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1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION DIVISION
4	
5	IN THE MATTER OF THE HEARING ) CALLED BY THE OIL CONSERVATION )
6	DIVISION FOR THE PURPOSE OF ) CONSIDERING: ) CASE NO. 11,048
7	APPLICATION OF BASS ENTERPRISES )
8	PRODUCTION COMPANY
9	,
10	ORIGINAL
11	
12	REPORTER'S TRANSCRIPT OF PROCEEDINGS
13	EXAMINER HEARING
14	BEFORE: MICHAEL E. STOGNER, Hearing Examiner
15	
16	August 4, 1994
17	Santa Fe, New Mexico - 2 1994
18	
19	
20	This matter came on for hearing before the Oil
21	Conservation Division on Thursday, August 4, 1994, at
22	Morgan Hall, State Land Office Building, 310 Old Santa Fe
23	Trail, Santa Fe, New Mexico, before Steven T. Brenner,
24	Certified Court Reporter No. 7 for the State of New Mexico.
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1	INDEX	
2		
3	August 4, 1994 Examiner Hearing	
4	CASE NO. 11,048	
5		PAGE
6	EXHIBITS	3
7	APPEARANCES	3
8	OPENING STATEMENT By Mr. Carr	5
9	APPLICANT'S WITNESSES:	-
10	WAYNE BAILEY	
11	Direct Examination by Mr. Kellahin Cross-Examination by Mr. Carr	6 25
12	GEORGE HILLIS	
13	Direct Examination by Mr. Kellahin Cross-Examination by Mr. Carr	31 46
14	CLOSING STATEMENTS	
15	By Mr. Carr By Mr. Kellahin	56 57
16	REPORTER'S CERTIFICATE	59
17	* * *	
18		
19		
20		
21		
22		
23		
24		
25		

EXHIBITS 1 Identified Admitted 2 Exhibit 1 7 25 3 Exhibit 2 9 25 Exhibit 3 10 25 4 15 Exhibit 4 25 5 Exhibit 5 23 25 Exhibit 6 24 25 6 7 Exhibit 7 33 46 Exhibit 8 34 46 Exhibit 9 35 46 8 Exhibit 10 41 46 9 Exhibit 11 43 46 Exhibit 12 44 46 10 \* \* \* 11 12 APPEARANCES 13 14 FOR THE APPLICANT: 15 KELLAHIN & KELLAHIN 16 117 N. Guadalupe P.O. Box 2265 17 Santa Fe, New Mexico 87504-2265 By: W. THOMAS KELLAHIN 18 19 FOR MARALO, INC.; TEXACO EXPLORATION AND PRODUCTION, INC.; 20 SANTA FE ENERGY RESOURCES, INC., OR SANTA FE ENERGY OPERATING PARTNERS, L.P.: 21 CAMPBELL, CARR, BERGE & SHERIDAN, P.A. 22 Suite 1 - 110 N. Guadalupe P.O. Box 2208 23 Santa Fe, New Mexico 87504-2208 By: WILLIAM F. CARR 24 \* \* \* 25

WHEREUPON, the following proceedings were had at 1 2 1:52 p.m.: EXAMINER STOGNER: At this time I'll call Case 3 4 Number 11,048, which is the Application of Bass Enterprises 5 Production Company for compulsory pooling, Eddy County, New 6 Mexico. 7 At this time I'll call for appearances. 8 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of 9 the Santa Fe law firm of Kellahin and Kellahin, appearing 10 on behalf of the Applicant, and I have two witnesses to be 11 sworn. 12 EXAMINER STOGNER: Any other appearances? MR. CARR: May it please the Examiner, my name is 13 William F. Carr with the Santa Fe law firm Campbell, Carr, 14 Berge and Sheridan. 15 16 I'd like to enter our appearance for Maralo, 17 Inc., for Texaco Exploration and Production, Inc., and for 18 Santa Fe Energy Resources, Inc., or Santa Fe Energy Operating Partners, L.P. 19 20 I will not call a witness, and I have a very brief opening statement. 21 22 EXAMINER STOGNER: Okay, let me swear the witnesses in first, and then we'll have opening statements. 23 24 (Thereupon, the witnesses were sworn.) 25 EXAMINER STOGNER: Okay, Mr. Carr?

1 MR. CARR: Mr. Examiner, as you're aware, Maralo, 2 Inc., is the operator of the north half of Section 30, the 3 immediate north offset to the proposed spacing unit. And 4 as you also know, we're currently drilling a well and 5 anticipate to have that well down to the Morrow within the 6 next approximately 20 days.

7 Because of this, as you are further aware, we
8 sought a continuance that would enable us to evaluate the
9 data that we would obtain from the completion of a well in
10 the north half of the subject section. We were concerned
11 about having to make an election before the data was
12 available, and also about the well location. The Division
13 denied the request for a continuance.

14 The purpose of this statement is to just emphasize that it was the position of Maralo, Santa Fe and 15 16 Texaco that they didn't want to assume an adversary 17 position here today and hoped it would be unnecessary. New data will be available soon, and if that changes the 18 information that we now have about the Morrow formation in 19 20 this acreage, we will pursue that at a subsequent hearing. 21 Accordingly, we're not calling witnesses, and I will have 22 some limited cross-examination.

I would like to clarify initially that Santa Fe and Maralo are, at least for the purpose of this hearing, appearing in opposition, but Texaco is taking no position

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1	on the Application. They have appeared simply because
2	they're potentially subject to a pooling order, and they
3	wanted to reserve the right to a subsequent hearing, should
4	that be necessary.
5	EXAMINER STOGNER: Mr. Kellahin, do you have
6	anything to add, or do you have an opening statement?
7	MR. KELLAHIN: No, sir, we'll present our case
8	through the witnesses.
9	We're ready to proceed.
10	EXAMINER STOGNER: You may proceed.
11	MR. KELLAHIN: Call at this time Mr. Wayne
12	Bailey.
13	WAYNE BAILEY,
14	the witness herein, after having been first duly sworn upon
15	his oath, was examined and testified as follows:
16	DIRECT EXAMINATION
17	BY MR. KELLAHIN:
18	Q. Mr. Bailey, would you please state your name and
19	occupation?
20	A. I'm Wayne Bailey. I'm a landman, petroleum
21	landman, with Bass Enterprises in Fort Worth, Texas.
22	Q. On prior occasions have you testified before the
23	Division in that capacity?
24	A. Yes.
25	Q. As a petroleum landman for Bass, have you been
-	

1	involved in the efforts by your company to develop the deep
2	gas formations in Section 30, 23 South, 30 East, of Eddy
3	County, New Mexico?
4	A. Yes.
5	Q. And have you made yourself aware of the general
6	spacing configurations for wells to be drilled at that
7	depth?
8	A. Yes.
9	Q. And you're familiar with the ownership within
10	Section 30?
11	A. Yes.
12	Q. Has it been your primary responsibility as the
13	landman to negotiate on a voluntary basis the formation of
14	a spacing unit for the south half of this section so that
15	Bass might operate and drill a well?
16	A. That's correct.
17	MR. KELLAHIN: We tender Mr. Bailey as an expert
18	petroleum landman.
19	MR. CARR: We have no objection.
20	EXAMINER STOGNER: Mr. Bailey is so qualified.
21	Q. (By Mr. Kellahin) Mr. Bailey, let's turn to
22	Exhibit 1 and have you identify that.
23	A. Okay, Exhibit 1 is a land map which shows the
24	leasehold interest ownership in Section 30 of 23 South, 30
25	East, Eddy County. It shows Also, the map shows the

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proposed location, in red, of Bass's proposed well in the 1 south half of Section 30. It's in the northeast guarter of 2 the southwest quarter. The name of the proposed well is 3 the Remuda Basin 30 State Comm. Number 1. It's located at 4 an orthodox location 1980 feet from the west line and 1980 5 feet from the south line. 6 Also, the map shows -- In the red outline is the 7 proposed 320-acre unit for Bass's proposed well. 8 Also on the map is shown the adjacent unit to the 9 north, which is a 320-acre unit for the well that's 10 currently drilling, the Maralo Gold Rush "30" Federal Comm. 11 Number 1. 12 At the bottom of the map is the color key that 13 shows the acreage in yellow owned by Bass, 50 percent, and 14 Texaco, 50 percent. 15 And in the south half of Section 30, in the 16 southwest quarter, that yellow area comprises 160.88 acres. 17 In the orange, that acreage is controlled by 18 Maralo, 33 1/3 percent; Collins and Ware, 33 1/3 percent; 19 20 and Santa Fe, 33 1/3 percent. And in Section 30, that orange acreage, or the 21 orange tract, consists of 160 acres. 22 Also shown on the map is Bass's Poker Lake 23 federal unit outlined to the south. 24 When we look at Section 30, before Maralo 25 Q.

1	initiated a spacing orientation choice Forget the two
2	laydown spacing units, but look at the basic orientation of
3	the leases. The west half of the section in yellow, is
4	that a common lease?
5	A. Yes, it's a state lease.
6	Q. And that interest is shared 50-50 between you and
7	Texaco?
8	A. That's correct.
9	Q. In the east half of the section, it appears that
10	the east half is further subdivided somehow. There's the
11	north half of the northeast?
12	A. Right.
13	Q. And there's the balance of the east half?
14	A. Well, there's two federal leases that Maralo, et
15	al., own in the east half of Section 30. There's two
16	federal leases in the northeast quarter, but the tract in
17	the southeast quarter is just one federal lease.
18	Q. Maralo has committed the north half to its
19	drilling well, the Gold Rush "30" Federal Comm. 1?
20	A. Yes.
21	Q. Let's turn your attention now to Exhibit Number 2
22	so that you can show us how the south half would be divided
23	in a spacing unit for deep gas production.
24	A. Okay, Exhibit 2 is a schedule showing the
25	division of interest just in the south half. The column on

	10
1	the left are the different leasehold owners that control
2	the interest in the proposed 320-acre unit.
3	The middle column is the record title ownership
4	that Bass found when we checked the public records and
5	found that Bass owned a proportionate 25 percent interest
6	in the unit, Texaco 25 percent, Maralo approximately 31
7	percent, and Meridian with approximately 18.69 percent.
8	And then the third column shows the result of our
9	conversations with these parties that shows a different
10	ownership than is actually owned of record.
11	Q. In terms of trying to negotiate a voluntary basis
12	the commitment of these interest owners, have you utilized
13	the center column or the far right column in terms of the
14	percentages?
15	A. Well, for our purposes we're using the far right
16	column.
17	Q. All right, okay. Let's look at Bass's specific
18	interest as the spacing units are proposed now and have you
19	compare for us your interest in the north half versus your
20	interest in the south half. Do you have a display that
21	illustrates that?
22	A. Yes, Exhibit 3 is a short schedule which shows
23	the disparity of interests which Bass has in the north half
24	as compared to the south half.
25	In the north half, due to a farmout agreement

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1	that we granted, that Maralo requested and Bass granted for
2	their current drilling well, we have about a 3-percent
3	override in the north half, and after if the well is
4	productive and it pays out, we'll have the option to
5	convert that to a 6.25-percent working interest, 5.46-
6	percent net revenue interest, while in the south half we
7	still have our full 25.068 percent unit interest.
8	And it shows that sort of difference in our
9	interest in the south half as opposed to our potential
10	working interest in the north half, is about 19 percent.
11	Q. Let's go back to the earliest point in the
12	chronology that's relevant today, and that's the point in
13	time where Maralo first proposed any well at all in the
14	section.
15	Approximate for us when Maralo made the proposal
16	for what has turned out to be the Gold Rush "30" Federal
17	Comm. 1 Well.
18	A. Okay, on March 28, 1994, Bass received a letter
19	from Maralo proposing their well in the northeast quarter
20	of section 30, and that was on March 28th.
21	Q. Prior to that time, had there been any
22	communications or discussions between Bass and Maralo with
23	regards to a specific deep gas well in Section 30?
24	A. Not to my knowledge.
25	Q. This is the first one, then, that you had to

respond to within the context of these two cases? 1 2 Α. Yes, yes. All right. What were they proposing to do? 3 Q. They propose to drill a well at the location 4 Α. which is shown on the land map, Exhibit 1, and they were 5 6 proposing a laydown 320 in the north half, and they asked 7 Bass for a farmout, and we told them that we would take it under consideration. 8 All right, that's on March 28th. Those details 9 Q. are communicated to you in a letter? 10 Yeah, that was a letter -- a farmout-request 11 Α. letter with an AFE attached. 12 Okay. At what point in the chronology, then, did 13 Q. Maralo file a force-pooling case for the north half? 14 Well, the drilling proposal or the farmout 15 Α. request/drilling proposal letter we received was dated 16 March 28th, and their force-pooling application was dated 17 18 April 4th, 1994. 19 That pooling case came to hearing before Examiner 0. 20 Morrow on April 28th. Do you have a copy of the order that 21 was issued out of that case, Mr. Bailey? 22 Α. I don't believe I do. 23 Let me show you my copy. Q. 24 Thank you. Α. 25 In Case 10,963, that's the application of Maralo? Q.

1	A. Yes.
2	Q. The order indicates that it came to hearing
3	before Examiner Morrow on what day?
4	A. May 10th.
5	Q. That's the date of the order.
6	A. Oh, April 28th.
7	Q. Yes, sir. And then the order was issued on May
8	10th?
9	A. Yes.
10	Q. Okay. Within the context of that time frame,
11	from March 28th to the hearing of April 28th, what did Bass
12	decide to do?
13	A. We elected to farm out.
14	Q. Okay, why did you decide to farm out?
15	A. Well, it was a for one thing, it was because
16	that's what Maralo asked us to do, and we made a business
17	decision to farm out according to their proposal, taking
18	all the situation into account.
19	Q. Okay. The orders issued You have now farmed
20	out your interest to Maralo only insofar as your interest
21	covers the north half, right?
22	A. That's correct, and as far as zones from the top
23	of the Wolfcamp on down to the base of the Morrow.
24	Q. What we characterize as the deep gas zones?
25	A. Correct.

. .

1	Q. Do you know when they commenced drilling their
2	well?
3	A. July 4th.
4	Q. Do you know what the current forecast is to get
5	that well to total depth and be ready to complete it?
6	A. I've been told that it's August 20th to August
7	24th.
8	Q. Part of the discussion that the Examiner is aware
9	of is a request by Maralo that Bass delay its efforts for a
10	well in the south half until Maralo and the other parties
11	know the results of the drilling well, and you've chosen
12	not to wait?
13	A. Uh-huh.
14	Q. Why not?
15	A. Well, as a landman it's part of my job to do all
16	the planning and scheduling necessary to expedite the
17	drilling of a well in an area where we think drainage is
18	possible.
19	Q. That is the concern of your technical people?
20	A. Yes.
21	Q. And as a landman, describe for us what that
22	concern is.
23	A. The drainage concern?
24	Q. Yes, sir.
25	A. Well, with what we know about the characteristics

of the deep gas zones, we feel that if Maralo makes a well, 1 that there is a very real possibility of drainage to the 2 south half of Section 30, where, as I've stated before, 3 Bass owns 19 percent higher interest than we do in the 4 north half. 5 So every day that the -- if Maralo makes a well, 6 every day they produce can result in damage to Bass's 7 interest in the south half. 8 Q. In order to protect itself from that possibility, 9 when did you propose formally to Maralo and the others the 10 drilling by Bass of a well in the south half? 11 We sent out letters on June 20th, and that's in 12 Α. Exhibit 4. 13 All right, let's turn to Exhibit 4 and start 14 Q. looking at the chronology of correspondence. Summarize for 15 us what you did on the 20th of June. 16 The letter to Maralo with an AFE attached was 17 Α. 18 dated June 20th, and it's a farmout request for their 19 interest and it proposes a well in the south half of 20 Section 30. An AFE is attached, that was prepared by 21 Bass's drilling department, and transmitted to me for -- so 22 that I could provide it to the parties for their election. 23 The footage call on the well is stated on the face of the AFE. 24 25 The Maralo letter is on top of this package, and

1 then a letter to Collins and Ware, which was June 21st, exactly the same letter to Santa Fe and exactly the same 2 letter to Texaco and exactly the same letter to Meridian, 3 because as far as we knew they still owned an interest. 4 And after we wrote this letter to them we found out that 5 6 they had previously committed their interest to a third 7 party, and we found out later that that was to Maralo, 8 so... By letter of June 20th --9 0. June 20th and June 21st. 10 Α. As of these two dates, were you satisfied that 11 Q. 12 you were proposing this well to all the proper parties that would participate in the well? 13 14 Α. Yes. The AFE that's attached, is that the AFE that is 15 Q. 16 generated in the normal course of doing business at Bass by the drilling people that do this on a daily basis? 17 That's correct. 18 Α. Having made that proposal, did you receive any 19 Q. written responses back from any of these interest owners? 20 21 Α. Well, we received a written response from 22 Meridian saying that they had previously farmed out their 23 interest to another party. 24 And the only other correspondence we got is also 25 included as the next item in this package of Exhibit 4, and

1	it's a letter that Bass received on July 7th from Maralo,
2	stating that they would like to farm in Bass's interests
3	for a well that they wanted to drill in the southwest
4	quarter of the southeast quarter of Section 30, and an AFE
5	was attached to that.
6	Q. Did you receive a direct reply to your well
7	proposal?
8	A. No.
9	Q. What you got back was a proposal by Maralo for
10	the south-half well?
11	A. That's correct.
12	Q. What did you take that to mean?
13	A. We took that to mean that Maralo did not want to
14	voluntarily pool their interests with Bass's proposed well,
15	and we took that as a definite sign that there could be
16	some significant delays in voluntary support for Bass's
17	proposed well.
18	Q. In their proposal, were they proposing a well to
19	be located at the same position in the south half of the
20	section as you were proposing?
21	A. No.
22	Q. Where was their proposal for the well?
23	A. It was in the southwest quarter of the southeast
24	quarter, and the footage location is 1980 feet from the
25	east line, 660 from the south line.

1	And then later they provided us with a notice
2	that the BLM had asked them to move it slightly, so I think
3	the final location is approximately 2100 feet from the east
4	line and 660 from the south line.
5	Q. There's a difference of proposals as to the well
6	location in the south half?
7	A. Yes.
8	Q. Have you reviewed with Bass and the people at
9	Bass that make these decisions to see if you're agreeing to
10	moving to Maralo's location?
11	A. Yes.
12	Q. And what is your decision?
13	A. Well, we feel that our location is an optimum
14	geological position.
15	Q. The cost components, have you had your technical
16	people analyze the Maralo AFE for the south half and
17	compare it to the Bass AFE?
18	A. Yes.
19	Q. Give us the bottom lines on each AFE.
20	Q. Bass's AFE is \$1,064,000 dryhole cost, and the
21	completed cost is \$1,427,000. Maralo's AFE is higher.
22	Their dryhole cost is \$1,197,750, and their completed cost
23	is \$1,520,355.
24	Q. Do you know wherein lies the difference that
25	caused the Maralo AFE to be higher than the Bass AFE?

1	A. I've been told by our drilling department that we
2	have a different casing program which will allow for a
3	larger stimulation, a larger frac if necessary, and also
4	But we got some lower costs on the tubular prices, and that
5	led to a lower completed well cost.
6	Q. Have you had conversations on the telephone or in
7	person with representatives of Maralo?
8	A. I've had conversations with Maralo and some other
9	people at Bass. I've had conversations with Maralo and
10	Texaco, some other people at Bass, I've had conversations
11	with the other parties.
12	Q. Let me talk about Maralo's concern. Has Maralo
13	raised with you any objection to your AFE cost?
14	A. No.
15	Q. The wasn't an issue?
16	A. No.
17	Q. Have they raised an objection to you operating a
18	well in the south half?
19	A. No.
20	Q. Have they raised any question about the overhead
21	rates?
22	A. No.
23	Q. What questions did they raise with you?
24	A. They didn't raise a question.
25	Q. All right. From the pleadings filed by Maralo,

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we know their concern is, they want the results of a
drilling well before something happens in the south half?
A. Correct.
Q. All right. How do you propose to handle the
sequence of elections, Mr. Bailey, if the Examiner issues
you a compulsory pooling order for the south half?
A. Uh-huh.
Q. One of the concerns Mr. Carr expressed a while
ago was the opportunity for Maralo to have the results of
the drilling well within the period of time they needed to
elect under a pooling order.
A. Uh-huh.
Q. What do you plan to do?
A. Well, we feel like that if an order is granted as
a result of the hearing today, that all the parties in the
south half can still be accommodated, because the Maralo
well will be down and tested and probably fully completed
by the time that Bass is allowed to commence operations
under a compulsory pooling order.
If we get an order the latter part of August,
first part of September, we can't do anything for 30 days
after that, so that puts us in the first part of October,
and then it takes us just a To go a little further, we
approximate that the drilling of these wells takes about 50
days.

1	So if Maralo does make a well, then and they
2	start producing at the end of August, then we're into
3	November for yeah, the middle of November or latter part
4	of November before we can start producing in the south
5	half.
6	But the Everybody in the south half should be
7	able to fully evaluate the Maralo well and make an election
8	even if it's under a compulsory pooling order. And we will
9	continue to attempt to acquire voluntary support.
10	Q. After the June 20th, 21st, correspondence, let's
11	turn to the next series of efforts by you with regards to
12	this matter. Within that same exhibit number, my next
13	letter is July 28th?
14	A. The letter to Collins and Ware?
15	Q. Yes, sir.
16	A. These are letters to Collins and Ware, Maralo and
17	the other parties, just providing them with a proposed
18	joint operating agreement in the event they elect to
19	participate.
20	There's a letter to Texaco that's different from
21	the one we wrote to the other parties, because Texaco
22	indicated they would consider supporting Bass as the
23	operator in the south half but that they would not be able
24	to make an election to participate in the well at this
25	time.

So we wrote a letter just asking them to support
us as operator, with an election to be made at a later
date.
Q. Have you reviewed the Maralo pooling order that
Examiner Morrow had issued by the Division for the north-
half well?
A. Yes.
Q. Let me borrow your copy so I might show it to the
Examiner.
Are there any provisions or conditions in the
Maralo pooling order that are different from what you're
seeking for the south half?
A. I don't believe there are.
Q. The overhead rates that Maralo requested in the
north half were what, sir?
A. \$6000 while drilling and \$600 while producing.
Q. And what are you proposing for the south half?
A. \$6000 while drilling and \$600 while producing.
Q. And is that generally consistent with the <i>Ernst</i>
and Young overhead rates when averaged for wells at this
depth?
A. Yes.
Q. In terms of some special provisions in the
pooling order, there's a provision in this order to
escalate the overhead rates on an annual basis according to

COPAS accounting procedures? 1 Α. 2 Yes. 3 Q. And you're seeking that same type of provision for the south half? 4 5 Α. Yes. In terms of an election period for the parties, 6 Q. 7 the Maralo order provides for 30 days election, after 8 notice, after issuance of the order? 9 Α. That's correct. 10 And you're seeking the same thing? Q. 11 That's correct. Α. 12 The risk factor penalty in their order is 200 Q. 13 percent; you're seeking 200 percent in your order? 14 Α. That's correct. No material differences in here, except for the 15 Q. 16 operator, the well location and the spacing unit? 17 Α. That's right. And all these are deep gas formations that, to 18 0. the best of your knowledge, are conventional 320 gas 19 20 spacing? 21 Α. Yes. Identify for the record, if you will, Exhibit 22 Q. 23 Number 5. 24 Α. Exhibit 5 is Bass's AFE for the drilling and completion of the Remuda Basin "30" State Comm. Number 1. 25

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1	And as we said before, the completed costs reflected on the
2	last page is \$1,427,000, and the dryhole cost is
3	\$1,064,000.
4	Q. And this is the same AFE that you circulated to
5	the proposed parties back on the 20th and 21st of June?
6	A. Yes.
7	Q. All right. And Exhibit 6, Mr. Bailey?
8	A. Exhibit 6 is a schedule that Ernst and Young
9	Service provides operators, which shows the suggested
10	drilling and producing overhead rates for the west Texas
11	and the eastern New Mexico area for oil wells and for gas
12	wells at the bottom, and it shows that for wells in this
13	range depth, that a drilling rate of \$6000 and a producing
14	rate of \$600 is acceptable.
15	Q. Other than knowing that Maralo would like to know
16	the results of their drilling well before they have to make
17	an election on the well in the south half, are you aware of
18	any other dispute with regards to this issue?
19	A. No.
20	MR. KELLAHIN: That concludes my examination of
21	Mr. Bailey.
22	We move the introduction of his Exhibits 1
23	through 6.
24	EXAMINER STOGNER: Are there any objections?
25	MR. CARR: No objections.

EXAMINER STOGNER: Exhibits 1 through -- Did you 1 2 say 6 or 4? 3 MR. KELLAHIN: 6. EXAMINER STOGNER: -- 6 will be admitted into 4 evidence at this time. 5 Mr. Carr, your witness. 6 7 CROSS-EXAMINATION 8 BY MR. CARR: Mr. Bailey, the first contact from Maralo or, I 9 Q. 10 guess, anyone at Bass concerning the development of Section 30 was the March 28th letter; is that correct? 11 12 Yes, that's when Maralo wrote to us proposing the Α. 13 north half -- the well in the north half. Were they proposing a laydown unit at that time 14 0. in the north half of the section? 15 16 To the best of my recollection, they were, yes. Α. To the best of your recollection was any 17 Q. objection raised by Bass to proceeding with development of 18 this section with laydown units? 19 20 Α. No. 21 Q. Now, when you were approached back in March, you 22 were given an opportunity to farm out your interest in the 23 north half; is that right? 24 Α. Yes. 25 Were you also given an opportunity to participate 0.

	20
1	in the well in the north half?
2	A. Yes.
3	Q. Now, look at what has been offered as Bass
4	Exhibit Number 3. This is the breakdown of the Bass
5	interest in the north half as compared to the breakdown in
6	the south half; is that right?
7	A. That's correct.
8	Q. The reason Bass has a 3.125-percent overriding
9	royalty interest and an opportunity to let you convert
10	but the reason you have this particular interest in the
11	north half is because of the farmout agreement that you
12	decided that you would execute, farming out this interest
13	to Maralo; is that right?
14	A. That's correct.
15	Q. If you had not signed that farmout agreement,
16	your interests in the north half would be identical to what
17	it is today in the south half?
18	A. Well, no, that's not correct. We would have been
19	subject to the compulsory pooling application, so we would
20	have been out of the well in the north half.
21	Q. If you had decided to participate in the well
22	with the interest as it was
23	A. Yes.
24	Q on March the 28th, your interest would be
25	identical in the north half as to the south half?

	27
1	A. Yes.
2	Q. The case came on for compulsory pooling. Did
3	Bass oppose that pooling application?
4	A. No.
5	Q. In fact, you continued to negotiate after the
6	hearing with Maralo, did you not?
7	A. Yes, we did.
8	Q. The order, I think you stated, was entered on May
9	10th. When did you enter into the farmout agreement or
10	execute that? June the 20th?
11	A. We had a farmout letter, and then we had an
12	amended farmout letter, and then we had an actual formal
13	farmout agreement.
14	Q. When were those?
15	A. The first farmout letter was April 26th, an
16	amended agreement was May 24th, and an actual farmout
17	agreement was June 9th.
18	Q. So you actually continued your negotiations after
19	the pooling order was entered?
20	A. Yes, we were cooperating with Maralo in the
21	drilling of the well.
22	Q. And you would propose to cooperate after an order
23	was entered in this case?
24	A. Yes.
25	Q. You've testified that the concern that you have

is about drainage? 1 2 Α. Yes. 3 Q. Because of the reduced ownership? Α. That's correct. 4 5 And I suspect you would prefer that I direct Q. actual drainage questions to a later witness? 6 7 That would be better. Α. Okay. At this point in time, you've been trying 8 Q. 9 to develop the south half of the section. You have 10 proposed drilling a well to each of the other working interest owners in the section. Have you received an 11 12 agreement to date from Texaco? 13 Α. No. From Maralo? 14 Q. 15 Α. No. From Collins and Ware? 16 Q. 17 No. Α. From Santa Fe? 18 Q. 19 Α. No. 20 Q. From anyone? 21 Α. No. 22 So if this is approved, you are prepared to carry Q. 23 74 percent of the interest in the south half? 24 Α. Well, if this is approved, we'll continue to 25 acquire voluntary support. We're preposed [sic] to drill

28

1 the well today. When are you prepared to spud the well? 2 Q. We're prepared to spud the well -- The date that 3 Α. we have planned on, and this is merely a plan, would be 4 5 after -- as soon as possible after the completion of the 6 Maralo well in the north half. And if we are delayed by 7 requirements under a compulsory pooling order, then it 8 would be delayed because of that. 9 0. Is it your testimony that you don't intend to 10 drill until you see the completion information on the 11 Maralo well? 12 Α. That's probably the way everything will fall in 13 place. 14 Q. And if you don't get voluntary joinder, you're going to drill a well and carry 74 percent of the interest? 15 Well, I'm not the one that makes those decisions, 16 Α. 17 but right now, today, we have proposed the well, and we're 18 prepared to drill it. I'm not trying to push you into an area where you 19 Q. don't make the decision. Do you know, if no one else 20 21 joins, would you drill the well? 22 I don't know. Α. 23 0. Do you know if you intend to spud the well before 24 there's completion information available on the Maralo well? 25

	30
1	A. Say that again?
2	Q. Do you know I'm just trying to be sure there's
3	not confusion in what you said a minute ago. Do you know
4	whether or not you'll commence the well prior to getting
5	completion information on the Maralo well?
6	A. That's not currently what we plan to do.
7	Q. What's not currently what you plan to do?
8	A. We don't plan to spud the well before we get
9	results from Maralo.
10	Q. So you're not going to build a location or
11	anything until you know?
12	A. No, we acquired a permit, and so we are prepared
13	to commence our well as soon as information is received
14	from the Maralo well.
15	Q. Okay. From strictly a land perspective, is there
16	any reason that you have to get the well going in an
17	expedited fashion? Is there a lease expiring or any land
18	reason, other than the drainage question, that dictates
19	going forward at this time?
20	A. No, we feel like the drainage issue is reason
21	enough to expedite the drilling of the well.
22	Q. So there's no reason in your area of expertise to
23	delay this; it's a drainage question?
24	A. Not to my knowledge?
25	MR. CARR: That's all I have.

1	EXAMINER STOGNER: Thank you, Mr. Carr.
2	Mr. Kellahin, any redirect?
3	MR. KELLAHIN: No, sir.
4	EXAMINER STOGNER: I have no questions of this
5	witness. He may be excused.
6	Mr. Kellahin?
7	MR. KELLAHIN: Yes, sir, call Mr. George Hillis.
8	<u>GEORGE HILLIS</u> ,
9	the witness herein, after having been first duly sworn upon
10	his oath, was examined and testified as follows:
11	DIRECT EXAMINATION
12	BY MR. KELLAHIN:
13	Q. Mr. Hillis, would you please state your name and
14	occupation?
15	A. My name is George Hillis. I'm a geologist with
16	Bass Enterprises Production Company in Fort Worth, Texas.
17	Q. On prior occasions, Mr. Hillis, have you
18	testified as a petroleum geologist before the Division?
19	A. Yes, I have, sir.
20	Q. As part of your geologic responsibilities, have
21	you made a geologic study of this particular area?
22	A. Yes, sir.
23	Q. At my request, did you examine the transcript and
24	the technical displays presented by John Thoma on behalf of
25	Maralo at the hearing before Examiner Morrow?

1 Α. Yes, I have. And in response to the geologic issues that he 2 Q. presented to that Examiner, have you made your own 3 interpretation of those same reservoirs that Mr. Thoma 4 presented to that other Examiner? 5 6 Α. Yes, sir. And based upon that information, do you have an 7 **Q**. 8 opinion as to the risk that is involved with regards to a 9 pooling order in the south half of this section? 10 Α. Yes. In addition, do you have a geologic opinion about 11 Q. 12 the probability of drainage by the Maralo well of the acreage in the south half of Section 30? 13 14 Α. Yes, I do. 15 MR. KELLAHIN: We tender Mr. Hillis as an expert 16 geologist. MR. CARR: We have no objection. 17 18 EXAMINER STOGNER: Mr. Hillis is so qualified. (By Mr. Kellahin) Mr. Hillis, let's turn first 19 Q. 20 of all to your Exhibit Number 1. Well -- And I very cleverly got mine mixed up here. You start with number --21 22 Α. -- 7. That wasn't too hard, was it? 23 -- 7, all right. Q. 24 That's the hard part. 7 is a structure map on top of the Morrow lime? 25

1	A. Yes, sir.
2	Q. Let's start with that one.
3	A. Exhibit 7 is a structure map on top of the Morrow
4	lime, the top of the Morrow lime being defined by the State
5	of New Mexico tops, defined in 1984 by the Stratigraphic
6	Nomenclature Committee appointed by the NMOCD.
7	The contour interval of the map is a 100-foot
8	interval, and the areal scale of the map is 1 to 3000.
9	Basically, the map is showing the proposed
10	location for the Bass well in the south half of Section 30,
11	and 2 1/2 miles north there is showing the location of a
12	type log, which we will have as a further exhibit, and
13	geologically demonstrating a north northwest-south
14	southeast plunging nose on top of the Morrow.
15	Q. I've asked you to compare your structural
16	interpretation with that of John Thoma's when he presented
17	his case before. He chose to present a structure map that
18	was slightly different. What did he do?
19	A. The major difference in Mr. Thoma's map, which is
20	Exhibit 6 in Case 10,963, his map was also called the top
21	of the Morrow lime, but in fact the horizon he was mapping
22	on is known as the Atoka datum, as recognized by the
23	Stratigraphic Nomenclature Committee in 1974. And this
24	datum, in this area, lies anywhere between 415 to 495 feet
25	above or shallower than the actual true top of the Morrow

lime. 1 Apart from the fact that you're mapping a 2 Q. 3 different point within the vertical extent of the deep gas 4 formations, is there a material difference of consequence, 5 when the Examiner looks at the Maralo structure map versus yours? 6 7 Not to the eye. Both of us have a north Α. 8 northwest-south southeast plunging nose. The only difference would be that our nose axis would be further 9 west than the one presented by Maralo. 10 Let's turn now to Exhibit Number 8. Would you 11 Q. 12 identify that for us? 13 Exhibit 8 is the type log I previously mentioned. Α. It's the porosity log from the Nash Draw Number 2, drilled 14 15 in 1976, approximately two and a half miles north of Bass's 16 proposed location. 17 The exhibit is to serve for the intervals going 18 from the top of the Wolfcamp to the base of the Morrow. We recognize the Wolfcamp, Pennsylvania, Strawn, Atoka, Atoka 19 20 datum, Morrow lime, Morrow clastics and lower Morrow tops as defined by the State of New Mexico. We have color-coded 21 22 the reservoirs and put a gas symbol beside them. All of 23 these intervals are productive within the vicinity of our 24 study area. 25 0. When we look at all of these intervals, I want

you to select the intervals that Mr. Thoma was discussing 1 in his presentation to the Division. Tell us how he 2 identified those and how you identify them so that we're 3 4 looking at the same reservoirs. Mr. Thoma discussed only three of these 5 Α. reservoirs, and all of these would be in the middle Morrow. 6 What we term the middle Morrow "A" sand Mr. Thoma 7 recognizes as being called the Paduca sand. The middle 8 Morrow "B" sand Mr. Thoma recognizes as the Lotos sand. 9 And the middle Morrow "C" sand Mr. Thoma recognized as the 10 Teal sand. 11 He did not address any of the other reservoirs 12 above the Morrow at that particular hearing. 13 Let's look at Exhibit 9, Mr. Hillis. If you'll 14 Q. 15 identify that display, we'll talk about the information on it. 16 Exhibit 9 is a production map for horizons from 17 Α. 18 the Wolfcamp through to the Morrow, for the study area 19 which is approximately 50 square miles. We identify by 20 color code the actual production from Wolfcamp, Atoka, Morrow. 21 22 The larger circles are an attempt to better 23 visualize the more productive wells, and the larger the 24 circle, obviously, the better the well. And beside each well we post the cumulative 25

production from the well through January 1st of 1994. And
if it is not inactive, we also post the total 1993
production, as well as the reservoir intervals that the
well is producing or has produced from.
Q. Mr. Bailey identified that Bass's concern and
reason to proceed ahead with this pooling case was its fear
of offset drainage by the Maralo drilling well?
A. Yes, sir.
Q. Is there anything on this display that helps us
understand the magnitude of that concern?
A. Yes.
Q. Show us.
A. This is I mean, our major concern and several
examples just within this area of the production map, we
have looked at several of the decent wells.
Of the 16 wells on here, really only four have
made over 2 BCF of gas. Ten of the wells, or 62.5 percent
of them, have made less than a BCF, and that includes four
dry holes. But of the four wells that have made over 2
BCF, three of them in particular we have studied for the
early production from that well.
I draw your attention to the Nash Number 2 in the
north area in Section 18 of 23-30. In the first six months
of production, this well made .856 BCF of gas.
Immediately west of there, the Nash Number 1 in

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1	Section 13 of 23-29, in its first six months, made .498,
2	approximately one-half of a BCF of gas, from the Morrow.
3	Going to the south end of the map, the Bass Poker
4	Lake Unit 49 Well in Section 17 of 24-30, in the first six
5	months of production from the Middle Morrow "C" or the
6	Teal sand, as Mr. Thoma referred to it this well made
7	.732 BCF of gas.
8	Q. When you go down into 24 South, 31 East, are
9	there other examples within the "B" sand of the tremendous
10	productivity in the early time performance of those gas
11	wells?
12	A. Yes, sir, approximately seven to eight miles east
13	southeast of our proposed location, the three Lotos Federal
14	wells, after which I guess the Lotos sand was named by Mr.
15	Thoma the Lotos "A" Federal Number 1 drilled by Bettis
16	in Section 15 of 24-31, from the "B" sand, or Mr. Thoma's
17	Lotos sand, produced 1.2 BCF of gas in its first six
18	months.
19	The Lotos Federal Number 1 in Section 9 of 24-31
20	produced .883 BCF of gas in its first six months.
21	And the Lotos "B" as in "boy" Federal
22	Number 1, in Section 10 of 24-31, produced .66 BCF in its
23	first six months of production from the Middle Morrow "B"
24	sand.
25	Q. What is Bass's concern within Section 30 when it

1	looks at the early time productivity of other wells in this
2	area that are producing gas out of the Morrow?
3	A. We recognize that the Maralo well is completed
4	initially in this middle Morrow "B" or "C" sand, which are
5	the lower-two-most reservoirs, being the objective in the
6	well, that we will undergo severe drainage before we can
7	get our well drilled and on line.
8	Q. When you look at the wells in this area and I
9	think you referred to the map as having 16 wells
10	A. Yes, sir.
11	Q within that area, what is the range of maximum
12	productivity or cumulative gas production?
13	A. There's a lot of geological risk. As I
14	mentioned, four of the 16 wells have made over 2 BCF of
15	gas, and
16	Q. Four of the 16?
17	A. Four of the 16.
18	Q. Only four of the 16 have made more than 2 BCF?
19	A. Yes, sir.
20	Q. Okay, what about the rest?
21	A. The rest, ten of the other wells, including four
22	dryholes, have been less than 1 BCF of gas. That's around
23	62.5 percent of the wells.
24	Q. Apart from the drainage issue, have you also
25	examined the geologic risk in terms of a percentage?

1	A. Yes, sir.
2	Q. The Examiner has the authority to apply a risk
3	factor of cost plus 200 percent for the risk undertaken by
4	those parties that elect to pay, to recover out of the
5	share of those that decide not to pay?
6	A. Yes, sir.
7	Q. Do you understand that concept?
8	A. Yes, sir.
9	Q. Within the context of this case, what is your
10	recommendation?
11	A. I recommend the 200 percent.
12	Q. Does that recommendation illustrate an example
13	of that. In the north portion of the display, can you show
14	us wells in close proximity to each other that have
15	substantially different recoveries?
16	A. Yes, I've worked the Morrow for quite a few years
17	with Bass, and the Morrow is the Morrow, but there is a
18	perfect example in the north part of this study area.
19	The Nash Number 3 well, drilled in Section 12 of
20	23-29, was eventually just completed in the Atoka. It
21	found the top of the middle Morrow "B" sand at a subsea of
22	minus 10,312, and a water saturation of 90 to 100 percent.
23	The irony of the "B" sand being wet there is the
24	fact that that well is 147 feet high to the "B" sand in the
25	Nash Number 2 to the southeast in Section 18 where the

water saturation is 45 percent and the well is perforated 1 in that interval. 2 It's 94 feet high to the Number 1 Nash zone to 3 4 the south in Section 13, where water saturation is 40 5 percent, and it's probably the major pay interval in that well by logs. 6 7 And it is also 67 feet high to the Nash Number 7, 8 drilled downdip to the east where the "B" sand is also 9 perforated and productive also. So that demonstrates, that very close spacing of 10 those four wells, the very lenticular nature. When you 11 12 take the logs from these wells and correlate them, the "B" 13 sand looks like the "B" sand in each well, it just looks 14 identical, yet they're obviously not connected from a 15 reservoir standpoint. Another example, in the southwest part of the 16 study area, the Santa Fe Number 1 HB State in Section 2 of 17 24-29, that well was perforated in the middle Morrow "A" 18 and "B". By logs, the "B" is the major pay zone. 19 That 20 well through January of 1994 had made 2 BCF, and it made 21 almost half of a BCF last year. Yet Santa Fe's offset, just to the southwest, is perforated in the same sand, made 22 .23 BCF and is an inactive well in the Morrow, once again 23 24 demonstrating the lenticular nature of the Morrow. When we look at Section 30 within the context of 25 Q.

1	the risk involved, prior drilling the Maralo well, would
2	you concur with Mr. Thoma that 200 percent was appropriate?
3	A. Yes, I would.
4	Q. Does the fact that we have the Maralo well
5	drilling change, in your opinion, the risk component that
6	goes into the pooling orders?
7	A. Not in my opinion.
8	Q. Why not?
9	A. Just for the basic reason, we've just really just
10	given examples of what could happen to you when you drill a
11	Morrow well and believe you're actually in the same
12	reservoir interval as a well a half a mile away from you.
13	This applies also We have studied the Atoka
14	bank, the Atoka sand out here regionally, and the same
15	principles apply, where you cannot guess what's going to
16	happen in your well, necessarily, and what's happening in
17	what other well.
18	Q. Let's look at your analysis of the sand
19	distribution with regards to the maps that are comparable
20	to what Mr. Thoma had introduced.
21	A. Okay. Mr. Thoma introduced just a map on the
22	Middle Morrow "C" sand, his Teal sand. We have taken the
23	two lower sands, the "B" and the "C", and we have isopach
24	maps of those for exhibits.
25	Q. All right, let's turn to 10. That's the Morrow

1 "B" sand?

2

A. Yes, sir.

3 0. And that would -- The Morrow "B" sand would be 4 the equivalent of his Morrow Lotos sand map? Yes, sir. This is a net isopach. The contour 5 Α. 6 interval is five feet, the scale once again is 1 to 3000. 7 And the thickness -- We have kind of come from the 8 normalized gamma ray on the log. We have normalized all the gamma rays, and this is the thickness for less than or 9 equal to 20 percent clay content in the sand. 10 On the exhibit copies I've indicated with the 11 pink or red color on the well locations if the well was 12 13 perforated in this particular sand. 14 Basically, at the proposed location of Bass, we anticipate 10 to 15 feet of net sand in the "B" or Lotos 15 16 We also anticipate the Maralo well to be on the sand. 17 eastern edge but have five or six feet of pay, which would be more than adequate to affect drainage towards the south 18 19 half of Section 30. 20 Q. All right. Let me ask you about that point. Is the character and composition of the Morrow channel through 21 here -- the sand package, if you will -- such that if they 22 23 get within a certain quality level of the reservoir, that 24 regardless of thickness, then geologically it would be well 25 connected and have the capacity to take all the gas?

1	A. Yes, it's very possible. A good example we had
2	mentioned earlier were the Lotos federal wells to the east
3	in 24-31. One of the wells in there is actually on the
4	west side of the "B" channel over there, the Lotos Federal
5	Number 1 in Section 9. That well only had about five feet
6	of pay, quite low porosity for the Morrow. But that well
7	made almost 9/10 of a BCF in its first six months and was
8	connected with additional wells drilled in the Lotos
9	federal area.
10	Q. Okay, let's turn now to Exhibit Number 11. This
11	is your Middle Morrow "C" sand?
12	A. Yes, sir.
13	Q. Describe for us what your conclusion is here.
14	A. The system of mapping is similar for the "B".
15	We've normalized the gamma ray, once again, for H less than
16	20 percent clay. We've also in pink shown the wells
17	perforated in this "C" sand.
18	Here at our proposed location we anticipate
19	approximately 30 feet of net sand, and at the currently
20	drilling Maralo well we anticipate around 20 feet.
21	Q. When we look at this sand member, in order to
22	have the opportunity to protect yourself from drainage, is
23	it important to have your well in the reservoir as soon as
24	you can in relation to the Maralo well?
25	A. Very much so.

44 1 Q. Let's look at what Mr. Thoma did. If you'll turn 2 to what you've marked as Exhibit Number 12, that in fact is a copy of his Exhibit 8 out of Case 10,963? 3 Α. Yes, sir. And --4 Show us his interpretation, and then we'll draw 5 Q. 6 the comparison. Okay. His interpretation of the Maralo location 7 Α. in the north half has got a little triangle on it. 8 I have added Bass's proposed location with a yellow dot in the 9 south half. 10 This particular channel we are mapping in a 11 similar fashion. Our axis of the sand would be a little, 12 slightly -- a few hundred feet west of Mr. Thoma's. But at 13 the same time the axis of his channel is coming through the 14 western half of Section 30. 15 16 Basically they anticipate around 30 feet of sand and would anticipate a little over 30 feet of sand at the 17 18 proposed Bass location. 19 Q. Do you know the current status of the Maralo well? 20 21 Yesterday morning, I believe it was drilling just Α. 22 below 12,000 feet. 23 0. And it's going to approximate total depth of what? 24 It should really go to 14,400, 14,500. 25 Α.

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1	Q. Do you have a forecast of, from now until the
2	time that they have tested the productivity of their well,
3	how long a period that would be?
4	A. Well, initially when the well gets down, which
5	should be towards the latter part of August here, the
6	initial log run should tell an awful lot about the
7	potential reservoir properties from the point of view of
8	the testing in the next several weeks after that, making
9	their completion. So I would imagine around the mid to
10	latter part of September where the well is capable of
11	flowing through the line.
12	Q. If under the compulsory pooling procedure there
13	is an election and that election is sequenced in such a way
14	that Maralo will have the opportunity to evaluate its logs,
15	look at initial tests on its well and then make an election
16	on your well, do you think there should be any adjustment
17	in the risk factor penalty for your spacing unit versus
18	his?
19	A. No.
20	Q. If he's got that information to look at and then
21	makes his choice not to participate with you, what does
22	that tell you about the risk?
23	A. It tells you that it's a high risk.
24	Q. And if he has that information and elects to
25	participate, then the penalty doesn't apply anyway?

1 Α. That's correct. 2 All right. Summarize for us, Mr. Hillis, what Q. 3 your concerns are and what your recommendations are. My major, primary concern is the fact that with 4 Α. 5 delays here, we could be up to six months behind in getting our well down and on line behind Maralo. And from our 6 7 regional studies and local studies of what the "A" and "C" 8 sands can produce, a huge part of their ultimate production 9 in those first six months, we could be in a very serious drainage situation. 10 11 MR. KELLAHIN: That concludes my examination of Mr. Hillis. We move the introduction of his Exhibits 7 12 13 through 12. 14 No objection. MR. CARR: EXAMINER STOGNER: Exhibits 7 through 12 will be 15 admitted into evidence. 16 17 Mr. Carr, your witness. CROSS-EXAMINATION 18 BY MR. CARR: 19 20 Mr. Hillis, you're the geologist for Bass 0. 21 responsible for the development of this area; is that 22 right? 23 Α. I had a geologist working for me who had this 24 primarily under concern, and the timing of such events --25 He elected to resign and join another company around the

time this all started. 1 2 When did you actually start working on Section ο. 30? 3 I've worked in the Remuda and the Section 30 area 4 Α. 5 off and on in the Eighties. It's been my primary area. Ι 6 just had assigned it to him. 7 With respect to looking at the current situation and updating the wells, I did not get a chance to do it 8 9 with him leaving until the latter part of May. Were you involved in Bass's decision to farm out 10 0. instead of joining in the well in the north half of 30? 11 12 Α. I wasn't at the time; the other geologists worked it with their own management. 13 Do you know why Bass would elect to farm out an 14 0. 15 interest instead of participating in the well? 16 Α. From what I've been told and what my feelings 17 would have been, was from the regional mapping we have done 18 in there historically, that we felt the Maralo location 19 would have been a little more riskier on the eastern side. 20 We felt that the reservoirs -- and we've just touched on two of them today -- but the Morrow "A", the 21 22 middle Morrow "A", the upper Morrow, the Atoka sand and 23 bank, would be better developed by our interpretation a 24 little further west. So risk was a factor? 25 Q.

	40
1	A. Risk would be a factor, yes.
2	Q. You said you've worked the Morrow for quite a few
3	years. It's fair to assume that you have a general
4	understanding of the Morrow formation?
5	A. No claim to fame there, sorry. I've tried for
6	several years, anyway.
7	Q. Is it fair to say that any Morrow well is
8	probably a high-risk well?
9	A. In this part of New Mexico, yes.
10	Q. And it's because, I think as you testified, the
11	lenticular nature of the Morrow channels throughout the
12	area?
13	A. Well, the channel movement you're making, you're
14	talking more of a sinuous channel. But even with them like
15	a straight channel, what appears to be the same sand
16	between two logs from two wells may not be connected from a
17	reservoir point of view.
18	Q. So these channels may pinch out and reappear and
19	pinch out?
20	A. Well, they appear as one channel in the logs, and
21	in fact what you have are varying sand flows at that period
22	of time down the channel. So the sand that's actually in
23	this wellbore is not going to have been the same well
24	fluid, necessarily, as the one in the other wellbore.
25	Q. In trying to pick a location for a Morrow well,

1	it's important to hit these channels as accurately as
2	possible; is that not correct?
3	A. Yes, sir.
4	Q. And the way you do that is, you take a look at
5	the data that's available to you and you make your best
6	call?
7	A. Yes, sir.
8	Q. In this area have you had any seismic information
9	to look at in determining how to map the Morrow?
10	A. In this particular area, no, we have not. We
11	have examined it in some of the other areas down here.
12	Q. So in fact, we've been really working on well-
13	control data?
14	A. We primarily have rested on both well-control
15	data and analogues from where there has been dense well
16	control to provide a model for the channel thicknesses and
17	width.
18	Q. If I look at your Exhibit Number 9, the Morrow is
19	indicated in brown?
20	A. Brown or orange.
21	Q. Okay, whatever
22	A. That's okay, I'm partly color blind. It may be
23	brown.
24	Q. Brown or orange. But there's a code at the
25	bottom that shows the location of the Morrow wells in the

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1	area?
2	A. Yes, sir.
3	Q. So your proposed location and, in fact, the
4	Maralo Gold Rush Number "30" are over two wells from Morrow
5	production?
6	A. Yes, sir.
7	Q. Do you have any data closer than that? Any well
8	information closer than that on the Morrow? Did the well
9	in 24 to the northwest of the proposed location, did that
10	penetrate the Morrow?
11	A. That penetrated the Morrow, yes, sir.
12	Q. So you have data on that point as well?
13	A. Yes, we do.
14	Q. That's the well control?
15	A. Yes.
16	Q. You indicated that you understood that the
17	current Gold Rush Number "30" was at a certain depth to
18	date. Have you been reviewing geological information on
19	that well as it has been drilled?
20	A. I have been glancing at it. We receive a daily
21	or pretty close to daily mud log, and we get a drilling
22	report sent to our Midland office, which is then sent to
23	our Fort Worth drilling wire, showing the depth they're at.
24	Q. Has any information, geological information, from
25	the Maralo Gold Rush Number "30" been integrated into any

of the exhibits you've presented here today? 1 Α. No. 2 The information from that well is going to be 3 ο. important information in determining whether or not a well 4 should be drilled where you have proposed it; isn't that a 5 fair statement? 6 7 Every data point helps, I agree with that. Α. 8 And immediate offsetting data --Q. In that context it will be a data point. 9 Α. And it will be an immediate offsetting data 10 0. point? 11 12 Α. It will be a data point to the east, yes. If -- Hypothetical. If the information is other 13 Q. than as depicted on these maps, that could result in a need 14 to move the well location; isn't that right? 15 16 Not in my opinion. Α. 17 So you are going to commit that you would drill Q. the well at this location? 18 If my management asks me, that will be my 19 Α. 20 recommendation. 21 Q. And yet you wouldn't, no matter what you learn on 22 the Maralo well in the north half, determine to move the 23 well? 24 It would have to be very startling information Α. 25 from what we anticipate that well to encounter.

1 0. And that's consistent with your testimony from your isopach map, saying that the Maralo well, even if it 2 is, based on your interpretation, not in as thick a portion 3 4 of the reservoir, doesn't make any difference, it still could really drain the south half of the section? 5 Yeah, there are numerous examples out here of 6 Α. 7 that happening. Just as long as you have a few feet of permeability porosity, you've got your pipeline into the 8 channel. 9 10 0. So on the one hand we have testimony that says 11 we've got these Morrow channels that meander and pinch out 12 and reappear, and it's important to hit them; but if I also 13 understand your testimony, in the Morrow a well that is on 14 the edge of the channel also could drain everything to the 15 south of it? Yes, and that's part of the oil and gas business. 16 Α. I mean, if Maralo come through here and have a high flow 17 rate from, say, the "B" sand, yes, we would still be 18 drilling, obviously. And at the same time, we would be 19 very knowledgeable of the fact that we could also encounter 20 the "B" sand updip and wet, just what happens in the 21 That's a risk we're, you know, prepared to take. 22 Morrow. So if that's the case, then, the differences that 23 Q. I see -- and I'm certainly not a geologist -- between Mr. 24 Thoma's maps and yours is probably no significant; you've 25

1	got a potential drainage situation in your opinion?
2	A. Yes, sir.
3	Q. Okay. And it's my understanding also that even
4	if they had a dry hole at the Maralo location, that
5	wouldn't cause you to want to move your well location?
6	A. From a personal point of view, no, it wouldn't.
7	From upper management, I'd have to maybe resell it or
8	rework it for them in that sense.
9	Q. And if Based on your knowledge of the area,
10	you would recommend, even if that well is dry, going
11	forward with the well at this location?
12	A. Yes, because we recognize other reservoirs in
13	addition to the Morrow.
14	Q. And what are those other reservoirs?
15	A. We recognize potential, as we identified on our
16	type log, Exhibit 8, within the Wolfcamp, the Atoka sand,
17	the Atoka bank and the upper Morrow and middle Morrow "A"
18	sands.
19	Q. Can you tell me if Mr. Bailey was correct that
20	you were intending to wait to commence the actual drilling
21	of a well in the south half until you had information on
22	the completion of the Maralo well in the north half of the
23	section the south yes, in the north half? Is that
24	correct?
25	A. I don't know. I haven't been privy to any of

1	those conversations where that would have come from. I've
2	just gone with the assumption that because of the timing,
3	as I understand it, for an order to be given and for a 30-
4	day allowance for Maralo and partners to elect to join or
5	not in the proposed location, that by that time everyone
6	will be down and they should all be happy with what they've
7	got. Either happy or unhappy.
8	Q. So you don't really know when management intends
9	to spud the well?
10	A. I haven't been given a firm date, but we have
11	been I asked to expedite in the matter to the point
12	where we can get the well drilling as soon as possible.
13	Q. You wouldn't have any information or knowledge
14	that would contradict, though, what Mr. Bailey said? I'm
15	just trying to get
16	A. Yes.
17	Q an idea
18	A. No, no.
19	Q if you're planning to drill the well, commence
20	drilling, before completion information is available on the
21	well in the north half?
22	A. I don't think it's feasibly possible.
23	Q. Are you aware of any topographic conditions out
24	here that might require that you in fact move the well?
25	A. I'm not aware of any.

1	Q. Have you been party or aware of any objection
2	that might exist on the part of Bass to developing this
3	acreage with laydown units in Section 30?
4	A. I'm sorry, ask me again, please.
5	Q. In Mr. Kellahin and I have been squabbling
6	over this case
7	A. Okay.
8	Q and there have been some suggestions that
9	perhaps laydown units were inappropriate and that Bass
10	thought so.
11	And my question to you is whether or not you were
12	aware of any objection ever expressed by Bass to developing
13	Section 30 with laydown units?
14	A. No, I'm not.
15	Q. But laydown units, in fact, if the basic channel
16	is over to the west side, there would be an opportunity for
17	two wells in the west side of 30, would there not be?
18	A. With laydown units, there would have been, yes.
19	Q. And with the laydown units and the peculiar
20	nature, if I can use that term with the Morrow, in fact,
21	you might minimize your risk of in fact being able to
22	produce reserves from the west half when you have two shots
23	at it?
24	A. Yes and no.
25	MR. CARR: That's all I have, Mr. Stogner. Thank

1 you. EXAMINER STOGNER: Thank you, Mr. Carr. 2 Mr. Kellahin, any redirect? 3 4 MR. KELLAHIN: No, sir. EXAMINER STOGNER: I have no questions of this 5 You may be excused. 6 witness. 7 Mr. Kellahin? 8 MR. KELLAHIN: I have nothing else, Mr. Examiner. EXAMINER STOGNER: Okay. Mr. Carr, do you have 9 any closing statements? 10 MR. CARR: Very briefly, Mr. Examiner. 11 12 Trying to come before the Division, not assuming an adversarial position but at the same time asking to 13 cross-examine what is being presented, puts me in a 14 15 somewhat awkward position. But I think it's important to underscore that at 16 this point in time you have one party before you who is 17 18 stating that unless other people join they can't even 19 commit to you today they would drill the well. No other 20 party -- 75 percent of the interest basically standing out, waiting for data on a well to the north. 21 22 We've requested a continuance because we believe 23 that will affect the location. We believe it will affect 24 the plans to go forward, and for us it certainly would. 25 That's why we request the continuance.

And I would renew that request again today so 1 that we can have that information and not be guessing as to 2 when the well would be spudded. 3 I, in conversations with you, know how you will 4 dispose of my motion. 5 But I would like to point out that when an order 6 7 is entered in this case, based on the testimony here today, so that everything stays as it is presented to you, we 8 9 would suggest that you -- if you decide to approve this 10 Application, you approve it for one location, the location 11 which is proposed, because if information becomes available 12 on the north half of the section which changes the picture, 13 we think then if only one location is approved, it would in 14 fact create a situation where we would all have another 15 opportunity to look at this matter when appropriate data is available. 16 EXAMINER STOGNER: Mr. Kellahin? 17 MR. KELLAHIN: Mr. Examiner, as a practical 18 matter, the issuance of a pooling order is going to provide 19 Mr. Carr and his clients with the election opportunity they 20 seek to have. What a delay causes is verification of the 21 22 concerns Mr. Hillis has expressed, is that the drilling well will be successful and within six months we will have 23 a substantial advantage over the interest owners in the 24 south half, and because of the arrangements with that 25

58
property, Bass has a significant smaller working interest
to the south half.
We would like to expedite the process, but in
doing so it's no impairment of the others. The well will
be drilled and tested, certainly within the 30-day period
of election, by which they can then decide if they want to
join us in the south half.
We see this as a rather routine matter that has
some urgency. We see no reason not to go forward with this
Application and have you issue us a pooling order.
Thank you.
EXAMINER STOGNER: Thank you, Mr. Kellahin.
If nothing else further in this case, then Case
Number 11,048 will be taken under advisement.
And with that, hearing adjourned.
(Thereupon, these proceedings were concluded at
3:05 p.m.)
* * *
I do hereby certify that the foregoing is
a complete record of the proceedings in the Examiner hearing of the evolution
heard by me op 7 hours 19 94.
Oil Conservation Division
Oil Conservation Division

58

59 CERTIFICATE OF REPORTER 1 2 3 STATE OF NEW MEXICO ) ) ss. COUNTY OF SANTA FE 4 ) 5 6 I, Steven T. Brenner, Certified Court Reporter 7 and Notary Public, HEREBY CERTIFY that the foregoing 8 transcript of proceedings before the Oil Conservation 9 Division was reported by me; that I transcribed my notes; 10 and that the foregoing is a true and accurate record of the 11 proceedings. I FURTHER CERTIFY that I am not a relative or 12 13 employee of any of the parties or attorneys involved in 14 this matter and that I have no personal interest in the 15 final disposition of this matter. 16 WITNESS MY HAND AND SEAL August 14, 1994. 17 18 STEVEN T. BRENNER 19 CCR No. 7 20 21 My commission expires: October 14, 1994 22 23 24 25