

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING)
CALLED BY THE OIL CONSERVATION)
DIVISION FOR THE PURPOSE OF)
CONSIDERING:) CASE NO. 10810

APPLICATION OF MARBOB ENERGY CORPORATION

REPORTER'S TRANSCRIPT OF PROCEEDINGSEXAMINER HEARING

BEFORE: Michael E. Stogner, Hearing Examiner

August 26, 1993

Santa Fe, New Mexico

This matter came on for hearing before the
Oil Conservation Division on August 26, 1993, at
Morgan Hall, State Land Office Building, 310 Old Santa
Fe Trail, Santa Fe, New Mexico, before Deborah O'Bine,
RPR, Certified Court Reporter No. 63, for the State of
New Mexico.

ORIGINAL

CUMBRE COURT REPORTING

P.O. BOX 9262

SANTA FE, NEW MEXICO 87504-9262

(505) 984-2244

I N D E X

August 26, 1993
Examiner Hearing
CASE NO. 10810

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A P P E A R A N C E S

FOR THE DIVISION: ROBERT G. STOVALL, ESQ.
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FOR THE APPLICANT: CAMPBELL, CARR, BERGE &
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BY: WILLIAM F. CARR, ESQ.

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1 EXAMINER STOGNER: Hearing will come to
2 order. Call next case, No. 10810.

3 MR. STOVALL: Application of Marbob Energy
4 Corporation for statutory unitization, Eddy County,
5 New Mexico.

6 EXAMINER STOGNER: Call for appearances.

7 MR. CARR: May it please the examiner, my
8 name is William F. Carr with the Santa Fe law firm
9 Campbell, Carr, Berge & Sheridan. I represent Marbob
10 Energy Corporation. I have one witness.

11 EXAMINER STOGNER: Are there any other
12 appearances?

13 Will the witness please stand and be sworn.

14 (Witness sworn.)

15 RAYE PAUL MILLER,
16 the witness herein, after having been first duly sworn
17 upon his oath, was examined and testified as follows:

18 EXAMINATION

19 BY MR. CARR:

20 Q. Will you state your name for the record,
21 please.

22 A. Raye Paul Miller.

23 Q. Where do you reside?

24 A. Artesia, New Mexico.

25 Q. By whom are you employed?

1 A. Marbob Energy Corporation.

2 Q. And what is your position with Marbob
3 Energy Corporation?

4 A. I'm a corporate officer,
5 secretary-treasurer.

6 Q. What are your duties as secretary-treasurer
7 of Marbob Energy?

8 A. I oversee accounting, land, do internal
9 work, engineering and geology type of work on our
10 infill drilling program, and oversee the work of
11 outside engineers and geologists.

12 Q. Do you have an in-house engineer and
13 geologist?

14 A. No, we do not.

15 Q. Are you it?

16 A. I'm as close as it gets.

17 Q. Have you previously testified before the
18 Division?

19 A. No, I have not.

20 Q. Would you summarize for Mr. Stogner your
21 educational background?

22 A. I have an undergraduate degree from the
23 University of New Mexico and a business -- or a
24 master's in business administration from the
25 University of Southern California.

1 Q. How long have you worked for Marbob?

2 A. I began work in 1980 for Marbob Energy
3 Corporation, and I've been there for the past 13
4 years.

5 Q. How many wells have you actually been
6 involved with in terms of drilling and completion of
7 the wells?

8 A. During the time that I've been with Marbob,
9 we've been involved in the drilling of over 200 infill
10 wells.

11 Q. Are you familiar with the application filed
12 in this case?

13 A. Yes, sir.

14 Q. Are you familiar with the status of the
15 lands involved in the Burch-Keely Unit Area?

16 A. Yes, sir.

17 MR. CARR: Mr. Stogner, at this time we
18 would tender Mr. Miller as a practical oilman.

19 MR. STOVALL: I would like to ask Mr.
20 Miller one question. Mr. Miller, is John Gray a
21 principal in the Marbob Energy?

22 THE WITNESS: Yes, sir.

23 MR. STOVALL: Would it be safe to say that
24 you are apprenticing under Mr. Gray as a practical
25 oilman?

1 THE WITNESS: Would I say what?

2 MR. STOVALL: That you are apprenticing
3 under Mr. Gray as a practical oilman?

4 THE WITNESS: Yes, except for the hat and
5 the voice.

6 MR. STOVALL: With that kind of experience
7 and mentorship, how can we other than qualify Mr.
8 Miller.

9 EXAMINER STOGNER: Mr. Miller is so
10 qualified as a practical oil and gasman and an
11 apprentice of Mr. Johnny Gray.

12 Q. (BY MR. CARR) Mr. Miller, would you
13 briefly state what Marbob Energy seeks in this case?

14 A. Marbob is seeking the unitization of the
15 shallow producing zones for secondary recovery
16 purposes. The lands involved were previously owned by
17 Phillips Petroleum Company and were part of a previous
18 cooperative waterflood, or most of the lands were part
19 of a previous cooperative waterflood which was
20 approved under Order R-7900 in April of 1985.

21 After that, several wells were converted to
22 injection wells, and several wells were worked over by
23 Phillips. We are the -- or we purchased Phillips'
24 interest in November of last year as to all of that
25 area involved in the cooperative flood.

1 We seek to, with the statutory unitization,
2 to lessen the problems of field operating procedures,
3 the burdens of right of ways and hearings. Also to
4 address questions of migration of oil across lease
5 lines with significant differences in the royalty and
6 overriding royalty burdens. And also the prior and
7 new drilling of infill wells at locations less than
8 the normal 330 feet setoff to lease lines.

9 We feel it's necessary to have statutory
10 unitization to fix the allocation of unit production
11 to each lease so that later an overriding royalty
12 owner which did not ratify would not be able to file a
13 claim against Marbob for additional revenue.
14 Hindsight in the oil business is excellent.

15 With this hearing we seek to solidify the
16 unit to protect the sizable investment the working
17 interest owners are planning to undertake in
18 developing the unit area and expanding the waterflood
19 over the entire unit area. The expansion of this
20 waterflood will be requested in a later hearing before
21 the OCD when we've gathered more information to try to
22 maximize the injection pattern for the best ultimate
23 recovery.

24 Q. Mr. Miller, what you're in essence doing is
25 statutorily unitizing certain overriding royalty

1 interests; is that correct?

2 A. Yes, sir, that is correct.

3 Q. By doing that those interest owners then
4 will share in unit production based on the allocation
5 formula in the unit agreement?

6 A. Yes, sir.

7 Q. By doing this they will then have their
8 proportionate share or fair share of the reserves from
9 the reservoir?

10 A. That's correct.

11 Q. By doing this are you then able to proceed
12 with your development plans to go forward in this unit
13 area?

14 A. Yes, sir.

15 Q. A waterflood project was previously
16 approved?

17 A. Yes, it has been.

18 Q. That was not part of a unit plan, though,
19 was it?

20 A. No. It was a cooperative lease agreement.

21 Q. That was in Case 84-18?

22 A. Right.

23 MR. CARR: Mr. Stogner, at this time we
24 would request that the record in case 84-18 be
25 incorporated into the record in this case. It

1 contains a full geological presentation, and our
2 presentation here today would be consistent with that.

3 EXAMINER STOGNER: The record in case No.
4 84-18, which was the application of Phillips Petroleum
5 Company for a waterflood project, may be incorporated
6 in the record in this case.

7 Q. (BY MR. CARR) Mr. Miller, are you familiar
8 with the statutory unitization act?

9 A. Yes, sir.

10 Q. Have you prepared certain exhibits which
11 will show that substantial additional recovery will be
12 obtained if the unit is formed and the waterflood
13 project that you are working on fully implemented?

14 A. Yes, sir.

15 Q. Can you identify what has been marked for
16 identification as Marbob Exhibit No. 1?

17 A. Exhibit No. 1 is the area map of the unit
18 agreement. It looks like the copy machine destroyed
19 the bottom line there, but it extends straight
20 across. The leases involved are seven federal
21 leases. They wind up -- they are included completely
22 in this unit.

23 Q. Are there other units in the immediate
24 area?

25 A. Yes, sir. On the north edge of this unit

1 in Section 12, it is bounded by the square-like Unit
2 12 unit, which is a Grayburg Unit operated by Mock
3 Energy Corporation. The southwest corner is bounded
4 by the Robinson-Jackson Unit, which is operated by
5 Southland Royalty, which is an offset Grayburg-San
6 Andres Unit.

7 Q. There are other offsetting waterflood
8 projects, are there not?

9 A. Yes, sir. There are lease flood projects
10 that are in place in Section 22 and in Section 14 to
11 the west that are cooperative lease flood projects,
12 and there have been other lease projects on the east
13 side of the unit in the same formation.

14 Q. Basically, the unit boundary that we have
15 before the Division today is an area surrounded by
16 other areas that have previously been subject to
17 waterflood?

18 A. That's correct.

19 Q. Let's go now to Exhibit No. 2. Would you
20 identify and review that?

21 A. Exhibit No. 2 is a listing of each of the
22 leases involved which identifies the actual lease, the
23 royalty owners, the overriding royalty owners, and the
24 working interest owners of each tract.

25 Q. Does this unit contain state, federal, or

1 fee lands?

2 A. The unit is completely federal, both
3 surface and subsurface mineral interests.

4 Q. Would you now identify Exhibit No. 3?

5 A. Exhibit No. 3 is the unit agreement form
6 that was utilized in this unit. The form is a fairly
7 common standard type of unit form. A little bit of
8 the variation in the fact that it is only federal
9 lands. All the references to the Commissioner of
10 Public Lands and those type of notations have been
11 deleted, but it basically is a fairly standard type of
12 unit, secondary recovery unit form.

13 Q. So it provides for waterflood?

14 A. Yes, sir.

15 Q. It sets forth the basis for participation
16 of each of the parties?

17 A. Yes, sir.

18 Q. And it also provides for the filing of
19 periodic plans of development?

20 A. That's correct.

21 Q. Will those plans be filed with the Oil
22 Conservation Division at the time they're filed with
23 other government agencies?

24 A. If so requested.

25 Q. Will you identify what has been marked as

1 Exhibit No. 4?

2 A. Yes. Exhibit No. 4 is the unit operating
3 agreement which outlines the operations that will be
4 conducted, as to how they'll be conducted and paid for
5 on the unit, who is the operator, the removal and
6 replacement of the operator. This agreement has been
7 executed by all of the working interest owners in all
8 of the tracts.

9 Q. Has Marbob Energy reviewed this application
10 with the Bureau of Land Management?

11 A. Yes, sir. The Bureau of Land Management
12 has approved and certified the effectiveness of the
13 unit as of August 1, 1993.

14 Q. So the voluntary unit has been approved?

15 A. That is correct.

16 Q. The purpose of this proceeding is simply to
17 bring certain overriding royalty interest owners into
18 the unit plan?

19 A. That is correct.

20 Q. You've indicated that 100 percent of the
21 working interest is voluntarily committed?

22 A. That is true.

23 Q. Being all federal land, you have 100
24 percent of the royalty interest in the unit?

25 A. That is correct.

1 Q. Could you review for the examiner the
2 efforts you have made to identify and obtain the
3 voluntary joinder of the overriding royalty interest
4 owners in the unit area?

5 A. These leases have been productive for many
6 years, and they are on pay status, or they have been
7 paid both in oil and casinghead gas by Phillips
8 Petroleum and a subsidiary, GPM. We took as that the
9 initial basis for search and mailing for
10 ratifications.

11 In looking at the listing, there were some
12 items in suspense, or a few of the ownership interests
13 were in suspense. We did a search of the records in
14 Eddy County. We have ordered complete abstracts, and
15 we had reviewed all the county records to try to
16 determine through means of probate or assignments as
17 to where we might locate some of these folks.

18 Also what became apparent in our review was
19 that some of the folks that were not on pay were
20 actually related to other parties who we did have
21 addresses for. We made several phone calls to known
22 parties and were able to talk to them to try to
23 identify the status of some of these unknown parties.

24 Some of the folks are deceased and their
25 children are deceased. One of the folks was

1 identified as being last known in Detroit, Michigan,
2 as having gone into a cult, the Order of the
3 Brotherhood, and his name was Thomas Purcell, and he
4 now was going by the name Reverend Michael. We
5 checked with Directory in Detroit for the Purcell. We
6 checked for Order of the Brotherhood.

7 We expanded it to Michigan and actually had
8 a listing for a Thomas Purcell in Lansing, Michigan,
9 or Dearborn. We called and talked to that person, and
10 I opened it by asking him if they were the Purcell
11 that was related to some of these others. It was his
12 wife; she wasn't sure. I says, "Well, does he go by
13 the name Reverend?" She kind of thought she had a
14 crank caller, but we made a fairly extensive search to
15 try to find these folks, and it was not very
16 successful.

17 Q. Mr. Miller, were you personally responsible
18 for conducting that search?

19 A. I made the calls.

20 Q. Can you identify what has been marked
21 Marbob Exhibit No. 5?

22 A. Yeah. Exhibit 5 is actually a compilation
23 in a couple of different ways of what the status of
24 the overriding royalties actually are. The overrides
25 in Tract 3A, 3B, and 6 are fully committed. In Tract

1 1, there are 37 overrides. Of those 37 individuals or
2 individuals/companies/entities, 31 of them have
3 committed or signed ratifications to the unit.

4 Those overrides, in other words, the
5 overrides differ by party, and we actually calculated
6 what percentage of those 31 overrides of the total
7 override outstanding was, and actually that figure is
8 89 percent of the total overriding royalty burden
9 basically is committed. The other six folks have the
10 remaining 11 percent. And all of the people in Tract
11 1 were identified or were notified of -- requested to
12 sign the ratification and notified of this hearing.

13 Similarly, in Tract 2, 4 and 5 is the same
14 type of analysis. Tract 2 is where the unfindables
15 are. There are seven of those parties, but as you can
16 see, they comprise a very small interest in the
17 burdens actually on this tract.

18 Also, I might note because I did not list
19 it out, many of the overriding royalty owners involved
20 in this are people with substantial knowledge of the
21 oil and gas business. These are not all just families
22 that are living in Timbuktu. People who have joined
23 and signed ratifications are people such as Jack
24 McCaw, used to be landman for Yates Petroleum, Dorothy
25 Kemper, who works at Yates and is present landman or

1 principal landman's mother.

2 And so there were a variety of people who
3 have reviewed this information on behalf of themselves
4 as overriding royalty owners who have committed, and
5 we've received no objection or question from anyone.

6 Q. Would you identify what has been marked
7 Marbob Exhibit No. 6?

8 A. Exhibit No. 6 is a stack of notices which
9 also show the receipt from the owner as to requesting
10 their ratification. Also notifying them that they had
11 questions, they could contact the BLM, notifying them
12 of a hearing at the OCD, and volunteering to help, if
13 they had any questions, to contact us.

14 Q. The Bureau of Land Management was also
15 notified?

16 A. Yes. The last notice is a notice to the
17 Bureau of Land Management which notified them of this
18 hearing.

19 Q. Could you identify for Mr. Stogner the
20 formations that are the subject of this statutory
21 unitization application?

22 A. Yes. The unit actually covers from the top
23 of the Seven Rivers to the base of the San Andres
24 formation or 5,000 feet, whichever is lesser. That
25 would cover the geological formations of Seven Rivers,

1 Queen, Grayburg, and San Andres.

2 Q. And the description you just gave of the
3 unitized formation is the way the formation is in fact
4 defined in the unit agreement; is that correct?

5 A. That's correct.

6 Q. The formations that you're proposing to
7 unitize here, are those the same formations that were
8 approved for waterflooding in the Phillips application
9 in that prior case?

10 A. Actually, the waterflood approval of the
11 prior case was focused on the Grayburg and San Andres
12 formation. It did not include the Seven Rivers and
13 the Queen, and this area is not productive.

14 The Seven Rivers was added to the unit
15 because of the extreme marginal productive
16 characteristics in this area. And there were a few
17 wells that were already downhole commingled in that,
18 and we felt that there would be a loss of reserves if
19 those wells were not allowed into the unit or that
20 that zone had to be plugged off.

21 Q. Is the portion of the reservoir that you
22 proposed to unitize been recently defined by
23 development?

24 A. Yes. There have been 209 wells previously
25 drilled in the unit area.

1 Q. Could you just identify what's marked as
2 Marbob Exhibit No. 7?

3 A. Exhibit No. 7 is a brief summary,
4 geological summary that was part of the BLM file that
5 was involved in the approval of the unit.

6 Q. This is in fact a presentation that Marbob
7 made to the BLM?

8 A. Yes, that is correct.

9 Q. This is the document that is included in
10 their file that they considered in approving the unit?

11 A. That's correct.

12 Q. Do you believe the entire unitized area in
13 fact will contribute reserves to the unit?

14 A. Yes, we do.

15 Q. Are there productive wells throughout?

16 A. Yes, there are.

17 Q. Based on your experience in drilling
18 producing wells in the area, do the wells appear to be
19 in communication?

20 A. Yes.

21 Q. Can the portion of the pool that's included
22 in the proposed unit area be effectively and
23 efficiently operated under a unit plan?

24 A. Yes, it can.

25 Q. And you've previously explained how the

1 boundaries were actually selected based on other units
2 in prior waterflooding?

3 A. Yes, that's correct.

4 Q. In your opinion, will waste occur if these
5 unsigned interests are not committed to the unit plan?

6 A. Yes.

7 Q. In fact, if they are not committed, will it
8 complicate your plans to go forward with the
9 waterflood in such a way that you may have to
10 reevaluate the project?

11 A. It poses an additional risk as to future
12 review by persons after the project has been done,
13 whereas what appears now to be fair might appear to be
14 unfair at a later time.

15 Q. In your opinion, is unitized management,
16 operation, and further development of the area that's
17 covered by this application necessary to substantially
18 increase the ultimate recovery of oil from the
19 unitized portion of the pool?

20 A. Yes, definitely.

21 Q. Will the additional value of conducting
22 unitized operations exceed the estimated value of the
23 additional oil that can be recovered from unitized
24 management plus a reasonable profit?

25 A. Would you restate?

1 Q. Exactly. Will the additional cost, if any,
2 of conducting unitized operations exceed the estimated
3 value of the additional oil to be recovered?

4 A. No. Actually, we anticipate costs involved
5 in the unit to be somewhere on the order of \$28
6 million. We anticipate additional value to be
7 recovered of excess of \$81 million.

8 Q. In your opinion, will the implementation of
9 the waterflood project in the area be feasible?

10 A. Yes.

11 Q. Will the method of operation following
12 statutory unitization result in increased recovery of
13 substantially more hydrocarbons than would be
14 recovered without this statutory unitization?

15 A. Yes. Our estimate is that under current
16 operations or continued present operations, the
17 recovery from the unit would be roughly 1,487,000
18 barrels of oil. We anticipate based on unit
19 operations a total recovery of 5,796,000 barrels of
20 oil, or an increased recovery of in excess of 4
21 million barrels of oil.

22 Q. Could you identify what has been marked
23 Marbob Exhibit No. 8?

24 A. Yes. Exhibit No. 8 is a decline curve that
25 shows basically the cumulative oil and gas production

1 of the seven leases on a unit basis for 1982 to '92.
2 It shows an anticipated decline under continued
3 operations and a hoped-for improvement under unit
4 operations.

5 Q. If this application is approved, Marbob
6 intends to come back at a later date to seek approval
7 of expansion and changes in the waterflood project
8 with a C-108 application; is that right?

9 A. That's correct.

10 Q. Prior to that time, if this application is
11 approved, will Marbob be undertaking additional work
12 to determine exactly what needs to be presented in
13 that subsequent application?

14 A. Yes, that's true. We have already
15 submitted a plan of operations to the Bureau of Land
16 Management which covers a tentative outline of
17 operations through the remainder of 1993 and
18 anticipated through 1994, '95 and '96.

19 Currently on this lease there are 49 wells
20 that are either inactive injectors, TA'd or shut in
21 producers or injectors. Part of our plan is to return
22 all of the existing wells to production in the next
23 three years. Additionally, we're looking at an infill
24 development program to try to identify target areas in
25 the unit which may have considerable additional

1 reserves to be gained through secondary recovery. And
2 then to develop an infill injection pattern that would
3 maximize whatever information we've acquired through
4 putting the wells back on and developing additional
5 infill locations.

6 Q. What is the basis for the participation
7 formula in the unit agreement?

8 A. The participation formula in the unit
9 agreement that was set up or that has been approved by
10 the BLM was based 50 percent on the prior cumulative
11 production, 12-1/2 percent on continued operations or
12 anticipated estimated continued operations, 12-1/2
13 percent on the 1992 prior year production, and 25
14 percent on the estimated future unit operations.

15 Q. In your opinion, does this formula allocate
16 production on separately owned tracts in the proposed
17 unit in a fair, reasonable, and equitable basis?

18 A. Yes.

19 Q. In your opinion, will unitization and
20 adoption of the proposed unitized methods of operation
21 benefit the working interest owners, the royalty
22 interest owners, and the overriding royalty interest
23 owners in the area affected by this application?

24 A. Yes.

25 Q. In your opinion, is unitized management,

1 operation, and further development in the portion of
2 the pool which is the subject of this application
3 necessary to effectively carry on these secondary
4 recovery operations?

5 A. Yes.

6 Q. Will the unitize methods in the proposed
7 waterflood prevent waste of oil and result with
8 reasonable probability in the increased recovery of
9 oil from the unitized portion of the pool?

10 A. Yes.

11 Q. In your opinion, will granting the
12 application for statutory unitization be in the best
13 interest of conservation, the prevention of waste, and
14 the protection of correlative rights?

15 A. Yes.

16 Q. Mr. Miller, were exhibits 1 through 8
17 either prepared by you or compiled under your
18 direction and supervision?

19 A. Yes, they were.

20 MR. CARR: At this time, Mr. Stogner, we'd
21 move the admission of Marbob Energy Exhibits 1 through
22 8.

23 EXAMINER STOGNER: Exhibits 1 through 8
24 will be admitted into evidence.

25 MR. CARR: I have nothing further of Mr.

1 Miller on Direct.

2 EXAMINATION

3 BY MR. STOVALL:

4 Q. I guess I do have some questions, and I'm
5 not sure what they are. I guess because we don't have
6 a geologic presentation, and this is not -- let me
7 start out and make sure I understand. The Order
8 R-7900 which authorized the waterflood project --

9 A. Yes, sir.

10 Q. -- is that the same horizontal and vertical
11 boundaries as you are unitizing today?

12 A. No, sir. This map, if you want to look
13 here, the area of initial coverage of the cooperative
14 waterflood agreement is outlined by this boundary
15 here. Our actual unit boundary extends further to the
16 north and to the east.

17 Q. Is that marked in one of the exhibits we've
18 already got?

19 A. No, it is not, but I will provide you that,
20 if you would like.

21 Q. Can we get that?

22 A. Yes.

23 Q. So basically Section 18 -- 13, 18, and the
24 north three quarters of 19 are not under the current
25 waterflood project; is that right?

1 A. That's correct.

2 Q. Did I understand you correctly at the
3 beginning then, it is your intent to bring a
4 waterflood -- well, is it a waterflood expansion
5 project, or is it a new waterflood project under the
6 unitization?

7 A. Well, we'll determine that at a later
8 date. Also we have previously submitted to the BLM,
9 and I suspect I have a copy of it here, if I can find
10 it, that would outline what was identified as a
11 proposed expansion under the waterflood, but we
12 deferred all work on that until we gained more
13 knowledge.

14 Q. So this order is a single waterflood
15 project which incorporates several leases; is that
16 correct?

17 A. That's correct. The leases outside the
18 existing cooperative flood are included in the
19 cooperative flood in part, and all we've done is added
20 the remaining portion of those leases into the actual
21 unit. And they are productive in the Grayburg, San
22 Andres formation inside and outside and are contiguous
23 across the unit area.

24 Q. Is it your intention to somehow extend the
25 waterflood into that outside area so that they will --

1 there will in fact be some flooding in those
2 additional areas?

3 A. Yes, sir, it is.

4 Q. So when you say you're not sure whether
5 it's an expansion or a new project, it is because of
6 procedurally you're not sure what you're going to do?

7 A. Exactly. It's not a question of doing the
8 expansion. It's just a question of how it needs to be
9 defined to the Commission at a later hearing.

10 There is, if you want to look, is one of
11 the roughs that was done of the expanded injection
12 wells into the outlying areas. Part of the problem
13 that we see at this point is with as many wells TA'd's
14 and inactive, we're very concerned that some of those
15 wells may not be suitable. If there is a mechanical
16 downhole problem, those wells may have to be indeed
17 plugged and a new well redrilled to effectively drain
18 the area.

19 And, as a result, prior to coming forward
20 and defining what wells would actually be converted
21 into injection wells, we felt it was very important to
22 try to gain as much information as we could about
23 where there were problems inside the lease.

24 Actually, in the last -- I think our
25 original proposal on the unit plan of operations

1 called for returning five or ten wells to active
2 status in the remainder of 1993. And in the month of
3 July, I believe there were actually 11 wells, one
4 injector and 10 producers, that were actually returned
5 to active status because we felt like that that was
6 good faith effort to show the BLM that we were getting
7 started with the plan as it had been identified to
8 them.

9 Q. Under your proposed unit agreement and unit
10 operating agreement, those additional tracts that are
11 brought in will in fact share in proceeds and expenses
12 in accordance with that formula; is that correct?

13 A. That's correct. All of the unit formula
14 for sharing of income and expenses is based on the
15 allocation that's shown.

16 Q. In coming up with that allocation, did you
17 in any way account for the fact that the existing
18 waterflood project -- the expense of installing it had
19 occurred, there had been some waterflooding already,
20 and there was some recovery from that?

21 A. The expense portion is really not an issue
22 with the parties involved because the parties owning
23 the working interest outside the current cooperative
24 area and inside are identical. In other words, their
25 interest is purely identical.

1 Our feeling in looking at developing the
2 allocation formula was that what we have found in our
3 experience in dealing with -- we operate the
4 offsetting acreage to the west in Section 22 and
5 Section 14, and it was a similar type of project that
6 we did on a lease basis beginning with our purchase of
7 that property in 1982, was that some of the additional
8 reserves were directly correlated to where the best
9 production was when the field was initially
10 discovered.

11 There are a lot of separate stringers and
12 different pay sections from a depth of about 2300 feet
13 to 3300 feet that are productive. Some of these have
14 been or some of those zones have been fairly well
15 developed and completed, whereas many of them exhibit
16 qualities of virgin reservoir type of
17 characteristics.

18 But it was intended to correlate the prior
19 successful production was also where our infill work
20 and reactivation of the flood was the most
21 successful. And that was why it was the largest
22 factor, and then there was other logic that we used as
23 to assigning different factors for the fact that there
24 are reserves that would have been produced otherwise
25 without any type of unitization. There was certainly

1 a factor as to what you have received in the last year
2 may correlate to what you should be entitled to. And
3 then the other single largest factor was what we
4 anticipated as some of the results of our unit
5 development operation.

6 And that was -- those calculations were
7 done by an outside engineer on a lease-by-lease basis
8 and were part of our testimony or our presentation to
9 the Bureau of Land Management because one of the areas
10 of concern was these leases are not standard 12-1/2
11 percent federal royalty leases. Some are, but there
12 are also some 5 percent federal royalty leases, and
13 you also have the recent implication of the stripper
14 royalty reduction.

15 And part of our work there was to
16 demonstrate that what the Feds had under the current
17 lease operation system would roughly be equivalent to
18 exactly what they would have under this particular
19 lease-by-lease allocation into the unitization, that
20 they would roughly wind up with exactly the same, even
21 given the variances that are there.

22 Q. So really the only -- I guess what you're
23 saying, the only real variance in revenue interest is
24 in the overrides?

25 A. The overrides are not consistent. The

1 royalty was not consistent across the unit, but
2 basically what the Feds would have gotten on an
3 ununitized basis versus what they got on a unitized
4 basis was roughly equivalent. The working interest
5 certainly is equivalent. Individual owners, their
6 checks would roughly be the same before and after, but
7 it's based on a tract allocation. Some would be
8 slightly higher. Some would be slightly less.

9 Q. Vertical intervals the same for the project
10 in the flood or the unit?

11 A. The flood will probably be identified as
12 Grayburg-San Andres. At this point we're not looking
13 to actually flood the Seven Rivers.

14 Q. The unitized interval will take in all of
15 the waterflood area?

16 A. Yes, it will.

17 Q. Is there any Seven Rivers production?

18 A. Yes, there is.

19 Q. And it will still be allocated, even though
20 it's not flooded, it will be allocated under the
21 formula?

22 A. It will be allocated under the formula
23 because it is extremely marginal. The production out
24 of the Seven Rivers in that area cum's probably less
25 than 2,000 barrels in the ultimate recovery per well.

1 There are presently, I believe, five wells that are
2 perforated and producing out of the Seven Rivers.

3 Q. While it would appear from your Exhibit 5
4 that the uncommitted or unfound percentage of noncost-
5 bearing interest is less than 25 percent, would you
6 verify that that is true?

7 A. Yes. In Tract 1, the uncommitted is 11
8 percent of the overrides, not of their interest in the
9 unit. In other words, the override total, there's
10 only 11 percent of that that is not committed. And in
11 Tract 2, there is less than 14 percent of the total
12 override burden. The override burden on these tracts
13 may be -- it varies. Some of it's 5 percent. Some of
14 it's roughly 7-1/2 percent. But that's the only
15 portion that has not been committed at this point.
16 Many of these are --

17 Q. Probably less than 1 or 2 percent of the
18 total cost-bearing interest that's not committed?

19 A. Oh, yes, much less. These overrides that
20 you're looking at, some of these folks have five zeros
21 after the decimal point before you get to their
22 interest, and that was before we unitized them. We
23 had to use some long digit calculators to --

24 Q. These percentages, are they the percentage
25 of the number of override interests or the percentage

1 of the percentage of override interests on Exhibit 5?
2 Does that make sense? Do you follow me?

3 A. Yes, it does because they are not the
4 percentage of the numbers. In other words, what they
5 are is actually -- let's say that the total overriding
6 burden was 5 percent. If one owner had a 1 percent
7 override, then that would show here as 20 percent not
8 being committed.

9 Q. Okay.

10 A. This is the percent of overriding royalty
11 of the total overriding royalty that has not been
12 committed.

13 Q. So that the committed number equals the
14 number of overriding interest owners. Committed
15 percent equals the percent owned by that number of
16 owners?

17 A. Of the overriding royalty burden, that's
18 correct.

19 MR. STOVALL: I think I'm certainly as
20 confused as I want to be.

21 THE WITNESS: I must say I prepared that
22 myself to try to make it clear. Obviously, I botched.

23 MR. STOVALL: No, I'm talking about the
24 whole thing, not on this particular -- I understand
25 that exhibit. The idea of unitizing an existing flood

1 that's bigger than the flood, that will keep Mr. Carr
2 busy for the next hearing.

3 THE WITNESS: We have had the BLM busy.
4 I've had the OCD busy. We're already reviewing with
5 Mr. Catanach the current pressure limitations on the
6 cooperative flood. There are several, or there are
7 multiple aspects. You're right, I wish this was the
8 last time we would be here, but I'm afraid it is not.

9 MR. STOVALL: Mr. Carr, I would suggest
10 that it might be useful to mark and enter and if we
11 need to photocopy, we can do that, the two items which
12 Mr. -- I was going to say Mr. Marbob has presented --
13 Mr. Miller has presented.

14 MR. CARR: The two plats, Mr. Stovall?

15 MR. STOVALL: There are two plats.

16 MR. CARR: They would be our Exhibits 9 and
17 10.

18 MR. STOVALL: Okay. And then for reference
19 I would say let's call Exhibit 9 the plat on which is
20 outlined the existing waterflood, Burch-Keely
21 waterflood outline. And Exhibit 10 will be the plat
22 on which is outlined the entire area and is indicated
23 the proposed injection wells. The examiner has made
24 number notations on those so we can -- if we need to
25 reproduce them so we can have them back, we can do

1 that.

2 MR. CARR: Mr. Stogner, with your
3 permission, I would move the admission of Exhibits 9
4 and 10, and we will make copies available for the
5 record.

6 EXAMINER STOGNER: Exhibits 9 and 10 will
7 be admitted into evidence at this time. Do you need
8 these back?

9 MR. CARR: Yes, sir.

10 EXAMINER STOGNER: You will mark them more
11 sufficiently other than that.

12 MR. STOVALL: Who is Dawn Allen Willis? Is
13 she related to Jack Allen.

14 THE WITNESS: It's Jack's daughter. She
15 did the work, was scheduled to testify if we had
16 problems -- well, we were anticipating having some
17 problems that didn't arise. She was going to qualify
18 before the Commission to testify in this. She had a
19 child recently, and she is fairly, what you would say
20 not young for child-bearing years. But she's a
21 competent geologist. Don't get me wrong.

22 MR. STOVALL: No relationship between the
23 two; right?

24 MR. CARR: And she'll be happy to have that
25 in the record, I'm sure.

1 THE WITNESS: Sorry about that.

2 MR. STOVALL: I think I'm, as I say, as
3 confused as I need to be.

4 EXAMINER STOGNER: Mr. Carr, do you have
5 anything further?

6 MR. CARR: I have nothing further, Mr.
7 Stogner.

8 EXAMINER STOGNER: I have nothing further
9 to confuse the issue. If there's nothing further in
10 case 10810, it will be taken under advisement at this
11 time, and if you will supply me with Exhibits 9 and
12 10.

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CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
 COUNTY OF SANTA FE)

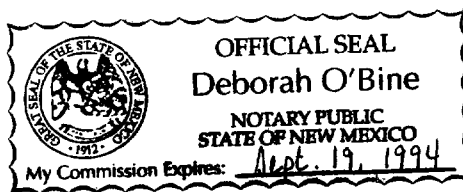
I, Deborah O'Bine, Certified Shorthand Reporter and Notary Public, HEREBY CERTIFY that I caused my notes to be transcribed under my personal supervision, and that the foregoing transcript is a true and accurate record of the proceedings of said hearing.

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, August 28, 1993.

Deborah O'Bine

DEBORAH O'BINE
 CCR No. 63



I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 10810, heard by me on 26 August 19 93.

[Signature], Examiner
 Oil Conservation Division