

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:	)	
	)	
APPLICATION OF FASKEN OIL AND RANCH,	)	CASE NOS. 11,755
LTD., FOR A NONSTANDARD GAS PRORATION	)	
AND SPACING UNIT AND TWO ALTERNATE	)	
UNORTHODOX GAS WELL LOCATIONS, EDDY	)	
COUNTY, NEW MEXICO	)	
	)	
APPLICATION OF MEWBOURNE OIL COMPANY FOR	)	and 11,723
AN UNORTHODOX GAS WELL LOCATION AND	)	
NONSTANDARD GAS PRORATION UNIT, EDDY	)	
COUNTY, NEW MEXICO	)	
	)	(Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

VOLUME I

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

April 3rd, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday and Friday, April 3rd and 4th, 1997, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

\* \* \*

STEVEN T. BRENNER, CCR  
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## I N D E X

April 3rd, 1997 (Volume I)  
 Examiner Hearing  
 CASE NOS. 11,755 and 11,723 (Consolidated)

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\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   4:07 p.m.:

3           EXAMINER STOGNER: Hearing will come to order at  
4   this time. I'll call, if there's no objections, Cases, and  
5   consolidate them, 11,755 and 11,723.

6           Call for appearances.

7           MR. BRUCE: Mr. Examiner, Jim Bruce from Santa  
8   Fe, appearing on behalf of Mewbourne Oil Company in  
9   association with Mike Shepard, an attorney for Mewbourne  
10   Oil Company.

11          EXAMINER STOGNER: I guess we ought to call the  
12   cases first, and I will -- We'll keep that on the record  
13   there.

14          MR. CARROLL: Application of Fasken Oil and  
15   Ranch, Ltd, for a nonstandard gas proration spacing unit  
16   and two alternate unorthodox gas well locations, Eddy  
17   County, New Mexico.

18          And Application of Mewbourne Oil Company for an  
19   unorthodox gas well location and nonstandard gas proration  
20   unit, Eddy County, New Mexico.

21          EXAMINER STOGNER: Since we've got Mr. Bruce's  
22   entry of appearance on Mewbourne and his information and  
23   his three witnesses, any other appearances?

24          MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of  
25   the Santa Fe law firm of Kellahin and Kellahin, appearing

1 on behalf of Fasken Oil and Ranch, Ltd., and I have two  
2 witnesses to be sworn.

3 EXAMINER STOGNER: Other appearances?

4 MR. CARR: May it please the Examiner, my name is  
5 William F. Carr with the Santa Fe law firm Campbell, Carr,  
6 Berge and Sheridan.

7 I'd like to enter my appearance at this time for  
8 Texaco Exploration and Production, Inc. I have two  
9 witnesses.

10 I have previously filed an entry of appearance in  
11 this matter for Penwell Energy, Inc. Penwell has reached  
12 an agreement with Fasken concerning the well location in  
13 the northern -- the northern well location, and so  
14 consequently I will leave my appearance in place for  
15 Penwell and not intend to further participate in the case,  
16 and we do not have objection to the northernmost location.

17 EXAMINER STOGNER: Any other appearances?

18 At this time would all witnesses stand up to be  
19 sworn?

20 (Thereupon, the witnesses were sworn.)

21 EXAMINER STOGNER: Okay, Mr. Bruce, how many  
22 witnesses do you have?

23 MR. BRUCE: Three.

24 EXAMINER STOGNER: Mr. Kellahin?

25 MR. KELLAHIN: Two.

1 EXAMINER STOGNER: Mr. Carr?

2 MR. CARR: Two.

3 EXAMINER STOGNER: I saw eight people stand up.

4 Okay, somebody's got an extra witness.

5 Are there any -- Is there need for opening  
6 remarks at this point?

7 MR. KELLAHIN: Yes, Mr. Examiner, there's some  
8 pending motions to resolve.

9 EXAMINER STOGNER: Okay.

10 MR. KELLAHIN: Let me see if I can set the  
11 background to refresh your recollection.

12 We're dealing with another irregular section.  
13 The proposed spacing unit is a nonstandard 297-acre gas  
14 spacing unit. It's what we've characterized as the  
15 southern third of an irregular section.

16 We are dealing with the potential for deep gas  
17 production. If it is successful in the Morrow, then this  
18 is part of the Catclaw Draw-Morrow Gas Pool. You may  
19 remember that that pool is currently spaced on 640-acre gas  
20 spacing, wells 1650 from the outer boundary, and there's an  
21 optional infill well procedure in those pool rules where  
22 you can have a second gas well. Standard well locations  
23 are 1650 from the outer boundary.

24 The proposed development of the south half of  
25 Section 1 was formally initiated by Mewbourne, who is a

1 nonoperating working interest owner in the spacing unit.  
2 There is a 1970s joint operating agreement that covers the  
3 operations in the spacing unit. Fasken's is the successor  
4 and the current operator of that spacing unit.

5 Mewbourne has proposed to the other interest  
6 owners, in January, an unorthodox well location that  
7 encroaches on the southern portion of Section 1. They  
8 desire to be 660 out of the side boundary and 2310 from the  
9 east line.

10 In addition, Mewbourne as the nonoperator has  
11 filed its application before the Division, which Fasken now  
12 seeks to have you dismiss.

13 Fasken has a disagreement with Mewbourne over the  
14 well location. Fasken is proposing an unorthodox well  
15 location which is 750 feet from the west boundary, which  
16 encroaches on a spacing -- a section operated by Penwell  
17 and is 2080 feet from the -- should be 2080 feet from the  
18 south line of that section, which is a standard location to  
19 that boundary.

20 In order to have a procedure for you to consider  
21 both those unorthodox locations, we have filed an  
22 application to have you consider those two locations, and  
23 we believe that we have the sole right to do that because  
24 we are the operator. We are doing so, so that Mewbourne  
25 will have an opportunity to advance the geologic reasons to



1 support their requested location.

2           So within your authority, in order to protect  
3 correlative rights, because these are each unorthodox  
4 locations, you could either grant them both, deny them  
5 both, penalize them both, or some combination of all of  
6 those. It will afford an opportunity, then, to the  
7 interest owners to make a decision among themselves about  
8 how to go forward.

9           Fasken's position is that we would ask that you  
10 deny Mewbourne's unorthodox location. We think the optimum  
11 location in the spacing unit is the one proposed by Fasken.

12           We will present to you two geologic witnesses to  
13 advance the preference of our location over the Fasken over  
14 the Fasken location.

15           But at this point we would seek that you dismiss  
16 Mewbourne's Application because they don't have appropriate  
17 standing to file an application seeking regulatory approval  
18 when they are, in fact, not the operator of the spacing  
19 unit. And that's our motion. There's a written motion  
20 filed, and it has been pending before the Division since it  
21 was filed on March 4th.

22           EXAMINER STOGNER: Mr. Bruce?

23           MR. BRUCE: I'll get to the motion to dismiss in  
24 a minute, Mr. Examiner.

25           I agree with some of what Mr. Kellahin said.

1 This is in the Catclaw Draw Morrow Pool, which is spaced on  
2 640 acres, and both applications by Fasken and Mewbourne  
3 involve nonstandard well units. This is necessitated by  
4 the middle third of that section being unleased federal  
5 land. That is the reason for the nonstandard spacing and  
6 proration unit. We think that's a minor issue in this  
7 case.

8 Another issue in this case involves the  
9 unorthodox locations. Because of the nonstandard spacing  
10 unit and the pool rules, every well in this proposed unit  
11 will be nonstandard.

12 The unorthodox locations are only of concern, we  
13 believe, because of Texaco's objection. We will present  
14 evidence that based on the geology, the location proposed  
15 by Mewbourne is necessary to develop the unit and to  
16 protect the correlative rights of the interest owners of  
17 that unit.

18 In addition, based on drainage and well-  
19 development patterns within the pool, which our geologist  
20 and engineer will go into, no penalty should be assessed on  
21 Mewbourne's unorthodox location. Granting Mewbourne's  
22 Application without penalty simply puts it on an equal  
23 footing with all other wells in this pool

24 The third issue involves the two well proposals  
25 by Mewbourne and Fasken. I don't refer to them as

1 competing well proposals, because this matter is not two  
2 competing compulsory pooling applications where the  
3 Division grants one and denies the other.

4 In this case there's an operating agreement.  
5 I'll have a landman testify quite briefly about that. That  
6 operating agreement provides that once a well proposal is  
7 made, a procedure begins to implement the drilling of a  
8 well. It states that after the 30-day election period ends  
9 -- and that period has ended -- the parties shall actually  
10 commence work on the proposed operation and complete it  
11 with due diligence.

12 There's no dispute that Mewbourne first proposed  
13 a Morrow well to the interest owners under the operating  
14 agreement. And as a result, the parties must proceed to  
15 drill that well first.

16 By the way, Fasken has elected to participate in  
17 Mewbourne's well. Without question, Mewbourne's diligence  
18 in seeking approval for its location before the OCD shows  
19 that it has timely begun work to implement its proposed  
20 location.

21 We fail to see how a party, Fasken, that agreed  
22 to participate in our well can now say, No, it shouldn't be  
23 drilled.

24 Now, in regard to this dispute between Mewbourne  
25 and Fasken, geology is not the determining factor. Of

1 course geology is important, because Mewbourne as the  
2 largest interest owner in the proposed well, with the most  
3 at risk, has a vested interest in proposing a good geologic  
4 location.

5 However, if an interest owner under the operating  
6 agreement doesn't agree with that location, its option, its  
7 remedy is to go nonconsent in that well, not come before  
8 the OCD and say, Hey, Mr. Stogner, deny approval of  
9 Mewbourne's location.

10 We are asking that the Division approve the  
11 Mewbourne location and either temporarily deny the Fasken  
12 application at this time or approve it with the stipulation  
13 that Mewbourne's well has a right to be drilled first.

14 The fact of the matter is, both wells are  
15 proposed Morrow tests, and they can't be drilled and  
16 produced at the same time without a simultaneous dedication  
17 order from the Division, and no party is here requesting  
18 simultaneous dedication.

19 If you do what Mr. Kellahin suggests, approve the  
20 Fasken well and deny Mewbourne's location, then you're  
21 treating this matter, as I said, like competing pooling  
22 applications, rather than as wells proposed under the  
23 operating agreement.

24 The true effect of that decision would be to give  
25 the operator, or any other interest owner under the

1 operating agreement, an absolute veto over any well  
2 proposal. They simply elect to go in it and then come to  
3 the OCD and say, Hey, Mr. Stogner, deny it. That's not in  
4 the operating agreement.

5 Now, as to this motion to dismiss, the operating  
6 agreement says nothing that would prevent a nonoperator  
7 like Mewbourne from filing an application with the  
8 Division. The operating agreement gives the operator  
9 control of operations on the well unit itself. It does not  
10 speak about regulatory approvals.

11 In fact, if -- That's not the case here, but if  
12 the operator went nonconsent under the operating agreement,  
13 someone, some working interest owner, would have to apply  
14 to the OCD for pertinent regulatory approvals. So we think  
15 Mewbourne has the right to do so.

16 Secondly, Division Rule 1203 allows any interest  
17 owner to apply for a hearing. The Division has always been  
18 quite liberal in allowing any interest owner or interested  
19 party to be heard before it. Similarly the courts, in  
20 deciding cases involving the Division, have held that an  
21 interest owner should be given a full opportunity to be  
22 heard.

23 These rules are especially important, considering  
24 the fact that Fasken has shown little or no inclination to  
25 drill Mewbourne's proposed well. If you dismiss

1 Mewbourne's Application, what assurance does Mewbourne have  
2 that Fasken will diligently pursue approval and operations  
3 of the Mewbourne location? Mewbourne needs to be allowed  
4 to proceed with its case to protect its rights.

5 One final point. Based on the land records, we  
6 have severe doubts that Fasken Oil and Ranch, the Applicant  
7 in Case 11,755, is a proper applicant. We don't think it's  
8 an interest owner in the well. We also doubt that it was  
9 duly appointed the operator of the well. We believe the  
10 best way to proceed is to hear both cases, hear all the  
11 evidence and make your decision.

12 Thank you.

13 MR. KELLAHIN: May I respond, Mr. Examiner?

14 EXAMINER STOGNER: Well, I was going to give Mr.  
15 Carr -- where do you stand or -- Mr. Carr, let's hear from  
16 you.

17 MR. CARR: Very briefly.

18 Texaco is the operator of Section 12 that's due  
19 south of the subject spacing unit. The Mewbourne location  
20 is 660 feet from the south line of Section 1 instead of  
21 1650. We believe a well at that location will not be on an  
22 equal footing with other wells in the pool but, in fact,  
23 will gain an advantage on Texaco.

24 We will present testimony seeking a penalty on  
25 the producing rate for that well. That is the only

1 participation we intend to have in this case.

2 EXAMINER STOGNER: Yes, Mr. Kellahin?

3 MR. KELLAHIN: Mr. Stogner, there are two parts  
4 to this dispute. There is a contractual dispute, there's a  
5 land dispute, and there's a courthouse resolution of that  
6 dispute. That's where you go to fight over the contracts  
7 and the interpretations of that issue. That is not your  
8 jurisdiction, and that's not what we're asking you to do.

9 We're asking you to dismiss their Application  
10 because they don't have the right to drill. We have the  
11 operating agreement, and we're the operator. And in order  
12 to give them the opportunity to advance the technical case  
13 that's within your jurisdiction, we have applied, for  
14 purposes of hearing a request for consideration of their  
15 location and our location. And so that gives them the  
16 opportunity to present on their technical case.

17 This is within your jurisdiction, because each  
18 one is an unorthodox well location. And you can defer to  
19 the courts and to the parties how they're going to resolve  
20 the dispute within the spacing unit, but that does not  
21 eliminate you from the obligation to decide the correlative  
22 rights involved in each of these well locations.

23 And as I said earlier, you have jurisdiction and  
24 authority to either approve them both, deny them both,  
25 approve one or the other, or some combination of penalties,

1 because they do affect the offsetting rights of other  
2 interest owners.

3 This is highly unusual because, on almost all  
4 instances I can recall, it's the operator that brings the  
5 application.

6 In this instance, Mewbourne pre-empts the  
7 operator from bringing the application and, as a minority  
8 interest owner with less than 50 percent, files a well-  
9 location exception before all the parties have made choices  
10 on where to drill the well.

11 So we're not asking you to resolve the dispute  
12 among ourselves internally in the spacing unit, but we are  
13 asking you to make your judgment under your jurisdiction as  
14 to what happens to each of these wells in terms of whether  
15 they're drilled at all, whether they're approved under your  
16 process for being drilled and, if so, will they be subject  
17 to any kind of production penalty?

18 We think the Fasken location geologically is  
19 better, and we would ask that you find accordingly and  
20 allow that well to be drilled without penalty.

21 EXAMINER STOGNER: Restate the objection or the  
22 motion.

23 MR. KELLAHIN: My motion is to dismiss  
24 Mewbourne's Application because they are not a proper  
25 applicant before the Division, because they're a



1 nonoperating working interest owner in the spacing unit,  
2 and that by doing so, then, the Application to go forward  
3 is Fasken's, which still provides Mewbourne the opportunity  
4 to put on their technical evidence, their geologic and  
5 engineering witnesses.

6 I am objecting to any testimony from land people,  
7 legal conclusions or other information with regards to the  
8 internal dispute in the spacing unit and asking you to  
9 decide this case based upon the geology and the well  
10 locations themselves.

11 MR. CARROLL: Do you have anything further, Mr.  
12 Bruce?

13 MR. BRUCE: In order to determine who has  
14 operating rights, I think you have to look at the operating  
15 agreement. And like I said, there's a simple provision in  
16 the operating agreement that talks about operations. It  
17 doesn't address who has the right to apply.

18 Furthermore, just like I said, look at Division  
19 Rule 1203. It allows any interest owner to apply for a  
20 hearing, period. And Mewbourne is certainly an interest  
21 owner.

22 As to the operating agreement, we're not asking  
23 you to determine all rights of the parties under the  
24 operating agreement. But like I said, if Fasken didn't  
25 want to drill Mewbourne's well, they could have gotten

1 nonconsent in it.

2           Instead, they came here to subvert the procedures  
3 set forth in the operating agreement. And I think you have  
4 to at least look at that to see what the basis of  
5 Mewbourne's position is, so that you can see that its well  
6 location should be approved, regardless of what happens to  
7 Fasken's.

8           EXAMINER STOGNER: I'm going to defer making a  
9 decision on the motion and proceed with the evidence of all  
10 seven and a half witnesses.

11           MR. KELLAHIN: We would ask that you address my  
12 question to limit Mewbourne's presentation to a technical  
13 geologic presentation and that you not be required to  
14 listen to and hear the land dispute and the contract  
15 matters.

16           I don't think that's relevant.

17           MR. CARROLL: Are you going to put on evidence  
18 regarding the land dispute and contract matters?

19           MR. BRUCE: Very briefly, yes, indeed. I fully  
20 intend to do that. I think I'm entitled to do that.

21           Like I said, there's a question as to whether  
22 Fasken Oil and Ranch is an interest owner in the well and  
23 whether it's the operator and whether it should be here.  
24 That's a threshold decision that this Division has to make.

25           Furthermore, as I said, it gets into the issue

1 of, what happens to the Fasken Application?

2 First and foremost, you should consider  
3 Mewbourne's Application.

4 EXAMINER STOGNER: Mr. Kellahin, I'm going to  
5 allow such testimony.

6 But Mr. Bruce, I want that testimony held briefly  
7 and no opinions, mostly just for background information,  
8 because I think it is -- and I agree with Mr. Bruce in this  
9 matter that some background is definitely needed. I have  
10 to admit, I'm somewhat confused on this whole issue at this  
11 point.

12 But Mr. Bruce, limit it to just background  
13 information, and let's try to keep away from opinions at  
14 this point.

15 MR. BRUCE: Call Mr. Cobb to the stand.

16 EXAMINER STOGNER: Point of procedure. It  
17 appears that -- I'm sure it will, it looks like we're going  
18 over.

19 I'd like to shut down at about 5:30 this evening,  
20 and we will pick it up in the morning.

21 So with that in mind -- and I won't cut it down  
22 at 5:30 exactly, we'll find a good stopping point.

23 MR. BRUCE: As Mr. Carr says, we will be brief.

24 Ready, Steve?

25 EXAMINER STOGNER: Mr. Bruce?

1                                    STEVE COBB,  
2    the witness herein, after having been first duly sworn upon  
3    his oath, was examined and testified as follows:

4                                    DIRECT EXAMINATION

5    BY MR. BRUCE:

6            Q.    Would you please state your name and city of  
7    residence for the record?

8            A.    Steve Cobb, Midland, Texas.

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

10          A.    Mewbourne Oil Company, District Landman.

11          Q.    Have you previously testified before the  
12    Division?

13          A.    Yes, I have.

14          Q.    And were your credentials as an expert petroleum  
15    landman accepted as a matter of record?

16          A.    They were.

17          Q.    And are you familiar with the land matters  
18    involved in this Application?

19          A.    Yes, I am.

20                MR. BRUCE: Mr. Examiner, I tender Mr. Cobb as an  
21    expert petroleum landman.

22                EXAMINER STOGNER: Any objections, Mr. Kellahin?

23                MR. KELLAHIN: No, sir.

24                EXAMINER STOGNER: Mr. Carr?

25                MR. CARR: No objection.

1 EXAMINER STOGNER: So qualified.

2 Q. (By Mr. Bruce) Mr. Cobb, briefly what is it that  
3 Mewbourne seeks in this Application?

4 A. We seek approval of a nonstandard Morrow well  
5 unit, comprised of the south third of Section 1, 21 South,  
6 25 East, Eddy County, New Mexico, which is an irregular  
7 section containing 297.88 acres for our proposed unit.

8 The unit we're proposing would be dedicated to  
9 our well for an unorthodox well location, located 660 feet  
10 from the south line and 2310 feet from the east line of  
11 Section 1.

12 Q. Okay. What is Exhibit 1?

13 A. Exhibit 1 is a land plat of the subject are. Our  
14 well unit is outlined and cross-hatched, and our proposed  
15 well location is identified with the pink dot.

16 The offset operators or owners are highlighted in  
17 yellow.

18 Q. Why can't you form a standard well unit?

19 A. The middle one-third of this section, I've been  
20 advised by the BLM, is subject to a falcon -- the study of  
21 some type of falcon, and will not put it up for lease for  
22 six months to three years. They don't have --

23 Q. Okay, so you don't have any idea when it will  
24 be --

25 A. No.

1 Q. -- put up for lease?

2 A. No.

3 Q. What is Exhibit 2?

4 A. Exhibit 2 is the tract ownership of this proposed  
5 297.88-acre tract. It shows each working interest in this  
6 tract and the status of their interest.

7 At the bottom of the page I show a summary of  
8 unit ownership, and I -- in my summary there, I am assuming  
9 that each participating party will elect to take its share  
10 of any nonconsent interest.

11 Q. How were these interests on Exhibit 2 determined?

12 A. We ha a title opinion prepared.

13 Q. The ICA, Unocal and Chevron interests are listed  
14 as committed to Mewbourne. How was that accomplished?

15 A. We obtained a farmout from ICA and purchased the  
16 interest of Unocal and Chevron.

17 Q. Now, Exhibit 2 also lists Fasken Land and  
18 Minerals, Ltd., as owning an interest; is that correct?

19 A. That's correct.

20 Q. Now, that's different than Fasken Oil and Ranch,  
21 Ltd., isn't it?

22 A. That's correct.

23 Q. So the Applicant in the other case, Fasken Oil  
24 and Ranch, does not own an interest in the well unit,  
25 according to your title opinion?

1 A. That's correct.

2 Q. Does the operating agreement provide a person who  
3 does not own an interest in the unit can be a party to the  
4 operating agreement?

5 A. No, the operating agreement states that each  
6 party owns an interest in the unit.

7 Q. Therefore Fasken Oil and Ranch is not a party to  
8 the operating agreement?

9 A. That is correct.

10 Q. Can Fasken Oil and Ranch be the operator of the  
11 well unit if it's not a party to the operating agreement?

12 A. No, the operator of the unit must be a party to  
13 the operating agreement.

14 Q. So once again, we're dealing with two entities,  
15 just to clarify, Fasken Oil and Ranch --

16 A. That's correct.

17 Q. -- which claims to be the operator, and Fasken  
18 Land and Minerals, which actually owns the mineral  
19 interest --

20 A. That's correct.

21 Q. -- the leasehold interest?

22 What is Exhibit 3?

23 A. Exhibit 3 is the model form operating agreement  
24 which governs this unit.

25 Q. Okay. Now, so you don't get into any opinions,

1 is Section 5 on page 3 of the operating agreement the  
2 provision regarding operator?

3 A. Yes, it is.

4 Q. Okay. If you look through it, is there any other  
5 provision that states what the authorities of the -- the  
6 rights and duties of the operator are?

7 A. No.

8 Q. Okay. And does this provision specifically state  
9 that only the operator can apply to the OCD --

10 A. No, it does not.

11 Q. -- for well approvals?

12 Now, let's turn to page 5, Article 12, of the  
13 operating agreement. Does the operating agreement allow a  
14 nonoperator to propose a well?

15 A. Yes, it does.

16 Q. Okay.

17 A. If you look at pages -- Well, 5 and 6 here,  
18 Section 12 -- I've highlighted in yellow the applicable  
19 wording to -- which illustrates who can propose a well.

20 Q. Okay. Any interest owner can propose the  
21 drilling of a well?

22 A. Correct.

23 Q. When did Mewbourne first start looking at  
24 drilling a well in Section 1?

25 A. In the latter part of 1996.



1 Q. And when did you obtain your farmout from ICA?

2 A. November of 1996.

3 Q. And did it then propose a well under the  
4 operating agreement?

5 A. Shortly thereafter.

6 Q. And is your proposal letter to Fasken marked  
7 Exhibit 4?

8 A. Yes, it does.

9 Q. And dated January 20, 1997; is that correct?

10 A. That's correct.

11 Q. Were similar letters sent out to other interest  
12 owners under the operating agreement?

13 A. Yes, they were.

14 Q. And I think the end result of your -- of the  
15 elections is set forth on Exhibit 2; is that correct?

16 A. That's correct.

17 Q. Only a small percentage did not elect to join in?

18 A. That's correct.

19 Q. Did Mewbourne have any discussions with Fasken  
20 over this period since that February 20 election letter?

21 A. Yes, we've had several telephone calls and  
22 meetings with Fasken.

23 Q. Okay. Now, when did Fasken's election under  
24 Section 12 of the operating agreement expire?

25 A. Expired on February 26th, 1997.

1 Q. And what is Exhibit 5?

2 A. Exhibit 5 is Fasken's election to participate in  
3 our well.

4 Q. Okay. Was their election to participate  
5 qualified?

6 A. Yes, this letter states that Fasken will  
7 participate in our well, though they'll reserve the right  
8 to protest the same.

9 Q. Okay, and that would be the second-to-the-last  
10 paragraph of the letter?

11 A. That's correct.

12 Q. Does anything in this Section 12 of the operating  
13 agreement permit a qualified election?

14 A. No, it just provides you either participate or  
15 nonconsent in the proposed well.

16 Q. What else did Exhibit 5 state?

17 A. It also proposed Fasken's well to Mewbourne.

18 Q. Okay. How does the operating agreement address  
19 the second well proposal to the same formation? Both of  
20 these proposals are to the same formation, are they not?

21 A. That's correct. The operating agreement doesn't  
22 specifically address the second well proposal. However,  
23 once a well proposal is on the table, the operating  
24 agreement provides a procedure to implement the joinder of  
25 that well. Any second proposal would be secondary in

1 nature to the initial proposal.

2 MR. KELLAHIN: I object to the legal conclusions  
3 of the witness, Mr. Examiner. He's gone beyond the scope  
4 of his limited testimony.

5 EXAMINER STOGNER: I concur.

6 MR. BRUCE: Mr. Examiner, the language of the  
7 pertinent provision is highlighted, Section 12 of the  
8 operating agreement.

9 You can look at it. We don't think that's an  
10 opinion.

11 Q. (By Mr. Bruce) And did Mewbourne commence  
12 proceedings to get its operations commenced?

13 A. Yes, by filing this Application.

14 Q. Has Mewbourne elected to participate in Fasken's  
15 well?

16 A. No, we've advised Fasken that we refuse to  
17 participate at the location they propose.

18 Q. And what is Exhibit 6?

19 A. Exhibit 6 is our letter to Fasken stating our --  
20 that we refuse to participate in their proposal.

21 Q. Were all of the offset operators or lessees or  
22 unleased mineral interest owners notified of this hearing?

23 A. Yes, they were.

24 Q. And is Exhibit 7 my affidavit of notice?

25 A. Yes, it is.

1 Q. And were Exhibits 1 through 7 prepared by you,  
2 under your supervision --

3 A. Yes.

4 Q. -- or compiled from company business records?

5 A. Yes, they were.

6 Q. In your opinion, is the granting of Mewbourne's  
7 Application in the interests of conservation and the  
8 prevention of waste?

9 A. It is.

10 MR. BRUCE: Mr. Examiner, I'd move the admission  
11 of Mewbourne Exhibits 1 through 7.

12 EXAMINER STOGNER: Any objection?

13 MR. KELLAHIN: Yes, Mr. Examiner, we object on  
14 the grounds that we initiated earlier that he's asking you  
15 to resolve and interpret a contract in a dispute among the  
16 parties, and therefore we don't think it's relevant to your  
17 consideration.

18 EXAMINER STOGNER: So noted, Mr. Kellahin.

19 I will accept Exhibits 1 through 7 into evidence  
20 at this time.

21 And if you have any cross-examination, Mr.  
22 Kellahin, I'll open that up.

23 MR. KELLAHIN: No questions, Mr. Examiner.

24 EXAMINER STOGNER: Mr. Carr?

25 MR. CARR: I have no questions.

## EXAMINATION

BY MR. CARROLL:

Q. Mr. Cobb, when did Mewbourne acquire the interest of ICA?

A. November, 1996.

EXAMINER STOGNER: No further questions of this witness. He may be excused.

MR. BRUCE: Call Mr. Williams to the stand.

KEITH WILLIAMS.,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

## DIRECT EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name and city of residence for the record?

A. My name is Keith Williams from Midland, Texas.

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

A. I'm a geologist employed by Mewbourne Oil Company.

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

A. Yes, I have.

Q. And were your credentials as a petroleum geologist accepted -- as an expert petroleum geologist, accepted as a matter of record?

1 A. They are.

2 Q. And are you familiar with the geology pertaining  
3 to these Applications?

4 A. I am.

5 MR. BRUCE: Mr. Examiner, I'd tender Mr. Williams  
6 as an expert petroleum geologist.

7 EXAMINER STOGNER: Any objections, Mr. Kellahin?

8 MR. KELLAHIN: No, sir.

9 EXAMINER STOGNER: Mr. Carr?

10 MR. CARR: No objection.

11 EXAMINER STOGNER: So qualified.

12 Q. (By Mr. Bruce) Mr. Williams, in what pool will  
13 Mewbourne's well be located?

14 A. It will be located in the Catclaw Draw Morrow  
15 Pool.

16 Q. What is Exhibit 8?

17 A. Exhibit 8 is a small plat that illustrates the  
18 wells dedicated to that pool in yellow.

19 Q. And what are the rules for this pool again?

20 A. Currently the rules are 640 acres, with spacing  
21 of 1650 from the lease lines.

22 Q. From the outer boundary of the section?

23 A. From the outer boundary of the section, yes, sir.

24 Q. Is only one well allowed per unit?

25 A. No, originally there was one well per unit. The

1 pool was created in 1971, and in 1973 the field rules  
2 allowed one well per unit due to having two pipeline comes  
3 in here in non-ratable take situations where they had  
4 competing wells with different allowables.

5 So in 1973, they formed -- they prorated the  
6 pool, based solely on surface acres, and that was 640  
7 acres.

8 And in 1980 they actually downspaced the pool to  
9 320 acres where you could drill 660 off the side boundary,  
10 1980 off the east boundary as having an acreage factor of  
11 one, but then in 1981 they rescinded that order due to  
12 having losses of leases when they did that within this  
13 pool.

14 But it was in that 1980 order, R-4157-C that  
15 determined the drainage of wells in Catclaw Draw Morrow  
16 Pool being between 280 acres and 350 acres.

17 Q. And then Order R-4157-D reinstated the 640-acre  
18 spacing with an infill provision; is that correct?

19 A. Yes, sir, not based on drainage but again because  
20 the downspacing unit would have prevented -- would have  
21 lost leases and not protected correlative rights.

22 MR. BRUCE: Mr. Examiner, I would ask the  
23 Division to take administrative notice of the files in  
24 Cases 6751 and 7326, which are the pertinent cases in the  
25 pool rules.

1 EXAMINER STOGNER: What was those order numbers  
2 again?

3 MR. BRUCE: The order numbers were R-4157-C and  
4 -D, and it was Cases 6751 and 7326.

5 EXAMINER STOGNER: Are the pool rule presently  
6 enacted under that 4157 series, or is it by some other  
7 order?

8 MR. BRUCE: I believe that is the current rules.

9 EXAMINER STOGNER: Does order R-50- -- 8170, the  
10 proration rules, enter into that?

11 MR. BRUCE: The pool was prorated. I couldn't  
12 find the order, but it is no longer prorated.

13 EXAMINER STOGNER: Okay. At this point I'm going  
14 to take administrative notice of those two cases in which  
15 Order Number R-4157-C and -D were issued, and any other  
16 cases and orders pertinent to this pool, which I believe  
17 there are but...

18 MR. BRUCE: I couldn't find them all.

19 EXAMINER STOGNER: Well, it's not an easy task, I  
20 assure you.

21 Q. (By Mr. Bruce) Looking at your Exhibit 8, Mr.  
22 Williams have two wells generally been drilled in each  
23 section in the pool?

24 A. Yes, they have. The pool is effectively drilled  
25 on 320-acre spacing, and the arrows note the number of



1 wells that don't fit the current field rules, being 1650  
2 from the common boundaries.

3 Q. So about half the wells in this pool are at  
4 unorthodox locations; is that correct?

5 A. Yes, sir.

6 Q. Were any of these wells, these 13 or 14 wells,  
7 assessed a penalty on production?

8 A. We only found one in the southwest quarter of  
9 Section 18, and it was a -- It was half of a 320-acre  
10 spacing unit, and it was too close to side and outer  
11 boundaries. So it really didn't fit anything.

12 Q. Okay. And that penalty was assessed based on  
13 productive acreage in the half well unit?

14 A. Yes, sir.

15 Q. Okay. And I think Mr. Cobb has already stated  
16 that regardless of where you place your well, it's going to  
17 be nonstandard; is that correct?

18 A. Yes, sir.

19 Q. Would you please identify Exhibit 9 for the  
20 Examiner and discuss the Morrow geology in this area?

21 A. Okay. Exhibit 9 is a series of four maps. The  
22 upper left-hand map is a structure map on top of the lower  
23 Morrow. The red dots note the Morrow producers from all  
24 zones; the purple ones, Cisco Reef producers.

25 I have two main faults that cut through this

1 area. The ones from southwest to northeast is a regional  
2 throughgoing fault, and I believe this is the one that  
3 limits the pool to the north. It's the defining feature  
4 that limits Catclaw Draw Pool to the north. And you have  
5 virtually no Morrow production across that fault for quite  
6 a ways.

7 Q. Now, looking at that, Mr. Williams, this fault  
8 shows up in the wells in Sections 2 and 11, does it not?

9 A. Yes, it cuts the southeasternmost quarter of 2  
10 and the northwestern quarter of 11.

11 Q. And now you said regional. Does this -- Do  
12 you see evidence of this fault to the north off your map  
13 here --

14 A. Yes.

15 Q. -- to the top of your map?

16 A. Yes, you see it to the northeast on some regional  
17 work and to the southwest as well. And it's evidenced real  
18 clearly, both the loss of production from 11 to 10 and the  
19 values of the subsea points at the top of the lower Morrow.  
20 It's about 150 to 250 feet of throw along that fault.

21 Q. Why don't you move over to your lower Morrow  
22 isopach and discuss that?

23 A. The lower Morrow is -- This is the lowermost sand  
24 in the field. It is, by and large, in the prorated field.  
25 For many years it produced the majority of the allowable,

1 being at the bottom of the hole. It is wet over to the  
2 east in wells in 7 and 6, in 21-26, and is virtually  
3 pinched out in 2, the west half of 11, 10, up in there.

4 This was the big, main early producer within  
5 Catclaw Draw-Morrow Pool.

6 Q. Now, if you move to the north in the lower  
7 Morrow, does that affect the quality of your well location?

8 A. Yes, I have a zero map that the well in Section  
9 1, spot P, that well did not encounter any production lower  
10 Morrow sand.

11 Q. Why don't you move on and discuss the middle  
12 Morrow over in the lower left of your map?

13 A. Okay. Coming up the hole is the middle Morrow  
14 green sand. It's mapped as a kind of distributory bar,  
15 north-south, more or less. It deteriorates rapidly east  
16 and west. The red wells, colored red wells, are only the  
17 wells that are productive out of that zone.

18 The well currently offsetting to the south in  
19 Section 12 is the new Texaco well, the E.J. Levers Number  
20 2, that has about 26 feet of net pay in that well,  
21 producing currently at about 4 million a day, on the  
22 constraint.

23 In Section 1, the old Fasken well had about 10  
24 feet of net pay and made about 300 million out of that  
25 zone. And basically east-west, it deteriorates, and I have

1 an uneconomic amount mapped at the location in the  
2 northwest quarter of the proposed spacing unit.

3 Q. Okay. Now, this location, your location, as to  
4 the middle Morrow, does structure play a part in it?

5 A. It does. I believe that's why the older Fasken  
6 well in Section 1 was so poor. You lose -- You have a fair  
7 amount of gross pay that your net pay is below what we deem  
8 is commercial, which is about between 13 and 15 feet of  
9 net. And when you, you know, basically push out at 1650  
10 you go structurally downdip, as well as deteriorate net  
11 pay.

12 Q. Also, if you move too far to the north, are you  
13 getting too close to that poor Fasken well up to the  
14 northeast?

15 A. Yes, yes. Not very well developed there.

16 Q. Now, what about the upper Morrow?

17 A. The upper Morrow is -- essentially in this  
18 prorated pool is one of the last sands to produce in a lot  
19 of these old wells. It is currently where they are  
20 producing. It looks like it's a viable target at our  
21 location. It tests wet off to the east as you fall  
22 offstructure, and it tested fairly tight to the west,  
23 although it had a decent thick section.

24 Q. So if you move too far to the north, you'd also  
25 lose structure in the upper Morrow?

1 A. You lose structure and thickness, yes, sir.

2 Q. Overall, is the entire -- what I'm calling the  
3 south half or, if you will, the south third of Section 1  
4 productive -- prospective in the Morrow?

5 A. It is prospective in the Morrow.

6 Q. Now, based on these maps, in your opinion, is  
7 Mewbourne's location the best location in Section 1 for a  
8 Morrow well?

9 A. It is.

10 Q. What is Exhibit 10?

11 A. Exhibit 10 is a two-well cross-section. It's got  
12 the proposed location in the center of it. It shows the  
13 new Texaco well on the left side, to the south, and the  
14 older Monsanto Avalon Federal well to the north in Section  
15 1.

16 The nomenclature, the green brown is all internal  
17 to Mewbourne Oil Company for the most part, but it pretty  
18 well ties the maps we've just shown. The green sand is the  
19 main interval that produced downdip to the north and is  
20 currently producing unrestrained in the Texaco well to the  
21 south.

22 Q. Now, in the upper right-hand corner you have a  
23 small production map also. Could you discuss that?

24 A. The production map has a little series of T's by  
25 each well. The northwest part of that T is the potential,

1 the right-hand top side of that is the completion date,  
2 below that is either the abandonment date or the production  
3 for about the last seven months of this year, and to the  
4 left of that is the cumulative for that well in that zone.

5 Basically, the wells in 2, that information is  
6 out of the upper Penn or Cisco. The rest is as it pertains  
7 into the Morrow. And you can see the wells in 11, 11K,  
8 that well made 8.6 BCF. It was drilled in 1966. The well  
9 in 11P made about 2.5 BCF, drilled after those 1981 orders,  
10 as an infill-type well.

11 The well in 12N is the older Texaco well. It was  
12 drilled about 25 years ago. It's made 6.5 BCF. And the  
13 new well was drilled in January of last year.

14 Q. What is the current producing rate of that Texaco  
15 in the north half of Section 12?

16 A. It's been about 4 million a day since it came on  
17 in April about a year ago.

18 Q. So it's produced a substantial amount of gas over  
19 the last nine or ten months?

20 A. Roughly a BCF, 1 to 1.2 BCF of gas, yes, sir.

21 Q. And again, the Monsanto or Fasken well to the  
22 north at A', what was the total production from that well?

23 A. That well produced 323 million cubic feet and is  
24 noncommercial by Mewbourne's standards or just about any  
25 industry standards.

1 Q. That's been the only Morrow or Pennsylvanian-age  
2 production from Section 1; is that correct?

3 A. Yes, sir.

4 Q. Were Exhibits 8 through 10 prepared by you or  
5 under supervision or compiled from company business  
6 records?

7 A. Yes, sir.

8 Q. And in your opinion, is the granting of  
9 Mewbourne's Application in the interests of conservation  
10 and the prevention of waste?

11 A. Yes, sir.

12 MR. BRUCE: Mr. Examiner, I'd move the admission  
13 of Mewbourne Exhibits 8 through 10?

14 EXAMINER STOGNER: An objection?

15 MR. KELLAHIN: No objection.

16 MR. CARR: No objection.

17 EXAMINER STOGNER: Exhibits 8 through 10 will be  
18 admitted into evidence. Thank you, Mr. Bruce.

19 Mr. Kellahin, your witness.

20 CROSS-EXAMINATION

21 BY MR. KELLAHIN:

22 Q. Mr. Williams, when did you commence working for  
23 Mewbourne?

24 A. I started Mewbourne in first part of August last  
25 year.

1 Q. What was your former employment immediately prior  
2 to that date?

3 A. I worked for Texaco for about sixteen and a half  
4 years.

5 Q. Did your geologic responsibilities for Texaco  
6 include either or more [sic] of Texaco's Lever wells in  
7 Section 12?

8 A. Not for about seven years. I worked it in 1990.

9 Q. What's the vintage of the Levers 1 well?

10 A. It was drilled in 1996.

11 Q. So you weren't involved in drilling that well or  
12 doing any of the geologic work for Texaco for the Levers 1  
13 well?

14 A. Well, I had worked on it previously, but it was  
15 not drilled, areas shifted, reorganizations, and a new  
16 group out of Denver drilled that well.

17 Q. Okay. The vintage of the Levers 2?

18 A. The Levers 2, 1996.

19 Q. 1996. And the Levers 1, are they both 1996  
20 wells?

21 A. 1972.

22 Q. Okay.

23 A. Twenty-five years.

24 Q. Starting with -- You didn't put the Levers 1 on  
25 the cross-section, Mr. Williams. Why did you leave that



1 off the display?

2 A. It looks -- Well, no real reason, other than just  
3 to keep it short. It looks essentially identical to the  
4 Number 2 from my correlations. It's not difficult  
5 correlations.

6 Q. When the --

7 A. I have a log if you'd like to see it. I have a  
8 strip of the log.

9 Q. Oh, I have a lot, that's all right.

10 On the Levers 2 well, on this log section, let's  
11 start at the base of it, okay?

12 A. Okay.

13 Q. The brown sand --

14 A. Yes.

15 Q. -- was that a sand that produced in the Levers 1,  
16 the 1972 well, which is farther south than the Levers 2?

17 A. Yes, if it's colored on this map in the brown  
18 sand it produced out of it, yes.

19 Q. Okay. All right, let's start with the brown  
20 sand. The Levers to the farthest south had 12 feet, it  
21 produced out of the brown sand. Is there any way to  
22 determine how much gas was produced out of the brown sand  
23 in the Levers 1?

24 A. No, sir, it had several zones open, and it was  
25 not isolated. So it produced some part of 6.5 BCF?

1 Q. Do you recall what sands were open in the Levers  
2 1 well?

3 A. Yes, sir, the brown, the orange, the green and  
4 the upper Morrow.

5 Q. Were those all opened at the same time in that  
6 well?

7 A. As far as I remember, all but the upper A. It  
8 was opened in 1991, I believe.

9 Q. Okay. Then the next wells drilled, the Levers 2  
10 in 1996, which is on the cross-section.

11 A. Yes.

12 Q. Okay. Let's start with the brown sand.

13 A. Uh-huh.

14 Q. Did they complete all these perforations --

15 A. Yes.

16 Q. -- concurrently?

17 A. As far as I know. That's what the scout ticket  
18 says.

19 Q. All right. So Texaco didn't attempt to produce  
20 any of these Morrow intervals consecutively? They opened  
21 all the perforations I see here concurrently?

22 A. Yes, sir. That's what the scout tickets --  
23 That's the information I have.

24 Q. Okay.

25 A. 10,236 to 10,458, that's a gross interval that

1 includes green, orange and brown sands.

2 Q. When we look at Exhibit 9 for the lower Morrow  
3 brown sand, your gross isopach for that interval, does that  
4 correspond to what you've identified as the brown sand  
5 interval on the cross-section, Exhibit 10?

6 A. Yes.

7 Q. You didn't attempt to create a net-pay isopach  
8 out of the brown sand?

9 A. I believe I have one. I showed -- I showed more  
10 the geometry using the gross sand, so...

11 I mean, I'm basically dealing with wells that  
12 don't have any sand, wells that have sand and are  
13 productive, and the wells to the east that have sand and  
14 are wet. So --

15 Q. I understand.

16 A. -- that's really neither here nor there in this  
17 case.

18 Q. For purposes of the presentation today, this --  
19 You only presented a gross isopach of the brown sand?

20 A. Correct.

21 Q. This interpretation is dated March 4th of 1997?

22 A. Yes, sir.

23 Q. Did you have any prior interpretation of this  
24 sand that predates the date of this exhibit?

25 A. Prior interpretation?

1 Q. Of the brown sand?

2 A. No, sir.

3 Q. Have there been any new wells drilled in this  
4 immediate vicinity that you're studying after the Texaco  
5 Levers Number 2 well in 1996?

6 A. No, sir, it is the newest -- newest well in the  
7 area.

8 Q. Okay. In ranking the potential Morrow intervals  
9 that you're trying to access, we have the brown, the green  
10 and this upper Morrow A sand --

11 A. Yes, sir.

12 Q. -- on your display?

13 A. I consider these to be -- from my study of the  
14 whole field, to be the main intervals in the field, yes,  
15 sir.

16 Q. How do these contrast to any other interval in  
17 the Morrow?

18 A. Well, they are the known pays in the field.

19 Q. And for your purposes of your study we can  
20 exclude all the other Morrow, other than these three that  
21 you've mapped?

22 A. Commercially in this part of the field, yes, sir.

23 Q. Okay. When we look at the brown, the green and  
24 the Morrow A sand, how would we rank them in terms of your  
25 priority as the one that has the greatest potential under

1 your interpretation?

2 A. I'd say the number one is the green, number two  
3 is the brown, number three is the A.

4 Q. Do you make a judgment on locating the well based  
5 upon the thickness?

6 A. Yes, sir, and the structure.

7 Q. Okay. What do you estimate to be the net isopach  
8 thickness in the brown sand at your proposed location?

9 A. I'd say it would be the same as the gross. It  
10 would be about 12 or 13 feet. Because your question  
11 before, you have three types. You have the two that are  
12 wholly productive, and -- out of the brown, you have the  
13 wells that don't have any brown, and then you have the  
14 wells that have brown that are structurally too low and  
15 wet. So...

16 Q. If I'm looking at your second best priority in  
17 ranking, which is the brown sand, and if I want the best  
18 location in the spacing unit for Section 1, I would move  
19 the well to a thicker point on the isopach and go east,  
20 would I not?

21 A. Just on the pure structure, you would --

22 Q. No, sir, I'm on the isopach.

23 A. Oh, on the pure isopach, yes, sir, you would.  
24 But you would be giving up -- There's a gas-water contact  
25 that is between this location and the well in Section 7,

1 and that's -- that is what you'd be -- You know, it's a  
2 give and take; you'd like to have a little bit more net  
3 pay, but you don't want it to be wet.

4 Q. I'm trying to understand your strategy. When I  
5 look at the Morrow structure map on the top of the lower  
6 Morrow, identify for me what you believe to be the gas-  
7 water contact.

8 A. I believe it's right around 7200 feet on that  
9 map.

10 It's difficult to say. The lowest known water is  
11 in Section 7 at 7260, and the well in Section 1, of course,  
12 didn't have any of that sand, so it's difficult to say.  
13 It's somewhere between 7180 and 7263.

14 Q. All right. So when I'm looking at the structure  
15 map and the brown sand only, excluding the others, your  
16 preference has been to go to a less thick brown sand in  
17 order to gain structural position?

18 A. Yes, sir.

19 Q. Although the water contact appears to be at a  
20 structural position that would be east of the spacing unit  
21 in Section 1? The highest known water is minus 7200?

22 A. Well, that's --

23 Q. Did I understand that right?

24 A. That's the only real known water in this part of  
25 it, yes, sir.

1 Q. All right.

2 A. I don't think it's the highest known water.

3 Q. Ah, there -- All right.

4 A. Yeah.

5 Q. What's the lowest known gas that is water-free in  
6 the brown sand?

7 A. Oh, it's probably about 7160, roughly, from a  
8 well in 13, off this map.

9 Q. All right.

10 A. So you're somewhere in there.

11 Q. All right. So there -- At least in the brown  
12 sand you've got concern, while you have gross thickness  
13 you're increasing the risk that it's going to be wet and  
14 not gas-productive?

15 A. If you go east, yes, sir.

16 Q. All right. Let's look at the first priority,  
17 your green sand. The green sand was produced, or at least  
18 perforated, in the Texaco Levers 1 well?

19 A. Yes, sir, on the original in 1972.

20 Q. Any way to figure out what volume of the gas  
21 production from that well is directly attributable to the  
22 green sand?

23 A. Our -- I'll have to defer to our engineer. He  
24 has done that. And I have given the numbers of net pay and  
25 such to do that, so...

1 Q. When we look at the net map for the green sand --

2 A. Uh-huh.

3 Q. -- what do you mean by "net"? What's your  
4 cutoff?

5 A. My cutoff is about -- is 50 API units?

6 Q. I'm sorry, sir, 58?

7 A. 50 API units --

8 Q. 50.

9 A. -- on the gamma ray and 8 percent porosity. And  
10 that's a mix of sonic and neutron density logs. It's  
11 fairly good.

12 Q. When we look at the date of this interpretation,  
13 it's March 4th?

14 A. Yes, sir.

15 Q. Did you have any prior interpretations of the  
16 green sand?

17 A. Well, we've -- The date of this, this is the date  
18 of preparing a hearing exhibit.

19 Q. Okay.

20 A. You know, we had stated earlier, we had got our  
21 farmout in November, so it's -- probably October was the  
22 original date of this interpretation.

23 Q. And this is your interpretation, this is your  
24 work product?

25 A. Yes, sir.



1           Q.   Has this interpretation we're looking at now  
2 consistently been the same interpretation since you got the  
3 farmout in October of 1996?

4           A.   The net has, yes, and the gross has been the  
5 same.

6           Q.   This net green sand map is the same map that you  
7 showed the Fasken people when they met with you on February  
8 26th?

9           A.   Oh, no, sir. No, that was a gross green mapped  
10 sand of the entire field.

11          Q.   All right.

12          A.   It bears very little total correlation to this  
13 map.

14          Q.   So in the February meeting with Fasken you showed  
15 them a gross green map which you don't show today; you're  
16 showing a net map which you didn't show then?

17          A.   Right, I have that map if you would like to see  
18 it. But this is a net map for the purpose of engineering  
19 testimony.

20          Q.   Is there a structural component to the green sand  
21 that affects the location in the proposed spacing unit?

22          A.   I believe there is. The well in 1, spot P,  
23 produced marginally out of that zone, I believe due to a  
24 low structural, poor structural position.

25          Q.   Is there a water component?

1 A. No, sir.

2 Q. Not in the green sand?

3 A. Not in the green sand?

4 Q. But structural position affects the productivity  
5 of green sand?

6 A. Yes, sir.

7 Q. In what way, sir?

8 A. I think the lower you get on a lot of these  
9 sands, you tend to have more clay and lose permeability.

10 Q. The sand package that you've mapped as a Morrow A  
11 sand, it's the upper Morrow A sand --

12 A. Yes, sir.

13 Q. -- that's your third in order of priority.

14 Again, has this interpretation remained the interpretation  
15 you've made for the A sand from October to now?

16 A. I believe it has. It may have changed. I may  
17 have incorporated the well in 3 where I didn't before. I  
18 can't really remember. But it's essentially the same over  
19 Section 1, yes.

20 Q. Is there a gross isopach map for this sand  
21 interval that you've prepared?

22 A. I see this sand much like the lower sand.  
23 Everywhere --

24 Q. You didn't answer my question. Have you prepared  
25 a gross isopach for the Morrow A sand?

1           A.    I would consider the net to be the same as the  
2 gross.

3           Q.    So you did not prepare a gross A sand map?

4           A.    Not by definition.

5           Q.    What's your definition?

6           A.    Well, my definition in this case, gross is net.

7 And I guess I should note that on my exhibit, but --

8           Q.    Okay. Again, what's the cutoff to make the net  
9 map here?

10          A.    This is more of a porosity cutoff, again, in the  
11 7-percent range.

12          Q.    When we look at the structure map --

13          A.    Uh-huh.

14          Q.    -- has this continued to be your structural  
15 interpretation from October of 1996 to now?

16          A.    It has.

17          Q.    You have not changed it?

18          A.    No. I've had faults -- essentially the same  
19 faults that I showed Fasken on our meeting or here on this  
20 map.

21          Q.    The location and the length of the faults  
22 depicted on this display have not changed?

23          A.    Well, this is a much shorter version of my  
24 regional map I showed Fasken.

25          Q.    I mean, within the area depicted it is the same

1 map --

2 A. Yes.

3 Q. -- that you showed Fasken?

4 A. Yes.

5 Q. All right. Is there a structural component to  
6 the potential production in the Morrow A sand?

7 A. There is potentially, yes, sir. There's a wet  
8 test on the east side of the field, Section 7 -- Southwest  
9 quarter of Section 7 tested wet. So you're dealing with a  
10 gas-water contact in there somewhere.

11 Q. All right. What's your best opinion on the gas-  
12 water contact, using the structural contour map when we're  
13 looking at the Morrow A sand?

14 A. It would be roughly on top of the lower Morrow.  
15 Of course, this is projecting, you know, several hundred  
16 feet up the hole. But it's roughly going to be somewhere  
17 between 7160 and 7220.

18 Again, it's difficult, because the well in 1 is  
19 the most downdip well. That sand was not developed in that  
20 well either, so you can't say whether it would be wet or --

21 Q. All right. How strong an influence does  
22 structural position and your desire to be away from the  
23 water component of the Morrow A sand play in your decision  
24 to locate the well for purposes of Morrow A potential?

25 A. It's key in Morrow A production. The only one

1 that's exempt from that, it appears, is the green.

2 Q. How do you balance these two decisions as a  
3 geologist in deciding thickness in relation to structural  
4 position, for the Morrow A?

5 A. Oh, for the Morrow A?

6 Q. Uh-huh.

7 A. Well, we have a -- you know, you have essentially  
8 a thick between the well that was wet in Section 7 and the  
9 well in Section 2 that tested a show but did not produce  
10 out of that zone. You have a kind of a linear trend there.  
11 So you're at that, and you're above the well in 7 that  
12 tested wet. So it should work.

13 Q. Can I not gain thickness by moving westward  
14 towards Section 2, as well as improve my structural  
15 position?

16 A. Not according to my map. They're the same.

17 Q. If I --

18 A. In this one zone, they're the same, in --

19 Q. You're --

20 A. -- isopach -- they are -- yeah, Section 1 --

21 Q. Well, bear with me. Maybe we're not talking the  
22 same thing.

23 Morrow A sand, look at your proposed location.

24 A. Got it.

25 Q. You're just west of the 20-foot contour line,

1 right?

2 A. Yes.

3 Q. You center your position within the 20-foot  
4 contour line if you move farther west?

5 A. Well, that other circle is Fasken's proposed  
6 location, and that is the same distance off that 20-foot  
7 contour --

8 Q. Well, that's not what I'm looking at. I'm  
9 looking at your location. Forget the Fasken location. If  
10 you just take your location --

11 A. Oh --

12 Q. -- 660 from the south boundary and move it  
13 directly west without moving it north --

14 A. The maximum thickness on this map is the well in  
15 2R; it has 21 feet. It's a five-foot contour interval, so  
16 I did not contour 25 feet in there.

17 Q. I understand.

18 A. So maybe, maybe not.

19 Q. All right. How much structural position do you  
20 gain if you move farther west than your proposed location?

21 A. From my map, roughly 35, 40 feet. Now, this is  
22 projected. This is going to be less up the hole. This is  
23 down on the lower Morrow, so --

24 Q. I'm --

25 A. -- probably 20 feet.

1 Q. I'm just trying to understand why you picked your  
2 location.

3 What's the basis upon which you have located the  
4 faulting shown on the Morrow structure map? Is this log  
5 data?

6 A. Yes, sir. Well 10 is about right at 200 feet low  
7 and nonproductive from the well across the fault in Section  
8 11, and there's no Morrow production in Sections 10, 2, 3.

9 So I've basically separated the Cisco production  
10 to the northwest from the Morrow production to the  
11 southeast by this fault I see regionally through this area,  
12 and it is all subsurface control.

13 Q. And that's just done on log information,  
14 subsurface geologic information?

15 A. Yes, sir.

16 Q. You have not integrated seismic interpretations  
17 into this?

18 A. No, sir.

19 Q. Okay. When we look at your proposed location in  
20 relation to its opportunity to compete with the Texaco  
21 well, the Levers 2 --

22 A. Yes, sir.

23 Q. -- the Levers 2, under your analysis, would be  
24 competing in the green sand, the brown sand, but apparently  
25 not in the Morrow A sand?

1           A.    Yes, it would be, but that well is not open in  
2   that zone currently, so -- I think it would be ultimately,  
3   be competitive in the A as well.

4           Q.    All right, so those are --

5           A.    It's not open in that well.

6           Q.    I understand. And that's the only reason it's  
7   not colored, is that it has pay but it hasn't been  
8   perforated?

9           A.    Yes, it has 13 feet of net pay.

10          Q.    The color code indicates pay in this zone; it's  
11   simply --

12          A.    It's perf- --

13          Q.    -- an indication of perforated --

14          A.    Right, right.

15               MR. KELLAHIN: Thank you, Mr. Examiner, I don't  
16   have any further questions.

17               EXAMINER STOGNER: Thank you, Mr. Kellahin.

18               Any redirect, Mr. Bruce?

19               MR. CARR: I have some questions.

20               EXAMINER STOGNER: Mr. Carr?

21                               EXAMINATION

22               BY MR. CARR:

23               Q.    Mr. Williams, you've testified that at the  
24   current time this pool is operated under 640-acre spacing  
25   rules with an option of a second well; is that correct?



1           A.    Yes, sir.

2           Q.    When you showed on your Exhibit Number 8 a number  
3 of wells that were drilled at unorthodox locations --

4           A.    Yes, sir.

5           Q.    -- did you determine how many of those might have  
6 been drilled prior to the adoption of 640-acre spacing?

7           A.    How many -- I'm sorry, repeat that?

8           Q.    How many of the wells that you've shown are now  
9 at unorthodox locations were actually drilled at standard  
10 locations and then grandfathered in when 640 acres came  
11 into effect? Do you know?

12          A.    How many were grandfathered in?

13          Q.    Yes.

14          A.    Virtually none -- All the original wells without  
15 the arrows are at 1650.

16          Q.    What about the Levers Number 1 --

17          A.    Yeah, yeah --

18          Q.    -- wasn't that well drilled prior to the adoption  
19 of the 640-acre spacing?

20          A.    Yes, it was.

21          Q.    So that well would have initially been at a  
22 standard location and then grandfathered in?

23          A.    I'm not sure, but it's likely, it could have --

24          Q.    Do you know, as to the other wells that you've  
25 indicated with an arrow, whether or not when they were

1 drilled they were at a standard location?

2 A. They -- Yeah, they were not drilled at standard  
3 locations as far as the 640 rules, and they were mostly  
4 drilled in 1980, 1981.

5 Q. All right. Now --

6 A. When you -- I'm sorry, when they went through  
7 that period and geologically defined drainage in the Morrow  
8 as 320-acre spacing, they rescinded that only due to loss  
9 of potential lease and correlative rights. So they  
10 effectively drilled 320 acres.

11 Q. So you're saying there's an effective 320-acre  
12 spacing in effect in this pool?

13 A. Absolutely.

14 Q. And the rules have been changed to honor that; is  
15 that right?

16 A. Indirectly. The rules were changed, and changed  
17 back.

18 Q. But the rules as they stand right now are 640  
19 acres with an infill, correct?

20 A. Yes, sir.

21 Q. But the rules also did not change the well-  
22 location requirements; is that right? You still are  
23 required to be 1650 back from the outer boundary of a  
24 section; is that not correct?

25 A. Currently, yes.

1 Q. And when you talked only one well in the pool  
2 being penalized because of the location --

3 A. Yes, sir.

4 Q. -- how did you determine that?

5 A. Through the researching of the records, what we  
6 could find on the wells.

7 Q. And what records were you looking at to determine  
8 that? A proration schedule, a --

9 A. Yes, I have posted -- I have a map that posts all  
10 the proration units and acreage factors. And like I said,  
11 you can't make that map now, because the field hasn't been  
12 prorated for years.

13 Q. Were you able to determine how many times someone  
14 had proposed a well at an unorthodox location and had it  
15 been opposed and no penalty was assessed?

16 A. No, sir.

17 Q. So you don't know if there was ever a case where  
18 someone objected to an unorthodox location and the Division  
19 said, Well, the spacing is really technically something  
20 other than what the rules are, we won't penalize it?

21 A. I'm sorry, repeat that.

22 Q. You have no case that you can case that you can  
23 cite where someone objected to a location because it was  
24 unorthodox in this field and no penalty was set?

25 A. I think the well -- I believe the well in Section

1 11 is an unorthodox well. It was drilled in 1981 and has  
2 suffered no penalty.

3 Q. Was there an objection to that location when it  
4 was proposed?

5 A. There was no -- I don't believe so. I don't  
6 know, but it certainly didn't restrict its production if  
7 there was.

8 Q. Do you know of any well in this pool where there  
9 was an objection by an offset to an unorthodox location and  
10 no penalty was set?

11 A. Well, I think that well in 11 would fit that  
12 category.

13 Q. There was an objection to that well?

14 A. Oh, I'm not sure about that. But know --

15 Q. My question is -- My question is, did someone  
16 propose a well out here ever that you know of, and the  
17 offset objected saying you're encroaching on me, and the  
18 Division saying no penalty? Do you know of that case in  
19 this pool?

20 A. Neither way, no, sir, either that they got a  
21 penalty or they didn't.

22 Q. You don't know, is what you're saying?

23 A. Right.

24 Q. Now, you're proposing to drill 660 feet from the  
25 south line of Section 1, correct?

1 A. Yes, sir.

2 Q. A standard location, if Texaco was to drill an  
3 additional well in 12, would be 650 feet from that common  
4 lease line, correct?

5 A. I'm -- Say that again?

6 Q. What is the standard, the nearest standard  
7 location for a well to the north line of Section 12?

8 A. It would be 1650 from the north line.

9 Q. And you are proposing to be 660 from that common  
10 line, correct?

11 A. Yes, sir.

12 Q. In fact, you're 60 percent closer than you would  
13 be if you were at a standard location; isn't that correct?

14 A. Not -- Not technically on distance. We are  
15 within 100 feet of being 1650. The Texaco well is 2448 off  
16 the lease line.

17 Q. Correct.

18 A. We are 660. That's essentially a difference in  
19 two wells being 1650 apart.

20 Q. If we move the lease line --

21 A. No, just distance is the question.

22 Q. All right, well, let's ask you the distance. How  
23 close are you to the south line of 1?

24 A. 660.

25 Q. And how close is the nearest standard location in

1 12?

2 A. 1650.

3 Q. And how close is the Texaco well in 12?

4 A. 2448, I believe.

5 Q. Is it your testimony that being 60 percent closer  
6 than allowed doesn't give you an advantage over the  
7 offsetting operator?

8 A. No, sir, not in this pool.

9 Q. You think there's no advantage by being that much  
10 closer?

11 A. What I referred to is the order that set the  
12 geology of the pool at 320-acre spacing. For geologic  
13 reasons, and 320-acre spacing, that essentially an orthodox  
14 distance to be off the side boundary.

15 Q. Is there a rule in effect today that says 320-  
16 acre spacing for this pool?

17 A. No, sir.

18 Q. Is there a rule that says 660 from the sideline  
19 for this pool?

20 A. No, sir.

21 Q. Now, when we look at your isopach map, your  
22 composite map, your Exhibit Number 9, if we look at the  
23 upper left-hand corner, your structure map, and you compare  
24 your proposed location in 1 to the Texaco location south in  
25 12, you're downstructure from that well; isn't that

1 correct?

2 A. Yes, sir.

3 Q. That would mean that based on your testimony, you  
4 would be encountering more clay and lower permeability,  
5 being downstructure?

6 A. I don't believe at that location -- That's  
7 probably north, you know, up into the unleasable part of  
8 Section 1 there.

9 Q. Didn't you testify two minutes ago that when you  
10 move downstructure you encounter more clay and poorer  
11 permeability?

12 A. Yes.

13 Q. But that doesn't apply here, is what you're  
14 saying?

15 A. Well, it applies -- It applies somewhat, but --

16 Q. Now, if we go to the map in the upper right-hand  
17 corner, the gross isopach of the lower Morrow brown sand --

18 A. Uh-huh.

19 Q. -- and we compare your proposed location to the  
20 Texaco location in 12, we're moving into a thicker part of  
21 the reservoir when we move onto the Texaco tract, are we  
22 not?

23 A. It maps -- It appears so. There's not a lot  
24 control. It may be --

25 Q. Is your map wrong?

1           A.   No, sir, not necessarily. There's just no  
2 control to say the well -- The well to the east has 14  
3 feet, the Texaco well has 16 to 12 feet. So you're  
4 potentially in that ballpark.

5           Q.   On this map isn't it fair to say that the way  
6 you've mapped it, as you move in the lower Morrow brown  
7 sand toward the Texaco location in 12 you're seeing a  
8 thickening of this interval?

9           A.   A few feet.

10          Q.   Yes.

11               All right, if we go to the lower left-hand  
12 isopach of the middle Morrow green sand, and we look at  
13 your location and we move toward the Texaco location, we're  
14 looking at at least a comparable section on the Texaco  
15 property, are we not?

16          A.   Comparable as mapped, yes, sir.

17          Q.   Yes. And as mapped, if we go to the location in  
18 the upper Morrow A sand, is not the Texaco location in the  
19 better part of the reservoir?

20          A.   I have a thick mapped north of the Texaco  
21 location.

22          Q.   So it's going to be your interpretation that, in  
23 fact, in the A sand there is a thicker section on your  
24 tract?

25          A.   Potentially.



1 Q. When you're picking a location, you have told us,  
2 I believe, that what you're trying to do is get upstructure  
3 and into a thicker portion of the reservoir; is that right?

4 A. Yes.

5 Q. Is there going to be a witness called who can  
6 testify about how moving into a thicker portion of the  
7 reservoir will affect drainage patterns?

8 A. Yes, sir.

9 MR. CARR: That's all I have I have.

10 EXAMINER STOGNER: Mr. Bruce, redirect?

11 REDIRECT EXAMINATION

12 BY MR. BRUCE:

13 Q. A few questions.

14 Mr. Kellahin asked you about what your maps were  
15 based on, Mr. Williams. They were based on well control in  
16 the area; is that correct?

17 A. Yes, sir, solely.

18 Q. Looking at your Exhibit 8, there is substantial  
19 well control in this area, is there not?

20 A. There is quite a bit of well control, yes, sir.

21 Q. Enough to --

22 A. I think enough to make a real reasonable  
23 interpretation, yes.

24 Q. What about using seismic in the Morrow? Is that  
25 of value?

1           A.    It can be in some areas.  It depends on what  
2   you're trying to use it for.

3           Q.    Have other operators found that seismic is  
4   questionable at best?

5           A.    The results of 3-D seismic have been questionable  
6   from discussions with Amoco, ARCO and companies like this.

7           Q.    So you think you had enough data to map the area?

8           A.    Yes, sir.

9           Q.    Now, when you're picking a location, would it be  
10   fair to say it's kind of a -- You've got three different  
11   zones here that are prospective?

12          A.    Yes, sir.

13          Q.    Is it fair to say that there's a kind of a  
14   balancing?

15          A.    Sure.

16          Q.    You've said the middle Morrow is what you would  
17   rate the best zone --

18          A.    Right.

19          Q.    -- the lower Morrow brown the second best zone,  
20   and then the upper A is kind of the low -- the least  
21   favorable objective?

22          A.    Right.

23          Q.    Okay.  So looking -- even though, if you take the  
24   upper Morrow A sand, you look at that, you could move it  
25   around somewhat and perhaps still have 20, 25 feet.  That's

1 the least important sand; is that correct?

2 A. Yes, I believe so.

3 Q. And looking at the lower Morrow, if you move too  
4 far to the east you could get wet; is that correct?

5 A. Yes, sir.

6 Q. And you were asked about the middle Morrow, that  
7 if you would move further to the west you would gain  
8 structure; is that correct?

9 A. Yes, sir.

10 Q. But if you move further to the west, you'd  
11 definitely harm your lower Morrow location, would you not?

12 A. Yes, you might also get out of the middle Morrow  
13 sand as it's pretty narrow through there.

14 Q. Okay. So based on all these factors, this  
15 balancing of these various factors, this is the preferred  
16 location?

17 A. Yes, sir.

18 Q. One final thing.

19 Looking at your Exhibit 9, what is the -- The  
20 Texaco well in the southeast quarter of the northwest  
21 quarter of Section 12, what is the distance from that well  
22 to Mewbourne's proposed well?

23 A. It's right at 3200 feet.

24 MR. BRUCE: Okay. I have nothing further.

25 EXAMINER STOGNER: Thank you, Mr. Bruce.

1 Any other questions of this witness?

2 EXAMINATION

3 BY EXAMINER STOGNER:

4 Q. In looking at your cross-section, A-A', you had  
5 indicated to me that -- during your cross-examination, that  
6 the green, the brown and the A sand were your priorities.

7 Is the orange sand in this instance not a viable  
8 option?

9 A. I don't believe it is. It looks pretty shaley  
10 going to the north. The nearest wells -- You never know,  
11 but I don't believe it is, no, sir.

12 EXAMINER STOGNER: I don't have any questions of  
13 this witness. You may be excused.

14 With it being 5:30, Mr. Bruce --

15 MR. BRUCE: I would rather put on my engineer  
16 tomorrow.

17 EXAMINER STOGNER: Okay, we'll reconvene at 8:15  
18 in the morning.

19 (Thereupon, evening recess was taken at 5:30  
20 p.m.)

21 \* \* \*

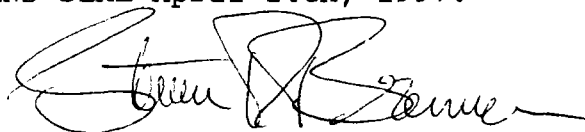
# CERTIFICATE OF REPORTER

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, Volume I, 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, 1997.



STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case Nos. 11755 and 11723 heard by me on 13 April 1997.

, Examiner  
 Oil Conservation Division