

STATE OF NEW MEXICO

OIL CONSERVATION DIV.

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY )  
 THE OIL CONSERVATION DIVISION FOR THE )  
 PURPOSE OF CONSIDERING: ) CASE NO. 12,037  
 )  
 APPLICATION OF YATES PETROLEUM )  
 CORPORATION FOR POOL CONTRACTION, )  
 POOL EXTENSION AND SPECIAL POOL RULES, )  
 OR IN THE ALTERNATIVE, SIMULTANEOUS )  
 DEDICATION, LEA COUNTY, NEW MEXICO )

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

April 1st, 1999

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, April 1st, 1999, 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.

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## I N D E X

April 1st, 1999  
 Examiner Hearing  
 CASE NO. 12,037

	PAGE
EXHIBITS	3
APPEARANCES	4
APPLICANT'S WITNESS:	
<u>ERIC CUMMINS</u> (Geologist)	
Direct Examination by Mr. Carr	6
Examination by Mr. Kellahin	15
OCEAN WITNESS:	
<u>JOHN R. MCRAE</u> (Geologist)	
Direct Examination by Mr. Bruce	17
Examination by Examiner Ashley	24
Examination by Mr. Kellahin	24
Further Examination by Examiner Ashley	30
Examination by Mr. Carroll	30
REPORTER'S CERTIFICATE	33

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## E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	8	15
Exhibit 2	9	15
Exhibit 3	10	15
Exhibit 4	12	15

\* \* \*

Ocean Energy	Identified	Admitted
Exhibit 1	18	24
Exhibit 2	22	24

\* \* \*

## A P P E A R A N C E S

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## FOR AMERISTATE OIL AND GAS:

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\* \* \*

1           WHEREUPON, the following proceedings were had at  
2 10:21 a.m.:

3           EXAMINER ASHLEY: At this time the Division calls  
4 Case 12,037.

5           MR. CARROLL: Application of Yates Petroleum  
6 Corporation for pool contraction, pool extension and  
7 special pool rules, or in the alternative, simultaneous  
8 dedication, Lea County, New Mexico.

9           MR. CARR: May it please the Examiner, my name is  
10 William F. Carr with the Santa Fe law firm Campbell, Carr,  
11 Berge and Sheridan. We represent Yates Petroleum  
12 Corporation in this matter, and I have one witness.

13           MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,  
14 representing Ocean Energy, Incorporated, and I have one  
15 witness.

16           EXAMINER ASHLEY: Any additional appearances?

17           MR. BREWER: Mr. Examiner, Phil Brewer on behalf  
18 of Ameristate Oil and Gas, Inc., and I have one witness.

19           EXAMINER ASHLEY: You have -- ?

20           MR. BREWER: One witness.

21           EXAMINER ASHLEY: One witness.

22           Any additional appearances?

23           MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of  
24 the Santa Fe law firm of Kellahin and Kellahin, appearing  
25 on behalf of Chesapeake Operating, Inc., and Amerind Oil

1 Company.

2 EXAMINER ASHLEY: Any additional appearances?

3 Will the witnesses please stand and be sworn in?

4 (Thereupon, the witnesses were sworn.)

5 EXAMINER ASHLEY: Mr. Carr?

6 MR. CARR: May it please the Examiner, initially  
7 Yates would request that the portion of this case which  
8 relates to special pool rules be dismissed.

9 EXAMINER ASHLEY: Yates' part of the Application  
10 regarding special pool rules will be dismissed.

11 Mr. Carr?

12 MR. CARR: At this time we call Eric Cummins.

13 Mr. Examiner, I would request that the record  
14 reflect that Mr. Cummins testified in the preceding case,  
15 and at that time his credentials as an expert in petroleum  
16 geology were accepted and made a matter of record.

17 EXAMINER ASHLEY: The record will reflect that.

18 ERIC CUMMINS,

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

21 DIRECT EXAMINATION

22 BY MR. CARR:

23 Q. Mr. Cummins, would you briefly state what it is  
24 that Yates Petroleum Corporation seeks in this case?

25 A. Yates seeks an order authorizing the simultaneous

1 dedication of its Brunson "AQK" State Com Well Number 1,  
2 located 2260 feet from the north line and 1795 feet from  
3 the east line, and its Big Flat "ASN" State Com Well Number  
4 1, located 1650 feet from the south line and 1980 feet from  
5 the east line, both in Section 10 of Township 16 South,  
6 Range 35 East, to be dedicated to the existing spacing unit  
7 covering the east half of Section 10.

8 Also for contraction and extension of the  
9 boundaries of the North Shoe Bar-Atoka Gas Pool to conform  
10 to the acreage dedicated to the wells therein.

11 Q. Mr. Cummins, are you familiar with the Division's  
12 memorandum from William J. LeMay in 1988 and 1990  
13 concerning simultaneous dedication of wells in nonprorated  
14 pools?

15 A. Yes, I am.

16 Q. And you understand that to receive approval to  
17 simultaneously dedicate wells, you have to show that your  
18 correlative rights would be impaired?

19 A. Yes.

20 Q. Is the pool which is the subject of this  
21 Application, the North Shoe Bar-Atoka Gas Pool, a prorated  
22 pool?

23 A. No, it is not.

24 Q. Let's go to Exhibit 1, and I'd ask you to  
25 identify that and review it for Mr. Ashley.

1           A.    Exhibit Number 1 is a land plat that first shows  
2 the current pool boundaries, as defined by the state, that  
3 are the north half of Sections 10 and 11. The pool was  
4 created by Division Order R-10,972, May 1st, 1988.

5                    It shows the wells in the pool. I'll point first  
6 to the Brunson and the Big Flat wells in the east half of  
7 Section 10. The green dot is the Brunson "AQK" State  
8 Number 1. The red dot is the Big Flat "ASN" State Com  
9 Number 1.

10                   Also, although not highlighted, in the northwest  
11 quarter of Section 11, 1980 from the north and west lines,  
12 the Yates Petroleum Shell Lusk "ANB" Com Well Number 1.

13           Q.    Is the west half of Section 11 dedicated to that  
14 well?

15           A.    Yes, it is.

16           Q.    And so the acreage dedicated to wells in the pool  
17 is a 640-acre tract, comprised of the west half of 11 and  
18 the east half of 10; is that right?

19           A.    That's correct.

20           Q.    And that's what Yates is recommending the pool  
21 boundaries be adjusted to?

22           A.    That is right.

23           Q.    Does this plat also show offset operators in the  
24 area?

25           A.    Yes, it does.

1 Q. Is Exhibit Number 2 a notice affidavit confirming  
2 that notice of the Application has been provided to  
3 affected interest owners, as required by Division rules?

4 A. Yes, it is.

5 Q. And to whom was notice provided?

6 A. All operators within a mile of the pool  
7 boundaries?

8 Q. What response to this Application has Yates  
9 received?

10 A. We had concern expressed from a number of  
11 different operators in the area. We have provided  
12 requested information on these wells to both Chesapeake and  
13 Ameristate. We believe that we have settled our  
14 differences and the Application is now unopposed.

15 Q. Now, Mr. Cummins, Yates currently has two wells  
16 in the east half of Section 10 which are capable of  
17 producing from the Atoka formation; is that correct?

18 A. That is correct.

19 Q. And what is the status of these wells at this  
20 time?

21 A. Currently the Big Flat is producing. That's the  
22 red dot on the land map in the southeast quarter. And the  
23 green dot, the Brunson well, is currently shut in.

24 Q. Is Yates only producing one well at any one time  
25 on the east half of Section 10?

1           A.    Yes, we are.

2           Q.    Could you refer to what has been marked for  
3           identification as Yates Petroleum Corporation Exhibit  
4           Number 3 and simply review for the Examiner the history of  
5           the events which have resulted in Yates having two wells on  
6           this 320-acre tract?

7           A.    Exhibit Number 3 is a brief history of the wells  
8           that were drilled in Section 10.  In May of 1997, the  
9           Brunson well was spudded, drilled to a total depth of  
10          12,600 feet.  It was completed in the lower Atoka Brunson  
11          sand.

12                    On February 13th of 1998, UMC, now Ocean Energy,  
13           spudded their Carlisle State Com Number 1 well.  It is not  
14           highlighted on Exhibit Number 1, but the well is located in  
15           the southwest quarter of Section 10, 1650 from the south  
16           line and 190 from the west line.

17                    On March the 20th, 1998, the Carlisle well blew  
18           out while drilling at 12,086 feet.  At that time, the  
19           decision was made by Yates to drill their Big Flat in order  
20           to try to recover reserves from what we call the Carlisle  
21           zone, the zone that blew out in the Carlisle well, that  
22           could be under our portion of Section 10 in the southeast  
23           quarter.

24                    We drilled the well.  TD was reached on that well  
25           on 6-11 of 1998, and we did not find the Carlisle zone, it

1 was not present.

2           On May the 22nd Ocean, or UMC, spudded their  
3 replacement well for the blowout, and they roughly moved  
4 100 feet to the northwest. The official location is 1721  
5 from the south line and 1909 feet from the west line. They  
6 drilled that well, and they did not encounter the lower  
7 Atoka Brunson sand that was encountered in the Brunson and  
8 the Big Flat wells in the east half of Section 10.

9           Ocean then, or UMC, then completed their well in  
10 the Carlisle zone, the zone that blew them out in the  
11 original wellbore, and are currently producing from that  
12 zone.

13           Yates Petroleum then completed the Big Flat well  
14 in the lower Atoka Brunson zone.

15           Q. When you were drilling and attempting to complete  
16 the Big Flat, did you also attempt to complete that well in  
17 the Carlisle zone?

18           A. Yes, we did.

19           Q. Would Yates have drilled the Big Flat on a stand-  
20 alone basis to produce the Brunson zone in the Atoka  
21 formation?

22           A. No, we would not.

23           Q. And the problem is, isn't it, Mr. Cummins, that  
24 as a result of the events that you have just summarized  
25 Yates now has two wells capable of draining the Atoka

1 formation on the 320-acre unit comprised of the east half  
2 of Section 10?

3 A. Yes, that is correct. We believe that if both  
4 wells are allowed to produce concurrently, we could drain  
5 the reserves quicker and more efficiently.

6 Q. Since we already have a wellbore, what would be  
7 the effect of denying Yates the opportunity to use this  
8 well?

9 A. It would delay the recovery of the hydrocarbons  
10 under our tract and increase the cost of producing the  
11 reserves.

12 Q. And the bottom line is, the reason we're here is,  
13 we have two wells capable of producing, and you're seeking  
14 authority from the Division to permit you to go forward and  
15 utilize both wells; isn't that correct?

16 A. That's correct.

17 Q. Let's take a look at the cross-section, Yates  
18 Exhibit Number 4. Will you identify and review that,  
19 please?

20 A. Exhibit Number 4 is a stratigraphic cross-  
21 section, a three-well cross-section that goes from the  
22 Ocean Energy Carlisle 1 Y, the replacement well for the  
23 blowout in Section 10, east to the Big Flat Number 1 well,  
24 and then north to the Brunson well.

25 This cross-section just shows very simply that

1 the Brunson sand, highlighted in yellow at the top of the  
2 cross-section is not present in the Carlisle well. It also  
3 shows in the Carlisle well the presence of the sand that  
4 blew them out, that it is not present in the Big Flat nor  
5 the Brunson wells in the east half of Section 10.

6 Q. Were they able to run a log in the Carlisle  
7 Number 1 well?

8 A. No, sir, they were not.

9 Q. In your opinion, would it be comparable to what  
10 we see of the log in the 1 Y?

11 A. Yes.

12 Q. When we look at these logs, do you have any doubt  
13 that the Brunson and the Big Flat are in communication with  
14 one another?

15 A. Absolutely no doubt.

16 Q. They are in communication?

17 A. They are in communication.

18 Q. And they're competing and producing the same  
19 reserves?

20 A. Yes, they are.

21 Q. And if both would be allowed to produce  
22 simultaneously and concurrently, you would be recovering  
23 the reserves at a more rapid rate; is that correct?

24 A. That is right.

25 Q. In your opinion, will approval of the Application

1 prevent waste?

2 A. Yes, it would. It would result in more efficient  
3 drainage of the remaining reserves, as well as reducing the  
4 cost of recovering those reserves.

5 Q. And you're not testifying that there would be  
6 substantial additional recovery, are you? It would just be  
7 more efficient to take it out at this faster rate since you  
8 have the wellbore?

9 A. That is correct.

10 Q. What about correlative rights? Will Yates'  
11 correlative rights be protected if, in fact, the  
12 Application is approved?

13 A. Yes, they would.

14 Q. And why is that?

15 A. Well, it would afford us the opportunity to  
16 produce the reserves under the tract more efficiently.

17 Q. In your opinion, would approval of this  
18 Application impair the correlative rights of any other  
19 operator in the pool?

20 A. No, it would not. Ocean Energy supports the  
21 Application and will present evidence that shows the  
22 limited extent of the reservoir, and that this well should  
23 only drain the reserves under this spacing unit.

24 Q. In fact, what Yates is here doing is trying to  
25 figure out how to deal with the situation where

1 inadvertently they have two wells completed on a spacing  
2 unit in the same formation; is that right?

3 A. That is correct.

4 Q. Were Exhibits 1 through 4 prepared by you?

5 A. Yes, they were.

6 MR. CARR: At this time we move the admission of  
7 Yates Exhibits 1 through 4.

8 EXAMINER ASHLEY: Exhibits 1 through 4 will be  
9 admitted as evidence at this time.

10 MR. CARR: And that concludes my examination of  
11 this witness.

12 EXAMINER ASHLEY: Mr. Bruce?

13 MR. BRUCE: No questions.

14 EXAMINER ASHLEY: Mr. Brewer?

15 MR. BREWER: No questions.

16 EXAMINER ASHLEY: Mr. Kellahin?

17 MR. KELLAHIN: A point of clarification, Mr.  
18 Examiner.

19 EXAMINATION

20 BY MR. KELLAHIN:

21 Q. Mr. Cummins, when you went through your  
22 chronology on Exhibit 3, it was not apparent to me why  
23 Yates drilled the Big Flat well. You've got the Brunson  
24 well producing in the Brunson sand. The second well in  
25 sequence was the Big Flat well. What was its original

1 targeted depth?

2 A. No, sir, I'm sorry. You misunderstood that. The  
3 second well in the sequence was the Carlisle well. The Big  
4 Flat was drilled third.

5 Q. The Carlisle well is Ocean's well?

6 A. That's correct.

7 Q. I meant among the two Yates wells.

8 A. Yes --

9 Q. Yates' well -- The first one was the Brunson  
10 well?

11 A. That's right.

12 Q. And it's drilling and producing and holding the  
13 east half of the spacing unit?

14 A. That is correct.

15 Q. All right, what was the reason for the Big Flat  
16 well?

17 A. The Big Flat was drilled to attempt to recover  
18 reserves from the Carlisle zone that may have been present  
19 under our tract.

20 Q. Which was not present in the Brunson well?

21 A. That's correct.

22 Q. All right. And then you drilled the Big Flat  
23 well. Was it drilled just to the Carlisle zone, or was it  
24 a deeper well?

25 A. It was drilled to the Carlisle zone.

1 Q. Okay, and so you found in that Big Flat well that  
2 the Carlisle zone was not present in your Big Flat well?

3 A. That is correct.

4 Q. But now you have the dilemma of having the two  
5 wells both able to produce out of the Brunson sand?

6 A. That is right.

7 MR. KELLAHIN: Okay, thanks.

8 EXAMINER ASHLEY: I have no further questions,  
9 Mr. Cummins. You may be excused. Thank you.

10 JOHN R. McRAE,

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

13 DIRECT EXAMINATION

14 BY MR. BRUCE:

15 Q. Would you please state your name and city of  
16 residence?

17 A. John McRae. I live in Highlands Ranch, Colorado.

18 Q. Who do you work for?

19 A. Ocean Energy.

20 Q. And what is your position with Ocean?

21 A. Senior geologist.

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

24 A. Yes, I have.

25 Q. And were your credentials as a geologist accepted

1 as a matter of record?

2 A. Yes.

3 Q. And are you familiar with the geology involved in  
4 this Application?

5 A. Yes.

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

8 EXAMINER ASHLEY: Mr. McRae is so qualified.

9 Q. (By Mr. Bruce) Preliminarily, Mr. McRae, what is  
10 Ocean Energy's position with respect to this case?

11 A. We support Yates Petroleum in the simultaneous  
12 dedication of the east half of Section 2 to produce the  
13 Brunson and the Big Flat well.

14 Q. Now, in the -- Mr. Cummins testified that Ocean  
15 is an offset operator in the west half of Section 10. It  
16 also owns an interest in these two wells, does it not?

17 A. Yes.

18 Q. Okay. Mr. McRae, would you identify your Exhibit  
19 1 now and tell the Examiner what it shows about this Atoka  
20 reservoir in this area?

21 A. Exhibit 1 is a gross isopach of what we call the  
22 "Brunson" Atoka Sand interval. I've highlighted in yellow  
23 the zero limits of the sand.

24 I want to point out that this isopach is not to  
25 depict one continuous, homogeneous sand. This is only a

1 sand fairway, a sand -- just the area where there's sand  
2 present. There's quite a bit of well control to the  
3 northwest and also to the east and to the southwest to show  
4 where there is no sand.

5 So we have reasons to believe that this is not  
6 one continuous homogeneous sand, but there are permeability  
7 barriers, possibly separate channels. We just don't know  
8 exactly what is going on within the sand fairway.

9 I would also like to point out the faults that  
10 I've put on this map. There's a very large fault that goes  
11 northwest-southeast through Section 15. That is the  
12 westerlymost fault. And then there is a fault zone -- I've  
13 labeled it as a fault zone -- and then a smaller fault,  
14 which would be the easternmost fault.

15 This particular area in here, this interpretation  
16 that I've showed is based on some 3-D seismic that we have.  
17 And that 3-D seismic shows that this fault zone is highly  
18 complex, highly faulted. It's a very contorted zone, and  
19 it's very difficult to tell where you are in that.

20 The Carlisle well encountered a Morrow sand, and  
21 that's the well in the northeast of the southwest of  
22 Section 10. It encountered a Morrow sand associated with  
23 this highly complex faulting and erosional -- associated  
24 with the Shoe Bar structure.

25 Also on this map, I've put on some production

1 figures for the well in Section 14, which was one of the  
2 original wells drilled. I've labeled it Well Number 7.  
3 This well was drilled in 1974 and to date has produced  
4 approximately 3.8 BCF and 90,000 barrels of oil. We do not  
5 have a bottomhole pressure; there was no DST run on that  
6 well.

7           The well up in Section 11, which would be the  
8 Number 3 well, is the Shell Lusk. That well was drilled in  
9 October of 1997. And from a shut-in bottomhole pressure,  
10 it has a pressure of 3016 pounds, which is quite a bit  
11 below normal gradient.

12           It has been testified in previous cases, or in a  
13 previous case. In fact, let me give you those numbers:  
14 Case Number 11,958, 11,959, 11,934, which were all  
15 consolidated. It was testified in that hearing that the  
16 reservoir pressure in the Shell Lusk had been affected by  
17 the production from the well in 14, Well Number 7, and  
18 Ocean Energy agrees with that interpretation.

19           The Brunson well, which is in the east half of  
20 Section 10, which is labeled Well Number 1, ran a DST in  
21 the Brunson zone in October of 1997, the same month as the  
22 Shell Lusk did the bottomhole pressure buildup. It had a  
23 pressure of 4086 pounds, which is over 1000 pounds higher.

24           And what we feel is that there are some type of  
25 permeability barriers or separate channels that separate

1 the Brunson and the Big Flat well, which are in the east  
2 half of Section 10, from the wells in Section 11 and  
3 Section 14.

4 Q. Mr. McRae, based on this map, with respect to  
5 correlative rights, since the sand pinches out to the west,  
6 there's no effect on the interest owners in the west half  
7 of Section 10; is that --

8 A. That's correct. The Carlisle well that we  
9 drilled had no sand in the Brunson interval.

10 Q. And because of the faulting, there is little or  
11 no effect on the interest owners to the south?

12 A. That's our interpretation. We actually looked at  
13 participating in a well to be drilled in the northeast of  
14 Section 15, and we turned that down because we were very  
15 concerned that there were -- first of all, there was any  
16 sand; and if there was, it would be very, very thin.

17 Q. And finally, because of that permeability  
18 barrier, based on these large pressure differences, there  
19 shouldn't be any effect to the people to the east of  
20 Section 11 -- I mean Section 10; is that correct?

21 A. That's correct. If we were in communication with  
22 the wells in 11 -- and I say we're in communication -- if  
23 the wells in the east half of 10, if they were in  
24 communication with the wells in 11, I would expect to see  
25 approximately the same bottomhole pressure, since the

1 pressure -- the DST and the bottomhole pressure were taken  
2 at essentially the same time.

3 Q. And you would expect to see the same because of  
4 the large production from the southeast too, would you not?

5 A. That's correct.

6 Q. Let's move on to your Exhibit 2. Would you  
7 identify that and explain what that shows for the Examiner?

8 A. Exhibit 2 is a structure map on top of the Morrow  
9 lime. The Brunson zone is about 30 to 40 feet above the  
10 Morrow lime. So this structure map shows fairly accurately  
11 the structural configuration of the Brunson zone.

12 I've overlaid on this structure map the zero edge  
13 of the Brunson sand that was shown on the previous exhibit.  
14 And as you can see, the Shoe Bar structure is in the  
15 southwest of the map in Section 15. Those are 100-foot  
16 contours. It's a very complex, sharp structure. Then you  
17 cross the big fault. This would be going to the northeast.  
18 It's about 300 feet of throw.

19 Then you go into the fault zone and then cross  
20 the last small fault in the extreme northeast corner of  
21 Section 15, and then the Morrow lime and the Brunson zone  
22 dips to the northeast.

23 Up in Section 2 there's a pronounced nose,  
24 pullout, and there's also no sand up in Section 2 -- or  
25 Section 3, excuse me. And to the south there's a nose that

1 pulls out in Section 13.

2           Recently, Yates drilled Well Number 5, which  
3 would be located in the southwest quarter of Section 2. It  
4 encountered 22 feet of sand in the Brunson zone, ran a DST  
5 and recovered water, 1603 feet of water. So the northern  
6 limits of this Brunson zone does have water, it's wet.

7           And not knowing exactly where the gas-water  
8 contact is, I've basically put it between the two wells.

9           And what that shows is that Section 2 and Section  
10 3 are downdip from the Shell Lusk well, which is the lowest  
11 producing well in this reservoir, and updip from the well  
12 in the southwest of Section 2, which is wet. So we feel  
13 that the -- what sand might be present in Section 3 is a  
14 high probability of being wet.

15           Q.    Putting Exhibits 1 and 2 together, Mr. McRae, it  
16 appears that the reservoir and the Brunson Atoka reservoir  
17 in the east half of Section 10 is pretty limited?

18           A.    That's correct.

19           Q.    And so the effect on any offset's correlative  
20 rights would be limited accordingly?

21           A.    All the well control and the pressure data  
22 supports that.

23           Q.    In your opinion, is the granting of Yates'  
24 Application in the interests of conservation and the  
25 prevention of waste?

1 A. Yes.

2 Q. And were Exhibits 1 and 2 prepared by you or  
3 under your direction?

4 A. Yes.

5 MR. BRUCE: Mr. Examiner, I'd move the admission  
6 of Ocean Exhibits 1 and 11 -- I mean 1 and 2, excuse me.

7 EXAMINER ASHLEY: Exhibits 1 and 2 will be  
8 admitted as evidence at this time.

9 MR. BRUCE: I'll learn to count later.

10 EXAMINATION

11 BY EXAMINER ASHLEY:

12 Q. Mr. McRae, the southeast quarter of Section 3,  
13 does Ocean have interest in that?

14 A. No, sir.

15 Q. Okay.

16 A. We do own interest in the southwest quarter of 3.

17 EXAMINER ASHLEY: Okay. Mr. Carr?

18 MR. CARR: I have no questions.

19 EXAMINER ASHLEY: Mr. Brewer?

20 MR. BREWER: No questions.

21 EXAMINER ASHLEY: Mr. Kellahin?

22 MR. KELLAHIN: Thank you, Mr. Examiner.

23 EXAMINATION

24 BY MR. KELLAHIN:

25 Q. Mr. McRae, may I draw your attention to Exhibit

1 Number 1? The Brunson Atoka sand is what you're mapping  
2 here?

3 A. Yes, that sand interval.

4 Q. And that interval is present in all the wells  
5 that you've numbered with the red pen, numbers 1 through 7?

6 A. Yes, that's correct.

7 Q. When I look at the east half of 10, in the  
8 Brunson well, the Yates Brunson well, you've got 14 feet of  
9 gross thickness in the Brunson sand?

10 A. Yes, sir.

11 Q. And then your next control point to the north and  
12 west is a zero line in Section 3; for that dryhole it shows  
13 a depth of 12,250?

14 A. Right.

15 Q. What's your basis for making the contours between  
16 those two control points, as you've chosen to do?

17 A. Several things. Our Carlisle well in the  
18 southwest of Section 10 had no sand, and the Big Flat, one  
19 location, one 40-acre location to the east, had 18 feet of  
20 sand. The sand drops off very quickly.

21 If you go up in Section 2, the Yates Field APK  
22 Number 3, located in the southwest quarter, had 22 feet of  
23 sand.

24 Q. That's the Number 5 well?

25 A. Yes, the Number 5.

1           And the Number 6 well is a well that we drilled,  
2 Ocean operated. It had two feet of sand, and that's even  
3 questionable. We're not even sure if it's sand or just a  
4 real thin lime. But it's -- essentially, the interval was  
5 gone, but there's just a hint of it there. Again, 22 feet  
6 to two feet is pretty quick. Down in Section 14, in the  
7 southeast quarter, there's a well that has 20 feet of sand,  
8 and --

9           Q. That's the Mesa well? I forgot the name of that  
10 well.

11          A. I don't know. It's the northeast of the  
12 southeast of Section 14.

13          Q. It's not the Number 7 well?

14          A. No, it's -- I didn't number this one. It's --

15          Q. I'm with you now, okay. It's the 20-foot to the  
16 east?

17          A. Right.

18          Q. All right.

19          A. And again, a 40-acre offset to the north is down  
20 to six feet. And then the other well had zero, so we don't  
21 know where the --

22          Q. What I'm trying to focus in on is that portion of  
23 Section 10 that is outside the zero contour line?

24          A. Okay.

25          Q. Yeah, what's your basis for putting those lines

1 where you've chosen to do so?

2 A. I just used the contour interval that I saw in  
3 other areas where I had well control. So I have no control  
4 to say -- well control, to say where that edge is.

5 Q. When you integrate the pressure data you  
6 describe, you're satisfied that the communication in the  
7 Brunson sand is not affecting all seven of these wells in  
8 the same way, right?

9 A. That's correct.

10 Q. The Number 7 well was one of the first wells  
11 drilled, was it not?

12 A. Yes.

13 Q. And that had an original pressure in the Brunson  
14 sand, did it not?

15 A. We don't know what that is. There was no DST  
16 run, no bottomhole pressure information.

17 Q. Did you testify at the prior hearing that you  
18 just described in Case 11,958? Were you a witness in  
19 that --

20 A. Yes.

21 Q. -- Yates-Ocean dispute?

22 A. Yes.

23 Q. Okay. That dispute had to do with a competition  
24 between Yates and Ocean for competing pooling cases up in  
25 irregular Section 2 to the north, did it not?

1 A. True.

2 Q. And as a result of the order in that case, the  
3 west-half equivalent, if you will, of Section 2 was  
4 determined to be the spacing unit, and Yates was given the  
5 right to drill the well?

6 A. Correct.

7 Q. All right. What happened as a result of that  
8 order? Which ones of these wells were drilled?

9 A. Well Number 6 was drilled first, operated by  
10 Ocean. It was our interpretation that there would be sand  
11 in that east half. As it turned out, we found just an  
12 edge, a hint, and the sand was tight.

13 Then Yates drilled the second well, Well  
14 Number 5 --

15 Q. This is Number 5?

16 A. Right. -- after we drilled Well Number 6. And  
17 they encountered 22 feet of Brunson sand, but it was  
18 downdip from the production and it tested wet.

19 Q. Those two wells, then, have provided new data  
20 that have substantially altered the geologic opinions  
21 expressed to the Division in those prior cases, did it not?

22 A. Actually, they've confirmed our interpretation of  
23 the sand. At that time I testified that as we move to the  
24 north and downdip, there was a possibility that we might  
25 encounter water. And that was why we wanted to do a

1 laydown in the south half of 2 and drill at a legal  
2 location in the southeast of the southwest, to minimize  
3 that risk.

4 Q. In that case, there was pressure evidence  
5 introduced that showed at least in a north-south direction  
6 there was a substantial distance in which the wells  
7 interfered with each other?

8 A. Yes, that's correct.

9 Q. Has anything occurred with this additional data  
10 to change that opinion?

11 A. Actually, the additional drilling has supported  
12 that, and that's why I pointed out the two shut-in  
13 pressures. It appears that east-west across this sand  
14 interval there are some type of permeability barriers. But  
15 as north-south -- Well, as it was testified in that, that  
16 well in 14 was essentially the only significant producer in  
17 this reservoir, and to pull the reservoir pressure down to  
18 3000 pounds, those have to be in some type of  
19 communication.

20 Q. Prior testimony in 1998 did show that there was a  
21 limited pressure effect east-west?

22 A. That's correct.

23 Q. But there was good communication north-south?

24 A. Well, "good" is meaning better than east-west.

25 Q. Well, better to the extent that it was testified

1 that the Well Number 7 had drawn the pressures so when the  
2 Shell Lusk Number 3 well was drilled, there was substantial  
3 pressure reduction?

4 A. That's apparently what the data indicates.

5 Q. When we look now at the relationship between the  
6 Brunson and the Big Flat well, is there pressure  
7 communication between those two wells in the Brunson zone  
8 in a north-south direction?

9 A. Yes, those wells appear to be in communication.

10 Q. And are Wells 3 and 4 in pressure communication?

11 A. I don't have the data on the Runnels 2, which is  
12 Well Number 4, because we're not involved in that -- Ocean  
13 is not involved in that particular well. So I can't answer  
14 that question.

15 MR. KELLAHIN: All right, sir. Thank you.

16 FURTHER EXAMINATION

17 BY EXAMINER ASHLEY:

18 Q. Mr. McRae, who operates Well Number 4?

19 A. Well Number 4 is operated by Yates Petroleum.

20 EXAMINATION

21 BY MR. CARROLL:

22 Q. Mr. McRae, you testified Ocean owns an interest  
23 in the Brunson and the Big Flat wells?

24 A. That's correct.

25 Q. How large an interest is that?

1           A.    I believe we have 50 percent; is that correct,  
2   Jim?

3           MR. BRUCE:  I think it's 25 percent.  I don't --

4           THE WITNESS:  I honestly don't remember the exact  
5   -- We have an interest in both wells, but I'm not sure what  
6   it is.  I don't remember.

7           EXAMINER ASHLEY:  Mr. Bruce, is it 25 percent per  
8   well, or combined?

9           MR. BRUCE:  I believe the wells are under the  
10   same JOA, so it would be equal in each well.  It's either  
11   25 or 50 percent.

12          THE WITNESS:  We can provide that information.

13          EXAMINER ASHLEY:  Mr. Bruce?

14          MR. BRUCE:  I don't have anything further.

15          EXAMINER ASHLEY:  I have no further questions.

16   Thank you, Mr. McRae.

17          Mr. Brewer?

18          MR. BREWER:  Mr. Examiner, in light of the  
19   amendment to the Application, we have no testimony to  
20   offer.

21          EXAMINER ASHLEY:  Okay, thank you.

22          Is there anything further in this case?

23          MR. CARR:  No, Mr. Examiner, that concludes our  
24   presentation in this case.

25          I mean, the facts are fairly obvious.  We've got

1 two wells on a 320-acre spacing unit. We didn't intend to  
2 be in this position. We believe that the most efficient  
3 thing to do, instead of requiring us to plug a perfectly  
4 good wellbore, would be to authorize us to simultaneously  
5 dedicate these wells and concurrently produce them.

6 We do not believe we will be impairing the  
7 correlative rights of any other operator, and for that  
8 reason we have requested this.

9 EXAMINER ASHLEY: There being nothing further in  
10 this case, Case 12,037 will be taken under advisement.

11 (Thereupon, these proceedings were concluded at  
12 11:05 a.m.)

13 \* \* \*

14  
15  
16  
17  
18  
19 I do hereby certify that the foregoing is  
20 a complete record of the proceedings in  
the Examiner hearing of Case No. 12037,  
heard by me on 4/1 1999.

21 Mark Ashley, Examiner  
22 Off Conservation Division  
23  
24  
25

## 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 4th, 1999.



STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 14, 2002