

**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. 10493

APPLICATION OF MARALO, INC.
FOR A UNIT AGREEMENT,
EDDY COUNTY, NEW MEXICO.

RECEIVED

JUL 27 1992

OIL CONSERVATION DIVISION

PRE-HEARING STATEMENT

This prehearing statement is submitted by William F. Carr, as required by the Oil Conservation Division.

APPEARANCES OF PARTIES

APPLICANT

Maralo, Inc.
223 W. Wall, 9th Floor
Midland, Texas 79701
Attn: Mr. Mark Wheeler

(915) 684-7441 _____
name, address, phone and
contact person

ATTORNEY

William F. Carr
Campbell, Carr, Berge & Sheridan
Post Office Box 2208
Santa Fe, New Mexico 87504

(505) 988-4421 _____

OPPOSITION OR OTHER PARTY

name, address, phone and
contact person

ATTORNEY

STATEMENT OF CASE

APPLICANT

Maralo, Inc., applicant in the above-styled cause, seeks approval of the Little Bear Unit Agreement for an area comprising 638.72 acres, more or less, of State lands comprising all of Section 18, Township 24 South, Range 25 East, Eddy County, New Mexico.

OPPOSITION OR OTHER PARTY

(Please make a concise statement of the basis for opposing this application or otherwise state the position of the party filing this statement.)

PROPOSED EVIDENCE

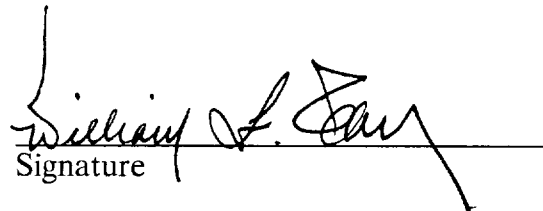
APPLICANT

WITNESSES (Name and expertise)	EST. TIME	EXHIBITS
Mark Wheeler, Landman	10 Min.	Approximately 3
John Thoma, Geologist	10 Min.	Approximately 3

OPPOSITION

WITNESSES (Name and expertise)	EST. TIME	EXHIBITS
--	------------------	-----------------

PROCEDURAL MATTERS


Signature

NEW MEXICO OIL CONSERVATION COMMISSION
EXAMINER HEARING
SANTA FE, NEW MEXICO
JUNE 25, 1992 -- 8:15 A.M.

NAME	REPRESENTING	LOCATION
William L. Jay	Sampbell, Jay, Fay & Finkler	Santa Fe
W T KELLAHAN	Kellolen Kellolen Aubrey	Santa Fe
Tom Mowen	Union Oil of California	Midland Tx
Jim Ose	Union Oil Co. of California	Midland Tx
John Thoms	MARACO, INC	Midland, TX
Mark Wheeler	MARACO INC.	Midland, TX.
Robert M. Altany	UNOCAL	Midland, TX.
James Bruce	Hinkle Low Firm	Santa Fe
ERNEST L. Padilla	PADILLA & SNYDER	Santa Fe
MIKE PIPPIN	MERIDIAN OIL	FARMINGTON
Robert S. Fant	Yates Petroleum	Artesia

**NEW MEXICO OIL CONSERVATION COMMISSION
EXAMINER HEARING
SANTA FE, NEW MEXICO
JUNE 25, 1992 -- 8:15 A.M.**

[illegible]

NEW MEXICO OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
STATE OF NEW MEXICO
CASE NO. 10493

IN THE MATTER OF:

The Application of Maralo, Inc.,
for a unit agreement, Eddy County,
New Mexico.

BEFORE:

DAVID R. CATANACH
Hearing Examiner
State Land Office Building
June 25, 1992

REPORTED BY:

DEBBIE VESTAL
Certified Shorthand Reporter
for the State of New Mexico

ORIGINAL

A P P E A R A N C E S

FOR THE NEW MEXICO OIL CONSERVATION DIVISION:

ROBERT G. STOVALL, ESQ.

General Counsel

State Land Office Building

Santa Fe, New Mexico 87504

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE & SHERIDAN, P.A.

Post Office Box 2208

Santa Fe, New Mexico 87504-2208

BY: WILLIAM F. CARR, ESQ.

I N D E X

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Appearances

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WITNESSES FOR THE APPLICANT:

1. MARK WHEELER

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Examination by Examiner Catanach 11

Examination by Mr. Stovall 11

2. JOHN THOMA

Examination by Mr. Carr 15

Examination by Examiner Catanach 19

Examination by Mr. Stovall 21

Certificate of Reporter

23

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10	Exhibit No. 7	18

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1 EXAMINER CATANACH: Call the hearing to
2 order this morning for Docket No. 19-92. We'll
3 call the dismissals and continuances first. Case
4 10323 is dismissed. Case 10479 is continued to
5 July 9. And Case 10497 is continued to July 9.

6 At this time we'll call Case 10493.

7 MR. STOVALL: Application of Maralo,
8 Inc., for a unit agreement, Eddy County, New
9 Mexico.

10 EXAMINER CATANACH: Are there
11 appearances in this case?

12 MR. CARR: May it please the Examiner,
13 my name is William F. Carr with the law firm,
14 Campbell, Carr, Berge & Sheridan of Santa Fe. I
15 represent Maralo, Inc., and I have two witnesses.

16 EXAMINER CATANACH: Any other
17 appearances in this case?

18 Will the two witnesses, please, stand
19 and be sworn in.

20 [The witnesses were duly sworn.]

21 MARK WHEELER

22 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, please?

3 A. Mark Wheeler.

4 Q. By whom are you employed?

5 A. Maralo, Inc.

6 Q. And in what capacity?

7 A. District landman.

8 Q. Where do you reside?

9 A. Midland, Texas.

10 Q. Mr. Wheeler, have you previously
11 testified before this Division and had your
12 credentials as a landman accepted and made a
13 matter of record?

14 A. Yes.

15 Q. Are you familiar with the application
16 filed in this case on behalf of Maralo, Inc.?

17 A. Yes.

18 Q. Are you familiar with the proposed
19 Little Bear State Unit?

20 A. Yes.

21 MR. CARR: Are the witness'
22 qualifications acceptable?

23 EXAMINER CATANACH: They are.

24 Q. (BY MR. CARR) Would you briefly state
25 what Maralo seeks with this application?

1 A. We seek approval of the Little Bear
2 Unit Agreement.

3 Q. Have you prepared certain exhibits for
4 presentation here today?

5 A. Yes, we have.

6 Q. Could you identify what has been marked
7 as Maralo Exhibit No. 1, identify this, and
8 review it for the Examiner?

9 A. This is the unit agreement that has
10 been prepared under our direction for the Little
11 Bear Unit.

12 Q. Have you utilized the State of New
13 Mexico form for an all-state unit in preparing
14 this unit agreement?

15 A. Yes.

16 Q. Could you refer to the last two pages
17 of Exhibit 1, the Exhibits A and B, and review
18 for Mr. Catanach the status of the lands?

19 A. When we presented this to the state for
20 preliminary approval at the time the tract in the
21 north half of Section 18 was owned by Terra
22 Resources, which had been merged into Pacific
23 Enterprises.

24 Since that time of the approval,
25 preliminary approval by the state, we have

1 purchased the north half of Section 18 from
2 Pacific Enterprises. And the state has approved
3 the assignment.

4 Q. Maralo is now the lessee of record of
5 all tracts within the proposed unit; is that
6 correct?

7 A. Yes.

8 Q. And you all own all the working
9 interests?

10 A. Yes.

11 Q. Would you identify Exhibit 2, please?

12 A. It is a new plat, Exhibit A and B,
13 showing Maralo as the lessee of record on the
14 north half of Section 18.

15 Q. Has the New Mexico Commissioner of
16 Public Lands given his preliminary approval to
17 the proposed unit agreement?

18 A. Yes, on June 11.

19 Q. As part of this preliminary approval,
20 did he require that Maralo obtained an order from
21 the Oil Conservation Division approving the
22 proposed unit agreement?

23 A. Yes, he did.

24 Q. Maralo represents 100 percent of the
25 interests in the unit area?

1 A. Yes, sir.

2 Q. So you'll have complete control of unit
3 operations?

4 A. Yes, sir.

5 Q. You're seeking to be designated unit
6 operator; is that correct?

7 A. Yes.

8 Q. When do you propose to spud an initial
9 test well on this unit?

10 A. As soon as possible but before August
11 1, 1992, which is the expiration date of the
12 leases.

13 Q. Are you requesting that the order
14 therefore be expedited?

15 A. Yes.

16 Q. Does the unit agreement provide for
17 periodic filings of plans of development?

18 A. Yes. Within six months after
19 completion of the initial well and annually
20 thereafter.

21 Q. And will you provide copies of these
22 plans of development to the Oil Conservation
23 Division at the same time you file them with the
24 Land Office?

25 A. Yes.

1 Q. In your opinion will approval of this
2 application permit Maralo to go forward with this
3 unit and thereby produce reserves that otherwise
4 will not be recovered?

5 A. Yes.

6 Q. Will granting the application otherwise
7 be in the best interests of conservation and the
8 prevention of waste and the protection of
9 correlative rights?

10 A. Yes.

11 Q. Will Maralo also call a geological
12 witness to review the --

13 A. Yes, we will, John Thoma.

14 Q. And he will review the technical part
15 of this case?

16 A. Yes.

17 Q. Were Exhibits 1 through 3 compiled
18 under your direction and supervision?

19 A. Yes, they were.

20 MR. CARR: Mr. Catanach, at this time
21 we move the admission of Maralo Exhibits 1
22 through 3.

23 EXAMINER CATANACH: Exhibits 1 through
24 3 will be admitted as evidence.

25 MR. CARR: That concludes my direct

1 examination of this witness.

2 EXAMINATION

3 BY EXAMINER CATANACH:

4 Q. Mr. Wheeler, what are the unitized
5 formations?

6 A. Delaware.

7 Q. Is it just the Delaware?

8 A. It will be the surface to the base of
9 the Delaware.

10 Q. From the surface to the base of the
11 Delaware.

12 A. Right.

13 MR. STOVALL: I was going to follow up
14 on that.

15 Q. (BY EXAMINER CATANACH) Is that
16 contained in the unit agreement itself?

17 A. Should be. Unitized substances on page
18 2: All oil and gas, other hydrocarbons in any
19 and all formations in the unitized land, which
20 we're just planning on drilling to the Delaware.
21 So I don't think at this point we need to unitize
22 anything deeper than what we drill.

23 EXAMINATION

24 BY MR. STOVALL:

25 Q. I think we need to clarify. Either the

1 unit agreement has to say -- I mean what you've
2 said here everything is unitized from the surface
3 to the basement regardless of whether you -- and
4 then down below it talks about drilling to a
5 discovery?

6 A. Correct.

7 Q. So what is the understanding with
8 respect to the Land Office as far as what the
9 unitized substances are?

10 A. Well, under paragraph 8 we're not
11 required to drill in any depth in excess of 5500
12 feet, in excess of 5500 feet. So I would assume
13 that they understand we're going to drill to the
14 Delaware to 5500 feet and we'll unitize all zones
15 from surface to that depth.

16 MR. STOVALL: Sounds to me, Mr. Carr,
17 that we need to look at and see what they're
18 going to do because regardless of whether you're
19 going to drill, the effect of the unit agreement
20 is to hold --

21 MR. CARR: You know, we are utilizing
22 the new Land Office unit agreement form that
23 they've adopted this year. That may be something
24 that needs to be discussed also with them to
25 clarify that.

1 The intent of this application is to
2 unitize everything surface to base of Delaware.
3 And if there is a discrepancy in this -- you
4 know, the Land Office is now requiring that we
5 use this form and is outright resisting any
6 amendment to the text because to the extent we
7 amend it, I guess they have to read it.

8 And for that reason we have had trouble
9 with them trying to get any amendments to these
10 forms. Our intent in this case is to unitize
11 surface to base of Delaware.

12 MR. STOVALL: My only comment, I don't
13 think it matters to us, but if I read the unit
14 agreement, I'd say the whole thing was unitized.
15 And if I tried to buy below the Delaware, I'd be
16 buying a unit.

17 MR. CARR: Part of the unit. I think
18 that's an important point to raise with the Land
19 Office. I'll be happy to do that because I'm
20 fighting with them on another unit agreement that
21 they won't permit me to amend.

22 MR. STOVALL: Again I don't think it
23 matters, but I think what you're asking for in
24 this hearing has to be consistent with what your
25 unit agreement says. So I think maybe what we

1 need to do is leave the record open to get that
2 clarification from the operator, either they're
3 going to go ahead and unitize the whole thing in
4 accordance with the agreement or amend the
5 agreement if the Land Office will let you do it
6 unless you've got another suggestion.

7 MR. CARR: We can clarify that by
8 letter I would suspect this afternoon.

9 EXAMINER CATANACH: Mr. Carr, the
10 paragraph 8 also says that: "Drill a well with
11 due diligence to a depth sufficient to attain the
12 top of the Delaware."

13 MR. CARR: Uh-huh.

14 EXAMINER CATANACH: That also needs to
15 be clarified. That may need to be the next
16 formation down from the Delaware. So if you'd
17 clear that up for us.

18 MR. CARR: We will. And we'll provide
19 a letter this afternoon on that assuming we can
20 get to the Land Office today on it.

21 EXAMINER CATANACH: Okay. I have
22 nothing further. The witness may be excused.

23 MR. CARR: At this time we call Mr.
24 Thoma.

25 JOHN THOMA

1 Having been duly sworn upon his oath, was
2 examined and testified as follows:

3 EXAMINATION

4 BY MR. CARR:

5 Q. Would you state your full name and
6 place of residence?

7 A. John Thoma, Midland, Texas.

8 Q. By whom are you employed?

9 A. Maralo, Incorporated.

10 Q. And in what capacity?

11 A. Geologist.

12 Q. And have you previously testified
13 before the Oil Conservation Division and had your
14 credentials as a geologist accepted and made a
15 matter of record?

16 A. Yes, I have.

17 Q. Are you familiar with the application
18 filed in this case?

19 A. Yes.

20 Q. Are you familiar with the proposed
21 Little Bear State Unit?

22 A. Yes.

23 MR. CARR: Are the witness'
24 qualifications acceptable?

25 EXAMINER CATANACH: Mr. Thoma is so

1 qualified.

2 Q. (BY MR. CARR) Mr. Thoma, have you made
3 a geological study of the area which is involved
4 in this application?

5 A. Yes, I have.

6 Q. Have you prepared certain exhibits for
7 presentation here today?

8 A. Yes.

9 Q. Let's go first to your cross-section,
10 Exhibit No. 4, and I would ask you to review that
11 for Mr. Catanach.

12 A. Exhibit No. 4 is a structural
13 cross-section of the Lower Brushy Canyon member
14 of the Delaware Formation. The objective sand in
15 the proposed unitized area is the lower most
16 Brushy Canyon Loving Sand, which is labeled on
17 the right-hand side of the section.

18 There is a secondary objective
19 immediately overlying the Loving Sand, which
20 we've named the Little Bear Sand. Those are both
21 in-house names for those sandstones. They're not
22 regional names by any means.

23 The cross-section traverses the area,
24 the prospect area, from point A on the left-hand
25 side of the section, which is located northwest

1 of the unit in Section 12 of 24 South, 24 East,
2 down through the prospect in Section 18 and
3 terminates at point A prime in the Santa Fe
4 Operating Partners' Lamb Chop 17 State Com. No.
5 1, which is located in Section 17 of 24 South, 25
6 East.

7 This section documents the continuity
8 of both the Loving Sand and the Little Bear Sand
9 down-dip of the unit area through the unit area
10 and on to the northwest of the unit area. It
11 also documents the ultimate termination of the
12 Loving Sand in Section 12.

13 Q. Let's go now to the isoporosity map,
14 Exhibit No. 5. Would you review that?

15 A. The isoporosity map is prepared on the
16 Loving Sand. It utilizes a 10 percent density
17 porosity cutoff. And it shows the distribution
18 of the porous reservoir occurring in the area
19 associated with the Loving Sand.

20 The trace of cross-section A to A prime
21 is shown on that map in red. The area
22 highlighted in green in Section 18 is the area
23 where we anticipate the oil accumulation to occur
24 within the Loving Sand.

25 Q. Let's go now to the structure map.

1 A. The structure map -- Exhibit 6 is a
2 structure map on top of the Lower Brushy Canyon
3 Loving Sand. It shows anticipated structural
4 reversal across the unitized area in Section 18.
5 That structural reversal is the anticipated
6 trapping mechanism for the Loving Sand in the
7 prospect area.

8 The proposed location in the southwest
9 quarter of the northeast quarter of Section 18 is
10 positioned at a location where it will penetrate
11 both the crest of the anticipated closure along
12 with the thickest portion of the Loving Sand
13 deposit.

14 Q. Do you believe you have identified here
15 a portion of the Delaware that can logically be
16 developed under a unit plan?

17 A. Yes.

18 Q. Exhibit No. 6 is your structure map.
19 Is Exhibit No. 7 a summary of your geologic
20 presentation?

21 A. Yes, it is.

22 Q. In your opinion will approval of this
23 application be in the best interests of
24 conservation, the prevention of waste, and the
25 protection of correlative rights?

1 A. Yes.

2 Q. Were Exhibits 4 through 7 prepared by
3 you or compiled under your direction?

4 A. They were.

5 MR. CARR: At this time, Mr. Catanach,
6 we move the admission of Maralo Exhibits 4
7 through 7.

8 EXAMINER CATANACH: Exhibits 4 through
9 7 will be admitted as evidence.

10 MR. CARR: That concludes my
11 examination of Mr. Thoma.

12 EXAMINATION

13 BY EXAMINER CATANACH:

14 Q. Mr. Thoma, the green portion on your
15 Exhibits 5 and 6 indicates what again?

16 A. It indicates that area above high
17 proven water, which is established by the Fasken
18 well in the southwest of the northwest of Section
19 18. The area above that contour, which is the
20 minus 790 contour, is that area where the
21 prospective oil accumulation potentially will
22 occur.

23 Q. Do you think that Fasken well would
24 have been wet?

25 A. Yes.

1 Q. Is there any other Delaware production
2 in this area?

3 A. Not in the immediate area of the unit.
4 The wells to the -- largely to the northwest are
5 deep Morrow producers or Strawn producers.
6 They're all for the most part gas productive
7 wells from those formations.

8 Several of those wells have apparent
9 Delaware-Lower Brushy Canyon Loving Sand
10 equivalent pay behind pipe based on shows and log
11 calculations, but they haven't been perforated as
12 yet.

13 The Santa Fe Lamb Chop No. 1 well has
14 shows also in the Delaware. And that was really
15 the critical well in establishing the potential
16 of the prospect area. That well was drilled and
17 completed in the summer of 1991, just under a
18 year ago or over a year ago.

19 And prior to the drilling of that well,
20 it was basically impossible to draw the structure
21 as I have drawn it. You could have wished the
22 structure in. But that data point, the Santa Fe
23 data point, showed definite flattening of
24 structure in the Lower Brushy Canyon. That
25 flattening is -- frequently that type of

1 flattening in the Lower Brushy is frequently
2 associated with low release structural reversals
3 in that section.

4 East Loving Field, which is located in
5 Township 23 South, Range 27 East, about two
6 townships east of here, is productive from this
7 Lower Brushy Canyon-Loving Sand. And it produces
8 in a very, very similar structural and
9 stratigraphic setting.

10 Q. Are there any other potentially
11 productive zones up-hole?

12 A. Within the Delaware there are. I do
13 not believe there is anything above the Delaware
14 in this area.

15 MR. STOVALL: I just have one question
16 for clarification.

17 EXAMINATION

18 BY MR. STOVALL:

19 Q. I thought I heard you say that your
20 porosity cutoff was 10 percent, but the map says
21 14.

22 A. I'm sorry. The map, that's correct.
23 It is 14 percent.

24 Q. Okay.

25 A. I have prepared a couple of different

1 porosity maps on the sands. The 14 percent --
2 the 10 percent I've used to show gross sand
3 distribution. But typically you need at least 14
4 percent for commercial production.

5 MR. STOVALL: That's all I have.

6 EXAMINER CATANACH: The witness may be
7 excused.

8 Anything further?

9 MR. CARR: Nothing further.

10 EXAMINER CATANACH: There being nothing
11 further, Case 10493 will be taken under
12 advisement.

13 [And the proceedings were concluded.]

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I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 10493,
heard by me on June 25 1982.

David H. Catanch, Examiner
Oil Conservation Division

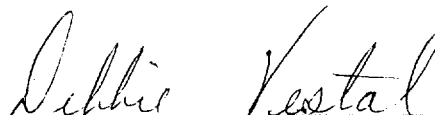
1 CERTIFICATE OF REPORTER

2
3 STATE OF NEW MEXICO)
4 COUNTY OF SANTA FE) ss.

5
6 I, Debbie Vestal, Certified Shorthand
7 Reporter and Notary Public, HEREBY CERTIFY that
8 the foregoing transcript of proceedings before
9 the Oil Conservation Division was reported by me;
10 that I caused my notes to be transcribed under my
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
14 relative or employee of any of the parties or
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 JUNE 29, 1992.
19
20

21 
22 _____
23 DEBBIE VESTAL, RPR
24 NEW MEXICO CSR NO. 3
25