

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 MACK ENERGY CORPORATION )	CASE NOS. 13,608	
FOR CONTRACTION OF THE EAST EMPIRE-YESO )		
POOL AND EXTENSION OF THE HORIZONTAL )		
BOUNDARIES AND THE VERTICAL LIMITS OF A )		
PORTION OF THE GRAYBURG-JACKSON (SEVEN )		
RIVERS-QUEEN-GRAYBURG-SAN ANDRES) POOL, )		
EDDY COUNTY, NEW MEXICO )		
APPLICATION OF MACK ENERGY CORPORATION )	and 13,609	
FOR AN AMENDMENT TO ORDER NO. R-3127-A )		
EXTENDING THE VERTICAL LIMITS OF THE )		
GRAYBURG-JACKSON WEST COOPERATIVE UNIT )		
AND FOR THE EXPANSION OF INJECTION )		
OPERATIONS, EDDY COUNTY, NEW MEXICO )		
	(Consolidated)	

2006 APR 27 AM 9 31

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID K. BROOKS, Jr., Hearing Examiner

April 13th, 2006

Santa Fe, New Mexico

These matters came on for hearing before the New Mexico Oil Conservation Division, DAVID K. BROOKS, Jr., Hearing Examiner, on Thursday, April 13th, 2006, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

\* \* \*

STEVEN T. BRENNER, CCR  
(505) 989-9317

## I N D E X

April 13th, 2006  
Examiner Hearing  
CASE NOS. 13,608 and 13,609 (Consolidated)

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

## FOR THE APPLICANT:

MILLER, STRATVERT P.A.  
150 Washington  
Suite 300  
Santa Fe, New Mexico 87501  
By: J. SCOTT HALL

\* \* \*

## ALSO PRESENT:

WILLIAM V. JONES, JR.  
Hearing Examiner  
New Mexico Oil Conservation Division  
1220 South Saint Francis Drive  
Santa Fe, NM 87505

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   9:25 a.m.:

3           EXAMINER BROOKS: Okay, call Case Number 13,608,  
4   Application of Mack Energy Corporation for contraction of  
5   the East Empire-Yeso Pool and extension of the horizontal  
6   boundaries and the vertical limits of a portion of the  
7   Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres)  
8   Pool, Eddy County, New Mexico.

9           Call for appearances.

10          MR. HALL: Mr. Examiner, Scott Hall, Miller  
11   Stratvert, PA, Santa Fe, on behalf of the Applicant, Mack  
12   Energy Corporation. I have two witnesses this morning.

13          And we would also request that you call Case  
14   Number 13,609 and that the cases be consolidated for  
15   purposes of hearing.

16          EXAMINER BROOKS: Okay, at this time call Case  
17   Number 13,609, Application of Mack Energy Corporation for  
18   an amendment to Order Number R-3127-A extending the  
19   vertical limits of the Grayburg-Jackson West Cooperative  
20   Unit and for expansion of injection operations, Eddy  
21   County, New Mexico.

22          Call for appearances.

23          MR. HALL: Mr. Examiner, again, Scott Hall,  
24   Miller Stratvert, PA, Santa Fe, on behalf of the Applicant,  
25   Mack Energy Corporation, and the same two witnesses this

1 morning.

2 EXAMINER BROOKS: No one else being here, I  
3 assume there's no objection to consolidation of these two  
4 cases as requested, so at this time Cases Numbers 13,608  
5 and 13,609 will be consolidated for purposes of hearing.

6 Witnesses stand to be sworn.

7 (Thereupon, the witnesses were sworn.)

8 MR. HALL: Mr. Examiner, just by way of brief  
9 introductory explanation, I think the best way to get your  
10 hands around these two cases is by taking the two  
11 Applications side by side and comparing them.

12 And you'll see that in the second case, Case  
13 Number 13,609, Mack Energy is asking for approval of the  
14 vertical extension of the unitized formation of a pre-  
15 approved unit. Contained within the unit, the Grayburg-  
16 Jackson West Cooperative Unit, are two pools, the East  
17 Empire-Yeso Pool and the Grayburg-Jackson (Seven Rivers-  
18 Queen-Grayburg-San Andres) Pool.

19 In order to accomplish the expanded vertical  
20 extension of the unitized formation, it would require the  
21 contraction of a portion of the East Empire-Yeso Pool and  
22 the concomitant expansion of the Grayburg-Jackson Pool. So  
23 we thought it would be best to present these to you in  
24 consolidated fashion.

25 EXAMINER BROOKS: Okay.

1 MR. HALL: With that, we'll call our first  
2 witness, Mr. Ron Lanning.

3 RONALD W. LANNING,  
4 the witness herein, after having been first duly sworn upon  
5 his oath, was examined and testified as follows:

6 DIRECT EXAMINATION

7 BY MR. HALL:

8 Q. For the record, please state your name, sir.

9 A. Ronald W. Lanning, Artesia, New Mexico.

10 Q. And by whom are you employed and in what  
11 capacity, Mr. Lanning?

12 A. I'm the land manager for Mack Energy Corporation.

13 Q. Have you previously testified before the Division  
14 or one of its Examiners and had your credentials  
15 established as a matter of record?

16 A. Yes, I have.

17 Q. Are you familiar with the two Applications in  
18 this case and the lands that are affected by the  
19 Applications?

20 A. I am.

21 MR. HALL: Mr. Examiner, we'd offer Mr. Lanning  
22 as an expert petroleum landman.

23 EXAMINER BROOKS: He is so accepted.

24 Q. (By Mr. Hall) If you would, please, Mr. Lanning,  
25 explain to the Hearing Examiner what Mack Energy is asking

1 by way of the two Applications.

2 A. Mack Energy is the current operator of the  
3 Grayburg-Jackson West Cooperative Unit, the agreement for  
4 which was originally approved by the Commission in 1966.  
5 The original unit agreement defines the unitized formation  
6 as that portion of the Grayburg-San Andres formation  
7 between the depths of 2200 feet and 3600 feet underlying  
8 the unit area. Both primary and secondary recovery  
9 waterflood operations are being conducted in the unitized  
10 interval, and we propose to extend the vertical limits of  
11 the unitized interval to include those depths from the top  
12 of the Seven Rivers to the base of the Glorieta-Yeso-  
13 Paddock formation and to expand primary and secondary  
14 recovery operations into that vertical extent.

15 And in Case Number 13,609 we're asking the  
16 Division to extend the horizontal boundaries and the  
17 vertical limits of the Grayburg-Jackson (Seven Rivers-  
18 Queen-Grayburg-San Andres) Pool throughout the unitized  
19 interval and in conjunction with that to contract the East  
20 Empire-Yeso Pool from within the unit area so a single  
21 consolidated common source of supply is established  
22 throughout the horizontal and vertical extents of the unit  
23 area.

24 Q. Mr. Lanning, have you prepared certain exhibits  
25 in conjunction with your testimony today?



1 A. I have.

2 Q. Turn to Exhibit 1, please, sir, and identify that  
3 for the Hearing Examiner.

4 A. Exhibit 1 is a plat that shows the current  
5 boundary of the unit outlined in green, the boundaries of  
6 the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San  
7 Andres) Pool outlined in blue, and the East Empire-Yeso  
8 Pool outlined in orange.

9 Q. Now, Mack Energy is currently the operator of the  
10 unit?

11 A. Yes.

12 Q. Would you explain who Concho Oil and Gas is?

13 A. Effective January 1st, a company named Concho  
14 Resources, Inc., was formed. Mack Energy and its  
15 affiliates contributed a portion of their assets to that  
16 company, and then COG Oil and Gas, LP, contributed all of  
17 its assets to that new company. And this unit is a part of  
18 the assets that were contributed to the new company, and  
19 Mack Energy and its affiliates are majority shareholders in  
20 that company. The operator of record with the OCD is  
21 currently being changed to COG Operating, LLC, and Mack  
22 Energy Corporation will continue to physically operate all  
23 the New Mexico properties under a contract operating  
24 agreement with COG Operating, LLC.

25 Q. All right, you're authorized to speak on behalf

1 of both Concho and Mack Energy today; is that correct?

2 A. I am.

3 Q. All right, let's identify Exhibit 2, please, sir.

4 A. Exhibit 2 is a copy of the unit agreement. I  
5 might state that there is no unit operating agreement  
6 because the working interest has always been 100 percent  
7 held by a single party.

8 Q. All right. And was this unit agreement the  
9 subject of an amendment to bring in additional acreage?

10 A. It was, there was an amendment shortly after 1966  
11 where the additional lands were brought in, and the unit  
12 now covers a total of 2400 acres.

13 MR. HALL: All right. Mr. Examiner, we have the  
14 second amendment available to you if you wish. We didn't  
15 deem it necessary for purposes of the hearing.

16 EXAMINER BROOKS: Exhibit 4 which is in their  
17 package is labeled "second amendment".

18 MR. HALL: I'm sorry, first amendment --

19 EXAMINER BROOKS: Oh, okay.

20 MR. HALL: -- I misspoke.

21 EXAMINER BROOKS: Okay. You may continue.

22 Q. (By Mr. Hall) When did Mack Energy Corporation  
23 actually assume operations over the unit?

24 A. 1992.

25 Q. Okay, and explain briefly the nature of

1 operations on the unit.

2 A. I think we decided Matt was going to cover that,  
3 didn't we?

4 Q. Okay. Do unit operations consist of primary and  
5 secondary --

6 A. Yes, they do.

7 Q. -- recovery operations?

8 A. Yes, they do.

9 Q. All right. Let's look at Exhibit 3, please, sir.

10 A. Exhibit 3 is very similar to an Exhibit B to most  
11 unit agreements. It's simply a list by tract. There are  
12 10 tracts in the unit. You'll notice that Tract 1 is a fee  
13 tract, and the balance of the tracts are all state. And  
14 the original lessee, the date of the lease and the lands  
15 covered by each lease are listed. And then the current  
16 lessee, which is COG Oil and Gas, LP, is listed with 100-  
17 percent working interest in each tract, and there's also  
18 not any overrides --

19 Q. And do you have one 40-acre fee parcel dedicated  
20 to the unit?

21 A. Yes, and we have a ratification from Midwest  
22 Investment Company. Our approval from the State is  
23 pending, and it will be furnished when it's available.

24 Q. Okay. Now is the working interest and mineral  
25 interest ownership in the currently defined unitized

1 formation, and then the proposed expanded vertical interval  
2 of the unitized formation, as amended, the same?

3 A. Yes, it is.

4 Q. Okay. And do Concho and Mack speak for and  
5 otherwise control 100 percent of the working interest in  
6 the expanded unit?

7 A. They do.

8 Q. Let's refer back to Exhibit 2, the unit  
9 agreement, briefly. And if you would turn to the third  
10 page, which is actually the first page of the unit  
11 agreement itself, does that identify the current unitized  
12 formation?

13 A. Yes, it does.

14 Q. And what is that?

15 A. "...that portion of the Grayburg-San Andres  
16 formation underlying the lands described in Exhibit "A"  
17 which is encountered between the depths of 2200 feet and  
18 3600 feet".

19 Q. All right, let's turn now to Exhibit 4. Is  
20 Exhibit 4 the second amendment to the unit agreement?

21 A. Yes, it is.

22 Q. And if you'll look at the italicized language on  
23 the first page of the second amendment, is that the new  
24 definition of the unitized formation?

25 A. Yes, it is.

1 Q. And does that comport with the Application and  
2 the advertisement in this case?

3 A. Yes, it does.

4 Q. Okay. Just explain briefly your efforts to  
5 obtain working interest owner and mineral interest owner  
6 consent to the amendment and the ratification by the one --

7 A. Well, the --

8 Q. -- the interest owner.

9 A. -- the amendment is signed by the working  
10 interest owners that were effective December the 1st, which  
11 is all affiliates of Mack Energy Corporation. And then  
12 also attached is a ratification by Mossman-Midwest Company,  
13 which is the only fee royalty interest in the unit. And  
14 then attached -- the last attachment is a ratification by  
15 COG Oil and Gas, LP, which is the new working interest  
16 owner effective January 1st.

17 Q. So you have --

18 EXAMINER BROOKS: Which exhibit are we looking  
19 at?

20 THE WITNESS: Four.

21 EXAMINER BROOKS: Four, okay.

22 Q. (By Mr. Hall) So you have consents, approvals  
23 and ratifications from 100 percent of the owners except the  
24 State Land Office at this point; is that correct?

25 A. That's correct.

1 Q. And have you been in discussions with the State  
2 Land Office to obtain their approval?

3 A. Yes.

4 Q. And do you expect to obtain that --

5 A. Shortly.

6 Q. -- in the short term?

7 MR. HALL: Mr. Examiner, we do not have a  
8 preliminary approval exhibit for you yet, but we will  
9 provide that one and ask that the record be supplemented to  
10 include that just as soon as we receive that.

11 EXAMINER BROOKS: Okay.

12 Q. (By Mr. Hall) Mr. Lanning, will any other  
13 amendment, other than the amendment shown on Exhibit 4, be  
14 necessary?

15 A. No.

16 Q. Now to your knowledge, Mr. Lanning, are other  
17 operators in the area currently operating those vertical  
18 intervals from the top of the Seven Rivers to the base of  
19 the Glorieta-Yeso-Paddock formation as a single common  
20 source of supply?

21 A. Yes, they are.

22 Q. And where are those?

23 A. Marbob Energy Corporation operates the Dodd  
24 Federal Unit and the Burch Keely Unit, which are north and  
25 easterly offsets to the G-J West Co-op Unit. And if you'll

1 look at the second page of Exhibit 1, you'll see that the  
2 Dodd Federal Unit was approved under R-12,256 and the Burch  
3 Keely Unit was approved under Order Number R-10,067, and  
4 the subject intervals are precisely the same as what we're  
5 asking for.

6 Q. And so the applications and approvals for the  
7 Dodd Federal Unit and the Burch Keely Unit are consistent  
8 with what Mack Energy is asking the Division to approve  
9 here as well?

10 A. It is, it's exactly the same.

11 Q. Okay. And what is Exhibit 5?

12 A. Exhibit 5 is a compilation of the various orders  
13 issued by the Commission and/or the Division with respect  
14 to the unit and the two pools that are affected by our  
15 Applications.

16 Q. Could you just briefly run through those for the  
17 Hearing Examiner? What do each of those orders do?

18 A. Okay, Order Number R-3127, dated October 4th,  
19 1966, is the original approval of the unit agreement.

20 Order Number R-3127-A, dated March 4th, 1968, is  
21 the approval of the first amendment to the unit agreement  
22 to include an additional 300 acres of land.

23 Order Number R-3069, dated June 1st, 1966, is  
24 where approval was given for waterflood operations in  
25 Section 28.

1           Order Number R-10,067, dated February 22nd, 1994,  
2           extended the vertical limits of the Grayburg-Jackson Pool  
3           to include the Glorieta-Yeso-Paddock formation.

4           Order Number R-10,067-A, dated March 1st, 1994,  
5           deleted the Paddock formation from R-10,067.

6           Order Number R-12,228, dated December 1st, 2004,  
7           was the order approving unitization of Marbob's Dodd  
8           Federal Unit area and authorizing the conduct of secondary  
9           recovery operations in the Grayburg-Jackson and East  
10          Empire-Yeso Pools.

11          And then Order Number R-12,256, dated January  
12          3rd, 2005, authorized the contraction of the East Empire-  
13          Yeso Pool and simultaneous extension of the horizontal  
14          boundaries and vertical limits of the Grayburg-Jackson  
15          Pools for the Dodd Federal Unit Area.

16          And then Order Number R-12,255, dated January  
17          3rd, 2005, authorized waterflood operations for the Dodd  
18          Federal Unit, including the Yeso-Paddock formations.

19          Q.   And so Mack Energy is simply asking the Division  
20          to follow the precedent established in those orders; is  
21          that right?

22          A.   That's correct.

23          Q.   In your opinion, Mr. Lanning, will the Division's  
24          approval of both the Mack Energy Applications facilitate  
25          coordinated primary and recovery operations throughout the



1 unit area as expanded both vertically and horizontally?

2 A. Yes.

3 MR. HALL: If you would, Mr. Examiner, Exhibits 6  
4 and 7 are my notice affidavits given to the interest owners  
5 in each of the two cases, a determining consultation with  
6 Examiner Catanach that notice would go to each of the  
7 interest owners in the unit. So that includes all of the  
8 parties to the unit agreement, as well as the State Land  
9 Office.

10 Q. (By Mr. Hall) Mr. Lanning, were Exhibits 1  
11 through 5 prepared by you or at your direction?

12 A. Yes.

13 MR. HALL: That concludes our direct of this  
14 witness, Mr. Examiner.

15 We'd move the admission of Exhibits 1 through 7.

16 EXAMINER BROOKS: Okay, 6 and 7 are both  
17 affidavits. One through 7 are admitted.

18 MR. HALL: That concludes our direct of this  
19 witness.

20 EXAMINER BROOKS: Okay. Well, I'm going to have  
21 to look at these things before I will have any input. So  
22 Mr. Jones, do you have any questions? Go ahead.

23 EXAMINATION

24 BY MR. JONES:

25 Q. Mr. Lanning, so you're asking for vertical

1 extension of the pools over the entire horizontal  
2 boundaries of the pool?

3 A. Yes -- No, only within the --

4 Q. Only within the unit?

5 A. Only within the unit.

6 MR. JONES: Okay. So I guess is the first time I  
7 am aware that pools were -- actually had varying vertical  
8 extents, depending on some horizontal boundaries. I  
9 thought those were consistently -- but -- Okay.

10 Well, as far as the notice goes, you noticed  
11 everybody in the offset two units, the interest owners?

12 MR. HALL: We did not. I -- We filed this  
13 Application in November, and I had trouble recalling why we  
14 noticed people, why we did. So I looked through my notes,  
15 and there were some notes where I had a conversation with  
16 Mr. Catanach about that and whether that would be necessary  
17 to notify the offset operators, and we determined that it  
18 would be sufficient to notify just the interest owners in  
19 the unit, as well as the mineral interest owner.

20 MR. JONES: Oh, in the unit. We're talking about  
21 the G- --

22 MR. HALL: The unit area, correct.

23 MR. JONES: -- -J West Co-op Unit?

24 MR. HALL: Yes.

25 MR. JONES: As far as the pool itself, this is

1 affecting both pools, correct?

2 MR. HALL: Yes --

3 MR. JONES: So -- but --

4 MR. HALL: -- portions of --

5 MR. JONES: -- portions of --

6 MR. HALL: -- the pools.

7 MR. JONES: -- both pools.

8 MR. HALL: And it is making them consistent  
9 vertically with the pool changes to the east.

10 MR. JONES: Okay.

11 MR. HALL: And if you go through that compilation  
12 of orders, Exhibit 5, you can walk your way through that,  
13 see how that was done over time.

14 MR. JONES: Okay, I definitely need to do that.  
15 But as far as the operators, the other operators within  
16 those two units that are being affected -- I mean, no, two  
17 pools, I'm sorry, that are being affected, those pools  
18 extend beyond any of these three units, I guess.

19 THE WITNESS: Yes.

20 MR. JONES: So the decision was made not to -- to  
21 notify all operators within the two pools, there being  
22 changed -- because they're only being changed within the  
23 dot -- this --

24 MR. HALL: Within the unit area, correct.

25 MR. JONES: -- within the unit area.

1           Okay, if that sounds reasonable to you, it sounds  
2 reasonable to me.

3           EXAMINER BROOKS: Well, I'll have to review the  
4 Rules to be sure, because I really had not looked at those  
5 Rules. And of course, as you know, you have to look at  
6 exactly what it says. If Mr. Catanach has looked at it, he  
7 probably -- he has a lot of experience with these things,  
8 and he's probably right, but I will definitely look at it  
9 again.

10          Q.    (By Mr. Jones) Okay. And the operator that you  
11 guys are going into here, that's confusing to me, that the  
12 operator of record is going to be COG --

13          A.    -- Operating, LLC.

14          Q.    -- Operating, LLC. And yet Mack Energy is going  
15 to do the operating?

16          A.    The physical operations, yes.

17          Q.    The physical operations. So our people in  
18 Artesia, they contact -- they send notices or letters, and  
19 so do we, to Mack. And yet COG Operating, Inc., LLC, is in  
20 Dallas, it's --

21          A.    They're in Midland.

22          Q.    Midland?

23          A.    Yeah.

24          Q.    So it's just a little confusing to me that --

25          A.    I know it is. And that's the reason we extended

1 so many times, is because that business transaction went on  
2 for many weeks there, and we're just now having time to  
3 take care of this.

4 Q. Okay. So is it fair to say that Mack Energy is  
5 -- that any correspondence should be directed to Mack  
6 Energy, with the stipulation that COG -- that they are  
7 representing COG Operating, LLC --

8 A. -- I'm not sure --

9 Q. -- in all --

10 A. -- Mr. Jones, how that's being handled, but I can  
11 assure you that it probably wouldn't make any difference  
12 whether it went to Midland or Artesia.

13 Q. Okay, that -- I saw the COG Operating, LLC, bond  
14 that -- for a well that I was working on, and it looked to  
15 me like it was in Dallas, but --

16 A. No.

17 Q. So the address of record is in Midland --

18 A. Yeah.

19 Q. -- for COG? Okay.

20 And Concho Resources, Incorporated, and Mack went  
21 together for all of this?

22 A. That's a simplistic way to put it, but --

23 Q. Okay. Okay, that's -- And then we got COG Oil  
24 and Gas, LP.

25 A. Title to the leases is now in COG Oil and Gas,

1 LP.

2 MR. JONES: Okay, that's -- Mr. Brooks --

3 EXAMINATION

4 BY EXAMINER BROOKS:

5 Q. Okay, on Exhibit 1, you said that the limits of  
6 the Empire-Yeso Pool were in orange, and that's pretty easy  
7 to follow. The limits of the Grayburg-Jackson Pool are in  
8 blue, and it doesn't look to me like the blue line closes  
9 anywhere. Can you outline for me -- let's see, does it go  
10 -- It goes off to the north, does it not, off of the map?

11 A. I can't...

12 Q. If it's the blue-lined area.

13 A. I think our other witness could better answer  
14 that question than me.

15 Q. Okay. Okay, well, that's -- Now can you explain  
16 to me exactly what is going on here, because this all went  
17 a little fast, and I understand what you're doing is,  
18 you're expanding the vertical limits of the unit, and in  
19 order to do that you have to contract this East Empire-Yeso  
20 Pool; is that correct?

21 A. Yes, sir.

22 Q. Because that pool is not a part of the unit,  
23 right?

24 A. That's correct.

25 Q. And so you will be taking the portion of the East

1 Empire-Yeso Pool that is in the -- within the horizontal  
2 boundaries of the unit, will be taken out of that pool?

3 A. Correct.

4 Q. Okay, that's going to leave it discontinuous.  
5 It's going to be -- the portion over to the east and the  
6 portion over to the west will be left into the pool?

7 A. I would assume that's correct.

8 Q. Okay. And then the -- now the Grayburg-Jackson  
9 Pool, is that pool -- What's being done to that pool?

10 A. Within the unitized interval, it's being expanded  
11 to include the Paddock formation.

12 Q. To include the what formation?

13 A. Paddock-Yeso.

14 Q. I'm sorry, I'm not hearing you, the Yeso --

15 A. The Paddock.

16 Q. Paddock, oh. Okay. So the Grayburg-Jackson is  
17 being pooled -- is going to continue to include the unit,  
18 but it will --

19 A. Correct.

20 Q. -- be expanded to --

21 A. -- to include those deeper depths --

22 Q. -- include the additional vertical --

23 A. Correct.

24 Q. The vertical boundaries will be expanded, the  
25 horizontal boundaries will not be changed?

1 A. Correct.

2 Q. And in the case of the East Empire-Yeso Pool, the  
3 reverse is true: The horizontal boundaries will be changed  
4 to exclude the unit area, but the vertical boundaries of  
5 that pool will not be changed?

6 A. Correct.

7 Q. Okay.

8 MR. HALL: Well, let's be clear here, see if I  
9 can add to that. Under the current unitized formation, it  
10 is entirely within the Grayburg-Jackson Pool now.

11 EXAMINER BROOKS: The current unitized  
12 interval --

13 MR. HALL: Yes --

14 EXAMINER BROOKS: -- is entirely within the --

15 MR. HALL: -- a hundred percent --

16 EXAMINER BROOKS: -- Grayburg-Jackson?

17 MR. HALL: -- within the pool.

18 EXAMINER BROOKS: Yeah, I -- Okay.

19 MR. HALL: To expand it vertically puts you into  
20 the East Empire-Yeso Pool.

21 EXAMINER BROOKS: That was what I was assuming at  
22 this --

23 MR. HALL: Yes, yes --

24 EXAMINER BROOKS: So --

25 MR. HALL: -- to do that.



1 EXAMINER BROOKS: -- when we get through,  
2 assuming we do this, when we get through, the unit will  
3 still be entirely in the Grayburg-Jackson Pool --

4 MR. HALL: Correct.

5 EXAMINER BROOKS: -- and -- because the Grayburg-  
6 Jackson Pool will be expanded vertically?

7 MR. HALL: Right. And to do that, you contract  
8 out -- if you look in Section 22, 27 and 28, you contract  
9 out those portions of the East Empire-Yeso Pool.

10 EXAMINER BROOKS: Right, that's what was my  
11 understanding --

12 MR. HALL: Okay.

13 EXAMINER BROOKS: -- of the witness's statement.  
14 So what I said, then, again remains true: The Grayburg-  
15 Jackson Pool will be expanded vertically, but its  
16 horizontal -- within the unit only?

17 MR. HALL: Yes, that's right.

18 EXAMINER BROOKS: But its horizontal boundaries  
19 will be unchanged?

20 MR. HALL: Right.

21 EXAMINER BROOKS: The East Empire-Yeso Pool will  
22 be contracted out of the unit so that there's no portion of  
23 the unit in that pool, and the unit becomes discontinuous,  
24 but --

25 MR. HALL: Not the unit.

1 EXAMINER BROOKS: I mean the pool becomes  
2 discontinuous, but it's -- the vertical boundaries of that  
3 pool will not be changed?

4 MR. HALL: That's correct.

5 EXAMINER BROOKS: Only the horizontal boundaries?

6 THE WITNESS: Yeah, and that's the same thing  
7 that was done in the other two units.

8 EXAMINER BROOKS: Okay.

9 MR. JONES: Okay, I understand that -- Okay, I  
10 think I understand this. But originally, instead of  
11 changing the unit borders themselves, you wanted to work on  
12 the pool boundaries and do nomenclature, right? Is that --

13 MR. HALL: Yeah, it's a nomenclature case --

14 MR. JONES: Nomenclature.

15 MR. HALL: -- and the only reason we're here for  
16 the unit is because there was an original unit approval,  
17 and that seemed to be the precedent from the unit's cases  
18 to the east, that you got approvals for those as well.

19 MR. JONES: Now, let's say those -- instead of --  
20 on those, instead of being nomenclature cases, they could  
21 have actually modified their statutory unitization, right?

22 MR. HALL: And they did that. In fact, they had  
23 three cases heard simultaneously, because one was a  
24 statutory unit, as I recall. And so they had three going  
25 at once.

1 MR. JONES: Okay.

2 EXAMINER BROOKS: Now this is a voluntary unit,  
3 is it not?

4 MR. HALL: Yes, it is.

5 EXAMINER BROOKS: That's what I thought. And  
6 you're going to supply the ratification from the State Land  
7 Office?

8 MR. HALL: Yes.

9 EXAMINER BROOKS: But you don't have that yet?

10 MR. HALL: We don't have that yet. We'll  
11 supplement the record with that.

12 EXAMINER BROOKS: Okay. Nothing further for this  
13 witness?

14 MR. HALL: No, sir.

15 At this time, Mr. Examiner, we would call Matt  
16 Brewer.

17 EXAMINER BROOKS: Okay, he's been sworn.

18 MATT BREWER,  
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. HALL:

23 Q. For the record, state your name.

24 A. Matt James Brewer.

25 Q. Mr. Brewer, where do you live and by whom are you

1 employed?

2 A. Artesia, New Mexico, for Mack Energy Corporation  
3 as a geologist and geological engineer.

4 Q. And have you previously testified before the  
5 Division and had your credentials established as a matter  
6 of record?

7 A. Yes, I have.

8 Q. And you're familiar with the Application and the  
9 lands that are the subject of the two Applications in this  
10 case?

11 A. Yes, I have.

12 MR. HALL: At this point, Mr. Examiner, we'd  
13 offer Mr. Brewer as a qualified petroleum geologist.

14 EXAMINER BROOKS: He is so qualified.

15 Q. (By Mr. Hall) Mr. Brewer, briefly summarize  
16 current unit operations in the Grayburg-Jackson West Co-op  
17 Unit.

18 A. We currently have 91 pumping wells, 10 injection  
19 wells and 15 plugged wells in the unit.

20 Q. If you could refer back to Exhibit 1, would you  
21 briefly orient the Hearing Examiner where primary and  
22 secondary operations are being conducted?

23 A. Okay, primary operations are mostly in Section 16  
24 on the north end of the unit --

25 (Off the record)

1 MR. JONES: I'm sorry.

2 THE WITNESS: That's okay.

3 MR. HALL: Do you need another set?

4 MR. JONES: No, no, I've got it here.

5 THE WITNESS: Exhibit 1, right there on the top.

6 EXAMINER BROOKS: May not have a copy of this  
7 one.

8 Go ahead.

9 THE WITNESS: Primary operations are mostly on  
10 the north end of the unit in Section 16 and also on the  
11 east end of the unit in Section 22. Secondary operations  
12 are primarily in Section 28 and Section 21, with the  
13 exception of one injection well on the north end of the  
14 unit in Section 16.

15 Q. (By Mr. Hall) All right, let's turn to Exhibit  
16 8, if you would identify that, please, sir.

17 A. Exhibit 8 is a list of all of the injection wells  
18 and producing wells, along with their locations, their API  
19 numbers, and I believe there's also some wells that have  
20 been staked on this unit, in this list.

21 Q. Now, all the injectors on Exhibit 8, do they have  
22 -- they have current C-108 approvals or other form of  
23 approvals for operations by the Division?

24 A. Yes, they all have been approved by the Oil  
25 Conservation Division, either administratively or by some

1 other form. They may not have been C-108 approvals.

2 Q. Let's turn to Exhibit 9, your cross-section.  
3 Pull that out, please. And if you would refer to the  
4 cross-section, could you identify the current vertical  
5 interval where unit operations are currently ongoing?

6 A. The current unitized interval is in green on the  
7 log in the middle. This log is in the unit in Section 28.  
8 This is called the Diamondbacks State Number 1, the current  
9 unitized interval in green from 2200 feet measured to 3600  
10 feet measured depth.

11 Q. Okay. Now by the way, Mr. Brewer, under the  
12 current unit agreement are unitized substances allocated on  
13 a surface acreage basis?

14 A. Yes.

15 Q. Okay. Is the well log for the Diamondback State  
16 Number 1 the well that is referred to in the second  
17 amendment to the unit agreement?

18 A. Yes.

19 Q. And on that one could you identify the top of the  
20 Seven Rivers and the base of the Glorieta-Yeso for the  
21 Hearing Examiner?

22 A. The top of the Seven Rivers on the log in the  
23 middle, again, which is the Diamondbacks State Number 1, is  
24 approximately 1115 feet measured depth. The base of the  
25 Yeso would be approximately 4635 measured depth on that

1 log.

2 Q. So --

3 A. It would also be the top of the Blinebry.

4 Q. All right. And so the expanded unitized interval  
5 is shown bracketed by the orange bar on the middle well  
6 log; is that right?

7 A. Yes, it is.

8 Q. Okay. Mr. Brewer, are there currently any other  
9 wells producing from the proposed expanded unitized  
10 interval that will be brought into the unit?

11 A. No, there is not.

12 Q. Okay. Are there any other temporarily abandoned  
13 or plugged and abandoned wellbores within the expanded  
14 unitized interval?

15 A. Yes, there is one Atoka well in the northeast of  
16 the southwest of Section 28, which is a plugged well.  
17 There's an Atoka well in the southeast of the southeast  
18 quarter of Section 21, and also in the southeast of the  
19 northeast of Section 21, which are both plugged.

20 Q. All right. Now in terms of operations, will  
21 initial operations in the expanded unitized area be limited  
22 to primary production?

23 A. Yes, initially.

24 Q. And then what are Mack's plans for expanding the  
25 waterflood operations in the extended unitized interval?

1           A.    We will evaluate the waterflood operations in the  
2 extended unitized interval after production is established.

3           Q.    And does Mack have plans to drill any new  
4 producing or injection wells within the unit area?

5           A.    Yes.

6           Q.    And what's the source of water being utilized for  
7 secondary recovery operations now?

8           A.    It is produced water from unit operations.

9           Q.    Okay, and has Mack evaluated the potential  
10 effectiveness of the waterflood project in the expanded  
11 unit area?

12          A.    No, we have not. We will evaluate this potential  
13 of waterflooding by gathering the data from primary  
14 development such as logs, cores and production performance.

15          Q.    Have you had the opportunity to evaluate whether  
16 the water you're currently utilizing for waterflood  
17 operations would be compatible with the fluids in the  
18 expanded vertical intervals?

19          A.    Yes, we have. As Mr. Jones is well aware of, we  
20 are currently downhole commingling to the west of this unit  
21 on several of our leases where we downhole commingled the  
22 Yeso and the Grayburg-Jackson Pool, and these have been  
23 approved by the Division.

24          Q.    Now, can all the water that you'll need for  
25 expanded waterflood operations in the future be made



1 available from current unit wells?

2 A. No, we would have to have makeup water, and we  
3 have disposal wells in the area that we believe that we  
4 could put on pump to make up this water, and this water has  
5 also been tested and compatible.

6 Q. How many additional wells do you anticipate will  
7 be necessary to reach full unit development?

8 A. We believe that it's approximately 145 wells to  
9 reach full development of this unit. We currently have 20  
10 wells that we have plans to drill this year on this unit.

11 Q. And do you anticipate that the waterflood pattern  
12 will be the same throughout the expanded unit?

13 A. Yes, our intentions are to design a 40-acre  
14 fivespot with new and available wells.

15 Q. And do you anticipate waterflood operations will  
16 be conducted in the Yeso?

17 A. Yes, we anticipate that the waterflood operations  
18 will be conducted, but only in the Yeso. A lot of times  
19 the Glorieta-Yeso is mentioned. The Glorieta is  
20 nonproductive in this area, so it would only be in the Yeso  
21 formation.

22 Q. And are you asking the Division to authorize  
23 expanding injection operations into the Yeso throughout the  
24 entire unit area?

25 A. Yes.

1 Q. Okay, and do you want to be able to do that by  
2 filing C-108s --

3 A. Yes.

4 Q. -- seek approval that way?

5 A. Yes.

6 Q. Okay. And is that consistent with the precedent  
7 established under Order Number R-12,255?

8 A. Yes, it is.

9 Q. Let's look back at your well log. Can you show  
10 us where the picks for the tops of the Grayburg and San  
11 Andres are?

12 A. Referring back to the well log on the  
13 Diamondbacks State Number 1 in the middle, the top of the  
14 Grayburg is approximately a measured depth of 2150, the top  
15 of the San Andres is approximately a measured depth of  
16 2461.

17 Q. And can you show us the tops of the Glorieta and  
18 the Yeso?

19 A. The top of the Glorieta would be at a measured  
20 depth of 3969, approximately. And the top of the Yeso,  
21 which is not currently identified on this cross-section,  
22 would be 4040, which is the base of the Glorieta. The  
23 Glorieta is a sand package.

24 Q. All right, let's turn to Exhibit 10, your  
25 structure map. Is that a structure map of the top of the

1 Glorieta?

2 A. Yes, Exhibit 10 is a structure map on top of the  
3 Glorieta. Exhibit 10 also shows the structural cross-  
4 section A-A', which is this structural cross-section, A  
5 being the well in Section 29, which is the White Star  
6 Federal Number 19. The log in the middle is the  
7 Diamondbacks State 21 in Section 28. And A' is a Marbob  
8 well, the Barnsdall Federal well, on the right-hand side of  
9 this cross-section.

10 As you can see, the structure on top of the  
11 Glorieta, if you look across the south half of Section 19,  
12 kind of the middle of Section 20, you'll see a nose coming  
13 down through those portions of those sections. That nose  
14 should -- This nose is very important to the production of  
15 the Yeso formation and also the Grayburg-Jackson  
16 formations, as I will explain shortly.

17 Q. Now, if we keep Exhibit 10 in front of us, let's  
18 turn to Exhibits 11 through 14, your production curves, if  
19 you would explain those to the Hearing Examiner, what they  
20 show.

21 A. Exhibits 11 through 14 are production curves.  
22 The first one, Exhibit Number 11 is the Mesquite State  
23 Number 10. This well is located in the northwest quarter  
24 of the northwest quarter of Section 20, and as you can see,  
25 this well is north of the nose of this structure. And if

1 you look at the production, the cum oil production on this  
2 well is 18,000 barrels at the bottom left of this chart,  
3 this being significant that the wells on the north side of  
4 this structure do not produce as much oil and gas as the  
5 wells on the south side of the structure.

6 If you'll look at the next exhibit, Exhibit  
7 Number 12, this is the White Star Federal 19, which is the  
8 well at the structural cross-section A-A'. It's A in  
9 Section 29. This well has cum'd approximately 55,000  
10 barrels of oil. This well is on the south side of this  
11 structure, structural nose. And as you can see, this well  
12 has made a lot more oil than the well on the north side of  
13 the structure. And that tends to be true throughout this  
14 whole area.

15 Exhibit Number 13 is a Grayburg-Jackson producer  
16 on the unit. This well is located in the south half of  
17 Section 16. It's in the southwest quarter of the southeast  
18 quarter. This well would also be on the north side of this  
19 structure, and as you can see, this well has cum'd 37,000  
20 barrels of oil over its lifetime.

21 If you look at the next exhibit, Exhibit Number  
22 14, this is a well, the GJ Number 101. This well is  
23 located in the south half of Section 21, right underneath  
24 the section number. And as you can see, this well would  
25 fall just on the south side of this structural nose. This

1 well has cum'd 75,000 barrels of oil.

2 The -- You can continue.

3 Q. Mr. Brewer, have you made estimates of the  
4 ultimate recovery of additional incremental reserves that  
5 are likely to result from expanded unit operations?

6 A. Yes, I have. Approximately 10 million BOEs on  
7 primaries and a conservative 5 million BOEs of reserves  
8 from waterflooding, assuming a .5 primary-to-secondary  
9 ratio, which is a conservative number of carbonate  
10 reservoirs in the Permian Basin.

11 Q. And what is the projected ultimate recovery out  
12 of the unit wells, if expanded unit operations are not  
13 approved?

14 A. Approximately 2 million BOEs.

15 Q. Okay. What's been the experience for production  
16 from these formations in the adjoining units?

17 A. The ultimate recovery of the offsetting wells to  
18 the west, which are the adjoining leases, are in the range  
19 of 40 to 150,000 barrels, depending on where you are on the  
20 structure. As I've -- as we have looked at in the previous  
21 exhibits, if you're north of this structure they produce  
22 less, if you're on the south side of the structure they  
23 produce a lot more.

24 Q. In your opinion, Mr. Brewer, should all of the  
25 formations contained within the expanded unitized interval

1 -- are they best managed as a single common source of  
2 supply?

3 A. Yes.

4 Q. Okay. Is the potential for production from the  
5 Glorieta and Yeso formations within the unit area  
6 significant enough to justify drilling stand-alone wells in  
7 those formations?

8 A. Right, it depends again on where you are on the  
9 structure. If you're in the north half -- If you look at  
10 the Exhibit Number 10, if you're in the north half of  
11 Section 28 and the south half of Section 21 and the south  
12 half portions of Section 22, then yes, you could probably  
13 drill those wells stand-alone.

14 If you're anywhere else on the unit, if you're in  
15 the north half of 21, north half of 22 and north of there  
16 in 16, and also on the south half of 28, due to the Yeso  
17 formations getting wet as you go downdip Basinward, that  
18 formation does get wet in that area on the adjoining  
19 leases, so on those portions of the unit, probably not.  
20 You would need to commingle to make these wells economic.

21 Q. Okay. Now, what effect will expanding operations  
22 to these additional formations have on overall unit  
23 economics?

24 A. We will be able to produce these reserves from  
25 the Yeso and the Grayburg-Jackson pools from each well,

1 instead of having to drill two wells, and be able to  
2 produce these wells into an already existing facility.  
3 Otherwise, we would have to build 10 -- There are 10 leases  
4 within this unit. We would have to build 10 tank batteries  
5 plus all of the products lines, saltwater disposal  
6 pipelines, and that cost is in excess of \$2 million to do  
7 that.

8 Q. All right. Now, will consolidating the various  
9 formations into a single common source of supply simplify  
10 your reporting to the Division?

11 A. Yes, it would.

12 Q. In your opinion, Mr. Brewer, would approval of  
13 both Applications be in the best interest of conservation  
14 and otherwise serve to prevent waste?

15 A. Yes.

16 Q. And in your opinion will implementation of unit  
17 operations in the expanded unitized formation, the  
18 Grayburg-Jackson Pool and the Glorieta-Yeso formations,  
19 result with reasonable probability in the increased  
20 recovery of substantially more oil and gas from the  
21 unitized area than would otherwise be recovered?

22 A. Yes, it would.

23 Q. And in your opinion will expansion of the  
24 unitized formation and unit operations to include  
25 additional depths benefit the working interest owners and

1 the royalty owners in the unit area?

2 A. Yes.

3 Q. And in your opinion will expansion and amendment  
4 of the vertical limits of the pools promote the efficient  
5 and orderly development of additional hydrocarbon  
6 resources?

7 A. Yes, it would.

8 Q. And in your opinion would the impairment of  
9 correlative rights result anywhere?

10 A. No, it will not.

11 Q. All right. Now, were Exhibits 8 through 14  
12 prepared by you or at your direction?

13 A. Yes, they were.

14 MR. HALL: That concludes our direct of this  
15 witness, Mr. Examiner. We'd move the admission of Exhibits  
16 8 through 14 at this time.

17 EXAMINER BROOKS: Okay, 8 through 14 will be  
18 admitted.

19 There was substantial testimony about the  
20 expansion of the waterflood operations. Now, as I  
21 understand what was said, though, the order that you're  
22 contemplating now be issued in this proceeding would not  
23 authorize those expanded operations, but they will be  
24 subsequently the subject of administrative application by  
25 C-108; is that what you're --



1 MR. HALL: Yes, that's in accordance with the  
2 precedent from the adjoining unit cases. And what they're  
3 doing in those cases, they have authorized on a blanket  
4 basis the expansion but subject to individual C-108  
5 approvals for each well.

6 EXAMINER BROOKS: Okay. Mr. Jones?

7 EXAMINATION

8 BY MR. JONES:

9 Q. That was actually the question that I was going  
10 to immediately ask. I guess -- you know, expanding this  
11 area substantially and having a real shallow top depth,  
12 that limits your allowable pressure that the Division would  
13 allow on your injection well, so -- and that might impair  
14 some of your injection into the lower zones. Is that a  
15 concern of yours?

16 A. I don't believe that you can flood all of that at  
17 one time.

18 Q. Okay.

19 A. So we would be flooding the Yeso, and then the  
20 Grayburg-Jackson, and then the shallower zones. I don't  
21 believe you can flood all of that at one time.

22 Q. Is that what the other offset operator have  
23 done --

24 A. Yes.

25 Q. -- Marbob?

1 A. Yes.

2 Q. Okay, that was the answer I was looking for. I  
3 don't have one. So are you looking at more of a pressure  
4 maintenance project here, or an actual waterflood?

5 A. No, this is an actual waterflood.

6 Q. Okay. So what would be your -- like your typical  
7 injection ratio, or something? Would you -- are you -- you  
8 actually were going to bring in the additional water?

9 A. Right, yes, we would have to bring in additional  
10 water to -- because these wells produce so much water. If  
11 you -- that you would have to bring in makeup water to be  
12 able to make the flood efficient, yeah.

13 Q. Are you planning on aggressively doing this, or  
14 -- You say you've got now 91 producers, 10 injectors and  
15 some plugged wells, so those 10 injectors, are they just in  
16 the -- probably the Grayburg-San Andres, right?

17 A. Yes, yes.

18 Q. And is that doing pretty good in your recovery?

19 A. No, that is an inefficient flood. If you look at  
20 the injection wells, they are -- in Exhibit 10, they do  
21 have a pattern, and there are five injection wells in  
22 Section -- actually, there are six injection wells in  
23 Section 28, and three in Section 21.

24 This is an inefficient flood, and this is why we  
25 want to go back in here and drill the wells where they need

1 to be drilled to create a 40-acre fivespot to where we can  
2 efficiently flood these formations.

3 Q. So a 20-acre well spacing?

4 A. Yeah -- 10-acre well spacing.

5 Q. Are you going for 10?

6 A. Yes. The --

7 Q. So 20-acre fivespots, right? Probably 40-acre  
8 fivespots?

9 A. I think that's still a 40-acre fivespot, if I --

10 Q. Okay. Okay, that's okay. But you're going to go  
11 for the Yeso first, pretty much, and --

12 A. Yes.

13 Q. -- and is that similar --

14 A. Because it's a lower -- the lowest zone.

15 Q. Okay. Is it similar to the Clearfork over in  
16 Andrews County, do you think?

17 A. Same equivalent. I'm not familiar with those  
18 over in Texas, but they are the equivalent marker, yes.

19 Q. Yeah.

20 A. Yes.

21 Q. I know there's some -- a lot of waterflood and  
22 even CO<sub>2</sub>-flood work done --

23 A. Right.

24 Q. -- Glorieta-Clearfork over there, and --

25 A. The problem is -- and Vacuum is -- Vacuum-

1 Glorieta is also another one. But that is flooding a  
2 different part of the Glorieta-Yeso --

3 Q. Oh.

4 A. -- so it is not similar to this carbonate  
5 package.

6 Q. Okay. Well, as far as the reservoirs themselves,  
7 the Grayburg-San Andres is sour, it's --

8 A. Yes.

9 Q. But the Yeso, is that --

10 A. It's also sour.

11 Q. Is it?

12 A. Yes.

13 Q. Okay, and the Seven Rivers?

14 A. Sour.

15 Q. Sour? Okay, that -- How far up is the salt zone,  
16 or the Yates and the salt?

17 A. The Yates formation is approximately 300 feet  
18 thick, so if you go 300 feet above the -- I don't know if  
19 the top of the Yates is on here. No, if you go about 300  
20 feet above the Seven Rivers, that would be the top of the  
21 Yates. And then above that sits the salt. Base of the  
22 salt, I believe, is approximately 800 feet.

23 Q. So it's a good ways above --

24 A. Yes.

25 Q. -- what you're looking at? And the Capitan Reef

1 is --

2 A. No Capitan Reef here in this area. It's way  
3 further south, Basinward.

4 Q. Okay. Okay, that's -- It sounds like if the  
5 operators would have gotten together, they could have  
6 changed the -- both pools, the extent -- vertical extent  
7 over the entire length of it -- horizontal --

8 A. That would save you a lot of downhole  
9 commingling.

10 Q. Yeah, it would.

11 A. Believe me, our production people are hounding me  
12 about that, Can you not unitize everything over here?

13 Q. Or you can change the pool.

14 A. Or change the pool to where they would -- we  
15 would not have to do downhole commingling.

16 Q. That reminds me, is Bryan Arrant on board with  
17 this?

18 A. Yes, he's -- he's the geologist in Artesia. I'm  
19 not sure -- I did call him and ask him why the -- in  
20 Exhibit 1, why the East Empire-Yeso Pool went across the  
21 north half of 28 in the unit, and he just said that he was  
22 connecting up the stuff on the west side of the unit with  
23 the pool on the east side of the unit. There is no Empire-  
24 Yeso production in that portion of the unit.

25 Q. Okay.

1           A.    He just told me that he just drew the line.

2                   And Mr. Examiner, your question earlier about the  
3   Grayburg-Jackson Pool in Exhibit 1, where those -- where  
4   the lines -- where the blue dotted line ends on the map, it  
5   continues to the north on the west side, and also --

6                   EXAMINER BROOKS:  I was beginning to conclude  
7   that was probably the case, and I --

8                   THE WITNESS:  Yes, sir.

9                   EXAMINER BROOKS:  And when he first said the blue  
10  line, I saw various blue lines in various places, and they  
11  didn't seem to be connected up, but I assume the south  
12  limit is the township line.

13                  THE WITNESS:  Yes, sir, it continues -- the blue  
14  line continues across the bottom of the township line,  
15  across Section 36, and they continue to the east.

16                  EXAMINER BROOKS:  So it continues to the east  
17  into the adjoining township?

18                  THE WITNESS:  Yes, sir, and also to the north,  
19  north of Section 9 in 17-29, and also north of Section 12  
20  in 17-28.

21                  EXAMINER BROOKS:  But the south line of 17-29 is  
22  the south boundary of the unit?

23                  THE WITNESS:  Yes, sir.

24                  EXAMINER BROOKS:  Okay, yeah, I think can see it  
25  now.  It was confusing at first, but I think I understand

1 it now.

2 Q. (By Mr. Jones) The GORs, are they always in the  
3 oil range here? Even if you test all these separately up  
4 and down the hole?

5 A. The GORs --

6 Q. They're always less than 100,000 GOR?

7 A. They're about one to one GORS --

8 Q. Okay.

9 A. -- a thousand to one.

10 Q. Okay. So you really have the same spacing up  
11 in -- because it's all oil, and --

12 A. Yes.

13 Q. -- there's no real spacing reason for keeping  
14 these separate?

15 A. No, sir.

16 MR. JONES: Sounds good to me.

17 EXAMINER BROOKS: Okay, very good. Subject to  
18 the record being supplemented with the preliminary approval  
19 from the general Land Office, Case Number 13,608 will be  
20 taken under advisement.

21 (Thereupon, these proceedings were concluded at  
22 10:23 a.m.)

23 \* \* \*  
24 I hereby certify that the foregoing is  
25 a correct record of the proceedings in  
the examination hearing of Case No. 13608-09  
heard by me on Apr 13, 2006

*David K. Brooks*, Examiner

STEVEN T. OBRENNER, CCR  
(505) 989-9317

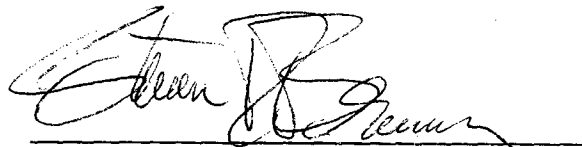
## CERTIFICATE OF REPORTER

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 24th, 2006.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2006