm a petroleum landman, independent.

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

5 A. Their agent for permitting.

6 Q. And have you done the land work on this prospect?

7 A. Yes, I have.

8 Q. Have you previously testified before the  
9 Division?

10 A. Yes, I have.

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

13 A. Yes, they were.

14 MR. BRUCE: Mr. Examiner, I'd tender Mr. Schultz  
15 as an expert petroleum landman.

16 EXAMINER STOGNER: Mr. Schultz is so qualified.

17 Q. (By Mr. Bruce) Mr. Schultz, what does Gothic  
18 seek in this case?

19 A. Gothic seeks an unorthodox location for the  
20 McClellan "MOC" Federal Number 18 well.

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

23 A. This is a land plat of the area. The proposed  
24 well is 660 feet from the north line, 330 feet from the  
25 west line in Section 29 of Township 5 South, Range 25 East,

1 in Chaves County, New Mexico.

2 The northwest quarter of Section 29 will be  
3 dedicated to this well, together with Gothic's existing  
4 well, the McClellan "MOC" Federal Number 7, which is  
5 located in the northeast of the northwest of the section.

6 Q. Now, Mr. Schultz, on Exhibit 1, it's blotted out  
7 by the name of this well, but there was another Abo well on  
8 this unit, was there not?

9 A. Yes, there was the Gothic McClellan "MOC" Federal  
10 Number 13 well, which was plugged and abandoned in March of  
11 1998.

12 Q. And that is located in the southeast quarter of  
13 the northwest quarter?

14 A. That's correct.

15 Q. Okay. To what depth will the proposed well be  
16 drilled?

17 A. It will be drilled to a depth to test the Abo  
18 formation.

19 The well is in the Pecos Slope-Abo Gas Pool.  
20 Pool rules require that 160-acre spacing is required and  
21 allows for two wells per unit, with the wells to be no  
22 closer than 660 to an outside boundary unit. They also  
23 require that an unorthodox-location application be set for  
24 hearing.

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

1           A.    It is based on geologic reasons.  Due to the  
2 geology, Gothic wants the well located in the west of the  
3 existing Number 7 well.

4                    If you look at Exhibit 1, there is a well in the  
5 southeast southwest of Section 29, which is the McClellan  
6 "MOC" Number 13 well.  This well was an Abo well which was  
7 plugged and abandoned in March of 1998.

8           Q.    And Gothic does have a geologist here today to  
9 testify; is that correct?

10          A.    Yes.

11          Q.    Who are the affected offset operators or lessees?

12          A.    In Sections 19 and 20 to the north and northwest,  
13 it is a single federal lease operated by Central Resources,  
14 Inc.

15                    Section 30 to the west is operated by Gothic.  
16 Section 29 and 30 are within the same federal lease.

17          Q.    Okay, so the lease that it's moving closer  
18 toward, that Section 30 lease, is also part of the Section  
19 29 lease?

20          A.    That's correct.

21          Q.    Was Central Resources notified of this hearing?

22          A.    Yes, my affidavit of notice, with the notice  
23 letters and return receipt, is submitted as Exhibit Number  
24 2.

25          Q.    Were Exhibits 1 and 2 prepared by you or under

1 your direction?

2 A. Yes.

3 Q. And in your opinion is the granting of this  
4 Application in the interests of conservation and the  
5 prevention of waste?

6 A. Yes.

7 MR. BRUCE: Mr. Examiner, I'd move the admission  
8 of Gothic Exhibits 1 and 2 at this time.

9 EXAMINER STOGNER: Exhibits 1 and 2 will be  
10 admitted into evidence at this time.

11 EXAMINATION

12 BY EXAMINER STOGNER:

13 Q. This McClellan federal lease that encompasses  
14 both Section 29 and 30, does it just encompass those two  
15 sections, or is it larger?

16 A. I believe it is larger. There's Sections 28 and  
17 31 also included in that lease.

18 Q. It looks like maybe portions of Section 28 --

19 A. Yes.

20 Q. -- as opposed to all of it?

21 And all of Section 31?

22 A. I believe that's correct.

23 Q. Okay. Now, obviously the US government is the  
24 royalty.

25 How about working interest? Do you know if

1 they're all common throughout that big lease?

2 A. Yes, they are.

3 Q. Okay. You wouldn't happen to have a lease  
4 number, would you?

5 A. NM-36409.

6 Q. As shown up there in Section 29 on Exhibit Number  
7 I, I believe that number shows up. Is that where you are  
8 getting that?

9 A. Yes.

10 Q. Do you know how many wells are operated on this  
11 lease by Gothic, that are currently producing?

12 A. That are currently producing?

13 Q. Yes.

14 A. I'm not sure, but I believe there's 17 wells.

15 Q. 17 wells, approximately 17 wells?

16 A. Yes. Well, I will -- there is the -- There's 16  
17 wells. The "MOC" Federal Com Number 16 has not been  
18 drilled yet.

19 Q. Okay.

20 A. It's been permitted.

21 EXAMINER STOGNER: Mr. Bruce, is your next -- I  
22 assume is the geologist, your next witness will be?

23 MR. BRUCE: Yes.

24 EXAMINER STOGNER: In that case, I don't have any  
25 other questions of this witness.

1           You may be excused. Thank you, sir.

2                           GEORGE SCOTT, III,

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

5                           DIRECT EXAMINATION

6           BY MR. BRUCE:

7           Q.    Would you please state your name and city of  
8           residence?

9           A.    George Scott, Roswell, New Mexico.

10          Q.    What is your occupation?

11          A.    I'm a geologist.

12          Q.    What is your relationship to Gothic in this  
13          matter?

14          A.    I'm working as a consulting geologist to them.

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

17          A.    Yes, I have.

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

20          A.    Yes, they were.

21          Q.    And are you familiar with the geology involved in  
22          the Pecos Slope-Abo Gas Pool?

23          A.    Yes, I am.

24                   MR. BRUCE: Mr. Examiner, I'd tender Mr. Scott as  
25          an expert petroleum geologist.

1 EXAMINER STOGNER: Mr. Scott is so qualified.

2 Q. (By Mr. Bruce) Mr. Scott, could you identify  
3 Exhibit 3 for the Examiner and discuss the primary zones of  
4 interest for the proposed well?

5 A. Yes, Exhibit 3 is a CNL density porosity log, and  
6 it's being used as our type section well-log exhibit. It  
7 shows in yellow the crossover effect due to gas pays from  
8 the reservoir zones that are indicated as numbered.

9 And zones number 1, 2 and 3, which are the  
10 principal zones, we also have isopach, porosity isopach  
11 maps, for.

12 Q. Okay. It mentions also on this log, there's a  
13 zone 5 denoted, but that's not a main zone of interest in  
14 this well?

15 A. Not really particularly for our location.

16 Q. Okay. Well, why don't you move on to -- maybe  
17 just go to Exhibits 4, 5 and 6 together and discuss for the  
18 Examiner the -- identify the exhibits and discuss the  
19 primary zones of interest and why the location needs to be  
20 where it is.

21 A. Okay. The next exhibit is the Abo sand map, the  
22 so-called, denoted pay zone. It is a lenticular sandbody  
23 with a -- basically a north-south trend, and due to the  
24 stratigraphic parameters that were used in mapping, it  
25 substantiated our location, as indicated, as the best

1 location.

2 Going to --

3 Q. There's quite a bit of well control in this area,  
4 is there not --

5 A. Yes.

6 Q. -- Mr. Scott?

7 A. Yes, there is.

8 And then going to the map that shows the number 2  
9 sand, you see a northwest -- generally a regional  
10 northwest-southeast trend to that body, but we do have an  
11 elongate lobe coming off, going north south, which again  
12 supports our location in the northwest of Section 29.

13 And then Exhibit Number 6 shows the Number 3 pay  
14 sand. And again you see the lenticular nature of this  
15 reservoir, but we have a north-south component that is  
16 again a stratigraphic component, that is the basis for our  
17 location.

18 Q. Now, considering all these three maps together,  
19 the proposed location will -- first of all, it will  
20 maximize the thickness of the pay zone?

21 A. Yes, we should get optimized thickness.

22 Q. And you will be moving away from the producing  
23 Number 7 well, which is in the northeast quarter of the  
24 northwest quarter?

25 A. Yes.

1 Q. And finally, you are also moving away from the 13  
2 -- Number 13 well, which is in the southeast of the  
3 northwest, which has been plugged and abandoned?

4 A. Yes.

5 Q. And that's the basic theory behind this well  
6 location?

7 A. To crowd away from that, correct.

8 Q. And if this well is successful, it could set up  
9 another infill well location over in the northeast quarter  
10 of Section 30?

11 A. Yes.

12 Q. Okay. Mr. Scott, who prepared these maps?

13 A. These maps were prepared by the staff geologist  
14 for Gothic.

15 Q. Have you reviewed the data involved in the  
16 preparation of these maps?

17 A. Yes.

18 Q. And do you agree with their interpretation?

19 A. Yes. As a matter of fact, I pulled the well logs  
20 for the surrounding well control and kind of did a quick  
21 double-check audit of the work, and I found it to be very  
22 accurate.

23 Q. Okay. In your opinion, is the granting of this  
24 Application in the interests of conservation and the  
25 prevention of waste?

1 A. Yes.

2 MR. BRUCE: Mr. Examiner, at this time I would  
3 move the admission of Gothic Exhibits 3 through 6.

4 EXAMINER STOGNER: Exhibits 3 through 6 will be  
5 admitted into evidence.

6 EXAMINATION

7 BY EXAMINER STOGNER:

8 Q. Mr. Scott, in looking at Exhibit Number 3 --

9 A. Yes, sir.

10 Q. -- it's been a while since I've heard that Abo  
11 case for infill drilling up there.

12 What is the depositional environment of those  
13 different sands, your 1, 2, 3 and 5 in this instance? I'm  
14 assuming there's a number 4, but it didn't show up.

15 A. Right, it's pinched out.

16 Well, they're highly lenticular. You can move to  
17 offset wells, and sands that are present in a north-south  
18 trend may not be present in the east-west trend. But  
19 generally it's assumed to be a fluvial deltaic depositional  
20 environment.

21 For years, because of the fact there were red  
22 sands, people thought perhaps that denoted a different  
23 depositional environment. But it's generally accepted that  
24 it's a fluvial deltaic environment.

25 Q. And in this particular area, which is your more

1 prolific zone of interest, or that would yield the most  
2 production, or is that --

3 A. Well, I would feel like it was probably zones 2  
4 and 3, but zone 1 in places is very well developed as well.  
5 Two and 3 seem to have pretty good lateral extent. Those  
6 are probably the principals.

7 Q. What are you hoping to find in 5, because I  
8 notice you didn't map that out?

9 A. Well, it's kind of hit or miss. It's -- If you  
10 mapped it, it's more -- It shows the lenticular nature, but  
11 probably the thickest you'd see 5 is as it is in the  
12 Exhibit Number 3. It's about a 10-foot-thick zone. And  
13 the same with zone 4.

14 Q. And looking at Exhibit Number 6, if this was the  
15 only zone of interest, this Number 3 sand, then a standard  
16 location would have been acceptable in this particular  
17 instance. Would that be safe to say?

18 A. Yes, if that had been the only zone that would  
19 have probably been okay. Although even then, you see a  
20 northwest-to-southeast component that might -- I wouldn't  
21 have felt uncomfortable with either location, but I still  
22 feel uncomfortable with the proposed location.

23 Q. Okay. What's Gothic's future plans for  
24 infilling, or basically drilling up in the Abo sand area?

25 A. Well, as I understand, all of the acreage that

1 they have deemed prospective they intend to drill the  
2 infill locations. They have a very active geologic mapping  
3 program going on in that area, and each time they drill a  
4 location they use that as a basis to determine subsequent  
5 locations.

6 Q. And let's see, Gothic has come in -- This is  
7 about the -- what? Fourth or fifth application such as  
8 this?

9 A. I believe that's correct.

10 Q. Now, how many infill wells would you say Gothic  
11 has drilled, say, in the last six months, other than those  
12 four or --

13 A. I believe about a half dozen.

14 Q. Just roughly, basically.

15 MR. BRUCE: Probably, Mr. Examiner -- I've looked  
16 at the title, as has Mr. Schultz on some of these, and some  
17 of their infills are at standard locations. So they've  
18 drilled more than those four wells, or three or four wells,  
19 that we've had to come for unorthodox locations, for  
20 hearings.

21 Q. (By Examiner Stogner) Okay, I was trying to get  
22 a feel of what Gothic is doing out there and what they're  
23 expecting in the future, and perhaps come up with some --

24 A. I would say one thing that's not exactly related  
25 to your question, but they've been able to get some

1 reservoir-stimulation treatments off that are probably  
2 better than most people have seen, and even to the point  
3 that Yates Petroleum is starting to emulate their  
4 technique.

5 So having them develop in this area is  
6 definitely, I think, beneficial to the development of the  
7 reservoir. They seem to have a more efficient stimulation  
8 treatment devised than most of the operators have had in  
9 the past.

10 Q. Now, how long has Gothic been a player out there  
11 in this area?

12 A. Oh, for about --

13 MR. BRUCE: Mr. Examiner, they bought their  
14 interests in August or September of 1997.

15 Q. (By Examiner Stogner) Okay, that's what I was  
16 getting at, they bought --

17 A. That's about two years.

18 Q. Okay, and you have bought operations from  
19 somebody else, but Gothic has only been out there since --

20 A. Yes, sir.

21 Q. -- the last two years? In other words, you  
22 weren't -- Gothic wasn't one of the original players --

23 A. No, sir.

24 Q. -- either initially or when the infill procedure  
25 was --

1 MR. BRUCE: They bought the interest of Tide West  
2 Oil Company.

3 EXAMINER STOGNER: Who?

4 MR. BRUCE: Tide West.

5 EXAMINER STOGNER: Tide West.

6 THE WITNESS: Yeah, the original players were  
7 Mesa and Yates, McClellan.

8 MR. BRUCE: The Tide West interest came out of  
9 McClellan.

10 Q. (By Examiner Stogner) Okay. Just for the  
11 record, on Exhibit Number 3, what location on the map --  
12 and I'm going to refer to Exhibit Number 1 that this map is  
13 of --

14 A. That is the location in the northwest of the  
15 southwest of Section 29.

16 Q. The Number 14?

17 A. Yes, sir, being 2000 feet from the south and 660  
18 from the west.

19 EXAMINER STOGNER: Are there any other questions  
20 of this witness?

21 MR. BRUCE: (Shakes head)

22 EXAMINER STOGNER: You may be excused.

23 Mr. Bruce, do you have anything further in Case  
24 12,230?

25 MR. BRUCE: Nothing further in this matter, Mr.

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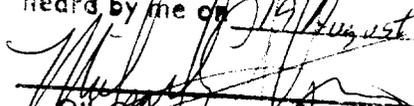
Examiner.

EXAMINER STOGNER: This case will be taken under advisement.

Thank you, gentlemen.

(Thereupon, these proceedings were concluded at 8:38 a.m.)

\* \* \*

I do hereby certify that the foregoing is a complete record of the proceedings at the Examiner hearing of Case No. 12230, heard by me on 19 August 1999.  
  
Examiner  
Oil Conservation Division

