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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. 10958

APPLICATION OF HANAGAN PETROLEUM CORPORATION  
-----

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: David Catanach, Hearing Examiner

April 14, 1994

Santa Fe, New Mexico

This matter came on for hearing before the  
Oil Conservation Division on April 14, 1994, at  
Morgan Hall, State Land Office Building, 310 Old  
Santa Fe Trail, Santa Fe, New Mexico, before Deborah  
O'Bine, RPR, Certified Court Reporter No. 63, for the  
State of New Mexico.

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I N D E X

April 14, 1994  
Examiner Hearing  
CASE NO. 10958

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<u>MICHAEL G. HANAGAN</u>	
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A P P E A R A N C E S

FOR THE DIVISION:     RAND L. CARROLL, ESQ.  
                           General Counsel  
                           Oil Conservation Commission  
                           State Land Office Building  
                           310 Old Santa Fe Trail  
                           Santa Fe, New Mexico 87501

FOR THE APPLICANT:    HINKLE, COX, EATON, COFFIELD  
                           & HENSLEY  
                           P.O. Box 2068  
                           Santa Fe, New Mexico 87504  
                           BY: JAMES G. BRUCE, ESQ.

1 EXAMINER CATANACH: At this time we'll  
2 call Case 10958.

3 MR. CARROLL: Application of Hanagan  
4 Petroleum Corporation for an unorthodox oil well  
5 location, Chaves County, New Mexico.

6 EXAMINER CATANACH: Are there appearance  
7 in this case?

8 MR. BRUCE: Mr. Examiner, Jim Bruce from  
9 the Hinkle law firm in Santa Fe representing the  
10 applicant. I have one witness to be sworn.

11 EXAMINER CATANACH: Any additional  
12 appearances? Will the witness please stand to be  
13 sworn in?

14 (Witness sworn.)

15 MICHAEL G. HANAGAN,  
16 the witness herein, after having been first duly  
17 sworn upon his oath, was examined and testified as  
18 follows:

19 EXAMINATION

20 BY MR. BRUCE:

21 A. Will you please state your name and city  
22 of residence for the record?

23 A. I'm Michael G. Hanagan. I live in  
24 Roswell, New Mexico.

25 Q. Who do you work for and in what capacity?

1           A.    I work for Hanagan Petroleum Corporation.  
2 I'm vice president and geologist.

3           Q.    Have you previously testified before the  
4 Division as a geologist?

5           A.    No, I have not.

6           Q.    Could you explain for the examiner your  
7 educational and employment background?

8           A.    I graduated from Fort Lewis College in  
9 1983, and since that time I've been employed by  
10 Hanagan Petroleum, primarily developing oil and gas  
11 prospects in southeastern New Mexico.

12          Q.    Are you familiar with the geology in part  
13 of this location?

14          A.    Yes, sir.

15               MR. BRUCE:  Mr. Examiner, I tender Mr.  
16 Hanagan as an expert petroleum geologist.

17               EXAMINER CATANACH:  Mr. Hanagan is so  
18 qualified.

19          Q.    (BY MR. BRUCE)  Briefly, Mr. Hanagan, what  
20 does the corporation seek in this case?

21          A.    We seek approval to drill an oil well at  
22 an unorthodox location, which would be 421 feet from  
23 the north line and 2,381 feet from the west line of  
24 Section 4, Township 14 South, Range 29 East, of  
25 Chaves County, New Mexico.

1 Q. What is the target formation?

2 A. This will be a 9,800-foot Devonian test.

3 Q. Is the location based on geological  
4 reasons?

5 A. Yes, it is.

6 Q. Would you refer to Hanagan Exhibit A,  
7 identify it for the examiner, and outline the reasons  
8 for the location?

9 A. Exhibit A is a structural contour map on  
10 the top of the Mississippian formation, showing the  
11 proposed location in the northeast quarter of the  
12 northwest quarter of Section 4. The Mississippian is  
13 the best identifiable marker on seismic. This map is  
14 based on seismic and subsurface geology. It reflects  
15 a small structure which we need to be at the highest  
16 position we can on that structure.

17 To the north is the Marathon -- about  
18 three quarters of a mile away to the north is the  
19 Marathon No. 2 Marathon Federal. That's the nearest  
20 producing Devonian well. It's accumulated  
21 approximately 20,000 barrels of oil to date and is  
22 currently shut in due to the high cost of excessive  
23 water production and some mechanical problems.

24 About a half mile north is the Hanagan No.  
25 1 Lobo Federal, which is a proposed Devonian location

1 which has not yet been drilled. In all likelihood,  
2 we'll drill this Leapin Lizard location prior to the  
3 Lobo location.

4 Q. Are these small structures common in the  
5 Devonian?

6 A. Yes, sir. This is typical of the Devonian  
7 structure in Chaves County.

8 Q. There's also a fault line on there. Does  
9 that come into play on your proposed location?

10 A. Yes. That's another reason we need to --  
11 in fact, one of the primary reasons we need the  
12 unorthodox location. It will increase the likelihood  
13 of encountering that fault as you move west. It's  
14 not as clearly defined as it looks there.

15 Q. The precise location could be a little  
16 closer to the your well?

17 A. Yes, that's right.

18 Q. Could you then move on to your Exhibit B  
19 and identify what that shows for the examiner?

20 A. Exhibit B is a leasehold map, showing the  
21 lease ownership in the immediate area of the  
22 location. Hanagan Petroleum and Marathon Oil jointly  
23 own all offset proration units to this location.

24 Q. Is Marathon an interest owner in your  
25 proposed well?

1           A.     Marathon has an interest in the acreage  
2 block. We're not sure if they will have a working  
3 interest in the well at the present time.

4           Q.     What is Exhibit C?

5           A.     Exhibit C is the standard well location  
6 acreage plat for this well showing it's unorthodox.  
7 It's 258 feet from the center line; so making it  
8 unorthodox by 71 feet. And I've also attached our  
9 application to drill to the BLM, which we expect to  
10 be approved next week.

11          Q.     Was Marathon notified of this hearing?

12          A.     Uh-huh. Exhibit D is a letter notifying  
13 Marathon of this hearing, along with an affidavit of  
14 notice of that.

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, it is.

19          Q.     Were Exhibits A through D prepared by you  
20 or under your direction?

21          A.     Yes, they were.

22          Q.     Do you have any request regarding, if the  
23 Division approves this, the timing of an order?

24          A.     Yes. If possible, I would appreciate  
25 approval of this location by May 1 due to the



1 availability of a rig in the nearby area. I mean May  
2 1st. Did I say April?

3 EXAMINER CATANACH: No. You said May.

4 THE WITNESS: Well, if I could by May 1st,  
5 due to the availability of rig in the immediate area  
6 which would result in substantial cost savings to us.

7 MR. BRUCE: Thank you. At this time, Mr.  
8 Examiner, I'd move the admission of Exhibits A  
9 through D.

10 EXAMINER CATANACH: Exhibits A through D  
11 will be admitted into evidence.

12 MR. BRUCE: We have nothing further in  
13 this matter.

14 EXAMINATION

15 BY EXAMINER CATANACH:

16 Q. Mr. Hanagan, what geologic information did  
17 you utilize to map that structure in Section 4?

18 A. This is based on subsurface geology but  
19 primarily on a 3D seismic survey that we shot on this  
20 future.

21 Q. Was that also used in picking a location  
22 for the Lobo Federal No. 1?

23 A. Yes, sir.

24 Q. Has Hanagan drilled a Devonian well in  
25 this area?

1           A.    Yes, sir.  We've drilled a Devonian  
2 discovery for the Long Arroyo Devonian approximately  
3 seven miles west from here.  That was a 3D prospect.

4           Q.    You did utilize 3D in that prospect?

5           A.    Yes, we did.

6           Q.    So you're pretty confident that it's  
7 pretty accurate in finding these structures?

8           A.    It appeared it was within five foot of the  
9 mapped.  And yes, we have a high degree of confidence  
10 in it.

11          Q.    Your well location was chosen to basically  
12 encounter the crest of the structure, the top of the  
13 structure?

14          A.    Yes, it was.  As small as this structure  
15 is, as defined by the 3D, it's critical to get  
16 absolutely as high as you can, with the primary risk  
17 being that fault over to the west.  You don't want to  
18 bump up too close to it.

19          Q.    As you move off the top of the structure,  
20 do you lose reservoir quality?

21          A.    No.  It's a real strong water-drive  
22 reservoir.  You'll get strong -- have high  
23 permeability offstructure, too.  This Marathon No. 2  
24 Marathon Federal Well which is up there minus 5,190,  
25 that well has encountered a large amount of water

1 after an acid job. They were producing waterfree  
2 prior to that. It's critical, we feel that we need  
3 to stay above that at least in case it wasn't just  
4 the acid job that brought the water in. And being a  
5 fairly steep structure, you can come off of there  
6 pretty quick.

7 Q. So you just want to make sure you stay  
8 above the oil-water contact?

9 A. Um-hm. The Marathon well was above oil-  
10 water contact until they acidized, but we're using  
11 that as the oil-water contact now as an assumed,  
12 based on no other.

13 Q. Marathon and Hanagan jointly own all of  
14 the offset acreage; is that correct?

15 A. Uh-huh. All of Section 33 and 34, north  
16 half of 4, and north half of 5 are all jointly owned  
17 Hanagan two thirds, Marathon one third.

18 EXAMINER CATANACH: I have nothing  
19 further. There being nothing further, Case 10958  
20 will be taken under advisement.

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CERTIFICATE OF REPORTER

STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF SANTA FE )

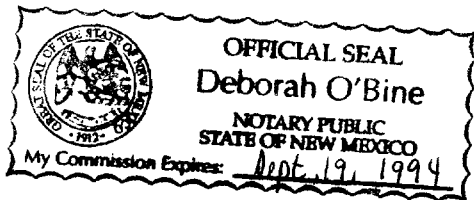
I, Deborah O'Bine, Certified Shorthand Reporter and Notary Public, HEREBY CERTIFY that I caused my notes to be transcribed under my personal supervision, and that the foregoing transcript is a true and accurate record of the proceedings of said hearing.

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, May 4, 1994.

*Deborah O'Bine*

DEBORAH O'BINE  
CCR No. 63



I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1087, heard by me on April 14, 1994.

*David Catant*, Examiner  
Oil Conservation Division