#### 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. 13,243

APPLICATION OF MEWBOURNE OIL COMPANY FOR )
POOL EXPANSION AND SPECIAL POOL RULES )
FOR THE YOUNG-STRAWN POOL, LEA COUNTY, )
NEW MEXICO )

ORIGINAL

# REPORTER'S TRANSCRIPT OF PROCEEDINGS

**EXAMINER HEARING** 

RECEIVED

BEFORE: DAVID R. CATANACH, Hearing Examiner

APR 15 2004

April 1st, 2004

Santa Fe, New Mexico

Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, April 1st, 2004, at the New Mexico Energy, Minerals and Natural Resources Department,
1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7
for the State of New Mexico.

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# APPEARANCES

# FOR THE DIVISION:

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Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

# FOR THE APPLICANT:

JAMES G. BRUCE Attorney at Law P.O. Box 1056 Santa Fe, New Mexico 87504

\* \* \*

WHEREUPON, the following proceedings were had at 1 2 8:35 a.m.: Okay, at this time we'll call 3 EXAMINER CATANACH: 4 Case 13,243, the Application of Mewbourne Oil Company for pool expansion and special pool rules for the Young-Strawn 5 6 Pool, Lea County, New Mexico. 7 Call for appearances. MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe, 8 representing the Applicant. I have three witnesses. 9 10 are the same three witnesses who testified in the prior 11 case. EXAMINER CATANACH: Okay, additional appearances? 12 13 Okay, let the record show that the three 14 witnesses have already been sworn in and qualified. 15 STEVE COBB, the witness herein, having been previously duly sworn upon 16 his oath, was examined and testified as follows: 17 DIRECT EXAMINATION 18 19 BY MR. BRUCE: 20 Mr. Cobb, would you identify Exhibit Number 1 for Q. 21 the Examiner and tell him what Mewbourne seeks in this 22 case? 23 Exhibit 1 is a Midland Map Company plat covering part of Township 18 South, Range 32 East. The Young-Strawn 24 25 Pool currently covers the northeast quarter of Section 20.

Q. And what acreage does Mewbourne seek to add to 1 2 the pool? We're seeking to add the east half of Section 17 3 where we've recently completed our SF 17 Fed Com Number 1 4 5 and 2 wells to the pool. Are there any other producing Strawn wells in 6 Q. 7 this pool? Α. No, there are not. 8 With respect to notice purposes, which we'll get 9 Q. into later, was Pecos Production Company the operator of 10 11 the prior Strawn well in the northeast quarter of Section 12 20? 13 Α. That's correct. 14 Q. What special pool rules does Mewbourne seek for 15 this pool? 16 A. We request 80-acre spacing, an allowable of 720 17 barrels of oil per day, and a gas-oil ratio of 4000 to 1. 18 o. And what setback requirements do you request? 19 330 feet from the quarter quarter section line. Α. 20 Referring to Exhibit 2, what is the leasehold Q. ownership situation in the east half of Section 17? 21 22 The east half is comprised of two federal leases. Α. 23 The east half northeast and the west half southeast are in 24 Lease Number NM-9016, and the west half northeast and the

east half southeast is in Lease Number 106717.

25

Okay. And although this will be on the next 1 Q. 2 exhibit, where are the two SF 17 wells located? One is in the northeast and the other one is in 3 Α. the southeast. 4 5 Okay. Does Exhibit 3 -- Again, these are federal Q. leases, and royalty ownership is common throughout the east 6 half of Section 17, is it not? 7 That's correct. Α. 8 0. And does Exhibit 3 list all of the overriding 9 royalty and/or production payment owners in the east 10 half --11 12 Yes, it --Α. 13 -- the entire east half of Section 17? Q. 14 Α. Yes, it does. 15 Okay, and again, is working interest ownership Q. common in the east half of Section 17? 16 17 Yeah, again it's covered by a joint operating Α. agreement which allocates production to all the working 18 19 interest owners in the whole east half. 20 Who was notified of this case? 0. 21 Α. We notified the BLM and all the overriding 22 royalty owners in the east half of 17 and Pecos Production 23 Company. And is Exhibit 4 the notice affidavit with the 24 Q. 25 notice letters and return receipts?

1	A. Yes, it is.
2	Q. Has any interest owner objected to this
3	Application?
4	A. No, they have not.
5	Q. And what is Exhibit 5?
6	A. Exhibit 5, again, is a notice of this hearing to
7	Pecos Production and their approval and support of this
8	hearing.
9	Q. Were Exhibits 1 through 5 prepared by you or
10	under your supervision or compiled from company business
11	records?
12	A. They were.
13	Q. And in your opinion is the granting of this
14	Application in the interests of conservation and the
15	prevention of waste?
16	A. It is.
17	MR. BRUCE: Mr. Examiner, I'd move the admission
18	of Exhibits 1 through 5.
19	EXAMINER CATANACH: Exhibits 1 through 5 will be
20	admitted.
21	EXAMINATION
22	BY EXAMINER CATANACH:
23	Q. Mr. Cobb, the working interest ownership is
24	common in the east half and the royalty interest ownership
25	is common?

1	A. Right.
2	Q. But the override is not?
3	A. That's correct.
4	Q. It's common on Tract 1, but it's different from
5	Tract 2, right?
6	A. Right, right.
7	EXAMINER CATANACH: Okay. Mr. Bruce, notice in
8	this case for special pool rules, is that within the pool
9	and within a mile of the pool; is that correct?
10	MR. BRUCE: The notice requirements are, first of
11	all, operators in the pool and within a mile of the pool,
12	providing that the well is not within another designated
13	pool. And then secondly, we had to notify interest owners
14	whose interest may be diluted by the increase in well
15	spacing.
16	And so we notified all of the interest owners in
17	this case, depending because of it depends on how the
18	well units are formed.
19	EXAMINER CATANACH: But you did notify all the
20	people, all the overrides in the east half of this section?
21	MR. BRUCE: Every single one, yes.
22	EXAMINER CATANACH: In the last case, didn't we
23	just notify the southeast southeast?
24	MR. BRUCE: Yes, because they were the only
25	interest owners whose interest would be diluted. The other

interest owners in the remainder of the southeast quarter of Section 22 will gain an interest, and therefore they're not adversely affected.

EXAMINER CATANACH: Hm.

MR. BRUCE: In this one, Mr. Examiner, I can ask
Mr. Cobb this question:

#### FURTHER EXAMINATION

#### BY MR. BRUCE:

- Q. At this point, Mr. Cobb, do you propose to stand up or lay down the Strawn well units in the east half of 17?
- A. We're proposing to lay these down, and we met last Thursday with Armando Lopez and John Simitz at the BLM in Roswell and went over this with them, and they approved it and were going to fax me a letter evidencing their proof of this and support of this Application. I haven't got it yet, but they told me they had no problem with laying down those units.

### EXAMINER CATANACH: Okay.

MR. BRUCE: And Mr. Examiner, if I may, this case is a little unusual, or the leasehold ownership is a little unusual since there are -- If you'll look at Exhibit 1, there are two leases involved. One well is on one lease, the second well is on a separate lease. Mewbourne does propose to lay down the units, so conceivably you could say

the interest ownership is diluted, although they -- Let's 1 take the Number 2 well: You're diluting the interest 2 ownership in that. On the other hand, the same thing will 3 happen in reverse on the Number 1 well. 4 5 EXAMINER CATANACH: But none of the interest owners, none of the overrides, have expressed any concern 6 7 about what's going on in that --8 MR. BRUCE: I've received calls from a couple 9 just asking for information, and we just sent out the exhibits we've submitted to the hearing, to them. 10 11 EXAMINER CATANACH: Okay. But there are no 12 additional operators within a mile of this pool boundary? 13 MR. BRUCE: Not -- No, and I've checked the 14 Division's records. No additional operators other than 15 those already within a defined pool, and those do not 16 count. 17 EXAMINER CATANACH: Okay, I have no other questions of this witness. 18 19 RALPH L. NELSON, the witness herein, having been previously duly sworn upon 20 21 his oath, was examined and testified as follows: 22 DIRECT EXAMINATION 23 BY MR. BRUCE: 24 Mr. Nelson, let's run through this briefly. 25 is Exhibit 6?

- A. Exhibit 6 is a regional map showing 18 South, 32 East, like was shown in the previous testimony, again just showing the Strawn pools in 18 South, 32 East.
- Q. And just to double check, you've made a study of this area, and these are the only Strawn wells that you're aware of in this particular township?
  - A. That is correct.

- Q. What is Exhibit 7?
- A. Exhibit 7 is a structure map on top of the Strawn formation. It shows a sharp anticlinal ridge running down through the northeast part of Section 20 and the east half of Section 17, the axis of which is very close to the center, the north-south line down the center of the east half of Section 17.
- Q. In the prior pool there was some faulting shown on that map. There's no faulting indicated by your geology in this particular map, in the area of this particular map?
- A. Right, this map was constructed primarily based on well control with some other means included.
  - Q. Okay. And what is Exhibit 8?
- A. Exhibit 8 is a gross isopach of the Strawn formation, again showing the three Strawn producing wells, and the gross, the net clean line and the net porosity.
- Q. And finally Exhibit 9, the cross-section, perhaps go through that in a little more detail.

12 Section 9 [sic] is the line of section shown on 1 Α. It starts with the well on the left side, in A, Exhibit 8. 2 in the west half of Section 17, with a Strawn penetration 3 that was dry in the Strawn but made a very good Wolfcamp 4 5 producer upon completion. The next well shown is the old ARCO Young 6 7 Federal, the discovery well for the Young-Strawn Pool. 8 drill stem tested the Strawn, had a bottomhole pressure of about 5300 pounds, flowed oil to surface, and has a similar 9 10 Strawn interval as shown in the Mewbourne SF 17 Federal Com 11 Number 2, which is currently testing flowing at high rates. The next well is SF 17 Federal Com Number 1. 12 13 Although it has some porosity, it does not have the good 14 limestone vuggy porosity for the most part that was present 15 in the SF Federal Com Number 2. 16

The last well on the section is a dry hole as far as the Strawn is concerned, located in Section 8.

- Q. Now, once again, based on the geology and on the surface features, do you believe the 330-feet setback requirement that you request is needed?
  - A. Yes, I do.
- Q. Were Exhibits 6 through 9 prepared by you or under your supervision?
  - A. Yes.

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Q. And in your opinion is the granting of this

Application in the interests of conservation and the 1 prevention of waste? 2 Α. It is. 3 MR. BRUCE: Mr. Examiner, I'd move the admission 4 5 of Exhibits 6 through 9. EXAMINER CATANACH: Exhibits 6 through 9 will be 6 admitted. 7 8 EXAMINATION BY EXAMINER CATANACH: 9 Mr. Young -- I mean, Mr. Nelson, can you tell me 10 Q. how the geologic properties in the SF 17 Number 2 compare 11 to the Young Fed Number 1? 12 In terms of the porosity? 13 Α. 14 Q. Porosity. Sure. As we examine the area, the 15 Α. Okay, sure. ARCO Young Federal Number 1 apparently has much higher 16 17 porosity than the SF 17 Federal Com Number 2. It had a good flow rate on drill stem test, but certainly nothing 18 compared to some other Strawn wells that we've seen. 19 20 our analysis of this, the ARCO well is on a very narrow 21 anticlinal ridge where it is located in the Strawn, and 22 that location is long and narrow. However, in the southeast quarter of Section 17 23 24 and also in the northeast quarter of Section 17 the Strawn buildup appears to expand in more of a -- encompassing most 25

of the southeast quarter, if not all of the southeast quarter, and part of the northeast quarter. The wells were located on top of the structural ridge, just as a conservative way to stake locations, however there is evidence there could be significantly more Strawn potential in the east half of the east half.

- Q. So the wells in 17 are structurally higher than the well in 20?
  - A. Yes, they are.

- Q. Okay. Does that contribute to being better-producing wells?
- A. I think in part it helps. I think fracturing may help with these reservoirs, although we don't see the great positive growth of Strawn accumulation in these wells.
- Q. The well in Section 20, I think your engineer testified that it probably drained an area of approximately 51 acres, if I'm not mistaken. Geologically, would the Number 2 well be capable of at least that, and given the nature of the expanded reservoir up there, would it probably drain more?
  - A. I believe it would, yes.
- Q. And the problem with the Number 1 well is what?

  Is it tight?
- A. It is tight. As you look on the cross-section, we define these Strawn reservoirs both in terms of

porosity, but the limestone content -- if you notice the 1 upper green colored-in porosity, if you will, the PE 2 indicates it to be much chertier than the lower porosity 3 4 zone. I think the main pay in the reservoir is -- as 5 we've seen in other Strawn pools, is going to be in this 6 7 Strawn algal mound facies. Can you make the determination whether or not 8 these wells are connected to the -- Is this the same 9 10 structure, basically, in Section 17 and 20? Α. Yes. 11 And it's geologically connected? 12 Q. It is. 13 Α. Okay. I guess there's a potential for drilling a 14 Q. second well south of the Number 2? 15 Yes, there is. 16 Α. Do you know if Mewbourne plans to do that or --17 Q. We're currently considering it. Whether it would 18 Α. 19 be in the O location or P location, we don't know yet. 20 EXAMINER CATANACH: Okay, I believe that's all I have, Mr. Bruce. 21 22 MR. BRUCE: I have nothing further of "Mr. 23 Young". 24 Mr. Examiner, I'm handing you in this matter some 25 exhibits, 10 through 13, which are the same exhibits which

Mr. Montgomery testified about in the prior case. 1 2 just have Mr. Montgomery confirm that he did indeed prepare those exhibits, and if you have any further questions... 3 BRYAN M. MONTGOMERY, 4 the witness herein, having been previously duly sworn upon 5 6 his oath, was examined and testified as follows: 7 DIRECT EXAMINATION BY MR. BRUCE: 8 9 0. Mr. Montgomery, did you prepare Exhibits 10 through 13? 10 11 Α. I did. MR. BRUCE: Mr. Examiner, I'd move the admission 12 of Exhibits 10 through 13 in this case. 13 EXAMINER CATANACH: Exhibits 10 through 13 will 14 15 be admitted, and I think we've gone over all that I need 16 to, so... 17 MR. BRUCE: Okay. THE WITNESS: Well, I had one thing I did notice 18 a question --19 20 EXAMINER CATANACH: Okay, go ahead. 21 THE WITNESS: That's unusual, I know. 22 discussion about the connectivity between the Young well 23 and the 17 Number 2 and how that might be geologically. 24 an engineering side, it's interesting to note the low GORs 25 we have in our 17 Number 2. We did not DST the well, and

We don't have the pressure, the bottomhole pressure of well.  But the low GOR, if you remember, it even do down lower when we opened the well up, and I'm not suffice.  We may have lost gas to the tank. When you put that	of that
But the low GOR, if you remember, it even d  down lower when we opened the well up, and I'm not su	
5 down lower when we opened the well up, and I'm not su	
	ipped
6 We may have lost gas to the tank. When you put that	re.
	much
7 oil through the system, sometimes you don't separate	it
8 properly. But regardless, it's around 1100, which to	me
9 exhibits a virgin-pressure assumption that I would th	en
make. So I did want to just add that.	
11 EXAMINATION	
12 BY EXAMINER CATANACH:	
Q. So you don't believe those are connected, o	r
14 their connectivity is not very good?	
A. Is limited, exactly.	
16 EXAMINER CATANACH: Okay, that's all I have	<b>!•</b>
MR. BRUCE: Maybe I'll have Mr. Carr say	
18 something.	
MR. CARR: Try and elevate the level.	
MR. BRUCE: I have nothing further, Mr. Exa	miner.
EXAMINER CATANACH: Okay, there being nothi	ng
further, Case 13,243 will be taken under advisement.	
(Thereupon, these proceedings were conclude de hereby certify that the fore	
24 9:55 a.m.)  a complete record of the procestive Exerciser hearing of Cope !	edings in
* * *eers by me on / Pril /	2004.

#### 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 2nd, 2004.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2006