

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO

15 July 1987

EXAMINER HEARING

IN THE MATTER OF:

Application of Presidio Oil Company      CASE  
for compulsory pooling Eddy County,      9173  
New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:

For the Applicant:

James G. Bruce  
Attorney at Law  
HINKLE LAW FIRM  
P. O. Box 2068  
Santa Fe, New Mexico 87504

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## I N D E X

## MICHAEL H. CANALE

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MR. STOGNER: Call next Case 9173, which is the application of Presidio Oil Company for compulsory pooling, Eddy County, New Mexico.

Call for appearances.

MR. BRUCE: Mr. Examiner, my name is Jim Bruce, representing Presidio Oil Company. I have two witnesses to be sworn.

MR. STOGNER: Are there any other appearances in Case 9173?

Will the witnesses please stand?

(Witnesses sworn.)

MR. STOGNER: Mr. Bruce.

MICHAEL H. CANALE,  
being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. BRUCE:

Q Would you please state your name and city of residence, please?

1           A           Michael H. Canale, Dallas, Texas.

2           Q           And what is your occupation and who is  
3 your employer?

4           A           Petroleum landman. My employer is Pres-  
5 idio Oil Company.

6           Q           Have you previously testified before the  
7 New Mexico OCD?

8           A           No, I have not.

9           Q           Would you please briefly describe your  
10 educational and work background?

11          A           I have a business degree in marketing  
12 from Oklahoma State University.

13                   I was employed as a landman with Phillips  
14 Petroleum Company for approximately six years from '81 -- or  
15 '80 to '86; landman with EuroTex Corporation for the past  
16 two years. I've been with Presidio Oil Company for the last  
17 month.

18          Q           And are you familiar with the land mat-  
19 ters involved in Case 9173?

20          A           Yes, I am.

21                   MR. BRUCE: Mr. Examiner, are  
22 the witness' qualifications acceptable?

23                   MR. STOGNER: Mr. Canale is so  
24 qualified.

25          Q           Mr. Canale, would you state briefly what

1 Presidio seeks in its application?

2 A Presidio Oil Compnay seeks an order pool-  
3 ing all mineral interest from the surface to the base of the  
4 Canyon formation at an approximate depth of 5600 feet,  
5 underlying the southwest of the northwest quarter of Section  
6 12, Township 26 South, Range 29 East, Eddy County, New  
7 Mexico, to be dedicated to a well at a standard location.

8 Presidio also requests consideration of  
9 the cost of drilling and completing the well and the alloca-  
10 tion of the cost thereof, as well as actual operating costs  
11 and charges for supervision.

12 Presidio requests that it be named well  
13 operator and that a charge for the risk involved in drilling  
14 the well be assessed against nonconsenting owners.

15 Q Would you please refer to Exhibit Number  
16 One and describe its contents?

17 A Exhibit Number One shows the approximate  
18 location of the proposed well; also the unit which will be  
19 around that well, which is the southwest quarter of the  
20 northwest quarter of Section 12, Township 26 South, Range 29  
21 East.

22 Q Has this well been drilled?

23 A It has been.

24 Q Recently?

25 A Yes. It's not been completed as yet but

1 it's in the process of drilling right now.

2 Q Okay. Who are the working interest  
3 owners in the southwest quarter of the northwest quarter of  
4 Section 12? Who do you seek to force pool?

5 A We seek to force pool Nu Energy Company.

6 Q Would you please describe your efforts to  
7 get Nu Energy to join in this well?

8 A We have contacted them on several  
9 occasions: 6-5, June 5th of this year we tried to get hold  
10 of the principal of that company, Mr. Davidson, and he was  
11 out of the office, said he should be back soon and will call  
12 back. We never heard anything.

13 June the 9th we tried again. We got the  
14 same response.

15 The 11th he was in a meeting there in the  
16 office, said he would definitely call back, never heard  
17 anything.

18 Same thing on June 15th, in a meeting,  
19 will call back, never did.

20 Same thing on June 17th.

21 June the 23rd we finally got hold of Mr.  
22 Davidson. He was not interested in drilling the well nor  
23 executing a joint operating agreement or farming out the  
24 interest to us. His statement at that time was that, go  
25 ahead and force pool us.

1                   6-23 of '87 we sent him a copy of the  
2 forced pooling application under certified letter.

3                   Q           And is this certified letter submitted as  
4 Exhibit Number Two?

5                   A           Yes, sir, it is.

6                   Q           Would you please now refer to Exhibit  
7 Number Three and discuss the cost of the proposed well?

8                   A           Okay. We show on there that -- this AFE  
9 evidences that the dry hole costs for this well are \$74,000;  
10 completion costs are going to be approximately \$155,000 and  
11 the costs are stated out as shown on Exhibit Number Three.

12                  Q           Is the proposed well cost in line with  
13 those normally encountered in drilling wells to this depth  
14 in Eddy County by Presidio Oil Company?

15                  A           Yes, it is.

16                  Q           Do you have a recommendation as to the  
17 amount which Presidio should be paid for supervision and ad-  
18 ministrative charges?

19                  A           Yes, we do. For a drilling rate of \$4500  
20 per month and a \$540 per month will allowed for operations  
21 costs for a producing well.

22                  Q           Are these amounts in line with those nor-  
23 mally charged by Presidio for its wells in this area?

24                  A           Yes, sir, they are.

25                  Q           What penalty do you recommend against

1 nonconsenting interest owners?

2 A 200 percent, which is a figure commonly  
3 used in operating a business in the area -- in this area of  
4 New Mexico, and our geologist will also discuss the proposed  
5 penalty.

6 Q And were Exhibits One through Three pre-  
7 pared by you or compiled from company records?

8 A Yes.

9 Q And in your opinion will the granting of  
10 this application be in the interests of conservation, the  
11 prevention of waste, and the protection of correlative  
12 rights?

13 A Yes.

14 MR. BRUCE: Mr. Examiner, I  
15 move the admission of Exhibits One through Three.

16 MR. STOGNER: Exhibits One  
17 through Three will be admitted into evidence.

18 MR. BRUCE: I have no further  
19 questions of this witness.

20

21 CROSS EXAMINATION

22 BY MR. STOGNER:

23 Q Mr. Canale, if I look at Exhibit Number  
24 Three here, I show down at the -- down at the last part of  
25 it the working interest and percentage and Nu Energy having



1 a 2-1/2 percent interest, and those are the ones you're  
2 force pooling.

3 A Yes, sir, that's correct.

4 Q Okay. As far as Paloma, Challenger, Mo-  
5 keen --

6 A Mokeen.

7 Q -- M-O-K-E-E-N Limited Partnership, what  
8 was their overhead charges that they agreed to and I assume  
9 that they agreed voluntarily on this particular investment?

10 A That is correct and the charges were the  
11 same as that we are going to propose to charge Nu Energy.

12 Q Does Presidio operate any other wells  
13 within this pool or general area?

14 A Yes, sir, we do.

15 Q Okay, do you recall what the overhead  
16 charges were on some of your partners that voluntarily  
17 agreed with you at that time?

18 A Right. They were \$4500 for a drilling  
19 rate and \$450 per month operations.

20 Q Is this the first time that Presidio  
21 has been in here to the New Mexico Oil Conservation Division  
22 for compulsory pooling?

23 A No, sir.

24 Q Okay, was -- was the well previous to  
25 this one, was it in a similar --

A It was exactly the same situation.

1           Q           Okay, and it had \$4500 drilling and \$450  
2 overhead charges in that particular application? Do you re-  
3 call?

4                   MR. BRUCE: I believe so. I  
5 could check and let you know, Mr. Examiner.

6                   MR. STOGNER: Would you at  
7 least let me know the order number on that particular case?

8                   MR. BRUCE: Yeah, I got it.

9                   MR. STOGNER: And how long ago  
10 and all it is.

11           Q           Has Presidio been a partner to any other  
12 parties in these particular -- in this particular area that  
13 had wells?

14           A           Well, we -- these -- these people that  
15 are shown on the AFE, Mokeen, Limited, Paloma, and Challen-  
16 ger, they've been partnes in several wells in this same  
17 area.

18           Q           Are any of those operators?

19           A           No, sir, they're not. We've operated all  
20 of them.

21           Q           So all of the interest that you have out  
22 there, Presidio is the operator.

23           A           That is correct.

24           Q           The total depth of this well is going to  
25 be 3500 feet, is that correct?

1           A           Yes, sir. 3500, that's correct.

2                           MR. STOGNER: I have no further  
3 questions of Mr. Canale at this time.

4                           MR. BRUCE: I have one  
5 question, Mr. Examiner.

6  
7                           REDIRECT EXAMINATION

8 BY MR. BRUCE:

9           Q           On Exhibit Number Three, Mr. Canale, the  
10 interest shown as the Petroleum Corporation, is that  
11 interest owned by Presidio?

12           A           Yes, it is. It's a wholly owned  
13 subsidiary of Presidio Oil Company.

14                           MR. STOGNER: One more  
15 question.

16  
17                           RECROSS EXAMINATION

18 BY MR STOGNER:

19           Q           One more question. As far as Challenger,  
20 Paloma, and Mokeen, are they associated partners with  
21 Presido?

22           A           No, they're not. Not -- simply in  
23 drilling the well only.

24                           MR. STOGNER: Thank you. I  
25 have no other questions for Mr. Canale. You may step down.  
Mr. Bruce?

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ROBERT R. RIVERS,  
being called as a witness and being duly sworn upon his  
oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. BRUCE:

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

A Robert R. Rivers, Denver, Colorado.

Q And what is your occupation and who are  
you employed by?

A I'm District Geologist for Presido Oil  
Company.

Q Have you previously testified before the  
OCD as a geologist?

A No, sir, I haven't.

Q Would you please describe your education  
and work background?

A I've got a Bachelor's degree from the  
University of Colorado with a degree in geology and a minor  
in engineering. Went to the University of Michigan for  
three years and the University of Colorado for two.

I've been in the oil business for four-  
teen years. I worked in Texaco's research lab for five

1 years. I've worked for a couple of small companies; worked  
2 for a major, and recently I ran the North American Explora-  
3 tion Group for BHP Petroleum, and I've been with Presidio  
4 for six months.

5 Q Does your area of responsibility include  
6 southeast New Mexico?

7 A Yes, sir, it does.

8 Q And are you familiar with the geological  
9 matters involved in this case?

10 A Yes, I am.

11 MR. BRUCE: Mr. Examiner, are  
12 the witness' qualifications acceptable?

13 MR. STOGNER: And that's Robert  
14 R. Rivers?

15 A Yes sir.

16 MR. STOGNER: Mr. Rivers is so  
17 qualified.

18 Q Mr. Rivers, would you please refer to Ex-  
19 hibit Number Four and describe that for the Examiner?

20 A This is a structure map with a net sand  
21 Isopach in red on the map and basically what it's showing is  
22 we are increasing in structure going to the west. It's  
23 striking north/south. The red lines on the Isopach go from  
24 zero to thirty showing the build-up of a channel deposit  
25 sand.

1                   The wells in question, and other wells in  
2 that field, are located on the map.

3                   Q            Would you please describe -- well, I'll  
4 go on.

5                   Move on to Exhibit Number Five and de-  
6 scribe the wells in the cross section?

7                   A            Okay, referring to cross section A-A',  
8 okay, going from west to east, going from the 11-1 Well to  
9 the fourth well, 12-4, to the 12-2, these are channel fill  
10 deposits. They were sourced from the north off the North-  
11 west Shelf and off the northeast -- from the northeast off  
12 the Central Basin Platform.

13                   It was a system of deposits that came  
14 from a channel -- or came through a reef, a Capitan Reef,  
15 Middle Permian age, cut down through that. Channels were  
16 scoured by density currents and later on infilled by finer  
17 grained sands.

18                   The reservoir that we're dealing with is  
19 called the Ramsey Sand. It's a member of the Bell Canyon,  
20 which is part of the Delaware Sand Group.

21                   These sands are very fine grained. The  
22 reservoir quality of the Ramsey Sand in this area at best is  
23 fair.

24                   In this cross section the -- drawing your  
25 attention to the 11-1, that sand is gone. The yellow line

1 that's marked is about 150 units on the gamma ray and that  
2 shows a clean sand.

3 Okay, we're toward the -- we have a  
4 greater increase in radioactivity. Our sand is basically  
5 shaled out or dirtied up quite a bit.

6 We go over to the 12-4 and the 12-2, we  
7 see 30 feet of good, clean sand as opposed to zero in the  
8 other one.

9 What's that basically saying is that this  
10 channel cut has come through there, it's been filled with  
11 finer grains, and it's terminating up dip to the west.

12 When we drilled this most recent well,  
13 going back to the other, other map, the 12-A, we didn't know  
14 if that channel would be positive and go to the west, stay  
15 in the same trend, go to the north, or go to the east. The  
16 most pessimistic case happened, it did go back to the east.  
17 We have 17 feet of net sand in the 12-A Well as opposed to  
18 30 in the No. 2 and No. 4.

19 We have pipe set on that. It was going  
20 to be perforated yesterday. I'm going to say that the IP is  
21 going to be right around 20 barrels a day. In a couple  
22 months that will probably drop off to about 10.

23 The current production from the 12-2,  
24 which has been producing for about five months, is 5 barrels  
25 of oil and 36 barrels of water a day. That's an uneconomi-

1 cal well.

2 The 12-4 is about 2-1/2 months old. It's  
3 currently making 26 barrels of oil and 60 barrels of water a  
4 day. That's the best well in the whole group.

5 What I'm trying to imply here is that the  
6 whole key in this situation is the sand quality of that res-  
7 ervoir and how quickly it can terminate.

8 Q What is the permeability in this (un-  
9 clear)?

10 A It runs about 10 millidarcies.

11 Q So it is not very good.

12 A No, the porosity is excellent. It runs  
13 anywhere from 22 to 27 percent but the permeability, because  
14 of the fine grain, is very small.

15 Q And the 11-1 Well is a dry hole, is --

16 A Yes, sir.

17 Q -- it not?

18 A It is.

19 Q Would you please move on to Exhibit Num-  
20 ber Six discuss the data set forth in that exhibit?

21 A Okay. The top three wells, the Brushy  
22 Federal No. 2, 3, and 4, respectively, their recent produc-  
23 tion for the month of June is listed. Again we're looking  
24 at 5 barrels of oil and 36 barrels of water for the No. 2;  
25 15 barrels of oil and 138 barrels of water for the No. 3;



1 and 26 barrels of oil and 60 barrels of water for the 4.

2 The other wells in this area that produce  
3 out of this same Ramsey Sand are listed in the next group.  
4 The Hankerman No. 1, which has cumed 10,000 barrels and  
5 plugged; the Hankerman No. 2, which has produced just under  
6 1700 barrels and currently it's making about a barrel a day.  
7 They pump it every third day and they get about 3 barrels of  
8 oil.

9 The Hankerman Schram (sic) made 66 bar-  
10 rels of oil out of this zone and they plugged it in 1961.

11 The Gulf Federal 3-A, which is listed on  
12 the structure map, has made over 30,000 barrels and they  
13 plugged that in 1974.

14 Again the cums out here run between 30  
15 and 50,000 would be a very good well. Payout is typical, 18  
16 months to 2 years.

17 Q Would you please now move on to the log  
18 marked as Exhibit Number Seven?

19 A This is the well that we most currently  
20 drilled. This is the 12-A No. 1.

21 As I told you on the map we had 17 feet  
22 of net sand and that's what this one is showing.

23 If you look at this log and the cross  
24 section and compared the sand build-up, or net sand in the  
25 different wells, again you're seeing how fast the change is.

1 This is a pretty risky, risky area, at least from a  
2 reservoir quality standpoint.

3 Q What penalty would you recommend on the  
4 nonconsenting owners?

5 A 200 percent.

6 Q And would you briefly state what that is  
7 based upon?

8 A I think that the -- any time you're  
9 dealing with a situation of channel sand and a reservoir  
10 that's questionable economically at best, you would have to  
11 set the high penalty.

12 Q And were Exhibits Four through Seven  
13 prepared by you or compiled from company records?

14 A Yes, sir, they were.

15 Q In your opinion is the granting of this  
16 application in the interest of conservation, and the  
17 prevention of waste?

18 A Yes, sir, it is.

19 MR. BRUCE: Mr. Examiner, I  
20 move the admission of Exhibits Four through Seven.

21 MR. STOGNER: Exhibits Four  
22 through Seven will be admitted into evidence at this time.

23 MR. BRUCE: I have no further  
24 questions of the witness at this time.

25

## CROSS EXAMINATION

BY MR. STOGNER:

Q Mr. Rivers, when I refer to Exhibit Number Four, there are no controlled wells up to the north of you except those that are P&A'ed way up in Section I guess that's No. 1?

A Yes, sir, that's correct.

Q So this is essentially an offset to the north or an out-step to the north of presently producing wells for the Petroleum Corporation, I assume.

A Yes, sir, it is.

Q Okay. When was this pool discovered, do you know, by which well?

A The No. 1, 12-1, was drilled in 1986 and that was completed out of a deeper sand, a 5500 foot sand called the Williamson out of the Cherry Canyon.

The first well that was really commercial was also drilled in '86 and that was the No. 3-12.

Okay, the well to the north of that, the No. 2, was drilled before the 3 but again they tried to complete it out of a deeper zone and so the Ramsey Sand interval was not perforated until about three or four months ago.

So late '86 and early '87 is when this

1 was discovered.

2 MR. STOGNER: I have no further  
3 questions of this witness.

4 Oh, I sure do.

5 Q When was this particular well that we're  
6 talking about today, when was it spud?

7 A June 16th. Can I add something else?

8 We have on -- the reason that well took  
9 so long to drill and the reason we're still playing with it,  
10 they had a lot of hole problems when they drilled it.

11 Normally it takes seven days to complete  
12 a well at 3500 feet but we had -- we lost 390 feet of drill  
13 collar in the bottom and we just had a lot of problems with  
14 the hole.

15 Q Which well was that?

16 A That's the No. 12-A.

17 Q That the one you're on today?

18 A Yes, sir.

19 Q Well, doggone. Okay, well, let's see,  
20 this well was spudded on June 16th. Your application was  
21 received by us on June 18th but it made no mention that the  
22 well was being drilled. I guess it was probably mailed the  
23 same day it was spudded.

24 Okay, let's go back to the problems on  
25 this No. 12-A, then.

1 When did you lose the hole or when did you lose the drill  
2 collar?

3 A We started -- about three or four days  
4 after we started drilling. I'm going to say around the  
5 20th.

6 Q About what depth were you at?

7 A 2339, and we dropped 390 feet, which is  
8 about 13 sections of drill collar down the hole.

9 Now we had that turnkey bid from Capstar  
10 Drilling and the completion cost was about \$155,000 turnkey.

11 They went down and the they tried to fish  
12 and wash over and pull that collar out and they couldn't do  
13 it.

14 The thing that happened initially is the  
15 formation came in on them. Started to come out of the hole  
16 and it was tight. After trying for two days they went down  
17 and they cut off the drill collar and they pulled the pipe  
18 out. Then they went back in with a wash over unit and an  
19 overshot and tried to grab the collar. They couldn't do it.  
20 They came out of the hole and put a cement plug in. It was  
21 1600 -- 600 feet high. They let it set for a day. They  
22 drilled down through the plug trying to kick off the plug  
23 and deviate. That didn't work. They ended up on top of the  
24 collar.

25 Capstar has been in that area quite a bit

1 so it was turnkey and we didn't put any input at all into  
2 that.

3 They went back again and they put another  
4 plug in and they went back with another unit, down hole  
5 motor, dynadrill, and they offset about 30 or 40 feet; came  
6 out of the hole and went back in with a regular bit and  
7 that's how they made their hole.

8 And that finally worked for them, they  
9 came out of the hole, and we set pipe.

10 The logs on the well were supposed to be  
11 a dualatero log and we did not get that run. We were lucky  
12 to get the one log that we have, which is a retro-density  
13 log, and that's the one that you have a copy of that we  
14 submitted. That's the only log we ran.

15 The pipe went in. I think the deviation  
16 was about two degrees and again we should have perforated  
17 that yesterday.

18 Q So that's where it sets now.

19 A Yes, sir.

20 Q Is completion on it.

21 A Right. And we will do a frac on it, a  
22 10,000 gallons frac.

23 MR. STOGNER: Okay, I have no  
24 further questions of Mr. Rivers.

25 I would like to ask Mr. Canale

1 a question.

2 I would remind you that you're  
3 under oath.

4 When did the other parties  
5 agree, reach an agreement and sign your agreement on this  
6 particular well?

7 MR. CANALE: Challenger Miner-  
8 als agreed on June 1st, 1987.

9 Mokeen, on May 27th, 1987.

10 And Paloma Minerals, we took a  
11 farm-in from them for their interest. The date of that was  
12 June 9th, 1987.

13 MR. STOGNER: Do you have those  
14 there with you today?

15 MR. CANALE: Yes, I do.

16 MR. STOGNER: Do you have by  
17 chance extra copies or could I get a copy of those before yo  
18 leave?

19 MR. CANALE: Sure, the executed  
20 AFE's, what date they were executed, and so forth.

21 MR. STOGNER: If you would,  
22 please.

23 Mr. Bruce, I'll leave that up  
24 to you to submit a copy of that and lay it on my desk,  
25 please, before you leave today.

1                   That's all I have for either  
2 witness.

3                   Is there any other questions,  
4 Mr. Bruce?

5                   If not, both witnesses may be  
6 excused.

7                   If there's nothing further in  
8 Case Number 9173 we'll take this case under advisement.

9  
10                   (Hearing concluded.)

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## C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY  
CERTIFY that the foregoing Transcript of Hearing before the  
Oil Conservation Division (Commission) was reported by me;  
that the said transcript is a full, true, and correct record  
of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 9173,  
heard by me on 15 July 19 82.

Michael J. Boyd Examiner  
Oil Conservation Division