

INDEX April 6th, 1995 Examiner Hearing CASE NO. 11,238 PAGE **APPLICANT'S WITNESS:** MICHAEL G. HANAGAN Direct Examination by Mr. Carr 3 Examination by Examiner Catanach 8 **REPORTER'S CERTIFICATE** 12 * * * EXHIBITS Identified Admitted Exhibit A 5 8 Exhibit B 8 6 Exhibit C 7 8 * * * APPEARANCES FOR THE DIVISION: RAND L. CARROLL Attorney at Law Legal Counsel to the Division State Land Office Building Santa Fe, New Mexico 87504 FOR THE APPLICANT: CAMPBELL, CARR & BERGE, P.A. Suite 1 - 110 N. Guadalupe P.O. Box 2208 Santa Fe, New Mexico 87504-2208 By: WILLIAM F. CARR * * *

2

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	23	A. Mike Hanagan.
A. In Roswell, New Mexico.	24	Q. Mr. Hanagan, where do you reside?
	25	A. In Roswell, New Mexico.

1	Q.	
	~	By whom are you employed?
2	А.	Marbob Energy.
3	Q.	And what is your current position with Marbob?
4	Α.	Geologist.
5	Q.	Have you previously testified before this
6	Division?	
7	Α.	Yes, I have.
8	Q.	At the time of that testimony, were your
9	credential	s as a petroleum geologist accepted and made a
10	matter of	record?
11	Α.	Yes, they were.
12	Q.	Are you familiar with the Application filed in
13	this case	on behalf of Marbob?
14	Α.	Yes, I am.
15	Q.	And have you made a geological study of the area
16	surroundin	g the South Lone Wolf-Devonian Pool and, in
17	particular	, of the proposed unorthodox location?
18	Α.	Yes, I have.
19	I	MR. CARR: Are the witness's qualifications
20	acceptable	?
21	:	EXAMINER CATANACH: Yes, they are.
22	Q.	(By Mr. Carr) Mr. Hanagan, could you briefly
23	state what	Marbob seeks in this case?
24	A. 1	We seek an unorthodox location based on geologic
25	considerat.	ions.

1	Q. And the well involved in this case is the White
2	Fang Federal Number 1 well?
3	A. Yes, sir, it is.
4	Q. And what is the unorthodox location you're
5	seeking for that well?
6	A. The well location is 1353 feet from the north and
7	1914 feet from the west of Section 33, Township 13 South,
8	Range 29 East.
9	Q. And what acreage will be dedicated to the well?
10	A. The southeast quarter of the northwest quarter.
11	Q. And that's a standard oil unit in this pool?
12	A. Yes, sir, it is.
13	Q. What are the current well-location requirements
14	for the South Lone Wolf-Devonian Pool?
15	A. I believe they're 330-foot offsets from the
16	boundaries.
17	Q. From the boundaries of the 40-acre tract?
18	A. Yes, sir.
19	Q. Let's go to what has been marked Marbob Exhibit
20	Number A, or Letter A, and would you identify that and
21	review it for Mr. Catanach?
22	A. Yes, Exhibit A is a leasehold map of Section 33,
23	which reflects all the offsetting proration units in this
24	section.
25	The White Fang is located is the red dot

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located in the very north part of the southeast quarter of 1 2 the northwest quarter. 3 Two other wells are shown, the Marbob Number 2 4 Marathon Federal, which was abandoned in July of 1994, and 5 the Marbob Number 1 Lobo Federal, which is located about a 6 quarter of a mile south. It's also -- This map also shows lease ownership, 7 8 which -- both of these are federal leases, both the leases 9 are owned by Marbob, record title is by Marathon. Marathon owns record title, Marbob has operating rights. 10 11 And in fact, you're only moving the well toward Q. 12 acreage operated by Marbob and acreage under which there's common ownership? 13 Yes, sir. 14 Α. All right, let's go to Exhibit Letter B. 15 Q. Would 16 you identify and review that? This is a structural contour map on the top of 17 Α. the Siluro-Devonian formation. It's based on 3-D seismic 18 information in conjunction with existing subsurface 19 20 geology. 21 The primary feature on this is -- There's a 22 north-south trending fault on the west side of this 23 feature, which is the thicker red line. There's a couple 24 of small adjustment faults having 50 to 75 foot of throw, 25 maybe up to 100 foot of throw.

Coming off of this main fault, one of them bounds 1 2 the Lobo feature to the south of this well, of this The other fault runs just north of the existing 3 proposal. Marbob Number 2 Marathon Federal, and we plan on -- This 4 location is based on getting the highest position on the 5 upthrown side of that fault. 6 And what you're doing is trying to locate as high 7 Q. as possible on this small Devonian feature to produce the 8 reserves in that feature? 9 Α. Uh-huh. 10 Do you have a bottom water drive in the area? 11 0. Is 12 that the reservoir drive? 13 Very strong bottom water drive in this area. Α. 14 Q. And by locating a well at this proposed location, 15 is it your intention to recover as much oil as possible 16 without leaving attic oil behind? 17 Α. Yes, sir. 18 0. Is Exhibit Letter C an affidavit confirming that 19 notice of this Application has been provided in accordance 20 with OCD rules? Yes, it is. 21 Α. 22 Q. And notice was given to the Bureau of Land Management and also to Marathon because of their ownership 23 in the area? 24 25 Α. Yes, sir.

1	Q. In your opinion, will approval of this
2	Application result in the recovery of hydrocarbons that
3	otherwise will be left in the ground?
4	A. Yes.
5	Q. And will it otherwise be in the best interests of
6	conservation, the prevention of waste and the protection of
7	correlative rights?
8	A. Yes, sir, it will.
9	Q. Were Exhibits A through C either prepared by you,
10	Mr. Hanagan, or at your direction?
11	A. Yes, they were.
12	MR. CARR: At this time, Mr. Catanach, we move
13	the admission of Marbob Energy Exhibits A through C.
14	EXAMINER CATANACH: Exhibits A through C will be
15	admitted as evidence.
16	MR. CARR: That concludes my examination of this
17	witness.
18	EXAMINATION
19	BY EXAMINER CATANACH:
20	Q. Mr. Hanagan, what's the current status of the
21	Marathon Federal Number 2?
22	A. It's been temporarily abandoned in July of 1994.
23	It was a Devonian producer, and it's been abandoned with a
24	bridge plug.
25	Q. Okay. Again, what you hope to get is

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1 structurally higher and on the other side of the fault from 2 the Marathon 2 Federal? Yes, sir. The Marathon 2 was not drilled on the 3 Α. 4 3-D survey; it was drilled prior to us shooting the 3-D 5 survey. 6 ο. Will the proposed well recover reserves that 7 weren't recovered by the Marathon 2 Federal? 8 A. Yes, sir. 9 The fault effectively seals off --Q. 10 Α. Yeah, that's somewhat a question whether that's 11 actually a sealing fault or not, but any reserves that are remaining on that side will either be recovered by that 12 well or the Lobo well. 13 14 The fault has at least raised the reservoir up above that. 15 16 Q. Do you have any estimates on how much oil the 17 proposed well may recover? 18 Α. Yeah, I would -- My estimates are close to -between 300,000 and 500,000 barrels. 19 20 0. Okay, you said that -- Is Marathon an interest owner in this lease? 21 Yes, sir, they are. 22 Α. 23 Q. Okay, is it just Marathon and Marbob, or are 24 there other interest owners? 25 Marbob has some internal partners. Α.

1	Q. The interest, however, is common as to all these
2	leases, or as to all this acreage in Section 33?
3	A. Yes, sir.
4	Q. Okay, that's including the white-colored acreage?
5	A. Uh-huh, the white-colored acreage is held by that
6	Number 1 Lobo Federal well, and the acreage is common
7	there. Marathon actually has a back-in in that piece, but
8	that's through a farmout agreement.
9	Q. Okay. The interest in the blue section is all
10	common?
11	A. Yes, sir.
12	Q. Mr. Hanagan, have you encountered any drift in
13	these wells that you know about?
14	A. No, sir, not in either the Marathon 2 or the
15	Lobo. The Marathon 2 had up to three degrees deviation,
16	according to the dipmeter, and that went to the southeast.
17	Q. You're not likely to drift to the north in that
18	proposed well?
19	A. No, sir, not unless we encounter that fault,
20	which we hope to be far enough away. That fault, the minor
21	fault that's separating the two, should be close to
22	vertical.
23	EXAMINER CATANACH: I have nothing further of the
24	witness.
25	MR. CARR: That concludes our presentation in
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this case. EXAMINER CATANACH: There being nothing further in this case, Case 11,238 will be taken under advisement. (Thereupon, these proceedings were concluded at 10:15 a.m.) * * * I do hereby certify that the foregoing is a complete accord of the proceedings in the Example of Case No. //23 / foul 6 heard by ... a on_ , Examine 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 April 14th, 1995.

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STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 1998