

## NEW MEXICO OIL CONSERVATION DIVISION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date JULY 23, 1998 Time 8:15 A.M.

NAME	REPRESENTING	LOCATION
William A. J...	Langford, Sam, Gary, Glenn	Santa Fe
George A. Williams	Zona Carbon	Denver
George A. Williams	Bass Enterprises Prod Co	Fort Worth
Stewart Hagan	Bass Enterprises	Fort Worth
John McKee	Ocean Energy	Denver
Chad Johnson	Ocean Energy	Denver
Worth Collins	BASS ENTERPRISES	FORT WORTH
Charles Martin	VALES RESEARCH CORP	ARTELA
James Burr	—	Santa Fe
John Donnell	Scott Exploration	Roswell
John Donnell	Scott Exploration	Roswell

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY )  
THE OIL CONSERVATION DIVISION FOR THE )  
PURPOSE OF CONSIDERING: )  
APPLICATION OF BASS ENTERPRISES )  
PRODUCTION COMPANY FOR A NONSTANDARD )  
SUBSURFACE OIL WELL LOCATION/PRODUCING )  
AREA, LEA COUNTY, NEW MEXICO )

CASE NO. 12,010

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

July 23rd, 1998

Santa Fe, New Mexico

98 AUG -6 AM 7:53

OIL CONSERVATION DIV

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, July 23rd, 1998, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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July 23rd, 1998  
Examiner Hearing  
CASE NO. 12,010

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

## FOR THE APPLICANT:

LOSEE, CARSON, HAAS & CARROLL, P.A.  
 311 West Quay  
 Post Office Box 1720  
 Artesia, New Mexico 88210  
 By: ERNEST L. CARROLL

## ALSO PRESENT:

MARK W. ASHLEY  
 NMOCDC Environmental Geologist  
 2040 South Pacheco  
 Santa Fe, New Mexico 87505

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   8:19 a.m.:

3           EXAMINER CATANACH: At this time we'll call Case  
4   12,010, which is the Application of Bass Enterprises  
5   Production Company for a nonstandard subsurface oil well  
6   location/producing area, Lea County, New Mexico.

7           Call for appearances in this case.

8           MR. CARROLL: Mr. Examiner, I'm Ernest Carroll of  
9   the Artesia law firm of Losee, Carson, Haas and Carroll.  
10   I'm here today on behalf of the Applicant, and I will have  
11   two witnesses.

12           EXAMINER CATANACH: Are there any additional  
13   appearances?

14           Will the two witnesses please stand to be sworn  
15   in?

16           (Thereupon, the witnesses were sworn.)

17           MR. CARROLL: Our first witness, Mr. Examiner,  
18   will be Worth Carlin.

19           This set, Mr. Catanach, has the original waivers  
20   in it, so --

21           EXAMINER CATANACH: Okay.

22           MR. CARROLL: -- as an exhibit, you have the  
23   originals.

24           Do you want to have the witness sit up in this  
25   table stand?

1 EXAMINER CATANACH: Please.

2 WORTH CARLIN,

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

5 DIRECT EXAMINATION

6 BY MR. CARROLL:

7 Q. Would you please state your full name, address  
8 and occupation for the record, sir?

9 A. My name is William Worth Carlin. I reside at  
10 3809 Fox Hollow, Bedford, Texas, 76021.

11 Q. All right, and what is your occupation again?

12 A. Oh, I am a landman for Bass Enterprises  
13 Production Company.

14 Q. Now, Mr. Carlin, have you an opportunity to  
15 testify before the New Mexico Oil Conservation Division in  
16 the capacity as a petroleum landman?

17 A. Yes, sir.

18 Q. And have you had your credentials accepted as an  
19 expert in that field?

20 A. Yes, sir.

21 MR. CARROLL: Mr. Examiner, I would tender Mr.  
22 Carlin as an expert in the field of petroleum land  
23 management.

24 EXAMINER CATANACH: Mr. Carlin is so qualified.

25 Q. (By Mr. Carroll) Mr. Carlin, we are here today

1 on an Application of Bass, seeking an unorthodox bottomhole  
2 oil well location for a well that is presently to be  
3 drilling. Are you familiar with that Application?

4 A. Yes, I am.

5 Q. Briefly, would you state for the Examiner's  
6 information why this Application has been made?

7 A. The Application has been made for the purposes of  
8 conducting a side-track off of the Monteith "C" Number 1  
9 well, which was a vertical well. The sidetrack bottomhole  
10 location will fall outside the 300-foot box that is  
11 presently required under the present field rules for the  
12 Penn formation in the Lovington Southeast field.

13 MR. CARROLL: Mr. Examiner, I've just noticed,  
14 the Application states that this is for Eddy County, New  
15 Mexico. It is not; it is Lea County. The advertisement  
16 was done for Lea County. I'm not exactly sure why it  
17 didn't get corrected, but somehow it slipped up. But I  
18 think it has been properly notified, all the people, as to  
19 the actual location, but there is a slip-up, at least in my  
20 copy of the Application. I'm not sure if the one file  
21 contains that.

22 But I'd like to move to amend that to show its  
23 proper county.

24 EXAMINER CATANACH: The Application that you  
25 filed shows Eddy County?

1 MR. CARROLL: Well, the copy I have in my file.  
2 I don't know if the one that got up to the Commission. If  
3 it is, I'd like to amend it. And I see that in the opening  
4 statement -- or the heading, "in the matter of". And in  
5 paragraph 1 it does say Eddy County.

6 EXAMINER CATANACH: I'm sorry, where are you  
7 looking at, Mr. Carroll?

8 MR. CARROLL: The actual -- Do you have a copy of  
9 the Application that is filed?

10 EXAMINER CATANACH: I don't know that -- This was  
11 set by Mike Stogner --

12 MR. CARROLL: Right, that's correct.

13 EXAMINER CATANACH: -- filed this  
14 administratively.

15 MR. CARROLL: There's some corrections here.

16 EXAMINER CATANACH: Okay.

17 MR. CARROLL: They have made some of them. I  
18 just -- Here's what I was noticing, that in the Application  
19 it says Eddy County, and here -- feet from the east line of  
20 Section -- Eddy County.

21 EXAMINER CATANACH: Okay, we must have caught  
22 that and corrected it.

23 MR. CARROLL: I think it was, but I just wasn't  
24 sure, but I want the record to adequately reflect, because  
25 the advertisement is correct.

1           EXAMINER CATANACH: The advertisement is correct,  
2 and your -- I presume your notice is correct.

3           MR. CARROLL: Yes.

4           EXAMINER CATANACH: Okay.

5           Q. (By Mr. Carroll) Mr. Carlin, would you briefly  
6 tell the Examiner the history of how this well was first  
7 proposed, drilled and then what led to the Application, the  
8 circumstances?

9           A. This well was drilled for the purpose of  
10 evaluating the Strawn formation, which, as I alluded to  
11 earlier, is based on 80-acre spacing within a hundred --  
12 the legal location has to be within 150 feet of the center  
13 of a governmental quarter-quarter section, and the well  
14 initially was drilled as a legal location.

15           The Strawn formation out here has been evaluated  
16 by 3-D seismic interpretation, which George Hillis will  
17 explain in more detail later. The Strawn features are very  
18 small in nature.

19           We felt like that we could evaluate this Strawn  
20 feature adequately at a legal location, but upon drilling  
21 the vertical hole and evaluating the Strawn formation, our  
22 seismic was confirmed that we really needed to be over to  
23 the west a little bit to properly evaluate the formation.

24           So that was the purpose of conducting a sidetrack  
25 a few hundred feet to the west, which under normal field

1 rules would still be at a legal location.

2 Q. The way this case was originally started, it was  
3 done through contacting Mr. Stogner, was it not?

4 A. Yes, it was. When we reached TD on the vertical  
5 hole and logged the Strawn formation and saw that we were  
6 just on the very edge of the feature, we contacted both Mr.  
7 Stogner as well as Chris Williams in the Hobbs office to  
8 explain to them that, you know, we had a drilling rig out  
9 there, we had already expended, you know, \$600,000,  
10 \$700,000 and, you know, we would like to do a sidetrack to  
11 protect our correlative rights and develop this feature.

12 Q. So the reason the drilling went ahead instead of  
13 waiting for this hearing or the Application to be granted  
14 was mainly a problem of economic, because you already had  
15 the rig out there on location, and you elected to proceed  
16 ahead after notification to both the Hobbs office and to  
17 the Santa Fe office of the New Mexico OCD?

18 A. That's correct.

19 Q. All right. You've prepared some exhibits to help  
20 illustrate what's going on out here with respect to this  
21 Application, have you not?

22 A. Yes, sir.

23 Q. Would you turn to Exhibit Number 1 and, Mr.  
24 Carlin, if you would, identify what this exhibit is for the  
25 record, and then if you would explain the items that are

1 depicted here.

2           A.    Okay.  Exhibit 1 is a land plat focusing on  
3 Section 13 of Township 16 South, 36 East, wherein outlined  
4 in green -- being the west half of the northeast quarter --  
5 is the spacing unit for the Monteith "C" Number 1, showing  
6 the surface location at 660 from the north, 1830 from the  
7 east line.

8           The red box there next to the surface location is  
9 the 300-foot box that falls within the pool rules to stay  
10 legal.

11           We also show the first sidetrack TD being off to  
12 the west of the initial surface location, and it's denoted  
13 as the first sidetrack because after we got the first  
14 sidetrack down, we stuck the drill pipe in the hole and  
15 weren't able to complete it.

16           As Mr. Hillis will explain later, we did  
17 encounter significantly higher -- or thicker Strawn sands,  
18 and so therefore we are presently conducting a second  
19 sidetrack, just paralleling the first sidetrack to drill  
20 around the junk in the hole.

21           I have also outlined around the 80-acre tract to  
22 the north the offset operators and mineral owners which  
23 have been notified, and Tract 2, 3, 4, 5 and 6 are also  
24 identified for purposes of explaining who the mineral  
25 owners are in those tracts.  This is a fee tract, and it is

1 a lot of mineral ownership in this section.

2 Q. All right, now, with respect to the issues of  
3 notification, you've prepared some other exhibits which  
4 actually show the ownership of the minerals, and that's on  
5 Exhibit Number 2, is it not?

6 A. Yes, sir.

7 Q. And what you have is, there's multiple pages, and  
8 each one of these pages are headed up with a heading such  
9 as Tract 1, Tract 2, Tract 3, and that corresponds with the  
10 tract notations on your Exhibit 1, do they not?

11 A. Yes, sir.

12 Q. Okay. And that's all that's contained in Exhibit  
13 2, is the actual notation, who owns it, whether it's a  
14 working interest or an unleased mineral interest, correct?

15 A. That is correct.

16 Q. Now, according to the rules, though, notice had  
17 to be given to the persons closest to the location; is that  
18 correct?

19 A. That is correct.

20 Q. And what tracts were the ones that notice was  
21 given to, then?

22 A. Notice was given to the parties in Section 12 to  
23 the north, and --

24 Q. And that's operated by Matador Petroleum?

25 A. Matador Petroleum, and Rio Pecos also owns a

1 leasehold interest in there. So both parties were  
2 notified.

3 Q. All right.

4 A. Tracts 2 and Tract 3, adjoining the west side of  
5 our 80-acre spacing unit, which is denoted as Tract 1,  
6 those parties were notified.

7 Q. One of the things in all the additional tracts,  
8 Bass is probably one of the single largest mineral interest  
9 owners in every one of these tracts surrounding except  
10 possibly for the Yates tract; is that correct?

11 A. That is correct.

12 Q. All right. Exhibit 3, would you tell us what  
13 this is?

14 A. Exhibit 3 is the APD, the application for permit  
15 to drill, the initial permit filed for the Monteith "C" 1.

16 Q. All right. This is the application under which  
17 the original straight-hole location was drilled; is that  
18 correct?

19 A. That's correct.

20 Q. And this is just presented to the Examiner so he  
21 can have it available to him for informational purposes,  
22 correct?

23 A. Yes.

24 Q. All right, would you turn to Exhibit 4 and would  
25 you identify what Exhibit 4 is for the record?

1           A.    Exhibit 4 is the notice -- evidence of notice  
2 sent to all of the parties in Section 12 to the north and  
3 Tracts 2 and 3 to the west.

4           Q.    All right, this contains copies of the initial  
5 letter that put them on notice of filing of the Application  
6 and then the change in hearing dates from the original July  
7 9th date to the July 23rd, today's date; is that correct?

8           A.    That's correct.

9           MR. CARROLL: Mr. Examiner, if you will note that  
10 all of these letters do have the proper county designation  
11 on them.

12          Q.    (By Mr. Carroll) Exhibit Number 5, Mr. Carlin,  
13 would you explain -- describe it for the record and explain  
14 what's contained therein?

15          A.    Exhibit 5 are copies -- except the Examiner has  
16 the originals -- of waivers that we received for our  
17 Application.

18          Q.    All right. So out of the people notified, you  
19 did receive 19 waivers with respect to this hearing; is  
20 that correct?

21          A.    Yes, sir.

22          Q.    All right. Mr. Carlin, in your opinion will the  
23 granting of this Application by the New Mexico OCD prevent  
24 waste and protect correlative rights?

25          A.    Yes, it will.

1 MR. CARROLL: Mr. Examiner, I would move  
2 admission of Bass Exhibits 1 through 5 at this time.

3 EXAMINER CATANACH: Exhibits 1 through 5 will be  
4 admitted as evidence.

5 MR. CARROLL: Mr. Examiner, I have no further  
6 questions of this witness at this time.

7 EXAMINATION

8 BY EXAMINER CATANACH:

9 Q. Okay. Mr. Carlin, in Section 12 is there  
10 actually any producing wells?

11 A. Yes, there is. Matador Petroleum operates the  
12 well -- and I believe it's denoted in the northeast of the  
13 southeast quarter.

14 Q. Is that -- Do you know if that's a Pennsylvanian  
15 or a Strawn well?

16 A. It is a Strawn well.

17 Q. Okay. You don't now what acreage is dedicated to  
18 that well?

19 A. I don't know what acreage is dedicated, no.

20 Q. But Matador and Rio Pecos are the lessees of the  
21 remainder of that section, or --

22 A. The title up there is also -- It's a state lease,  
23 but there's multiple working interest owners. And Rio  
24 Pecos was the only owner of operating rights, based on our  
25 record research, that was not a party to the operating

1 agreement for the -- that governs this well.

2 Matador and several other parties are working  
3 interest owners in the well, and my understanding is that  
4 the operator needs to be notified for that purpose.

5 And then, like I said, our records research  
6 showed that Rio Pecos also owned an operating-rights  
7 interest in that state lease but did not turn up as being a  
8 working-interest owner in the well.

9 Q. Okay. I'm not sure it's a big issue because  
10 you're not actually encroaching to the north --

11 A. Right.

12 Q. -- so they're really not affected.

13 A. Right.

14 EXAMINER CATANACH: Okay.

15 MR. CARROLL: Mr. Examiner, the giving the notice  
16 to the Rio Pecos Corporation was just in an abundance of  
17 caution. We think we're covered by doing it to the  
18 operator, but since they weren't a party to the operating  
19 agreement, we went ahead and -- what's another 30-some-odd  
20 cents or whatever letter it costs to get it notified?

21 EXAMINER CATANACH: Okay.

22 Q. (By Examiner Catanach) As far as you know, the  
23 interest owners that you have cited in Tracts 2 and 3,  
24 those are the interest owners in their entirety in those  
25 two tracts?

1 A. Yes.

2 Q. Including any royalty or overrides or anything,  
3 or did you --

4 A. No, all they represent is leasehold owners and  
5 unleased mineral interest owners. So any overrides would  
6 be a party to any leasehold interest.

7 MR. CARROLL: Mr. Examiner, you will note that we  
8 have denoted whether they are a leaseholder or an unleased  
9 mineral interest, and that's what the "MI" designation  
10 would be, an unleased mineral interest owner.

11 Q. (By Examiner Catanach) Have you received any  
12 correspondence from these parties with any concerns about  
13 your location?

14 A. No, sir.

15 Q. You've actually received waivers from a lot of  
16 them?

17 A. From a lot of them, yes, sir.

18 Q. Your notice letter to these parties -- Okay, what  
19 I was looking at is your waivers. Does that accurately  
20 reflect the approximate bottomhole location that you're  
21 drilling to, the 607 from the north line, 2454 feet from  
22 the east line?

23 A. At the time that the waiver letters were sent  
24 out, our sidetrack operation was currently in progress, so  
25 we really didn't know what -- This was an estimate or a

1 guesstimate of where we thought our bottomhole location was  
2 going to be at the conclusion of our sidetrack procedure,  
3 because the waivers went out immediately when we got -- you  
4 know, notified the OCD verbally of what our plans were and  
5 basically got their okay to -- you know, to do it.

6 We immediately sent out waivers to all the  
7 affected parties, and then as a result the sidetrack -- you  
8 know -- the sidetrack -- the true bottomhole is reflected  
9 on Exhibit 1, but this was just where we thought that the  
10 bottomhole was going to be at the time that the waivers  
11 were sent out.

12 MR. CARROLL: Mr. Catanach, if you will note,  
13 that the actual location is -- our waiver had it actually  
14 being closer to the two closest boundary lines than it  
15 actually did.

16 I will also put on testimony concerning what the  
17 new sidetrack is, and we actually believe we're  
18 sidetracking underneath the lost fish, which will -- in all  
19 likelihood, we will even be farther away from those lease  
20 lines, either right directly below the fish or closer back  
21 to the orthodox location.

22 Q. (By Examiner Catanach) Okay. The well is  
23 currently drilling?

24 A. Yes.

25 Q. Okay.

1           A.    And Mr. Hillis will be able to answer any up-to-  
2 date questions on that.

3           EXAMINER CATANACH:  I think that's all I have.

4           MR. CARROLL:  I have no further questions.

5           I have given you Mr. Hillis's exhibits in that  
6 envelope, Mr. Examiner.

7           EXAMINER CATANACH:  Okay.

8           MR. CARROLL:  Are you ready to proceed now?

9           EXAMINER CATANACH:  Yes.

10                               GEORGE A. HILLIS,

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

13                               DIRECT EXAMINATION

14 BY MR. CARROLL:

15           Q.    Mr. Hillis, would you state your full name and  
16 address and place of employment?

17           A.    My name is George A. Hillis.  I reside at 8824  
18 Glenhollow Drive, Forth Worth, Texas, and I'm division  
19 geologist with Bass Enterprises Production Company of Forth  
20 Worth.

21           Q.    You have attached your personal résumé as Exhibit  
22 6, have you not?

23           A.    Yes, sir.

24           Q.    And Mr. Hillis, you have had occasion to testify  
25 before the New Mexico OCD and have your credentials as an

1 expert in the field of petroleum geology accepted, have you  
2 not?

3 A. Yes, I have.

4 MR. CARROLL: Mr. Examiner, we would tender Mr.  
5 Hillis as an expert in the field of petroleum geology.

6 EXAMINER CATANACH: Mr. Hillis is so qualified.

7 Q. (By Mr. Carroll) Al right. Mr. Hillis, let  
8 us -- First of all, you are familiar with the Application  
9 that is before this Examiner today, are you not?

10 A. Yes, I am.

11 Q. You have prepared a group of exhibits to help  
12 illustrate the matters contained in this particular  
13 Application, have you not?

14 A. Yes.

15 Q. If you would, would you turn to your first  
16 exhibit beyond your personal résumé, and that would be  
17 Exhibit Number 7? Would you identify this exhibit for the  
18 record and then explain its significance with respect to  
19 this Application?

20 A. Exhibit 7 illustrates the location of the Bass  
21 Monteith "C" Number 1 relative to Strawn production in the  
22 Lovington field area. The red sector of the production  
23 bubbles reflects the total gas production, while the green  
24 part of the bubble reflects the total oil production on the  
25 well through July of this year.

1           The blue rectangle in the center of the exhibit  
2 illustrates the proration unit for the Monteith "C" Number  
3 1, and the solid pink dot within that is the location of  
4 the vertical hole that we drilled first, and to the west of  
5 the vertical hole the location where the sidetrack well cut  
6 the top of the Strawn and the location of the TD of the  
7 sidetrack well are also illustrated.

8           Q.    Now, Mr. Hillis, this particular Strawn play,  
9 this is a relatively older play, is it not?

10          A.    It's an older play which has been greatly  
11 rejuvenated in the past four or five years, using 3-D  
12 seismic.

13          Q.    Are these items or the structure of the points  
14 that are going after by drillers, the people that are  
15 drilling are exploring in this area, are they large in  
16 size, or are they very restricted in size?

17          A.    They tend to be very restricted in size.

18          Q.    All right. Is this indicative of the objective  
19 that Bass had in mind when it proposed this well and  
20 spudded it?

21          A.    Yes.

22          Q.    Now, you have personally worked in this field  
23 since the early 1980s, have you not?

24          A.    That's correct.

25          Q.    And were actually responsible for the drilling of

1 the first Bass well, this well down in the southeast corner  
2 of Section 13, right?

3 A. That's correct.

4 Q. Okay. Anything else that you would like to bring  
5 to the Examiner's attention with respect to Exhibit Number  
6 7?

7 A. No.

8 Q. All right. If you would turn, then, to Exhibit  
9 Number 8, and would you again identify the exhibit for the  
10 Examiner and then explain its significance with respect to  
11 this Application?

12 A. Exhibit 8 illustrates the structure of the Strawn  
13 for a nine-square-mile area centered on Bass's Monteith  
14 lease. The subsea data point of minus 7406, located in the  
15 northwest of the northeast quarter of Section 13, is from  
16 the vertical hole in the Monteith "C" Number 1.

17 Basically, the Monteith "C" 1 is located on the  
18 northeast flank of a southeast-to-northwest-trending  
19 structural nose located in the southwestern sector of the  
20 map.

21 Q. All right. Is structure a controlling factor in  
22 determining where you're going to drill in this field here?

23 A. No.

24 Q. Any other issues that you'd like to point out to  
25 the Examiner with respect to this exhibit?

1           A.    No.

2           Q.    All right.  Then let us turn to your next  
3 exhibit, which would be Exhibit 9, I believe.

4           A.    Exhibit 9 -- It's a three-page exhibit.

5                    The first page is a summary of the well history  
6 of the Monteith "C" Number 1.

7                    The second page is a sketch of both the sidetrack  
8 and the vertical hole on the wells.

9                    And the third page of Exhibit 9 depicts the fish  
10 that we had to leave in the hole on the sidetrack well.

11                   We spudded the vertical well back on the 20th of  
12 April.  We reached TD near the end of may.  We logged and  
13 drill-stem-tested the Strawn, found it to be tight.

14                   With the additional data from the vertical hole,  
15 we were able to refine the 3-D seismic, and that's what  
16 encouraged us to commence drilling a side frac in a  
17 westerly direction.

18                   And we commenced that in early June.  We reached  
19 TD in the middle of June, TD of 11,598 feet, measured  
20 depth.

21                   While were doing a survey at TD, we got stuck.  
22 We worked the stuck pipe for over a week, and we eventually  
23 had to leave a fish in the hole.  The top of the fish is  
24 covering the pay that we encountered in the Strawn.

25                   We ran 5-1/2-inch casing down to 11,400, above

1 the Strawn. We attempted to make an open-hole completion  
2 there, but with the fish across the pay and the cuttings in  
3 the well, we were unsuccessful. So we decided we would  
4 have to whipstock around it.

5 We began that around the 9th of July. We -- Two  
6 attempts at it. We were not able to get around the fish.  
7 We drilled into the fish the first two times, and we're  
8 currently going for third-time lucky.

9 Q. With respect to the intended location, when  
10 you -- If this third attempt is lucky, where will the  
11 bottomhole be located in reference to this first attempted  
12 whipstock?

13 A. The TD of this whipstock will be below the  
14 sidetrack hole, so the TD will actually be a little further  
15 to the east of the current TD of the sidetrack hole.

16 Q. Okay, closer, then, to the orthodox position?

17 A. Correct.

18 Q. All right. Anything further that you'd like to  
19 point out with respect to this exhibit?

20 A. No.

21 Q. Okay. Let's turn, then, to Exhibit 10, if you  
22 will. Would you again identify this exhibit for the record  
23 and discuss its significance?

24 A. Exhibit 10 illustrates the location of the  
25 vertical and sidetrack holes for the Monteith "C" 1 again,

1 and this time relative to the Strawn reservoir anomaly,  
2 identified by the 3-D seismic.

3 The original vertical hole is located on the  
4 eastern edge of the area for an orthodox location, and the  
5 location of where the sidetrack hole cuts the top of the  
6 Strawn is just west of the area for an orthodox location.  
7 That's number 1 on the map.

8 And then number 2 on the map is the TD of the  
9 sidetrack hole.

10 Q. The -- I suppose it was very hard to draw  
11 locations on top of another. The way this -- The fact that  
12 the number 2 is located more to the west differs from your  
13 testimony is just -- that's because of the problem of  
14 drawing the exhibit; is that correct?

15 A. Well, number 2 is the actual TD of the sidetrack  
16 hole.

17 Q. Okay, is that the sidetrack of the original, the  
18 original sidetrack?

19 A. The original sidetrack.

20 Q. Okay, so the number 1, then, is where the  
21 sidetrack -- you expect it to be located if it's  
22 successful?

23 A. No, the TD of the new sidetrack or the second  
24 sidetrack, the whipstock, should be just a little east of  
25 Number 2 --

1 Q. Uh-huh.

2 A. -- but not as far east as Number 1.

3 Q. And again, this relationship deals with trying to  
4 depict things that are vertically above and under things,  
5 as opposed to just a flat plane that we have here?

6 A. Correct.

7 Q. Now, you have a blue line that is labeled the  
8 "Strawn Reservoir Anomaly (3D)". Would you describe  
9 exactly what is meant and how the boundaries or the  
10 positioning of that line were drawn?

11 A. If you note on the exhibit, Exhibit 10, there's a  
12 pink line that follows the proration unit kind of on the  
13 east half and then along the south half. That's the edge  
14 of the 3-D seismic survey that we had available to us. So  
15 we were kind of on the edge of it.

16 We thought we had a larger anomaly that went more  
17 on the eastern part of our proration unit, and that's why  
18 we drilled a vertical hole at the unorthodox location. We  
19 were wrong.

20 Once we got the well down and we got a sonic log  
21 on that well, we were able to refine the 3-D data, and it  
22 showed us that we were on the edge of a much smaller  
23 anomaly than what we had originally hoped to be.

24 Q. You have depicted that most of the anomaly is  
25 still located within the 80-acre proration unit that has

1       been dedicated to this well; is that correct?

2           A.     That's correct.

3           Q.     Is that interpretation based on your new data  
4       from the drilling of the first straight hole and that 3-D  
5       seismic?

6           A.     It's based on integration of both those sets of  
7       data.

8           Q.     All right.  And you feel that that is a  
9       reasonable depiction, to the best of your knowledge, of  
10      what -- of where that producing part of this reservoir  
11      would lie?

12          A.     Yes, I do.

13          Q.     Anything further with respect to Exhibit 10, Mr.  
14      Hillis?

15          A.     No.

16          Q.     If you will, then, turn to Exhibit 11 and  
17      identify it for the record and explain what is depicted  
18      here with respect to Bass's Application.

19          A.     Exhibit 11 basically enlarges upon the previous  
20      exhibit, Number 10.  And what it does, it details the  
21      distances from the north and west lease lines of the  
22      proration unit for the critical sectors of the sidetrack  
23      hole.

24                   The sidetrack encountered the top of the Strawn,  
25      as indicated, 469 feet from the west lease line and 649

1 feet from the north lease line.

2 Continuing on, the top of the reservoir was  
3 encountered 405.5 feet from the west lease line and 641  
4 from the north lease line.

5 Then the base of the reservoir that we cut in the  
6 sidetrack was encountered 343.3 feet from the west lease  
7 line and 633 feet from the north lease line.

8 Q. All right. And is this the same part of the  
9 reservoir that you're trying to target with this latest  
10 sidetrack attempt?

11 A. Correct. We're between the top and the base of  
12 the reservoir; that's the area we're trying to target. And  
13 we will be just below that, so the top and the base will  
14 probably move a little bit to the east.

15 Q. All right. Anything further with respect to  
16 Exhibit 11 that you'd like to bring to the Examiner's  
17 attention?

18 A. Really only two things, I guess. Just -- these  
19 measurements -- I put this together to show that we're  
20 really not encroaching on the north lease line. And we  
21 are, in my opinion, a fair distance away from our west  
22 lease line also.

23 Q. Were you an original party to the development of  
24 the special field rules?

25 A. No, I wasn't.

1 Q. The interesting thing about the application  
2 that -- with respect to the application of normal  
3 statewide rules, would this bottomhole location be an  
4 unorthodox location?

5 A. For where we encountered the reservoir, if it was  
6 statewide rules with 330 from the legal center, it would be  
7 a legal location, it would be orthodox.

8 Q. All right. Okay, let us turn, then, to Exhibit  
9 12. Would you identify it for the record and describe its  
10 significance?

11 A. Okay. If you refer back to Exhibits 10 and 11,  
12 showing the areal view of the sidetrack hole and the  
13 vertical hole setup, this Exhibit Number 12 is a cross-  
14 section which illustrates the location of the vertical and  
15 sidetrack holes in the vertical dimension for the Monteith  
16 "C" Number 1.

17 The log on the mud log for the original vertical  
18 hole are shown on the right-hand side. You can see that we  
19 touched the very edge of the Strawn down around 11,340. We  
20 DST'd it, we got a little oil, but the pressures indicated  
21 we were tight, we could not make a completion. So that  
22 encouraged the sidetrack after we refined these logs with  
23 the 3-D data.

24 On the left-hand side, then, of the cross-section  
25 are the mud log, on the extreme left, the mud log for the

1 sidetrack hole and the measured depth. And just over to  
2 the right of there is a TVD, or a true vertical depth, log  
3 of the drill rate of the sidetrack.

4 As I mentioned before, we were not able to obtain  
5 electric logs on the sidetrack after we got stuck. So we  
6 just have our mud log. But it indicates that we in the  
7 sidetrack hole encountered approximately 60 feet of gross  
8 pay in the center of the reservoir.

9 Q. All right. So what you've tried to do by this  
10 particular cross-section is attempt to equate the only  
11 information you have on the sidetrack, which is a mud log,  
12 with the information that you got on the original logging  
13 of the straight hole; is that correct?

14 A. That's correct.

15 Q. Okay. And this particular log, what is shown  
16 here on this cross-section does show a significant  
17 difference in size of reservoir, does it not, from what the  
18 first hole was, to the sidetrack?

19 A. Thickness of reservoir, correct, and also the  
20 drilling shows associated with the drill break.

21 Q. In your opinion, is it reasonable for Bass to  
22 expect that a completion could be made in this part of the  
23 reservoir, as is shown from the mud log?

24 A. We believe so.

25 Q. Now, this particular operation on Bass's part has

1     been -- has turned out to be a very costly one, has it not?

2           A.     It's been a very tough hole.

3           Q.     All right.

4           A.     I think our original AFE for the hole was around  
5     \$723,000, and yesterday morning when I checked before I  
6     came here, we were pretty close to \$1.2 million.  So it's  
7     going to be a tough hole to make a lot of money on.

8           Q.     Yes.  Now, Mr. Hillis, one of the normal concerns  
9     that the New Mexico Conservation Division has to do when  
10    it's judging what should happen with respect to an  
11    unorthodox location is that they want to know, of course,  
12    the ultimate issues about preventing waste and protecting  
13    correlative rights, and whether or not they're giving an  
14    unfair advantage to an operator by granting an unorthodox  
15    location.

16                   With respect to the exhibits that you have  
17    presented and dealing with those issues of allowing Bass to  
18    seek to protect its correlative rights and also prevent the  
19    waste or the leaving of unproduced oil out here, with  
20    respect to all of those issues I wish you would make a  
21    statement to the Examiner, tie those in with this issue of  
22    whether or not there should even be considered a penalty  
23    because we are at an unorthodox location.

24           A.     Well, personally, I don't believe there should be  
25    a penalty applied.

1           We thought we had a larger anomaly, we drilled  
2 the vertical hole, logged it, refined the data from that  
3 with our 3-D seismic, find that we had a much smaller  
4 anomaly than we had hoped for.

5           But more importantly, we believe that anomaly is  
6 essentially restricted to within our proration unit. And  
7 as I mentioned earlier, we're not encroaching on the north  
8 lease line and in my opinion we're a fair distance from the  
9 west lease line also.

10           So there's some oil there that will not go to  
11 waste.

12           Q.    So you -- in granting -- in consideration of  
13 whether or not this Application should be granted, are you  
14 of the opinion that it will prevent waste and protect the  
15 correlative rights that exist out here?

16           A.    Yes.

17           Q.    All right. With respect to that Exhibit 12, are  
18 there any other issues that you wish to bring to the  
19 attention of the Examiner?

20           A.    No, sir.

21           Q.    Why don't we then turn to Exhibit 13, and if you  
22 would describe it for the record and explain its  
23 significance.

24           A.    Exhibit 13 is a wellbore diagram that illustrates  
25 the proposed and actual of the side frac on the Monteith

1 "C" 1. This data was provided to Bass by Anadrill, a  
2 division of Schlumberger.

3 The red line on the exhibit illustrates the  
4 actual sidetrack hole, whereas the blue line was the one  
5 that was originally planned, and the red then being the  
6 actual, so...

7 I've indicated on there the critical entry points  
8 by the wellbore for the Strawn and the sidetrack, but I  
9 guess the one thing to really point out is that we did not  
10 go as far to the west, the actual sidetrack, as we thought  
11 we would have.

12 Q. All right. This basically, then, confirms the  
13 earlier exhibits, and Exhibit 14 is actually the recorded  
14 data from which these graphs are drawn, is it not?

15 A. That is correct.

16 Q. So the purposes of Exhibit 13 and 14, then, were  
17 to confirm for the Examiner the actual location of this  
18 sidetracked operation?

19 A. That's correct. Basically, these two exhibits  
20 are the documentation from Anadrill, from which we obtained  
21 the distances which we have included in all the other  
22 exhibits.

23 MR. CARROLL: All right. Mr. Examiner, I would  
24 move, then, admission of Exhibits Numbers 6 through 14 at  
25 this time.

1 EXAMINER CATANACH: Exhibits 6 through 14 will be  
2 admitted as evidence.

3 MR. CARROLL: All right, and Mr. Examiner, I  
4 would have no further questions to ask of this witness.

5 EXAMINATION

6 BY EXAMINER CATANACH:

7 Q. Okay. Mr. Hillis, you say that your sidetrack  
8 Number 2 is going to be located further to the east. Do  
9 you know how much further?

10 A. I don't.

11 Q. Do you have an estimate, maybe?

12 A. I would -- I'm not a drilling person, but the way  
13 I understand it, we would put a motor on. We're trying to  
14 whipstock below the actual fish. And I'm told that we  
15 should stay within like 10 feet parallel to the wellbore at  
16 that point.

17 So for the top and the base of the reservoir, I  
18 think you're just talking, you know, five to ten feet  
19 further to the east. It's not a major distance. We're to  
20 stay as close to where we've seen the oil shows.

21 Q. Now, your estimate of what the configuration of  
22 this structure looks like comes from 3-D seismic and the  
23 data that you've obtained from drilling the well?

24 A. Correct. On the vertical well we ran a sonic  
25 log, which helps us tie into the seismic a lot better, and

1 that helped us refine the seismic interpretation through  
2 there, to refine where the anomaly really was.

3 And as I say, we were actually -- Going back to  
4 Number 10, we were on the edge of our 3-D, and typically  
5 that quarter-mile edge is kind of scary, the data you get  
6 from there. So that's where we went wrong in the vertical  
7 hole.

8 Q. Did you gain enough data from the sidetrack  
9 number 1 to show that you're in a good position to drain  
10 that reservoir at that point?

11 A. We believe we pretty much have hit it dead center  
12 now.

13 Q. Okay.

14 A. As I said, we have like 60 feet of gross pay by  
15 the drill rate and the mud-log shows, and when you compare  
16 that to production from other wells in the area, 50 to 60  
17 feet of gross pay is about average for the center of these  
18 anomalies.

19 Q. Is this, in your opinion, probably a one-well  
20 structure?

21 A. This is a one-well structure.

22 Q. So if you don't get it, chances are it won't be  
23 produced?

24 A. That's correct.

25 Q. Have you guys done any estimates, or is that

1 possible at this point, of oil in place?

2 A. No, because -- We've tried to do that on some of  
3 the other producing wells, and the problem there is, we  
4 don't have 3-D coverage over them, so we don't know the  
5 areal extent of that particular anomaly. So we haven't  
6 really developed a good relationship between anomaly size  
7 areally and ultimate production.

8 Q. Was that actually -- Sidetrack number 1, was that  
9 tested? Did you guys test that?

10 A. No -- Well, we did, yes. If you go back to  
11 Exhibit Number 9 --

12 Q. Uh-huh.

13 A. -- on the first page, on the summary of the well  
14 history --

15 Q. Yeah.

16 A. -- when we had the fish in the hole, the top of  
17 the fish is about 11,435, which covers the Strawn and a  
18 little bit above the Strawn. We were able to get 5-1/2-  
19 inch casing down to 11,400. We went ahead and released the  
20 rig, and we brought in a workover rig. We drilled out our  
21 cement down to the casing shoe and we washed the open-hole  
22 section from 11,400 to 11,435, where we had a lot of  
23 cuttings came up.

24 We attempted then to complete the well over a  
25 five-day period, and on the best two days -- I believe one

1 day we swabbed like nine barrels of oil in the whole day,  
 2 and one other day I think we got as high as 19, with some  
 3 water. And it wouldn't flow, we had to swab it each time,  
 4 so...

5 We believe there's pay down there, and we believe  
 6 the reason it wouldn't flow for us is the fact that the  
 7 fish is -- and the cuttings are kind of holding everything  
 8 back.

9 And you know, with the money we've spent on the  
 10 well, we feel we need to get a fresh cut at the pay zone to  
 11 try and get some of our money back.

12 EXAMINER CATANACH: I have nothing further, Mr.  
 13 Carroll.

14 MR. CARROLL: Mr. Examiner, I do not either.  
 15 This would then conclude the presentation that Bass has for  
 16 you today.

17 EXAMINER CATANACH: Okay. There being nothing  
 18 further in this case, Case 12,010 will be taken under  
 19 advisement.

20 (Thereupon, these proceedings were concluded at  
 21 9:06 a.m.)

22 \* \* \*  
 23 I hereby certify that the foregoing is  
 24 a complete record of the proceedings in  
 25 the Examiner hearing of Case No. 12010,  
 heard by me on July 23 1988.  
David P. Catanch, Examiner  
 Oil Conservation Division

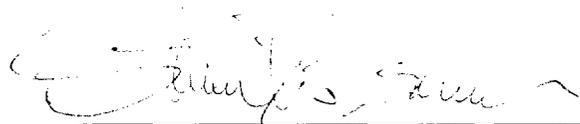
## CERTIFICATE OF REPORTER

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

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL July 24th, 1998.



STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 14, 1998