

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 MERIDIAN OIL, INC.,)
FOR COMPULSORY POOLING, RIO ARRIBA)
COUNTY, NEW MEXICO)
_____)

CASE NO. 11,406

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

RECEIVED

October 19th, 1995

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Santa Fe, New Mexico

Oil Conservation Division

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, October 19th, 1995, 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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 Examiner Hearing
 CASE NO. 11,406

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A P P E A R A N C E S

FOR THE APPLICANT:

W. PERRY PEARCE
 Attorney at Law
 Director, State Affairs
 Meridian Oil
 300 Galisteo, Suite 101
 Santa Fe, New Mexico 87501

* * *

1 WHEREUPON, the following proceedings were had at
2 8:59 a.m.:

3 EXAMINER CATANACH: At this time I'll call Case
4 11,406, the Application of Meridian Oil, Inc., for
5 compulsory pooling, Rio Arriba County, New Mexico.

6 Are there appearances in this case?

7 MR. PEARCE: Mr. Examiner, Perry Pearce for
8 Meridian Oil in this matter.

9 I have three witnesses who need to be sworn.

10 EXAMINER CATANACH: Any additional appearances?
11 Will the three witnesses please stand to be sworn
12 in?

13 (Thereupon, the witnesses were sworn.)

14 MR. PEARCE: Thank you, sir.

15 VAN L. GOEBEL,

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

18 DIRECT EXAMINATION

19 BY MR. PEARCE:

20 Q. For the record, would you please state your name
21 and place of residence?

22 A. My name is Van Goebel. I'm a landman for
23 Meridian Oil. I live in Farmington, New Mexico.

24 Q. Mr. Goebel, have you previously been qualified in
25 the area of -- as an expert in petroleum land matters

1 before this Division or Commission?

2 A. Yes, I have.

3 Q. And are you familiar with the Application filed
4 in Case 11,406 by Meridian that's under consideration
5 today?

6 A. Yes, I am.

7 MR. PEARCE: Mr. Examiner, I would tender Mr.
8 Goebel as an expert in the field of petroleum land matters.

9 EXAMINER CATANACH: Mr. Goebel is so qualified.

10 MR. PEARCE: Thank you.

11 Q. (By Mr. Pearce) Mr. Goebel, would you please
12 begin by referring to what has been marked in the booklet
13 of exhibits as Exhibit Number 1 and describe for the
14 Examiner and those in attendance what's reflected on that
15 exhibit?

16 A. Exhibit Number 1 is a copy of our Application
17 requesting that we be issued an order by the Commission
18 pooling the Mesaverde owners under the east half of Section
19 22, 25 North, 3 West, in our Arco Hill Number 1 well.

20 Attached to that is also our Application for the
21 pooling, along with Exhibit A to that Application, a land
22 plat showing the east half of Section 22 and the ownership
23 under the east half as to the Mesa Verde formation.

24 Q. Mr. Goebel, while we have that Exhibit A to the
25 Application before us, could you describe briefly for the

1 Examiner and those ion attendance what Meridian seeks to
2 accomplish by this Application?

3 A. Meridian has the Arco Hill Number 1 well, which
4 was completed in 1985 as a Dakota Gallup well. It is under
5 the West Lindrith Gallup-Dakota Pool, on 160-acre spacing.

6 The Dakota is depleted. This well is a candidate
7 to be plugged.

8 Prior to plugging, we would like to attempt a
9 recompletion to the Mesaverde formation, which is under the
10 Blanco-Mesaverde Pool rules, which requires 320-acre
11 spacing. We'd like to dedicate the east half of Section 22
12 to the Mesaverde recompletion.

13 Q. And I gather by the percentage numbers shown on
14 that Exhibit A to the Application that Meridian had 100
15 percent of the working interest in the northeast quarter of
16 Section 22; is that correct?

17 A. That is correct. In the northeast quarter we
18 have 100 percent of the operating rights.

19 In the southeast quarter we have no interest, and
20 we have a variety of interest owners under the southeast
21 quarter, we've requested to participate in the
22 recompletion.

23 Q. All right. And I would direct your attention,
24 please, to Exhibit B to the Application, which is part of
25 Exhibit 1, and are the names and addresses of those

1 interest owners in the southeast quarter of Section 22
2 shown on that exhibit?

3 A. Yes, they are.

4 Q. All right. And in the course of your
5 responsibilities for Meridian, did you attempt to contact
6 those interest owners in the southeast quarter?

7 A. Yes, we did.

8 Q. Let's look, please, at Exhibit Number 2, and
9 could you describe that for us, please?

10 A. Okay, under Exhibit 2 is a letter that I sent out
11 by certified mail, July 17th, to the working interest
12 owners under the Mesaverde formation, proposing the
13 Mesaverde recompletion in Arco Hill.

14 In this letter we indicated the estimated cost of
15 the recompletion, listed the working interest owners and
16 their interest and their estimated share of the cost for
17 the project.

18 Attached to this letter were also an operating
19 agreement, along with an AFE and a wellbore diagram and a
20 pertinent data sheet on the well.

21 We requested them to either make an election to
22 participate or to go nonconsent under the operating
23 agreement attached.

24 Q. Mr. Goebel, at this time let me address with you
25 an issue that will be addressed again subsequently when the

1 AFE itself is presented, but is Meridian seeking any
2 participation from the working interest owners in the
3 southeast quarter for the value of the existing wellbore in
4 the Gallup-Dakota Pool?

5 A. No, we're not asking them to pay any additional
6 cost for the existing wellbore. We're --

7 Q. And therefore -- I'm sorry.

8 A. I was going to say, we're asking them only to
9 participate in the plugging of the Dakota and to join us in
10 the recompletion of the Mesaverde.

11 Q. And those are the costs reflected as the
12 Estimated Share column on the letter, Exhibit 2?

13 A. Yes.

14 Q. Attached in Exhibit 2 is a letter ballot. Could
15 you describe for the Examiner, please, the response which
16 you received on that letter ballot?

17 A. Okay, under Exhibit 2 on the July 17th letter --

18 Q. Would it assist us to refer the Examiner to
19 Exhibit 3?

20 A. It probably would.

21 Q. Okay, let's do that, please.

22 A. Okay, under Exhibit 3 is the page from the
23 operating agreement, which is the Exhibit A to the
24 operating agreement where we list the formation to be
25 covered, and we list the operating parties under the

1 agreement.

2 We have added a column next to the working
3 interest owners indicating their approval, whether yes or
4 no.

5 Meridian is yes.

6 RB Operating Company, we had no response.

7 Hooper, Kimball and Williams requested that we
8 take a farmout for their interest. We evaluated that
9 request and determined we were not interested in farming
10 out their interest and advised them that we were not
11 interested and asked them to make an election either to
12 participate or go nonconsent. They have made no further
13 response.

14 IBEX has agreed to participate and has joined in
15 signing the operating agreement. They have executed the
16 signature page to the operating agreement.

17 PC, Limited, has also elected to participate in
18 the recompletion and has executed the signature page to the
19 operating agreement, and also both companies have executed
20 the AFE for the costs.

21 The next three, Warren Clark, care of Mabel Reed
22 Trustee; Warren Clark, care of Mabel Reed and W.W. Oatman
23 and Carolyn Clark Oatman -- I talked to them on the
24 telephone. They requested economic information that we had
25 done internally for our own evaluation. I advised them

1 that it was not Meridian's policy to give out its economic
2 evaluations, that each party would have to run their own
3 evaluation. After advising them of that, I have not heard
4 from them since.

5 Q. Let's look back, if we can, Mr. Goebel, at the
6 third page of Exhibit Number 2, which is a letter signed by
7 you, addressed August the 1st. What's reflected in that
8 letter?

9 A. In the letter of August 1st, we sent to the
10 interest owners three logs. We realize that they were not
11 in the initial well that we had 100-percent interest in and
12 that they may need additional information. So in this
13 letter we sent them additional logs for their evaluation.

14 Q. And the Warren Clark and Oatman parties that you
15 addressed in Exhibit 3 received that information so they
16 could make their own evaluation; is that correct?

17 A. Yes, all the interest owners received the same
18 information. And attached to that letter is the mailing
19 list.

20 Q. All right, thank you, sir. Did you address Ramco
21 NYL, the last party shown on Exhibit 3?

22 A. Yes, they had indicated they had acquired
23 interest in that area, and they could not tell from the
24 records they had received through their acquisition that
25 they owned anything there. I sent them a copy of the title

1 opinion we had done and have not heard from them since.

2 Q. Looking at the second page of Exhibit Number 3,
3 Mr. Goebel, am I correct that the percentages reflected on
4 the map itself are percentages in the quarter section, and
5 the percentages reflected on the previous page are the
6 percentages in the 320 -- proposed 320 spacing unit?

7 A. Yes, that's correct.

8 On the land plat what I have indicated there is
9 the ownership as to the northeast quarter and the southeast
10 quarter.

11 And what you see on Exhibit A to the operating
12 agreement is their drill block working interest.

13 Q. Turn your attention, please, to what we have
14 marked as Exhibit Number 4, and could you describe that for
15 the Examiner and those in attendance?

16 A. Okay, Exhibit 4 is a copy of the operating
17 agreement which was submitted to the working interest
18 owners, which would be used to govern the operations of the
19 well, the recompletion as to the Mesaverde.

20 Q. Okay. And this is the operating agreement that
21 was provided to all of the interest owners; is that
22 correct?

23 A. Yes.

24 MR. PEARCE: All right. Let's turn, please, to
25 page number 4 of the COPAS attachment to that operating

1 agreement, and the COPAS is Exhibit C.

2 And I apologize, Mr. Examiner, it's two-thirds of
3 the way through the package at page numbered 4.

4 Q. (By Mr. Pearce) Could you discuss, please, for
5 the Examiner and those in attendance the drilling well rate
6 and producing well rates of overhead shown on that exhibit?

7 A. Okay, under the COPAS agreement on page 4 is the
8 drilling and producing overhead rates.

9 For the drilling rates we're requesting \$4176.

10 For the producing well rate we're requesting
11 \$452.41.

12 Q. Are those drilling and producing well rates
13 within the range of values set forth in the *Ernst & Whinney*
14 report that is frequently used before the Division?

15 A. Yes, they are.

16 Q. And do you believe that that is generally in line
17 with the drilling and producing overhead rates of other
18 operators in this area of the San Juan Basin for these
19 types of wells?

20 A. Yes, they are.

21 Q. And do you believe, based on Meridian's
22 experience, that these are fair and reasonable drilling and
23 producing overhead rates?

24 A. Yes.

25 Q. Anything else you would like to highlight for the

1 Examiner on Exhibit Number 4, Mr. Goebel?

2 A. No, not at this time.

3 Q. Mr. Goebel, were Exhibits 1 through 4 prepared by
4 you or under your direction and supervision?

5 A. Yes.

6 MR. PEARCE: Mr. Examiner, at this time I would
7 move the admission of Meridian Exhibits 1 through 4.

8 EXAMINER CATANACH: Exhibits 1 through 4 will be
9 admitted as evidence.

10 MR. PEARCE: I have nothing further of the
11 witness at this time, Mr. Examiner.

12 EXAMINATION

13 BY EXAMINER CATANACH:

14 Q. Just to double-check, Mr. Goebel, the parties
15 that you're pooling right now at this point in time are
16 R.B. Operating; Hooper, Kimball and Williams; the Warren
17 Clark interests; and the Carolyn Oatman and the Ramco
18 interest?

19 A. Yes.

20 Q. Do you anticipate joinder from any of these
21 parties subsequently to this hearing?

22 A. No, I don't think so.

23 Q. As I understand it, Meridian is just seeking to
24 recover recompletion costs from those various interest
25 owners in the southeast quarter?

1 A. And the share of the costs for plugging the
2 Dakota.

3 Q. And the share of the costs for plugging.
4 Your recompletion cost estimates -- Where did I
5 see that?

6 A. That would be Exhibit 6. You were looking for
7 the AFE? Is that what you were --

8 Q. Yeah, but you had it somewhere else --

9 A. I had it in the letter that I sent out to the
10 partners.

11 Q. And that is the same that's on Exhibit 6?

12 A. Yes.

13 Q. \$226,610?

14 A. Yes.

15 Q. Okay. Those are the costs you're seeking to
16 recover from those interest owners.

17 And those interest owners that are going to
18 participate, they just pay their share of that cost --

19 A. Uh-huh.

20 Q. -- to participate in the well?

21 A. Uh-huh.

22 Q. Okay. Which party did you say you have requested
23 a farmout?

24 A. That was Hooper, Kimball and Williams.

25 Q. And Meridian determined that they did not care to

1 farm that out?

2 A. Yes, that's correct.

3 Q. At that point, you haven't had any further
4 discussion with that party?

5 A. No, and I think that they may have just figured
6 we would go ahead and force-pool eventually, because under
7 the operating agreement we gave them on this initial well
8 the opportunity to elect a nonconsent there, if they didn't
9 want to participate.

10 Q. Within the operating agreement, what is the
11 nonconsent penalty within there?

12 A. Three hundred percent.

13 Q. Is that cost plus 200 percent?

14 A. Yes.

15 Q. Okay, so it's basically the same as we would
16 generally issue in a force-pooling order?

17 A. Yes.

18 Q. Have any of the parties that have agreed to join
19 in the well expressed any concern over the overhead rates?

20 A. No. In fact they executed the signature pages to
21 the operating agreement, agreeing to those rates.

22 EXAMINER CATANACH: Okay, I have nothing further
23 of the witness, Mr. Pearce.

24 MR. PEARCE: One matter, if I may ask a few more
25 questions of Mr. Goebel.

1 FURTHER EXAMINATION

2 BY MR. PEARCE:

3 Q. Mr. Goebel, assuming this force-pooling order is
4 granted by the Division, it will be necessary, as I
5 understand it, to communitize these two federal leases; is
6 that correct?

7 A. That's correct.

8 Q. And we would like a provision in the order, as I
9 understand it, to indicate that subsequent to that
10 communitization, the force and effect of the Division's
11 order will remain the same; is that correct?

12 A. Yes.

13 MR. PEARCE: Okay. I have nothing further.

14 EXAMINER CATANACH: The witness may be excused.

15 MR. PEARCE: Bill?

16 BILL HOBBS,17 the witness herein, after having been first duly sworn upon
18 his oath, was examined and testified as follows:

19 DIRECT EXAMINATION

20 BY MR. PEARCE:

21 Q. Thank you, sir. For the record, would you please
22 state your name and place of residence?23 A. My name is Bill Hobbs. I'm a petroleum geologist
24 for Meridian Oil in Farmington, New Mexico, where I reside.

25 Q. And how long have you been employed as a

1 petroleum geologist by Meridian in Farmington?

2 A. Eight years.

3 Q. And have you testified before the New Mexico Oil
4 Conservation Division or Commission previously and had your
5 credentials as an expert in petroleum geology accepted and
6 made a matter of record?

7 A. Yes, I have.

8 Q. Are you familiar with the Application filed in
9 Case 11,406 by Meridian under consideration today?

10 A. Yes, I am.

11 MR. PEARCE: Thank you.

12 Mr. Examiner, we tender the witness as an expert
13 in the field of petroleum geology.

14 EXAMINER CATANACH: He is so qualified.

15 MR. PEARCE: Thank you.

16 Q. (By Mr. Pearce) I would refer your attention,
17 please, to what we have marked as Exhibit 5 in the booklet
18 before you. Could you describe for the Examiner and those
19 in attendance what's reflected on that exhibit?

20 A. We basically have four maps under Exhibit 5.

21 The first map is used as an index map for the
22 project. The larger dark outline shows the outcrop pattern
23 of the Mesaverde formation, which basically shows the
24 outline of the San Juan Basin. The darker outline within
25 that shows the areal extent of current Mesaverde production

1 within the Basin.

2 And if you'll notice on the southeast end of that
3 large trend, there is a dot on the map with an arrow
4 pointing at the location of the Arco Hill Number 1 well.

5 So this project to recomplete the Arco Hill
6 Number 1 to the Mesaverde will be an attempt to extend
7 known Mesaverde production approximately one mile to the
8 southeast of the main producing trend in the Basin.

9 Q. Okay. Let's look at the second page of Exhibit
10 Number 5, Mr. Hobbs. Would you describe what's shown on
11 that exhibit for us?

12 A. This is a structure contour map for Section 22,
13 the section in question. This map shows two wells. The
14 well in the northeast quarter is the Arco Hill Number 1.
15 The well in the southwest quarter is the Arco Hill Number
16 2. Those two wells are the only Mesaverde penetrations in
17 the section.

18 There's also two shallower Pictured Cliff wells
19 which show up on the next exhibit.

20 Both the Arco Hill Number 1 and Number 2 were
21 completed in 1985, in the Gallup-Dakota. Both of those
22 wells have been nonproductive for approximately three
23 years, and we started evaluating the Arco Hill in response
24 to a BLM demand to do something with these wellbores.

25 The structure contour interval is based on the

1 middle Lewis time stratigraphic marker, which is
2 approximately 315 feet above the top of the Mesaverde
3 formation.

4 There are no structural markers within the
5 Mesaverde because of the stratigraphic changes.

6 The map basically shows north northeast dip, very
7 mild dip, on the order of about 40 feet per mile. And
8 structure really plays a very minor role in the prospect.

9 Q. Mr. Hobbs, you mentioned a couple of other wells.
10 Let's turn to the third page of Exhibit Number 5. I
11 believe you said they were Pictured Cliff completions.
12 Could you point those out for the Examiner?

13 A. Yes, this map is -- The two dark dots are the two
14 Arco Hill Gallup-Dakota completions.

15 The two wells that are open with the gas-well
16 spokes, the Number 2 and the Number 10, those are the Hill
17 Number 2 and Number 10 Pictured Cliff completions, which
18 were not drilled any deeper than the base of the Pictured
19 Cliffs.

20 Q. Okay. Now, would you discuss for the Examiner
21 what's generally reflected on this exhibit?

22 A. Because of the anomalous nature of trying to
23 relate log character to sporadic production results in this
24 township, I chose to make a gross clean Mesaverde sandstone
25 map, which includes the Cliff House, Menefee and Point

1 Lookout members, to depict.

2 And what this map shows is a -- in general,
3 around the Arco Hill Number 1 well, in the northeast
4 quarter, it does show that there is a clean sand maximum,
5 located in the northeast quarter of that section. And the
6 sand -- The amount of clean sand which could be available
7 as reservoir thins down to less than 120 feet to the
8 southwest.

9 Q. Okay. Reflective of that -- the results of the
10 isopach map, I would ask you to look at the fourth page of
11 Exhibit Number 5 and describe that for the Examiner,
12 please.

13 A. This map -- Just to give a little bit larger view
14 of the project area, Section 22 is down in the lower right-
15 hand corner of this map. This is a four-section map,
16 including Sections 15, 16, 21 and 22.

17 This map also shows the location of stratigraphic
18 cross-section A-A', which goes through three wells, ending
19 up at A-A' at the Arco Hill Number 1 well. That cross-
20 section is enclosed in a packet at the back of the booklet
21 here for reference.

22 This map is a Mesaverde cumulative production
23 isopach map.

24 We've spotted all the oil and gas penetrations in
25 these four sections, so you can see that the Pictured

1 Cliffs well and the -- basically the Gallup-Dakota wells,
2 most of which in this area have been recompleted during the
3 middle Eighties, back up to the Mesaverde formation. There
4 are no Mesaverde completions in Section 22.

5 I chose to make a cross-section through the two
6 closest Mesaverde completion wells:

7 In Section 21, the Ora Number 2, which has a
8 cumulative production of 19 million cubic feet of gas and
9 is nearly inactive, making less than one MCF per day.

10 The well in the southeast quarter of Section 16,
11 the Number 3 Schalk 41, has a cumulative production of 119
12 million cubic feet of gas, and it is also nearly inactive.

13 So those wells are near their productive limit.

14 It should also be noted that within Sections 15,
15 16 and 21, all of those wells have only been completed in
16 the Point Lookout member of the Mesaverde formation. This
17 is partly to the wet-looking nature of the Menefee and
18 Cliff House sands on a fairly modern set of logs. Most of
19 these wells were drilled in the late Seventies through mid-
20 Eighties, so the log quality is fairly good.

21 Q. Mr. Hobbs, would you restate for the Examiner,
22 please, the members of the Mesaverde that Meridian expects
23 to complete in the Arco Hill well?

24 A. We are going to complete the well in the Point
25 Lookout, which is what the other wells in the other three

1 sections on this map have been completed in. We also are
2 going to attempt a completion in the Menefee and Cliff
3 House members of the Mesaverde formation.

4 Q. Mr. Hobbs, do you believe that based on your
5 review of geological data in the area surrounding the Arco
6 Hill Well Number 1, that there is a significant risk of
7 failure or moderate success, based on geological review?

8 A. Yes, considering where the project is located,
9 Mesaverde production stopped in the general Mesaverde trend
10 going to the southeast, due to the very sporadic,
11 marginally economic results. To date there are
12 approximately 55 Mesaverde completions in this township, of
13 which only about ten are economic, by pretty general
14 standards.

15 The log character in here, because all three
16 members are becoming very laden with clay, whether it be
17 original clay or diagenetic or secondary clay, has rendered
18 the logs very difficult to interpret in terms of whether or
19 not there is gas in each of these members and how much gas
20 would be recoverable from each member.

21 Q. Mr. Hobbs, were each of the parts of Exhibit 5
22 prepared by you or under your direction and supervision?

23 A. Yes, they were.

24 MR. PEARCE: Mr. Examiner, I move the admission
25 of Meridian Exhibit Number 5.

1 EXAMINER CATANACH: Exhibit Number 5 will be
2 admitted as evidence.

3 MR. PEARCE: I have nothing further of this
4 witness at this time, Mr. Examiner.

5 EXAMINATION

6 BY EXAMINER CATANACH:

7 Q. Mr. Hobbs, are you guys proposing a 200-percent
8 risk penalty in this case?

9 A. Yes, we are.

10 Q. Is that based on the geologic discussion we just
11 had?

12 A. Yes.

13 Q. Okay. Is the closest Mesaverde production to the
14 Arco Hill Number 1, is that located in Section 16?

15 A. Yes, 16 and 21, the other two wells on cross-
16 section A-A'.

17 Q. Okay. Are both those wells completed in all
18 three members of the Mesaverde formation?

19 A. No, they're just Point Lookout only. All the
20 wells on this map are completed in just the Point Lookout
21 member.

22 Q. Is there not any potential for Menefee or --
23 What's the other one?

24 A. Cliff House.

25 Q. Cliff House, yeah. -- in those wells?

1 A. I don't believe there is in the Number 3 Schalk
2 41.

3 The Cliff House in this whole township, the clean
4 sand members exhibit very fast facies changes. In fact,
5 we're kind of -- for the whole Mesaverde trend, we're only
6 about two miles north of what I believe are interpretively
7 100 percent water in all three members.

8 So part of the risk is what is the -- do we have
9 an effective stratigraphic trap seal updip from Section 22?

10 The log character, particularly in the Cliff
11 House, varies considerably in the whole township. It has
12 generally low resistivity and does not fit the normal pay
13 criteria we use up in the main trend of the Mesaverde. So
14 it's been very difficult to interpret.

15 The other problem that I think has discouraged
16 other operators in the past from attempting completions in
17 the Cliff House -- and we see this even in the wells that
18 were completed just in the Point Lookout -- is the sporadic
19 occurrence of water during production and not being able to
20 tell exactly where that water is coming from, based on log
21 character.

22 Q. You've looked at the log on the Arco Hill Number
23 1?

24 A. Yes, sir.

25 Q. And do you see that as having more -- a better

1 potential for Mesaverde production than the wells in
2 Section 16 and 21?

3 A. Yes, particularly relative to the well in Section
4 16, the Schalk 41 well. The density neutron logs in that
5 well don't even exhibit very good approach, which would be
6 an indication of gas, gas effect. And we do see some
7 approach and some minor crossover in the log from the Arco
8 Hill well, which indicates that we may have more gas
9 saturation than some of the offset wells.

10 But again, without having production from that
11 particular zone, to compare log results -- or logs to
12 production results, it would be hard to predict what the
13 irreducible water saturation would be, and moveable water.

14 Q. In all likelihood, your well will recover more
15 than what's been recovered in that Schalk well?

16 A. Well, that's our intent. We do have a wellbore
17 to work with. If we had to come out and drill a new well,
18 I don't think this well would cut economic muster. But
19 because we do have a wellbore to work with, rather than
20 waste that wellbore, we feel that there -- in spite of the
21 risk, that there is an upside chance that we could at least
22 make some wells as good as in the west half of Section 16.

23 Q. The Schalk well has cumulatively produced 119
24 million; is that correct?

25 A. Yes.

1 Q. And you said it was near depletion?

2 A. Yeah, both of these wells in this information --
3 If you want to look at the cross-section later, the
4 cumulative production and the current daily production for
5 both of those wells is down at the bottom, and both of them
6 are making less than one MCF per day.

7 Q. Are most of the other producing wells in this
8 township located north and west of the Arco Hill?

9 A. Yes, there is no Mesaverde production to the east
10 of us. And to the south of us, in Section 28 to the south
11 of us, there was a Point Lookout completion attempt. We
12 haven't been able to find the results of that, but they did
13 squeeze the zone immediately. And we -- our -- My
14 interpretation is that we are stratigraphically separated
15 from that well and do expect better results. We suspect
16 that they got some water, which is why they squeezed it
17 off.

18 Q. What kind of recoveries would you have to
19 accomplish in the Arco Hill well for it to be economic? Do
20 you have any ideas?

21 A. I think if we made wells like the Number 2
22 Schmitz and the Number 1 Schalk 41 in the west half of
23 Section 16, we'd be looking at recovering just a little bit
24 more than our investment.

25 And again, those were Point Lookout completions,

1 so that the upside to the project would be in the Menefee
2 and the Cliffhouse.

3 EXAMINER CATANACH: Okay, I have nothing further
4 of this witness.

5 MR. PEARCE: Nothing further of the witness.
6 Thank you, Mr. Examiner.

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

10 DIRECT EXAMINATION

11 BY MR. PEARCE:

12 Q. Thank you, sir. For the record, would you please
13 state your name and place of residence?

14 A. My name is Curtis Newstrom. I'm a petroleum
15 engineer for Meridian Oil. I live in Farmington, New
16 Mexico.

17 Q. Mr. Newstrom, have you testified before the New
18 Mexico Oil Conservation Division or Commission previously
19 and had your credentials accepted and made a matter of
20 record?

21 A. No, I have not.

22 Q. You are, by education and experience, a petroleum
23 engineer; is that correct?

24 A. Yes.

25 Q. Could you describe for the Examiner and those in

1 attendance your educational background in the field of
2 petroleum engineering?

3 A. I have a bachelor of science in petroleum
4 engineering from Marietta College. I graduated in 1986,
5 and since then I've had nine years of various experience
6 working oilfield service companies and also exploration and
7 production companies. I've worked in California, the Gulf
8 Coast, and in the last two years I've been working in the
9 San Juan Basin with Meridian oil.

10 Q. Could you describe your responsibility since you
11 came to work in the San Juan Basin for Meridian Oil?

12 A. I've done both reservoir and production
13 engineering.

14 Q. And are you familiar with the Application filed
15 in Case 11,406 by Meridian under consideration today?

16 A. Yes, I am.

17 MR. PEARCE: Mr. Examiner, I tender Mr. Newstrom
18 as an expert in the field of petroleum engineering.

19 EXAMINER CATANACH: He is so qualified.

20 Q. (By Mr. Pearce) Mr. Newstrom, to begin, I would
21 like to refer your attention, please, to what we have
22 marked as Exhibit Number 6, and could you describe the
23 contents of that exhibit for the Examiner?

24 A. This is an attachment to our authorization for
25 expenditure. It's a detailed breakdown of our completion

1 cost estimate, and it shows by subcode what we're
2 anticipating as the cost associated with not only the
3 plugging and abandonment of the Dakota-Gallup zone but the
4 recompletion to the Mesaverde.

5 Also, attached on the second page is the tangible
6 cost associated with the facilities work on the location.

7 Q. And was this information provided to the other
8 interest owners in Section 22 with regard to the
9 recompletion of the Arco Hill Well Number 1?

10 A. Yes, it was.

11 Q. And do you believe that the costs reflected on
12 the two sheets of Exhibit Number 6 are in line with
13 generally found costs in the San Juan Basin for work of
14 this type?

15 A. Yes, I do.

16 Q. Anything else you'd like to point out for the
17 Examiner on Exhibit 6?

18 A. Nothing other than the fact that we're not asking
19 for any wellbore value, only to have the parties
20 participate in the plugging of the Dakota Gallup.

21 Q. Thank you. Let's look, please, at Exhibit Number
22 7. Would you describe that exhibit for us, please?

23 A. It's a wellbore diagram of the Arco Hill Number 1
24 in its current condition and also the proposed condition
25 after the recompletion.

1 The left side shows the current wellbore
2 condition, open-ended tubing with Gallup and Dakota perms
3 open between 7090 and 8190.

4 Our plan is to run a cement retainer and squeeze
5 off the existing perforations and recomplete to the Point
6 Lookout, Menefee and Cliff House intervals indicated on the
7 right-hand proposed wellbore diagram and run open-ended
8 tubing for production.

9 Q. Could you restate for the Examiner, for the
10 record, please, the current producing status of the Arco
11 Hill Well Number 1?

12 A. It has been inactive since 1991. It had sporadic
13 production in 1991.

14 Q. And restate for us, please, the proposed
15 perforation zone in the recompleted well.

16 A. We're proposing to come from bottom up and test
17 the Point Lookout as well as the Menefee and Cliff House.
18 We plan to do individual testing in isolation of each zone
19 to see if it's economically viable to complete in either or
20 all of the zones.

21 Q. Anything else you'd like to point out for the
22 Examiner on that exhibit, Mr. Newstrom?

23 A. No, sir.

24 Q. All right. Mr. Newstrom, based on your
25 experience and expertise, do you believe that the granting

1 of the Application filed by Meridian in this case to
2 recomplete the Arco Hill Number 1 and compulsory pool
3 interests to provide a standard 320-acre spacing unit is in
4 the best interests of conservation, the prevention of waste
5 of natural resources, and will act to protect the
6 correlative rights of all interest owners in that section?

7 A. Yes, I do.

8 Q. And do you believe that the costs proposed to
9 perform this work and the drilling and producing overhead
10 rates previously discussed are reasonable and in line with
11 those generally found in this region?

12 A. Yes, I do.

13 MR. PEARCE: Thank you.

14 Mr. Examiner, I would move the admission of
15 Exhibits 6 and 7.

16 EXAMINER CATANACH: Exhibits 6 and 7 will be
17 admitted as evidence.

18 MR. PEARCE: I have nothing further of this
19 witness at this time, Mr. Examiner.

20 EXAMINATION

21 BY EXAMINER CATANACH:

22 Q. Just a couple of questions, Mr. Newstrom.

23 You're going to start from Point Lookout to test
24 for productivity.

25 If those zones are nonproductive, are you going

1 to squeeze them at that time?

2 A. Yeah, that's our intention.

3 Q. And is that cost included in your well cost?

4 A. Yes.

5 Q. Okay.

6 A. We propose three individual fracture treatments
7 for each zone, so that's included in the cost of the
8 stimulation.

9 Q. They're going to be perf'd and frac'd, and then
10 if they're nonproductive they're going to be squeezed?

11 A. Yes, sir.

12 Q. And all those costs are included?

13 A. The remedial costs to squeeze out those zones
14 have not been included. We have -- The remedial cementing
15 costs that are built into it are for plugging the existing
16 formation. We don't anticipate having to squeeze any of
17 the zones.

18 EXAMINER CATANACH: Okay. That's all I have, Mr.
19 Pearce.

20 MR. PEARCE: Thank you. I have nothing further
21 of the witness.

22 EXAMINER CATANACH: The witness may be excused.
23 Is there anything further in this case?

24 MR. PEARCE: I have nothing further.

25 One thing, Mr. Examiner, I apologize. There is

1 one other thing.

2 I have for submission to the record a certificate
3 of mailing and compliance with Order R-8054, subscribed and
4 sworn by Mr. W. Thomas Kellahin in this matter.

5 And if we may, Mr. Examiner, we would like to
6 submit a proposed order in this matter.

7 EXAMINER CATANACH: Okay. Certificate of mailing
8 will be admitted as evidence in this case.

9 And did you say you would like to submit a
10 proposed order?

11 MR. PEARCE: If we may, Mr. Examiner.

12 EXAMINER CATANACH: Certainly, Mr. Pearce.

13 MR. PEARCE: Thank you.

14 EXAMINER CATANACH: All right. There being
15 nothing further in this case, Case 11,406 will be taken
16 under advisement.

17 MR. PEARCE: Thank you, Mr. Examiner.

18 (Thereupon, these proceedings were concluded at
19 9:40 a.m.)

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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 October 25th, 1995.

STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete report of the proceedings in the Examiner hearing of Case No. 11406, heard by me on October 19, 1995.

, Examiner
 Oil Conservation Division