1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION DIVISION
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6	
7	EXAMINER HEARING
8	
9	IN THE MATTER OF:
10	
11	Application of Bird Creek Case 9959
12	Resources, Inc. for compulsory Case 9960
13	Pooling, Eddy County, Consolidated
14	New Mexico
15	
16	
17	TRANSCRIPT OF PROCEEDINGS
18	
19	BEFORE: MICHAEL E. STOGNER, EXAMINER
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21	STATE LAND OFFICE BUILDING
22	SANTA FE, NEW MEXICO
23	June 13, 1990
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- 1 HEARING EXAMINER: Call next case, 9959,
- 2 and at the request of the general counsel of the
- 3 applicant, we're going to consolidate Case Nos. 9959
- 4 and 9960; so I'm going to also call Case No. 9960.
- 5 MR. STOVALL: Both are titled in the same
- 6 manner, the application of Bird Creek Resources, Inc.,
- 7 for compulsory pooling, Eddy County, New Mexico.
- 8 HEARING EXAMINER: I'll call for
- 9 appearances in both cases.
- 10 MR. KELLAHIN: Mr. Examiner, I'm Tom
- ll Kellahin of the Santa Fe law firm of Kellahin,
- 12 Kellahin & Aubrey appearing on behalf of the Applicant
- 13 today, and I have two witnesses to be sworn.
- 14 HEARING EXAMINER: Are there any other
- 15 appearances? Will the witnesses please stand and be
- 16 sworn?
- 17 (Witnesses sworn.)
- MR. KELLAHIN: Mr. Examiner, we've asked
- 19 you to consolidate these two cases for hearing. We
- 20 would, however, request that you enter us separate
- 21 pooling orders for each of the two wells. The primary
- 22 objective of the well is Delaware well production on
- 23 40-acre spacing. Both of these applications are for
- 24 Delaware wells in the same section.
- I'll ask Mr. Larry Robinette, the landman

- 1 for Bird Creek, to describe his efforts on each case
- 2 separately. Then the geologic presentation by Mr.
- 3 Campbell will involve the same displays by which he'll
- 4 describe what in his opinion is the risk factor for
- 5 each of the cases.
- 6 HEARING EXAMINER: Thank you, Mr. Kellahin.
- 7 MR. KELLAHIN: You'll find that we have
- 8 submitted to you separate exhibit packages for each of
- 9 the two cases. In each instance, the first exhibit is
- 10 going to be the Notice of Hearing, then followed by
- 11 the efforts of Mr. Robinette to consolidate the
- 12 interest owners on a voluntary basis, and then finally
- 13 Mr. Campbell's exhibits will follow the land
- 14 correspondence.
- If you're ready to proceed, Mr. Examiner,
- 16 we're ready.
- 17 HEARING EXAMINER: I believe I am.
- LAWRENCE W. ROBINETTE,
- 19 the witness herein, after having been first duly sworn
- 20 upon his oath, was examined and testified as follows:
- 21 DIRECT EXAMINATION
- 22 BY MR. KELLAHIN:
- Q. Mr. Robinette, for the record would you
- 24 please state your name and occupation.
- 25 A. Lawrence W. Robinette. I'm land management

- l consultant, basically filling the position of land
- 2 manager for Bird Creek Resources.
- Q. Have you on prior occasions, Mr. Robinette,
- 4 testified before the Division as an expert petroleum
- 5 landman?
- 6 A. Yes, I have.
- 7 Q. And pursuant to your employment, have you
- 8 made an effort on behalf of Bird Creek Resources to
- 9 consolidate the various mineral interest owners within
- 10 the spacing units for the two subject wells on a
- ll voluntary basis?
- 12 A. Yes, I have.
- MR. KELLAHIN: At this time, Mr. Examiner,
- 14 we tender Mr. Robinette as an expert petroleum
- 15 landman.
- 16 HEARING EXAMINER: Mr. Robinette is so
- 17 qualified.
- 18 O. (BY MR. KELLAHIN) Mr. Robinette, let me
- 19 direct your attention, sir, to the package of
- 20 documents that are marked for Case 9959, and let's
- 21 turn to the  $8-1/2 \times 14$  document marked No. 9. It's
- 22 just beyond your correspondence. And let's use Mr.
- 23 Campbell's structure map for a moment to simply orient
- 24 the Examiner as to the two spacing units that you're
- 25 seeking the pooling orders for.

- 1 First of all, sir, let's look at the grid
- 2 on top of the structure map. And looking at the grid,
- 3 locate for us the 40-acre tract that's the subject of
- 4 Case 9959.
- 5 A. Each of the smaller squares on the map are
- 6 40 acres. The larger squares would be 160. On the
- 7 right-hand side of the map in the center, you see
- 8 Section 15. The initial location is indicated
- 9 outlined in black, darker black as the southeast of
- 10 the southeast quarter of Section 15, 23 South, 28 East
- ll in Eddy County.
- 12 Q. When we look at the second well, which is
- 13 identified by Division Case 9960, identify for the
- 14 Examiner the location of that well.
- 15 A. It's the same section. It's the northwest
- 16 quarter of the northeast quarter of Section 15, 23
- 17 South, 28 East, in Eddy County.
- 18 Q. Describe for the Examiner the land
- 19 ownership arrangements that have necessitated in your
- 20 opinion the need for a compulsory pooling order for
- 21 both of the wells.
- 22 A. First of all, the leases under the east
- 23 half of Section 15 are held by, the production by the
- 24 Yarbro "A" Com. However, the operator of the Yarbro
- 25 "A" Com, now Oxy, formerly Cities Service, set an up

- 1 operating agreement that only covered rights below the
- 2 Base of Bone Springs.
- I cannot explain to you why they did that.
- 4 It's not normally done, but they did it. That left
- 5 all rights from the base of the Bone Springs to the
- 6 surface as they, in this case, lay on the particular
- 7 40's. So the ownership is diverse rather than
- 8 uniform. Had it been under the operating agreement,
- 9 it would be uniform, and obviously we wouldn't be here
- 10 because we would be able to propose wells under the
- 11 operating agreement.
- 12 Secondly, I have farm-out agreements in the
- 13 east half that require continuous drilling. Because
- 14 of the diverse ownership, basically one well within
- 15 the time period will not fulfill all the farm-out
- 16 agreements.
- In other words, if I drill a well -- in
- 18 this case, for example, in the northwest of the
- 19 northeast, I will fulfill obligations under some of my
- 20 farm-out agreements but not all of them, and the same
- 21 thing applies to the well in the southeast southeast.
- 22 Basically one of the reasons that we're pooling other
- 23 than the fact that these people have not made an
- 24 election is the fact that in order to keep this on
- 25 schedule, we have to have, keep it within the time

- 1 frame that I can start these wells and fulfill my
- 2 farm-out agreement obligations.
- Q. In March of this year, Mr. Robinette, you
- 4 were before Examiner Stogner for similar compulsory
- 5 pooling cases in this very area involving two other
- 6 wells, were you not, sir?
- 7 A. That's correct.
- 8 Q. Identify for Examiner Stogner the two 40-
- 9 acre tracts that were the subject of those prior
- 10 hearings and orders.
- 11 A. Yes. That was the northeast northeast of
- 12 Section 15 of 23 South, 28 East, and the northeast of
- 13 the southeast of Section 15 of 23 South, 28 East.
- MR. KELLAHIN: For your information, Mr.
- 15 Examiner, the northeast northeast of 15 is Order No.
- 16 R-9142, and the northeast of the southeast in 15 is
- 17 Order No. R-9143.
- 18 HEARING EXAMINER: Thank you, Mr. Kellahin.
- 19 Q. (BY MR. KELLAHIN) Were the parties that
- 20 were pooled and the prior orders entered by the
- 21 Division earlier this year, did they eventually go
- 22 nonconsent of the pooling order or did they elect to
- 23 participate?
- A. Only one party went nonconsent, which we've
- 25 never received a reply from, and it was a minor

- 1 interest, just barely over 1 percent. The remaining
- 2 parties, all the major parties, participated.
- 3 Q. Are you dealing with some of the same
- 4 parties now in the current two pooling cases before
- 5 the examiner today?
- 6 A. In the northwest of the northeast, the
- 7 parties being pooled there are the same parties that
- 8 were pooled in the case for the northeast northeast
- 9 with the exception of A. W. Dugan was the only new
- 10 one. In the southeast southeast, one of the two
- 11 parties is the same, being Santa Fe Energy, and the
- 12 other party, Parker & Parsely, is new.
- 13 Q. Let's start now specifically with reference
- 14 to consolidate the acreage for Case 9959, which is the
- 15 southeast of the southeast of 15.
- 16 A. Okay.
- 17 Q. Describe for us your first efforts to
- 18 obtain voluntary agreement for a drilling of the well
- 19 in the east half of the section.
- 20 A. Basically, we started back in December
- 21 proposing to drill a well, the initial location of
- 22 which was to be in the northeast northeast, and
- 23 requested they grant a farmout to those parties --
- 24 let's see, this is case is southeast southeast, isn't
- 25 it?

- 1 Q. Yes, sir.
- 2 A. We made a proposal to those parties because
- 3 one of the letters here should be in the other stack,
- 4 I think, the Santa Fe Energy letter. Santa Fe is one
- 5 company who was throughout the whole east half.
- 6 Q. Exhibit No. 2 will represent the type of
- 7 letter sent to Santa Fe approximately during this
- 8 period of time?
- 9 A. Right.
- 10 Q. And represented your initial efforts to
- ll consolidate interest owners in the east half?
- 12 A. Right. Specific well -- in the case of
- 13 Santa Fe because they had interests throughout the
- 14 entire east half, the one location in the northeast
- 15 northeast was applicable.
- However, on Exhibit No. 3, you'll notice it
- 17 was sent to Maddix Energy care of Parker & Parsley
- 18 Petroleum. It was sent that way because on the record
- 19 that is still how it appears, even though we know it
- 20 is Parker & Parsley Development Partners. There we
- 21 proposed a well in the southeast southeast of 15 and
- 22 requested that they participate or farm out.
- Q. Let's go to Exhibit 4 and have you identify
- 24 and describe that.
- 25 A. On April the 10th, I made a formal proposal

- l to the parties in the southeast southeast --
- 2 MR. KELLAHIN: Time out here, Larry.
- 3 (Thereupon, a discussion was held
- 4 off the record.)
- 5 HEARING EXAMINER: Thank you, Mr. Kellahin,
- 6 you cleared the hall. Can you repeat that last
- 7 question?
- 8 Q. (BY MR. KELLAHIN) When we go to Exhibit
- 9 No. 4, what does that represent?
- 10 A. That represents a letter sent on April the
- ll 10th formally proposing the well. This was sent by
- 12 certified mail to all the parties in the southeast
- 13 southeast of 15.
- 14 Q. This is the April request for this specific
- 15 well in the southeast southeast?
- 16 A. That's correct.
- 17 Q. As of today's hearing, has J R. Rowan,
- 18 Inc., elected to participate on a voluntary basis?
- 19 A. Yes, they have.
- 20 Q. Turn to Exhibit No. 5 and identify and
- 21 describe the purpose of that letter.
- 22 A. It's the same letter sent to Parker &
- 23 Parsley Development Partners, L.P.; so between the
- 24 December letter and the April letter, we determined
- 25 that's how the ownership was; although I think on the

- 1 record they probably need to still make the
- 2 correction. That was a letter sent proposing the well
- 3 in southeast southeast to Parker & Parsley.
- 4 Q. What interest does Parker & Parsley have in
- 5 the spacing unit for this well?
- 6 A. They have 50.00493 percent.
- 7 Q. Have you received any response from Parker
- 8 & Parsley?
- 9 A. Yes. I've talked to them on the
- 10 telephone. They've made no written response. I fully
- ll expect them to participate. They've indicated that
- 12 they would do so, but they have not indicated that in
- 13 writing. They've only indicated verbally that they
- 14 were going to participate. They have some discussions
- 15 about completion techniques and things like that,
- 16 technical items, but I fully expect them to
- 17 participate; however, they have not made that election
- 18 in writing.
- 19 Q. Turn to Exhibit 6 and identify and describe
- 20 the purpose of that correspondence.
- 21 A. It's the same letter, April the 10th, to
- 22 Santa Fe on the southeast southeast. In the case of
- 23 Santa Fe, we previously made an agreement with them
- 24 regarding the previous two wells we pooled. We expect
- 25 to make an agreement with them covering the remainder

- 1 of the east half to where we won't have to have them
- 2 on any other pooling, as far as any other units in
- 3 their concern.
- I fully expect Santa Fe to participate.
- 5 They did participate in the northeast northeast. They
- 6 are participating in the northeast southeast. Again,
- 7 it's just a matter they have not made a written
- 8 election.
- 9 Q. Turn to Exhibit 7, identify and describe
- 10 the purpose of that letter.
- 11 A. That is a letter to Pogo Producing covering
- 12 the southeast southeast. Pogo Producing has elected
- 13 -- basically we made an agreement with Pogo in which
- 14 they would have committed to either farm out or
- 15 participate in any subsequent units in the entire east
- 16 half.
- 17 Q. So after filing the application and as of
- 18 today's hearing then, Pogo, to your satisfaction, has
- 19 made the necessary contractual commitments and --
- 20 A. Yes. We have a written letter agreement
- 21 with Pogo.
- 22 Q. So we may delete Pogo?
- 23 A. Yes.
- Q. When we look at the Santa Fe Energy
- 25 Operating Partnership, what interest do they have in

- 1 the spacing unit?
- 2 A. They have -- I'll have to look at my file
- 3 to see exactly. I believe it's 5.13 percent.
- 4 MR. STOVALL: Mr. Kellahin, are we
- 5 southeast southeast when you're asking that question?
- 6 MR. KELLAHIN: Yes, sir. We haven't
- 7 changed to the other one yet.
- 8 THE WITNESS: Santa Fe, 2.77956 percent.
- 9 Their interest was split into two parts; so I believe
- 10 we might have missed that one on the initial, a little
- 11 less than 3 percent.
- 12 Q. (BY MR. KELLAHIN) Mr. Robinette, why are
- 13 you seeking the aid of a compulsory pooling order now
- 14 rather than waiting and giving Santa Fe and Parker &
- 15 Parsley additional time in which to attempt to reach
- 16 voluntary agreement?
- 17 A. Basically, like I said, I have to keep the
- 18 wells on schedule due to the time it takes to file
- 19 pooling, have the order come out 30 days after that.
- 20 If I wait too long and someone has not made a written
- 21 election, then I'm caught by the time it takes to get
- 22 the process done, and I've gone beyond the time I have
- 23 on my continuous drilling.
- Q. And you would therefore subject certain of
- 25 your interests to termination because you failed to

- 1 satisfy the farm-out agreement?
- 2 A. In the case of the southeast southeast,
- 3 we're talking about 37-1/2 percent of the unit would
- 4 be in jeopardy because of that.
- 5 Q. Turn to Exhibit 8 and identify and describe
- 6 that for me.
- 7 A. That's the AFE that we sent to all the
- 8 parties.
- 9 Q. Have you received any objection from any of
- 10 the proposed working interest owners to the AFE cost?
- 11 A. No, we haven't. As a matter of fact, we've
- 12 modified this AFE from our previous AFE, which was
- 13 \$321,500, and we've brought it down based on the cost
- 14 experience we've had in the other wells.
- 15 Q. You talk about other wells and other AFE.
- 16 What specific other wells?
- 17 A. We have drilled -- at this time, we have
- 18 six wells we've drilled in the west half of 14, one of
- 19 which is -- five of which are on line, one of which is
- 20 still in the process of testing. We have drilled two
- 21 wells in the east half of 15, one of which is drilling
- 22 in the northeast southeast, and one of which is
- 23 waiting on completion in the northeast northeast of
- 24 15.
- 25 Q. In the prior orders entered by the Division

- 1 in April of this year for the two previous wells,
- 2 Examiner Stogner used an overhead rate of \$485.31 per
- 3 month drilling and \$438 per month producing well
- 4 rate. In your opinion, are those still accurate and
- 5 reasonable costs to be applied in a pooling order?
- 6 A. Yes.
- 7 Q. Let's turn now, sir, to the efforts that
- 8 you have made to consolidate on a voluntary basis the
- 9 necessary interest owners for the well in the
- 10 northwest of the northeast of this section.
- 11 Again briefly summarize for us your efforts
- 12 as regards this specific well?
- 13 A. As regards the case of most of the parties,
- 14 we have proposed the well originally in the northeast
- 15 northeast. The only exception to that fact was A. W.
- 16 Dugan. However, subsequently upon survey, we found a
- 17 small piece of A. W. Dugan's property, which was a
- 18 railroad right of way extended into the northeast
- 19 northeast of 15. Although we did not pool them, they
- 20 participated in that well.
- 21 So they were not contacted originally on
- 22 the December letter because they had no interest. The
- 23 only interest we showed for them at that time was in
- 24 the northwest northeast, and we were proposing the
- 25 initial well in the northeast northeast.

- But all the other parties were sent the
- 2 letter on December the 18th proposing the well in the
- 3 northeast northeast. Subsequently, we sent the letter
- 4 on April the 10th, the same date as the southeast
- 5 southeast, formally proposing the well in the
- 6 northwest northeast along with the AFE.
- 7 Q. Identify and describe the purpose of
- 8 Exhibit No. 3.
- 9 A. That was a letter, the April 10th letter
- 10 sent to Amoco, formally proposing the well in the
- ll northwest northeast, along with the attached AFE.
- 12 Q. What interest does Amoco have in the well?
- 13 A. Amoco has 18.87871 percent.
- 14 Q. What is the status of your efforts to get
- 15 Amoco on a voluntary basis to commit their interest to
- 16 the well?
- 17 A. Again, I fully expect Amoco to
- 18 participate. However, my experience with Amoco has
- 19 been that they do not make an election to do anything
- 20 in this day and time until they're absolutely forced
- 21 to do so, unless they're initiating the proposal.
- 22 That's unfortunate, but that's true.
- 23 Q. Turn to Exhibit 4 and identify and describe
- 24 the purpose of that correspondence.
- 25 A. It's the April 10 letter to Santa Fe Energy

- 1 Operating Partners, L.P., again proposing the well in
- 2 the northwest northeast and the attached AFE.
- 3 0. Exhibit 5?
- A. The same letter to A. W. Dugan proposing a
- 5 well in the northwest northeast with the attached AFE.
- 6 Q. And finally Exhibit No. 6?
- 7 A. That's the well to James E. Kiehne
- 8 proposing the well in the northwest northeast with the
- 9 attached AFE.
- 10 Q. Identify and describe Exhibit No. 8.
- 11 A. Exhibit No. 8 is the AFE for the well in
- 12 the northwest northeast.
- 13 Q. How do the proposed dry hole and completed
- 14 producing well costs compare to the other well you
- 15 described for Case 9959?
- 16 A. Exactly the same.
- 17 Q. The same reasons and justifications apply
- 18 for this well as the prior one?
- 19 A. That's correct.
- 20 Q. How about the overhead rates that you're
- 21 proposing?
- A. The same.
- Q. When we look at the working interest owners
- 24 then to be pooled and their percentage interests as of
- 25 today, who are those parties and what are the

- 1 percentages?
- 2 A. The parties are Amoco Production Company at
- 3 18.87871 percent, A. W. Dugan at 9.05764 percent,
- 4 James E. Kiehne at 15.26533 percent, and Santa Fe
- 5 Energy Operating Partners, L.P., at 15.10297.
- 6 However, I believe that on Kiehne, that interest we
- 7 have found he is divorced, and that interest is split
- 8 with his wife, and we have that interest covered. So
- 9 his interest is actually half of that.
- MR. STOVALL: Mr. Kellahin, if I may
- ll clarify that question while we're here. You were
- 12 saying that you've got the interest owned by his
- 13 ex-wife --
- 14 THE WITNESS: We have a farmout agreement
- 15 with his wife covering the entire east half of 15.
- 16 Initially we had thought that interest was not
- 17 covered, but it was, and that's why we have her
- 18 interest covered. Her interest was made basically off
- 19 the first well in the northeast northeast, and it
- 20 covers the entire east half and is one with a
- 21 continuous drilling and so forth.
- MR. STOVALL: It's only his share of
- 23 whatever they owned.
- 24 THE WITNESS: That's correct. It's
- 25 actually half of 15.26533. So we're talking about

- 1 approximately in the neighborhood of around 51
- 2 percent.
- Q. (BY MR. KELLAHIN) In terms of the sequence
- 4 for the wells, do the working interest owners in one
- 5 well -- in the second of the two wells to be drilled,
- 6 will they have the opportunity to know the results of
- 7 the first well before they have to make an election on
- 8 the second well?
- 9 A. The owners in the northwest northeast will
- 10 know the results of the well in the northeast
- ll northeast because they're all participating in it.
- 12 Like I said, that well is waiting on completion; so it
- 13 will be perforated and frac'd this week. So they'll
- 14 have all that information long before they have to
- 15 make an election.
- 16 As to the southeast southeast, Santa Fe
- 17 will have the information off of the well in the
- 18 offset. Parker & Parsley is not a participant in that
- 19 well. However, as I indicated, Parker and Parsley is
- 20 fully aware of the activity out here and has verbally
- 21 indicated that they're going to participate.
- 22 MR. KELLAHIN: That concludes my
- 23 examination of Mr. Robinette.
- We move the introduction of Exhibits 1
- 25 influence 8 in each of the two cases.

- 1 HEARING EXAMINER: Exhibits 1 through 8 in
- 2 both cases will be admitted into evidence.
- Are there any questions of Mr. Robinette?
- 4 If not, he may be exucsed.
- 5 Mr. Kellahin?
- 6 MR. KELLAHIN: I'd like to call Mr.
- 7 Campbell at this time.
- D. G. CAMPBELL,
- 9 the witness herein, after having been first duly sworn
- 10 upon his oath, was examined and testified as follows:
- 11 DIRECT EXAMINATION
- 12 BY MR. KELLAHIN:
- 13 Q. Mr. Campbell, for the record, would you
- 14 please state your name and occupation.
- 15 A. D. G. Campbell. I'm a geologist.
- 16 Q. Mr. Campbell, have you on prior occasions
- 17 testified before the Division as a petroleum
- 18 geologist?
- 19 A. Yes, I have.
- Q. Describe for us your involvement in this
- 21 particular prospect.
- 22 A. My involvement in here, one, as an
- 23 investor, as a geological consultant and completion
- 24 person for these particular wells that we have an
- 25 interest here in 23 28 in Eddy County, New Mexico.

- 1 Q. Have you as a geologist been involved in
- 2 picking the locations and assessing the risk involved
- 3 in drilling these wells?
- 4 A. Yes, all of them.
- 5 Q. Do you have an opinion, sir, with regards
- 6 to the percentage, risk factor penalty that you would
- 7 recommend to the Examiner in each of these two cases?
- 8 A. Yes, I do.
- 9 MR. KELLAHIN: We tender Mr. Campbell as an
- 10 expert petroleum geologist.
- 11 HEARING EXAMINER: Mr. Campbell is so
- 12 qualified.
- Q. (BY MR. KELLAHIN) Mr. Campbell, in each of
- 14 the two cases I have marked as Exhibit 9 your
- 15 structure mark the Delaware marker; Exhibit 10 is the
- 16 structure map on top of the Bone Springs, and Exhibit
- 17 ll is the isopach?
- 18 A. Yes.
- 19 Q. Let's have you tell me, sir, with regards
- 20 to the well in the southeast of the southeast of 15,
- 21 what in your opinion is the risk factor penalty you
- 22 would recommend to the Examiner in that case?
- 23 A. I would recommend 200 percent on that. The
- 24 reasoning behind that, this map, the initial map
- 25 you're looking at the top of the Delaware sand is

- l actually a time-line map, the best time line you can
- 2 find in this lower basal section of the Delaware. And
- 3 it represents not only the structure, but it
- 4 represents to a great extent the configuration of the
- 5 channel sand that comes through here.
- In this particular location, you see in the
- 7 southeast southeast of 15, is at a reentrant between
- 8 what appears to be the two little structural points on
- 9 the field. The production to the south is a little
- 10 bit different than the production to the north both in
- ll gas and oil ratio and water production. To the south
- 12 you produce water.
- The reentrant in there is you fall off the
- 14 sand or out of the sand channel, then the six
- 15 particular lenses that are in the lower section, they
- 16 get tight extremely quick and get to a porosity that,
- 17 in essence, is not effective porosity for production
- 18 of oil or gas.
- 19 Q. When we look at the Delaware marker in this
- 20 structure map, what are the elements of geology that
- 21 support your opinion that the maximum risk factor
- 22 penalty is justified?
- 23 A. The source of the sand through the channel
- 24 is from the northwest, across the bar, through the
- 25 high you see on the map, and both of these locations

- l are on the edge or appear to be at or near the very
- 2 edge of the channel. Once you get out of that
- 3 channel, that porosity is not there. It gets into
- 4 more of a laminar sort of a sand.
- 5 Q. When we look at Exhibit No. 10, and look at
- 6 the top of the Bone Springs structure, why have you
- 7 mapped on top of the Bone Springs, and what does it
- 8 show?
- 9 A. The reason for mapping on this is simply to
- 10 get another confirmation on what the structure really
- 11 is in here. The top of the Bone Springs is an
- 12 unconformity, but it's a very discernible pick. It
- 13 also shows the same configuration and pretty well
- 14 mirror images the structure you get on your pick at
- 15 the top of the basal Delaware section.
- Once again, it shows that these two
- 17 locations are at or near the edge of the channel.
- 18 Q. Can you find us an example on this display
- 19 of an area where you have a producer in the Delaware
- 20 and an immediate adjacent offset well that is not a
- 21 producer?
- 22 A. Say it again, Tom.
- Q. You described earlier a relationship or a
- 24 risk involved a water risk?
- 25 A. Yes.

- 1 Q. Describe for us where we might be exposed
- 2 to the water.
- 3 A. In a recent well, it would be the southeast
- 4 northeast of Section 14. If you look at the Carrasco
- 5 Com, you'll see it will be just due east of those
- 6 locations. That well was drilled and perforated. It
- 7 had high water saturations in the log, in part,
- 8 initially made water, and has come back to make
- 9 somewhere near 100 barrels of oil, 100 barrels of
- 10 water.
- Our experience in here has been, once they
- 12 start making water, then they drop off both in oil and
- 13 water. An example of that is the Jasso #1 down in the
- 14 northeast southeast of Section 22. Amoco's -- I
- 15 believe it's pronounced Jasso #1. It currently makes
- 16 50 barrels of oil and 50 barrels of water which is
- 17 down considerably from what both oil and water it was
- 18 making.
- 19 Q. Has there been sufficient drilling and
- 20 development in order to get an accurate location of
- 21 the well-water contact on the western side of the
- 22 structure?
- A. No, not exactly yet. It appears that the
- 24 Yarbro "A" in Section 15, which would be the northwest
- 25 southeast -- it appears that it's wet, and I would

- 1 think that that certainly gives a point. It probably
- 2 could be east of that, though.
- 3 Q. When you follow the structural relationship
- 4 of the Yarbro well in the northwest of the southeast
- 5 of 15, that is in the same general structural
- 6 relationship as your well in the southeast of the
- 7 southeast, isn't it?
- 8 A. Correct.
- 9 Q. Would that represent a component then of
- 10 the risk?
- 11 A. It certainly represents -- from that it
- 12 looks like it would be wet, but variations happen.
- Q. When we look then to the isopach, describe
- 14 for us what conclusions you reached that are important
- 15 to you as a geologist when you're assessing the risk.
- 16 A. What this map actually did is took the top
- 17 of the Delaware basal section we're mapping and the
- 18 top of the Bone Springs isopach the two, and actually
- 19 depicts where the bar lies, in essence, how it
- 20 thickens to both east and west as you move off the bar
- 21 and out of the channel, and just gives you a good
- 22 depiction of where that sand is, how that source come
- 23 in from the northwest and deposited in a flow regime
- 24 that left you a bar sand and then purged the rest of
- 25 it on to the south.

- 1 Q. When we look at this location, you do have
- 2 well control to the east, but as you move to the west,
- 3 you lack well control by which to make geologic
- 4 interpretations?
- 5 A. True.
- 6 Q. Will that be a component of your risk?
- 7 A. Yes, it is.
- Q. Let's turn now to the second well, which is
- 9 Case 9960, and that will be up in the northwest of the
- 10 northeast corner?
- 11 A. Um-hm.
- 12 Q. Starting back again with Exhibit No. 9,
- 13 assess for us your opinion of the risk factor
- 14 penalty.
- 15 A. It's the same risk factor. It's on the
- 16 edge of the channel here at where the strike is
- 17 diverging in a reentrant, falling off structure and
- 18 losing that particular deposition that you get from
- 19 channel sand-type deposition.
- Q. In summary then, Mr. Campbell, while in
- 21 your conclusion the geology supports the drilling of
- 22 the well, the risk is still in excess or equal to the
- 23 maximum risk factor penalty applied by the Division?
- A. Yes, it is.
- Q. And that applies to both wells?

1	A. Yes.
2	MR. KELLAHIN: That concludes my
3	examination of Mr. Campbell. We move the introduction
4	of his Exhibits 9, 10, and 11 in each of the two
5	cases.
6	HEARING EXAMINER: Exhibits 9, 10, and 11
7	will be admitted into evidence, and I have no
8	questions of Mr. Campbell. Are there any questions of
9	this witness?
10	MR. KELLAHIN: No, sir.
11	HEARING EXAMINER: If not, he may be
12	excused. Does anybody else have anything further in
13	either Case 9959 or 9960?
14	These cases will be taken under advisement.
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1	CERTIFICATE OF REPORTER
2	
3	STATE OF NEW MEXICO ) ) ss.
4	COUNTY OF SANTA FE )
5	
6	I, Deborah O'Bine, Certified Shorthand
7	Reporter and Notary Public, HEREBY CERTIFY that the
8	foregoing transcript of proceedings before the Oil
9	Conservation Division was reported by me; that I
10	caused my notes to be transcribed under my personal
11	supervision; and that the foregoing is a true and
12	accurate record of the proceedings.
13	I FURTHER CERTIFY that I am not a relative
14	or employee of any of the parties or attorneys
15	involved in this matter and that I have no personal
16	interest in the final disposition of this matter.
17	WITNESS MY HAND AND SEAL July 15, 1989.
18	Deboral OBine.
19	DEBORAH O'BINE CSR No. 127
20	CSR NO. 127
21	My commission expires: August 10, 1990
22	I do hereby confil that the forecoing to a confil the month of the production in a confidence of the c
23	
24	63.63
25	Oil Conservation Division