1	NEW MEXICO OIL CONSERVATION DIVISION
2	STATE LAND OFFICE BUILDING
3	STATE OF NEW MEXICO
4	CASE NO. 10470
5	
6	IN THE MATTER OF:
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8	The Application of Maralo, Inc.,
9	for compulsory pooling, Lea County, New Mexico.
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14	BEFORE:
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16	DAVID R. CATANACH
17	Hearing Examiner
18	State Land Office Building
19	April 30, 1992
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2 2	REPORTED BY:
23	DEBBIE VESTAL Certified Shorthand Reporter
24	for the State of New Mexico
25	

PIGINAL

1	APPEARANCES
2	
3	FOR THE APPLICANT:
4	CAMPBELL, CARR, BERGE & SHERIDAN, P.A. Post Office Box 2208
5	Santa Fe, New Mexico 87504-2208
6	BY: WILLIAM F. CARR, ESQ.
7	
8	FOR MEWBOURNE OIL COMPANY:
9	HINKLE, CLOX, EATON, COFFIELD & HENSLEY 500 Marquette, Northwest, Suite 740
10	Albuquerque, New Mexico 87102-2121 BY: JAMES BRUCE, ESQ.
11	BI. OMMED BROOM, BOQ.
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1		I N D E X	
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3		Page	Number
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5	Appearance	es s	2
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7	WITNESSES	FOR THE APPLICANT:	
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9	1.	MARK WHEELER	
10		Examination by Mr. Carr	5
1 1		Examination by Examiner Catanach	11
1 2			
13	2.	JOHN THOMA	
1 4		Examination by Mr. Carr	1 2
15		Examination by Mr. Bruce	20
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EXHIBITS Page Identified Exhibit No. 1 Exhibit No. 2 Exhibit No. 3 Exhibit No. 4 Exhibit No. 5 Exhibit No. 6

1	EXAMINER CATANACH: At this time we'll
2	call Case 10470, Application of Maralo,
3	Incorporated, for compulsory pooling, Lea County,
4	New Mexico.
5	Appearances in this case?
6	MR. CARR: May it please the Examiner,
7	my name is William F. Carr with the law firm of
8	Campbell, Carr, Berge & Sheridan of Santa Fe. We
9	represent Maralo, Inc., and I have two witnesses.
10	MR. BRUCE: Mr. Examiner, my name is
11	Jim Bruce from the Hinkle law firm. I'm
1 2	representing Mewbourne Oil Company. I have no
13	witnesses.
14	EXAMINER CATANACH: Other appearances?
15	MR. THOMA: John Thoma, Maralo, Inc.
16	MR. WHEELER: Mark Wheeler, Maralo,
17	Inc.
18	EXAMINER CATANACH: Will the witnesses,
19	please, stand to be sworn in.
20	[The witnesses were duly sworn.]
2 1	MARK WHEELER
2 2	Having been duly sworn upon his oath, was
23	examined and testified as follows:
24	EXAMINATION
25	BY MR. CARR:

1	Q. Will you state your name for the
2	record?
3	A. Mark Wheeler.
4	Q. Where do you reside?
5	A. Midland, Texas.
6	Q. By whom are you employed and in what
7	capacity?
8	A. Maralo, Inc., district landman.
9	Q. Mr. Wheeler, have you previously
10	testified before the New Mexico Oil Conservation
11	Division?
1 2	A. No, I have not.
13	Q. Would you briefly summarize your
1 4	educational background and review your work
15	experience?
16	A. I have a bachelor's of business
17	administration from West Texas State University,
18	graduated in 1980, and I have been a landman
19	since that time. Employed by Maralo, Inc., for
20	seven years and am a Certified Professional
2 1	Landman.
2 2	Q. Does the geographic area of your
23	responsibility for Maralo include the portion of
2 4	southeastern New Mexico involved in this case?

A. Yes.

1	Q. Are you familiar with the application
2	filed in this matter?
3	A. Yes.
4	Q. Are you familiar with the subject area?
5	A. Yes.
6	MR. CARR: We tender Mr. Wheeler as an
7	expert witness in petroleum land matters.
8	EXAMINER CATANACH: He is so qualified.
9	Q. (BY MR. CARR) Would you briefly state
10	what Maralo seeks with this application?
11	A. The compulsory pooling of the south
12	half, southeast quarter, Section 13, 18 South, 32
13	East, Lea County, New Mexico.
14	Q. Mr. Wheeler, before we go into your
15	exhibits, I ask you to refer to what has been
16	marked as Maralo Exhibit No. 4 and using that
17	identify for Mr. Catanach the acreage which is
18	the subject of this application.
19	A. The south half, southeast quarter of
20	Section 13, 18 South, 32 East has been outlined
21	in orange. The location designated by the yellow
2 2	dot is our proposed well location for that
23	proration unit.
24	Q. What is the ownership of the acreage in

this 80-acre spacing unit?

1	A. Maralo has the southeast-southeast of
2	the section under farmout. Mewbourne Oil Company
3	owns the southwest-southeast.
4	Q. And what is the primary objective in
5	this well?
6	A. Wolfcamp Formation.
7	Q. What you're doing here today is pooling
8	the Mewbourne interest?
9	A. Yes.
10	Q. The other information on this exhibit
1 1	will be reviewed by Mr. Killmer?
1 2	A. Yes.
1 3	Q. Let's go now to what has been marked as
1 4	your Exhibit No. 1. Could you identify that,
15	please?
16	A. Maralo's proposed authority for
17	expenditure for the drilling of the West Corbin
18	13 Federal No. 1 well.
19	Q. Could you review the totals on this
20	AFE?
2 1	A. The dry hole, two casing point cost
2 2	\$442,525. The completed well cost \$746,425.
2 2	O Are these costs in line with what has

been charged by Maralo for other wells in the

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area?

1	A. Yes.
2	Q. And has this AFE been provided to
3	Mewbourne?
4	A. Yes, it has.
5	Q. Could you summarize the effort you've
6	made to obtain Mewbourne's voluntary
7	participation in this venture?
8	A. Okay. I believe Exhibit 2 is a
9	detailing of the contacts made with Mewbourne
10	beginning on February 6, 1992, and continuing
11	through the day-before-yesterday, April 28.
1 2	We've made 13 attempts to obtain either their
13	farmout or joinder in this matter.
14	Q. What is the status of your negotiations
15	with Mewbourne at this time?
16	A. To date we have not obtained a joinder
17	or a farmout.
18	Q. Are negotiations with Mewbourne
19	continuing?
20	A. Yes.
2 1	Q. If you're able to effect a voluntary
2 2	agreement for development of this acreage, will
23	Maralo immediately advise the Examiner in this

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matter?

Α.

Yes.

- Q. Is Exhibit No. 3 an affidavit confirming that notice of this hearing has been provided by Maralo to Mewbourne as required by the Oil Conservation Division?

 A. Yes.
 - Q. Has Maralo made an estimate of the overhead administrative costs to be incurred while drilling a well and also while producing a well if it is successful?
 - A. Yes, we have.

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- Q. What are those figures?
- A. \$5,336 while the well is drilling per month; \$530 when it's producing.
 - Q. What is the source of these figures?
 - A. We used the Ernst & Young survey of overhead charges, 1991. And it's been escalated by slightly over 1 percent as per the COPAS procedure.
- Q. Do you recommend that these figures be included in any order which results from this hearing?
 - A. Yes, we do.
- Q. Does Maralo seek to be designated operator of the proposed wells?
- 25 A. Yes.

1	Q. Will Maralo also be presenting a
2	geological witness to explain the risks
3	associated with the development of this property?
4	A. Yes.
5	Q. Were Exhibits 1 through 3 either
6	prepared by you or compiled at your direction?
7	A. Yes.
8	MR. CARR: At this time, Mr. Catanach,
9	we move admission of Maralo Exhibits 1 through 3.
10	EXAMINER CATANACH: Exhibits 1 through
11	3 will be admitted as evidence.
12	MR. CARR: That concludes my direct
13	examination of Mr. Wheeler.
14	MR. BRUCE: I have no questions, Mr.
15	Examiner.
16	EXAMINER CATANACH: Okay.
17	EXAMINATION
18	BY EXAMINER CATANACH:
19	Q. Mr. Wheeler, the proposed location, 660
20	south and east of Section 13, has that location
21	been approved?
22	A. It has not been applied for, for a
23	permit to drill.
24	Q. That is the
25	A. That is the proposed location, yes,

1	sir.
2	Q. Has Maralo drilled Wolfcamp wells in
3	this area?
4	A. To the east of this area. About ten
5	miles is the closest.
6	Q. How recent?
7	A. About three or four months ago.
8	Q. So these drilling costs should be in
9	line with what is actually occurring at this
10	time?
11	A. Yes. These costs were taken from a
12	recent Wolfcamp well we drilled to a similar
13	depth.
14	Q. Do you anticipate reaching an agreement
15	with Mewbourne?
16	A. We're hopeful.
17	EXAMINER CATANACH: Okay. I have
18	nothing further. The witness may be excused.
19	MR. CARR: At this time we call John
20	Thoma.
2 1	JOHN THOMA
22	Having been duly sworn upon his oath, was
23	examined and testified as follows:
2 4	EXAMINATION
25	BY MR. CARR:

1 Q. Will you state your name for the record, please? 2 John Thoma. 3 Α. Where do you reside? Q. Midland, Texas. 5 Α. By whom are you employed and in what 6 Q. 7 capacity? 8 Α. By Maralo, Inc. I'm a geologist. Mr. Thoma, have you previously 9 Q. 10 testified before this Division and had your 11 credentials as a geologist accepted and made a 12 matter of record? Yes, I have. 13 Α. Are you familiar with the application 14 Q. 15 filed in this case on behalf of Maralo? 16 Yes. A. 17 Q. Are you familiar with the subject area? 18 Α. Yes. MR. CARR: Are the witness' 19 20 qualifications acceptable? EXAMINER CATANACH: They are. 21 22 Q. (BY MR. CARR) Have you prepared 23 certain exhibits for presentation here today? Yes, I have. 24 Α. 25 Q. Would you refer to what has been marked as Maralo Exhibit No. 4, identify this, and reviewed it for Mr. Catanach?

A. Exhibit No. 4 is a production map in the West Corbin Wolfcamp Pool or of the west Corbin Wolfcamp Pool. The green dots represent wells which have been completed and are producing from the Wolfcamp Formation.

On the west-northwest side of the field, the dots which have orange markers on them are those Wolfcamp producers that are producing from the primary objective of the Maralo location in the southeast of Section 13, that being the A-F zone.

There are five producing reservoirs within the Lower Wolfcamp. There's just one, however, which appears to be prospective in the southeast of 13, and that's what we'll be talking about as we look through these exhibits.

- Q. Let's move to your isopach map, Exhibit
 No. 5. Would you review that, please, for Mr.
 Catanach?
- A. Exhibit No. 5 is a clean carbonate isopach map of the objective interval in the Lower Wolfcamp, that being the AF zone. You can see the distribution of that carbonate zone. It

assumes a northeast-southwest orientation. And
you can also see the production which occurs from
that reservoir.

The location in the southeast of Section 13 is located north of production which has been established by BTA. It also offsets a recent well drilled by BTA in the northeast-northeast of Section 24, 18-32. We'll talk a little bit more about that well as we go on.

But generally speaking, the reservoir produces from fractures and matrix porosity. You typically need both to establish commercial production. You also need to be -- the reservoir does have a clearly established oil-water contact, which we'll also be discussing, and you need to be above the oil-water contact.

- Q. There have been dry holes in the area?
- A. Yes, there have been. A number of the wells -- well, the wells that you see on that map, on the clean carbonate map, which have values next to them but not producing well symbols have tested the AF and are nonproductive due to lack of either fracturing or matrix porosity or structural position.

Q. Let's move now to Exhibit No. 6. Would you identify and review this?

A. Exhibit No. 6 is a structure map on the Lower Wolfcamp Shale, which is a shale marker which is prominant through the area, is easily defined and correlatable. It forms a very good and reliable structural marker for the Lower Wolfcamp reservoirs.

The map shows the structure, the Lower Wolfcamp to be dipping from the northwest to the southeast. It also shows a prominant structural nose, an interpreted structural nose, which crosses through the Maralo leasehold in the southeast quarter of Section 13 and continues on to the south-southeast in the west half of Section 19, 18-33.

This structural feature is, and the integrity of this structural feature is very important in determining whether or not you have production, commercial production, from the AF zone.

The well in the northeast-northeast penetrated the marker bed, the mapping on here, at minus 7157. That well was wet. The wells down in the southeast quarter of Section 24, the

- No. 2 French in the northeast-southeast and the
 No. 1 French in the southeast-southeast are both
 productive from the AF zone.
 - Q. This exhibit also serves as an index map for your cross-section, does it not?
 - A. That's correct.

- Q. Let's move now to the cross-section, and if you would review that for the Examiner.
- A. This is a structural cross-section, C-C prime, which begins on the left-hand side at point C. And the French No. 2, BTA French No. 2, continues on to the north through the BTA French No. 3 in the northeast-southeast through the French No. 3 and the north -- I'm sorry, in the southeast-northeast-- I'm sorry.

Let me back up. It starts, the French No. 2, in the northeast-southeast, runs through the French No. 3 in the southeast-northeast, then through the French No. 4 in the northeast-northeast through the proposed location in the southeast of 13 then up into two producing wells, one in the southeast-northeast of Section 18 of 18-33, and the final well in the section on the right in the north-northeast-northwest of Section 8, 18-33.

What this section shows, one is the structural position of various reservoirs in the Lower Wolfcamp. It also shows the individual reservoir units as they develop across this line of section. But most importantly it shows the AF zone at the bottom of the section.

The coloring indicates oil and water; green being oil, blue being water. You can see that there is a very clear oil-water contact developed in each one of these wellbores. The only wellbore to date that does not appear to have the contact is the well furthest up-dip on the right-hand side of the section, the Santa Fe Kachina 8 No. 1. That appears to be entirely out of the water column.

The well offsetting the proposed location, the French No. 4, has an oil-water contact, and that zone was never tested. The oil-water contact I am basing on calculations. The calculations indicate that there is potentially oil in that reservoir, however, untested.

Moving down-dip, the French No. 2, the AF zone, both of the porosity streaks in the AF zone are below the water level. Moving down, or

rather down-section to the French No. 2, that well comes back up structurally on the flank of that AF nose and actually has column, oil column, above water. It's imperative that you have, obviously, oil column above water to establish production.

The structure map that I've drawn indicates that we should be structurally high to the No. 4 and the No. 3 wells. However, at this point that is interpreted, and certainly we will not know until we drill the well.

That is the primary risk that I see with the prospect, is that the structure, the structural position of the AF reservoir needs to be sufficient, sufficiently high to the existing wells to the south to establish production. And that to date has not been confirmed and will not be until the well is drilled.

- Q. Are you prepared to make a recommendation to Mr. Catanach as to the risk penalty that should be assessed against the Mewbourne interest if they do not voluntarily participate in this well?
- 24 A. Yes.

Q. And what is that?

1	A. 200 percent.
2	Q. You believe there's a chance at this
3	proposed location that you could drill a well,
4	but it will not be a commercial success?
5	A. Yes, I do.
6	Q. In your opinion will granting this
7	application, pooling these lands, and imposing a
8	200 percent risk penalty be in the best interests
9	of conservation, the prevention of waste, and the
10	protection of correlative rights?
11	A. Yes.
12	Q. Were Exhibits 4 through 7 prepared by
13	you?
14	A. Yes, they were.
15	MR. CARR: At this time, Mr. Catanach,
16	we move the admission of Exhibits 4 through 7.
17	EXAMINER CATANACH: Exhibits 4 through
18	7 will be admitted as evidence.
19	MR. CARR: That concludes my direct
20	examination of Mr. Thoma.
21	MR. CARR: Mr. Bruce.
22	MR. BRUCE: Just a few questions, Mr.
23	Thoma.
2 4	EXAMINATION
2 5	BY MR. BRUCE:

Q. Are there any other formations out here 1 spaced on 80 acres above the Wolfcamp? 2 Α. Not to my knowledge. 3 And you believe that only the AF zone 0. is prospective at this location? Α. Yes. 6 Not the AG? 7 Q. 8 Α. To date the AG has not been proven to be productive in this part of the field. 9 10 Q. And none of the other zones, A through AE? 11 12 Α. No. And looking at your Exhibit 6 and your 13 Q. 14 line of the cross-section there, am I 15 understanding you to say that generally in the AF zone the oil-water contact applies to the south 16 or east of that cross-section line generally? 17 Very generally. Very generally that 18 Α. 19 would be correct. Or if you had to place it in relation 20 to that cross-section line, where would it be? 21 22 Α. Well, I think what you would have to do 23 would be to look at the structural position. The

structural position of the Lower Wolfcamp Shale

relative to the AF. It doesn't track the

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it does give you a fairly good indicator of how the AF reservoir is behaving structurally.

And so if you took the contact that you see in the BTA No. 4 in the northeast-northeast and traced that around the map, that would weave in and out of the cross-section line.

- Q. That's to the south of the proposed location? Is that the well you're talking about?
 - A. That's correct. That's correct.
- Q. Okay. So did I understand you to say you hoped to be structurally higher than those wells to the south of you?
- A. That is also correct. There are a number of structural lows which do reach considerable distances from the southeast up into the northwest part of the map area. And those structural lows are what frequently drop the reservoir along strike below column.

Otherwise you could just draw an arbitrary line just south of the cross-section from the southwest to the northeast and say everything to the northwest would be productive; however, that really is not the case.

Q. We've been through that in excruciating

detail once, haven't we, Mr. Thoma? Twice.

A. It's committed to memory.

- Q. In looking at your Exhibit 5, the two wells in the south half of the northwest quarter of Section 18, just to the northeast of your proposed location, did the operator attempt to complete those in the AF zone?
- A. The two wells in the southeast quarter of 18?
- Q. In the south half of the northwest quarter of Section 18.
- A. South half of the -- okay, yes. Yes, they did. Well, actually the well in the south -- in the southeast of the northwest is mismarked. That well is not actually productive from the AF zone. That is an AG producer.

The well in the southeast -- I'm sorry, the southwest-northwest was tested in the AF.

They did actually perforate the AF, and it was tight. It had a fairly thick AF section of clean carbonate, but it was not porous nor fractured.

So it consequently didn't yield flood.

- Q. And the well in the southeast of the northwest is an AG producer, you said?
 - A. That's correct.

Q. Was it tested in the AF? 1 It has not been tested in the AF yet. 2 Α. 3 Q. And up in Section 8, the well in the southwest quarter of the northwest quarter, to your knowledge that was tested in the AF, was that not? 6 Yes, I believe that was perforated. 7 Α. And is producing from the AF? R Α. No. It was abandoned in the AF. They 9 10 came up and shot the AD, which is a carbonate that develops immediately above the Wolfcamp 11 12 Shale. It's shown on the cross-section C-C 13 prime. They shot that zone and are producing 14 from that zone. There's a bridge plug below the 15 AD and the AF or between the two. 16 That string of wells in Section 5 and Q. 17 Section 8, you were the geologist for those wells, were you not, Mr. Thoma? 18 That's correct. 19 Α. 20 MR. BRUCE: I have nothing further. EXAMINER CATANACH: I have no questions 21 2 2 of the witness. You may be excused. 23 MR. CARR: We have nothing further in

There being nothing

EXAMINER CATANACH:

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this case.

1	further in this case, Case 10470 will be taken
2	under advisement.
3	[And the proceedings were concluded.]
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16	I do hereby certify that the foregroup is a complete property for the
17	the Exercise - April 30, 92.
18	the Exercise April 30, 92. David R. Catant
19	Control of the Contro
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CERTIFICATE OF REPORTER 1 2 STATE OF NEW MEXICO 3) SS. COUNTY OF SANTA FE 4 5 I, Debbie Vestal, Certified Shorthand 6 7 Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before 8 the Oil Conservation Division was reported by me; 9 that I caused my notes to be transcribed under my 10 11 personal supervision; and that the foregoing is a 12 true and accurate record of the proceedings. 13 I FURTHER CERTIFY that I am not a relative or employee of any of the parties or 14 15 attorneys involved in this matter and that I have 16 no personal interest in the final disposition of 17 this matter. 18 WITNESS MY HAND AND SEAL May 6, 1992. 19 20 21 22 DEBBIE VESTAL, 23 NEW MEXICO CSR NO. 24