

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 U.S. ENERCORP, LTD., FOR ) CASE NO. 13,951  
A NONSTANDARD OIL SPACING AND PRORATION )  
UNIT AND AN UNORTHODOX OIL WELL LOCATION, )  
RIO ARriba COUNTY, NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: RICHARD EZEANYIM, Technical Examiner  
DAVID K. BROOKS, Jr., Legal Examiner

July 12th, date, 2007

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, RICHARD EZEANYIM, Technical Examiner, DAVID K. BROOKS, Jr., Legal Examiner, on Thursday, July 12th, 2007, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

\* \* \*

STEVEN T. BRENNER, CCR  
(505) 989-9317

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## I N D E X

July 12th, 2007  
Examiner Hearing  
CASE NO. 13,951

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\* \* \*

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

## FOR THE DIVISION:

DAVID K. BROOKS, JR.  
 Assistant General Counsel  
 Energy, Minerals and Natural Resources Department  
 1220 South St. Francis Drive  
 Santa Fe, New Mexico 87505

## FOR THE APPLICANT:

JAMES G. BRUCE  
 Attorney at Law  
 P.O. Box 1056  
 Santa Fe, New Mexico 87504

\* \* \*

1 WHEREUPON, the following proceedings were had at  
2 9:28 a.m.:

3 EXAMINER EZEANYIM: Let's go back on the record  
4 and call Case Number 13,951, Application of U.S. Enercorp,  
5 Ltd., for a nonstandard oil spacing and proration unit and  
6 an unorthodox oil well location, Rio Arriba County, New  
7 Mexico.

8 Call for appearances.

9 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,  
10 representing the Applicant. I have two witnesses.

11 EXAMINER EZEANYIM: Any other appearances?

12 May the witnesses stand to be sworn, please?

13 (Thereupon, the witnesses were sworn.)

14 EXAMINER EZEANYIM: Mr. Bruce, you may proceed.

15 MR. BRUCE: Thank you.

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

19 DIRECT EXAMINATION

20 BY MR. BRUCE:

21 Q. Could you please state your name for the record?

22 A. John Sowell.

23 Q. How do you spell your last name, for the court  
24 reporter?

25 A. S-o-w-e-l-l.

1 Q. And where do you reside?

2 A. I reside in Von Ormy, Texas, which is a little  
3 town outside of San Antonio, Texas.

4 Q. Who do you work for and in what capacity?

5 A. I work for U.S. Enercorp, Ltd., as a landman.

6 Q. Have you previously testified before the  
7 Division?

8 A. No.

9 Q. Would you please summarize your educational and  
10 employment background?

11 A. In 1974 I graduated from the University of Texas  
12 at Austin with a business degree, and then went on to law  
13 school at Texas Tech University, and I graduated in 1978  
14 with my law degree from Tech.

15 And out of law school I went to work for Exxon in  
16 Houston for almost three years, and then I worked for  
17 Clayton Williams, an independent oil and gas producer out  
18 of Midland, for almost 14 years, and the last five of which  
19 I was district land manager. Then I worked for several  
20 small independents. And five years ago, approximately, I  
21 began working for U.S. Enercorp, Ltd.

22 Q. Are you familiar with the land matters regarding  
23 this Application?

24 A. Yes.

25 Q. And does your area of responsibility at U.S.

1 Enercorp include this part of New Mexico?

2 A. Yes.

3 MR. BRUCE: Mr. Examiner, I'd tender Mr. Sowell  
4 as an expert petroleum landman.

5 EXAMINER EZEANYIM: Mr. Sowell, are you -- do you  
6 happen to be a certified public landman? Are you --

7 THE WITNESS: I don't have my CPL, but I do have  
8 a law degree and I am a member of the AAPL.

9 EXAMINER EZEANYIM: Mr. Sowell is qualified.

10 Q. (By Mr. Bruce) Mr. Sowell, could you identify  
11 Exhibit 1 for the Examiner and briefly describe what U.S.  
12 Enercorp seeks in this case?

13 A. Yes, Exhibit 1 is a plat outlining the west half  
14 of Section 2 and the east half of Section 3 in Township 23  
15 North, Range 1 West, NMPM. And we seek to form a  
16 nonstandard oil spacing unit comprised of these two half-  
17 sections, and we intend to drill a horizontal Mancos well.

18 Q. Before we move off of this, there's two half-  
19 sections. Is the west half of Section 2 a single lease?

20 A. Yes.

21 Q. What type of lease?

22 A. That's a private ownership fee lease.

23 Q. Okay. And then in Section 3, is Section -- is  
24 all of Section 3 covered by a single federal lease?

25 A. That's my understanding, owned by McElvain Oil

1 and Gas --

2 Q. And --

3 A. -- McElvain.

4 Q. -- does U.S. Enercorp have a farmout from  
5 McElvain on the east half of Section 3?

6 A. Yes, we do.

7 Q. Okay. What is the location -- the surface  
8 location and the bottomhole location for the proposed well?

9 A. The surface location is 1220 feet from the east  
10 line and 3250 feet from the south line of Section 3, and  
11 the bottomhole location is at 1870 feet from the west line  
12 and 2180 feet from the south line of Section 2.

13 Q. And is Exhibit 2 a portion of the Application for  
14 permit to drill this well?

15 A. I believe it is.

16 Q. And since the surface is on federal land, this  
17 Application is initially being filed with the Bureau of  
18 Land Management, is it not?

19 A. That's correct, we file our APD with the BLM.

20 Q. Okay. What -- This is a Mancos test. What  
21 Mancos pool is the well located in?

22 A. It is in the West Puerto Chiquito-Mancos Pool.

23 Q. Would you identify Exhibit 3 and describe the  
24 applicable pool rules?

25 A. Yes. Exhibit 3 is a copy of part of Order Number

1 R-6469, as amended, which instituted 640-acre spacing for  
2 the pool. A standard well unit is comprised of a single  
3 section. One well is allowed per well unit, with the wells  
4 to be no closer than 1650 feet to the section lines.

5 Q. And because of that 1650-foot requirement, this  
6 well is unorthodox?

7 A. That's correct.

8 Q. Is the well location and the nonstandard unit  
9 requested due to geological reasons?

10 A. Yes, it is, and I believe our geologist will go  
11 into more details on that.

12 Q. Okay. What is Exhibit 4?

13 A. Exhibit 4 is a plat of parts of 23 North, 1 West,  
14 and 24 North, 1 West, and it indicates the type of land in  
15 Sections 2 and 3 and identifies offset acreage and  
16 operators.

17 Q. Okay. And let's just run down this a little bit.  
18 To the north in Sections 34 and 35 there are Mancos wells  
19 that are operated by Elm Ridge Exploration Company, are  
20 there not?

21 A. That's my understanding, yes.

22 Q. And going down, your proposed well unit is  
23 highlighted in blue?

24 A. Correct.

25 Q. And then to the west it's McElvain Oil and Gas.

1 They are actually the owner of a single federal lease  
2 covering all of Section 3, correct?

3 A. Yes, that and I believe it covers additional  
4 acreage as well --

5 Q. Okay.

6 A. -- so we have a farmout on the east half of that.

7 Q. And then in the east half of Section 2, the east  
8 half is federal acreage; is that correct?

9 A. Yes.

10 Q. And U.S. Enercorp leases the northeast quarter?

11 A. Yes.

12 Q. And the southeast quarter is unleased federal  
13 land?

14 A. Yes.

15 Q. Okay. And then in Sections -- to the south, the  
16 operators are listed on those acreages, correct?

17 A. Yes.

18 Q. And there are no Mancos wells on the acreage to  
19 the south?

20 A. Not that I'm aware of.

21 Q. Okay. And were all of the offsets notified of  
22 this Application?

23 A. Yes, and I believe that's shown on Exhibit 6.

24 Q. That's Exhibit 6, yeah, which is my affidavit of  
25 notice, correct?

1 A. Yes.

2 Q. Now did representatives of U.S. Enercorp meet  
3 with any governmental entities regarding this Application?

4 A. I have not, but a principal of our company, Bruce  
5 Gates, who is a geologist, did meet with Mr. Jim Lovato  
6 with the BLM and Steve Hayden, and I believe he's with the  
7 OCD. And in fact, Mr. Lovato wrote a letter in support of  
8 our position, and a copy of that letter is attached as  
9 Exhibit 5, I believe.

10 Q. Okay. One item in the second paragraph of Mr.  
11 Lovato's letter, he asked U.S. Enercorp to request  
12 nonstandard units comprised of the east half of Section 2  
13 and the west half of Section 3; is that correct?

14 A. Yes.

15 Q. And U.S. Enercorp has filed those applications  
16 now with the Division, has it not?

17 A. Yes.

18 MR. BRUCE: Those applications are set for the  
19 August 9th hearing, Mr. Examiner.

20 EXAMINER EZEANYIM: For the east half of 2 and  
21 the west half of 3; is that --

22 MR. BRUCE: That is correct.

23 THE WITNESS: Yes, sir.

24 Q. (By Mr. Bruce) And that was requested not only  
25 by the BLM but by the -- Mr. Hayden of the Oil Conservation

1 Division; is that correct?

2 A. Yes.

3 EXAMINER EZEANYIM: So you want that to be heard  
4 on August 9th?

5 MR. BRUCE: That application, yeah. It wasn't  
6 filed until a few days ago, Mr. Examiner.

7 EXAMINER EZEANYIM: Okay, go ahead.

8 Q. (By Mr. Bruce) Were Exhibits 1 through 6  
9 prepared by you or under your supervision or compiled from  
10 company business records?

11 A. Yes.

12 Q. And in your opinion is the granting of this  
13 Application in the interests of conservation and the  
14 prevention of waste?

15 A. Yes.

16 MR. BRUCE: Mr. Examiner, I'd move the admission  
17 of Exhibits 1 through 6.

18 EXAMINER EZEANYIM: Exhibits 1 through 6 will be  
19 admitted.

20 MR. BRUCE: And I pass the witness.

21 EXAMINER EZEANYIM: Do you have any questions?

22 EXAMINER BROOKS: No, I have no questions. Go  
23 ahead.

24 EXAMINER EZEANYIM: Well, first of all maybe I  
25 have to listen to the geologist to see where you want to

1 divide those units because as you know, the order you  
2 cited, Order -2565 or -6469, says you have to have an oil  
3 well 640, and there are two 640s in that -- Exhibit Number  
4 4?

5 MR. BRUCE: Correct.

6 EXAMINER EZEANYIM: Go back to Exhibit Number 4.  
7 I think maybe I will understand why you want to do this  
8 when I listen to the geologist.

9 MR. BRUCE: That would be better addressed to the  
10 geologist, Mr. Examiner.

11 EXAMINER EZEANYIM: Okay, I think I will reserve  
12 those comments on that.

13 MR. BRUCE: Okay.

14 THE WITNESS: Thank you.

15 JAMES D. McCONNELL,

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

18 DIRECT EXAMINATION

19 BY MR. BRUCE:

20 Q. Would you please state your name for the record?

21 A. James Douglas McConnell.

22 Q. And where do you reside?

23 A. I reside in Fair Oaks Ranch, Texas, which is just  
24 outside the City of San Antonio.

25 Q. Who do you work for and in what capacity?

1 A. I work for U.S. Enercorp, Ltd., as a geologist.

2 Q. Have you previously testified before the  
3 Division?

4 A. No.

5 Q. Would you please summarize your educational and  
6 employment background?

7 A. Education is a BA in geology, BS in business,  
8 from Trinity University in San Antonio, and then an MBA  
9 from the University of Texas in Austin and some subsequent  
10 studies at Tulane University in reservoir engineering,  
11 where I didn't complete a degree.

12 I worked then for Exxon in New Orleans and  
13 Houston for about six years, retired early and went to San  
14 Antonio as an independent. About five years ago I started  
15 with U.S. Enercorp as a geologist and geophysicist and have  
16 been there since.

17 Q. Does your area of responsibility at U.S. Enercorp  
18 include this part of northwest New Mexico?

19 A. Yes, sir.

20 Q. And are you familiar with the geologic matters  
21 involved in this Application?

22 A. Yes.

23 MR. BRUCE: Mr. Examiner, I'd tender Mr.  
24 McConnell as an expert petroleum geologist.

25 EXAMINER EZEANYIM: Thank you very much. Do you

1 happen to be certified geologist, petroleum geologist? Are  
2 you -- do you have any -- in that area?

3 THE WITNESS: Yes, sir, I am a certified  
4 petroleum geologist through the American Association of  
5 Petroleum Geologists. I'm not registered with the State of  
6 Texas or the State of New Mexico.

7 EXAMINER EZEANYIM: Mr. McConnell is so  
8 qualified.

9 Q. (By Mr. Bruce) Mr. McConnell, if you could  
10 initially identify your Exhibit 7 and discuss the geologic  
11 conditions in the area of your proposed well?

12 A. Exhibit 7 is a geologic structure map on the top  
13 of the Gallup sand, which is a member of -- in the Mancos  
14 formation. This map is in the area where we're proposing  
15 to drill our directional well, and on the map I'd like to  
16 have you focus your attention on the yellow square, which  
17 is our proposed 640-acre unit, including the west half of  
18 Section 2 and the east half of Section 3, Township 23  
19 North, Range 1 West.

20 There's a couple of things I'd like to point out  
21 about this map. One is the location of a seismic line  
22 which we have used along with geologic subsurface  
23 information from the wells on the map and geologic surface  
24 locations, where the formations outcrop on the lower right-  
25 hand side of this map.

1           This -- on the map, shown in blue -- which it's  
2 kind of hard to see that it's in blue but is labeled Cuba 2  
3 is a 2-D seismic line, part of which we've used to create  
4 this map.

5           EXAMINER EZEANYIM: Where is the blue? I don't  
6 see that.

7           THE WITNESS: It's a numbered line that has --

8           EXAMINER EZEANYIM: Oh, Cuba 2?

9           THE WITNESS: Yeah, Cuba 2 labels on each end of  
10 it. It runs basically east-west. The top of the map is  
11 toward the north.

12           This map then shows the structural setting on the  
13 top of the Gallup sand, and on the lower right-hand side,  
14 as I mentioned, the Gallup outcrops at the surface. It  
15 then slopes very steeply down to approximately the west  
16 half of Section 2, and then is fairly flat as you go to the  
17 west. And this will be a little easier to see in the next  
18 exhibit, but I kind of wanted to explain the setting here  
19 first.

20           Shown on the exhibit in the yellow box is our  
21 proposed lateral, in red. The surface location is in  
22 Section 3. The lateral follows the seismic line and the  
23 geologic cross-section I'm going to show you in a minute,  
24 going to the east southeast, and the bottomhole location is  
25 noted with the symbol BHL.

1           And if you don't have any questions, I'd like to  
2 bring --

3           Q.    (By Mr. Bruce) One thing I do want you to point  
4 out. There are a couple of wells in Sections 2 and 3.  
5 Could you identify those and what they were -- what they  
6 produced?

7           A.    Yes. The well that you see in Section 2 is  
8 labeled Nassau Resources Laguna Colorado Number 2. It has  
9 a slight directional nature to it. That's what the little  
10 black line is from the black dot, going to the south  
11 southeast [sic]. It also has a label in red at the top of  
12 this Gallup sand horizon, and that's showing a plus-690.  
13 That's sea level -- above sea level.

14                The other well I'd like to -- That well produced  
15 5000 barrels. That's what the little 5 is in green, 5 CUM.

16                To the west in Section 3 is the Amoco Badland  
17 Flats well, which had cum'd 7000 barrels. And its  
18 structural position on the map is a plus 728.

19           EXAMINER EZEANYIM: Do you know when those wells  
20 were drilled? Do you know when those wells were drilled?

21           THE WITNESS: Approximately. The Amoco well was  
22 drilled in the late 1980s, and the Nassau Resources well  
23 was drilled around the same time.

24           Q.    (By Mr. Bruce) And those wells were definitely  
25 uneconomic?

1 A. Yes.

2 Q. Okay. Let's move on to your Exhibit 8 then at  
3 this point, and describe the reason for the nonstandard  
4 unit.

5 A. The reason for the nonstandard unit is due to  
6 geologic considerations which I think I can show you fairly  
7 clearly on this geologic cross-section. The line of the  
8 cross-section follows the Cuba 2 seismic line that's shown  
9 on the structure map. So at the right we're on the outcrop  
10 and you can see that that's coming up very steeply. And on  
11 the left it comes out to where these beds are very flat.

12 So the proposed unit is also shown on this cross-  
13 section with two yellow lines. On the right the yellow  
14 line is the half-section line for Section 2, and on -- the  
15 left-hand yellow line is the half-section line for Section  
16 3.

17 What we're targeting, as you can probably see, is  
18 the point where the beds bend. They've come down from the  
19 right-hand side or the east side, and they flatten out  
20 right in the center of our proposed location.

21 The proposed well is shown on the cross-section  
22 in dark red. We're going to drill the well straight down  
23 to just above the Gallup sand, and then we're going to  
24 attempt a lateral to the east southeast, towards the  
25 bottomhole location.

1 Q. Based on this plat, would you anticipate both the  
2 west half of Section 2 and the east half of Section 3 to be  
3 productive in the Mancos?

4 A. The west half of Section 3 --

5 Q. No, no, no, the west half of 2 --

6 A. Oh.

7 Q. -- and the east half of 3?

8 A. Well, we're hoping so. The sweet spot, if you'll  
9 allow that term, would probably be toward the center of the  
10 proposed unit. As you go to the west of the proposed unit,  
11 the beds are fairly flat. And as the results of the Amoco  
12 well indicate, we don't believe that the -- it's as  
13 prospective for production of oil.

14 As you go to the east the beds are highly  
15 dipping, and we again don't feel that they'll be as  
16 productive as in the curve.

17 Q. And so the reason for the nonstandard unit is  
18 because, based on your geologic study of the area, the east  
19 half of 2 and the west half of 3 are not prospective?

20 A. That is correct.

21 EXAMINER EZEANYIM: But you want to -- They are  
22 not prospective, but you want to combine them. So when you  
23 combine them, they become prospective? Is that what --

24 MR. BRUCE: No, no, no. I'm talking the east  
25 half of 2, the excluded acreage in --

1 EXAMINER EZEANYIM: Oh, the excluded.

2 MR. BRUCE: -- Section 2 --

3 EXAMINER EZEANYIM: Okay, the --

4 MR. BRUCE: -- and then the west half of 3.

5 EXAMINER EZEANYIM: But the -- neither of the one  
6 that you include is productive. Those wells were drilled  
7 in 1980, and they are cum'ing seven and five. And I heard  
8 you say that they are not productive. I don't know whether  
9 when you combine them, then they become productive.

10 MR. BRUCE: No, no. Well -- That's not what I'm  
11 asking, Mr. Examiner.

12 He -- I was asking Mr. McConnell if he expects --  
13 There's two separate questions: if he expects the west half  
14 of 2 and the east half of 3 to be productive --

15 EXAMINER EZEANYIM: Okay.

16 MR. BRUCE: -- and then separately the west half  
17 of 3 and the east half of 2 to be nonprospective.

18 EXAMINER EZEANYIM: Yeah, what was your answer  
19 when that question was asked, Mr. McConnell? When he was  
20 asking you if the -- this west half of 2 and the east half  
21 of 3, whether you expect them to be productive.

22 THE WITNESS: The west half of 2 and the east  
23 half of 3 --

24 EXAMINER EZEANYIM: Uh-huh.

25 THE WITNESS: -- which is in the proposed unit --

1 EXAMINER EZEANYIM: Yeah.

2 THE WITNESS: -- we do expect that to be  
3 productive because of its geologic position at the point  
4 where the beds come down steeply dipping and then turn to  
5 flat --

6 EXAMINER EZEANYIM: Yeah, I'm looking at --

7 THE WITNESS: -- so that's our target area for  
8 geologic considerations.

9 And for the similar reason, the areas outside of  
10 the proposed unit, which would include the east half of 2  
11 and the west half of 3, are not likely to be productive in  
12 our opinion, and that's supported by -- at least by the  
13 Amoco well's poor results.

14 EXAMINER EZEANYIM: I guess my other question  
15 would be, you know, that bottomhole is in the west half of  
16 Section 2, right? The bottomhole is in the west half of 2?  
17 The bottomhole location of that well is in the west half of  
18 2, right?

19 THE WITNESS: Yes, sir.

20 EXAMINER EZEANYIM: Okay. Let me ask you this  
21 question, because that will be a basis of approving this  
22 Application. If you go to the rules and have Section 2 as  
23 your standard unit, what would be the -- How would I ask  
24 that question? Are there going to be wells involved --  
25 what would be -- Just use Section 2 for example, and you

1 drill that well there. Under the order, -6469 or -2565,  
2 whichever that is going in that pool, Mancos Pool, and you  
3 use Section 2, what are you going to lose by using Section  
4 2, combining this half-section?

5 THE WITNESS: Well, I think we'll lose  
6 approximately half to maybe three-quarters of our  
7 prospective productive region, because we're expecting that  
8 the majority of the productive fractures will be pretty  
9 much on the centerline between Section 2 and Section 3.  
10 It's unfortunate that the geology didn't follow the  
11 governmental sections --

12 EXAMINER EZEANYIM: Uh-huh.

13 THE WITNESS: -- but we felt like to apply these  
14 modern technologies to make productive wells and add to  
15 production from an old field, we had to try to maximize our  
16 possibility of productivity by hitting that curve.

17 EXAMINER EZEANYIM: So it's because of economics  
18 that you want to drill that horizontal well?

19 THE WITNESS: Yes, sir.

20 Q. (By Mr. Bruce) And Mr. McConnell, these Mancos  
21 pools out here were discovered some 20 to 25 years ago,  
22 were they not?

23 A. It was longer than that, it was in the '60s.

24 Q. And really there has been very little development  
25 for about 20 years out here; is that correct?

1 A. That is correct.

2 Q. And so what U.S. Enercorp hopes to do is apply a  
3 little new technology to this old reservoir?

4 A. That is correct.

5 Q. And then as the Examiner correctly pointed out,  
6 that Nassau Resources well is in the west half of 2, but  
7 that was a vertical well, correct? More or less?

8 A. Yes.

9 Q. And so it isn't able to -- it wasn't -- or it  
10 didn't test any -- the bend in the formation like you are  
11 intending to test?

12 A. That is correct.

13 Q. Were Exhibits 7 and 8 prepared by you or under  
14 your supervision?

15 A. Yes.

16 Q. And in your opinion is the granting of this  
17 Application in the interests of conservation and the  
18 prevention of waste?

19 A. Yes.

20 MR. BRUCE: Mr. Examiner, I'd move the admission  
21 of Exhibits 7 and 8.

22 EXAMINER EZEANYIM: Exhibits 7 and 8 will be  
23 admitted.

24 MR. BRUCE: And I have no further questions of  
25 the witness.

1 EXAMINER EZEANYIM: Do you have any?

2 EXAMINATION

3 BY EXAMINER BROOKS:

4 Q. Mr. McConnell, looking at your Exhibit 8, you're  
5 attempting to place your bottomhole location right in the  
6 crook where the formation turns upwards; is that correct?

7 A. Yes.

8 Q. And then you're -- But you're going to penetrate  
9 farther back where the formation is more or less flat?

10 A. We think we're going to come into the formation  
11 -- As you can see, there are some faults indicated on  
12 here --

13 Q. Yeah.

14 A. -- with question marks. They're interpreted.  
15 But we're hoping that the fracturing will be prevalent from  
16 about the point we contact the formation, which is probably  
17 a little bit on the eastern edge of Section 3, all the way  
18 through to approximately where the Laguna Colorado well has  
19 been projected onto the seismic line.

20 Q. Okay.

21 A. We --

22 Q. Go ahead.

23 A. We're not sure we'll actually get this long a  
24 lateral when it comes to drilling. There's difficulties  
25 trying to get the lateral that long, but we wanted to try

1 to get as far as we could with it, and that's what we  
2 proposed here.

3 Q. Well, I readily understand your point about the  
4 change in grade of the beds, or change in depth of the  
5 beds. At the same time, I would ask the question, then,  
6 since the formation appears to be relatively flat through  
7 the entirety of Section 3, why is it that you believe that  
8 the east half of Section 3 will contribute to the  
9 production and the west half of Section 3 would not?

10 A. I think that the contribution, even though it's  
11 shown as relatively flat, the junction of the sloping  
12 formation and the flat is probably -- we don't know exactly  
13 where it is --

14 Q. Yeah.

15 A. -- to be honest. But the faulting we've proposed  
16 there, even though it's flat, the fracturing is likely to  
17 be where we think that faulting is occurring.

18 Q. So the fault is -- the faulting is the line shown  
19 with the question marks on it, on Exhibit 7, right?

20 A. Yes, sir. And there's actually little arrows  
21 that you may be able to see, that indicate what direction  
22 that fault has moved, we believe.

23 Q. So would it be correct, then, to say that you're  
24 relying on the change in the dip of the beds as a trapping  
25 mechanism here or --

1           A.    The change in the dip of the beds is a trapping  
2 mechanism in the sense that that's likely to be where the  
3 fractures will occur, and the fractures are where the oil  
4 is held.

5           Q.    Yeah.

6           A.    They are the trap.

7           Q.    And do you think, though -- the fault that you've  
8 put in here as a question mark, would that be a western  
9 boundary to the area that you would think would be where  
10 the production would be, or -- What I'm trying to get to is  
11 why you think the west half would be unproductive, other  
12 than the relatively poor performance of the Badland Flats  
13 well.

14          A.    We believe that the fracturing is probably  
15 occurring in the bend, as I indicated, and that -- by that  
16 same idea, there would be less fracturing as you got out  
17 into the flatter section of the formation, out toward the  
18 Amoco well. The results of the Amoco well, of course, are  
19 not very compelling to drill out there either, but it's  
20 really because of the fracturing. We think that that will  
21 be maximized in the bend area and -- the area where we've  
22 shown this proposed fault.

23          Q.    Okay. If -- And you're not real sure exactly  
24 where the structure is, then?

25          A.    That's correct.

1 Q. It's somewhere around the boundary between  
2 Section 2 and 3, but you don't know exactly?

3 A. Right. It could be a little bit more on the  
4 eastern edge of 3 or a little bit more on the western edge  
5 of 2, we're not sure. But we feel like with this unit  
6 we've got our best chance of hitting that fractured bend.

7 Q. And the farther you get away from that structure,  
8 the less juice you expect to find?

9 A. That's what we are thinking in this area.

10 Q. So if you created a standard unit in -- if you  
11 created two standard units as a project area, you could do  
12 this same well, but you'd have to share the production with  
13 the owners of the east half of 2 and the west half of 3,  
14 correct?

15 A. Yes.

16 Q. And that would be kind of hard on your  
17 correlative rights if your geologic theory is correct?

18 A. That's true.

19 MR. BRUCE: And one thing, Mr. Examiner. I will  
20 point out that the -- and I didn't get into this with Mr.  
21 Sowell, but U.S. Enercorp has a farmout that's coming to  
22 the end with McElvain Oil and Gas, and they have to drill  
23 the well fairly shortly. But the southeast quarter of  
24 Section 2 is unleased federal minerals, and -- which Mr.  
25 Sowell did testify to.

1 EXAMINER BROOKS: Yes, I believe I recall that.

2 MR. BRUCE: And so as you know, you can't force  
3 pool the federal government --

4 EXAMINER BROOKS: That's true.

5 MR. BRUCE: -- et cetera, et cetera, and it also  
6 leads to issues regarding if they make a good well, then  
7 somebody could go out and buy that lease after seeing  
8 what's happened, et cetera. So that's an issue too.

9 EXAMINER BROOKS: Okay, that's all I have.

10 EXAMINATION

11 BY EXAMINER EZEANYIM:

12 Q. Yeah, geology alone is not very convincing to me.  
13 I would have preferred there are some calculations done  
14 here to prove that what you are trying to do is going to --  
15 even more production. So I would like to see some  
16 reservoir engineering calculations. You have some offset  
17 wells there on 3 and 2 that could have given you some  
18 information.

19 Of course, you should -- with your geology, you  
20 know the porosity and everything. You could do some  
21 calculations to demonstrate that what you are doing is  
22 going to be profitable. You know, you are -- right now, if  
23 I understand what you said correctly from geology, so I  
24 don't know whether dividing those two will yield the  
25 desired results that you wanted unless you have a

1 calculation to back that up. I mean, that's my feeling. I  
2 don't know how you feel about it.

3 A. Well, geology is an inexact science, but this is  
4 our best estimate of the geologic setting, and this unit  
5 would give us the best way to test that idea. The  
6 calculations you're referring to, I'm not quite sure what  
7 else we can add to the concept we've come up with.

8 We do have this seismic line Cuba 2, which is the  
9 basis for this cross-section, and it shows basically the  
10 same thing as we've gone through with the cross-section,  
11 where the bend is. So locationwise, the bend -- we're  
12 pretty close. It's somewhere along the boundary line  
13 between Section 2 and Section 3.

14 So the only way to penetrate that bend position  
15 is to create a unit that doesn't follow the governmental  
16 sections. That's really the only way to test it at this  
17 location.

18 Now we're not experts at this yet, but we have  
19 drilled another well on this type of idea, and it is  
20 working. So it's new to the area, the area really hasn't  
21 had much activity in a long time, and we'd like to come in  
22 and employ new technology as far as lateral drilling. But  
23 we need to do it where we think we have our best shot.

24 Q. You are also asking for approval of the  
25 nonstandard location, correct?

1           A.    Yes, sir.

2           MR. BRUCE:  That's correct, Mr. --

3           Q.    (By Examiner Ezeanyim)  And that includes the  
4 terminus and the -- I don't know where is the penetration  
5 point of this one.

6           MR. BRUCE:  Well, both the surface location and  
7 the terminus proposed terminus are unorthodox, both of  
8 them.

9           EXAMINER EZEANYIM:  I don't really care about the  
10 surface, but I care about where the -- where that will  
11 penetrate the formation.

12          MR. BRUCE:  And that's -- and I think Mr.  
13 McConnell can address that.  It's -- where it penetrates  
14 the Mancos --

15          EXAMINER EZEANYIM:  Yeah.

16          MR. BRUCE:  -- might be a little -- where you  
17 first penetrate the Mancos might be a little uncertain  
18 until you get down there and start drilling.

19          EXAMINER EZEANYIM:  Well, yeah, it's okay, I  
20 needed to know where it is.  You are asking for those to be  
21 approved too, so --

22          MR. BRUCE:  Yes.

23          EXAMINER EZEANYIM:  -- I think you have done your  
24 notification requirements, but I wanted to know where it  
25 penetrated it, because bottomhole location is --

1 THE WITNESS: Right, the penetration point for  
2 the Gallup will be further east than the surface location.

3 EXAMINER EZEANYIM: Oh, okay.

4 THE WITNESS: Where it's going to be, as Mr.  
5 Bruce said, we don't know until we actually get there. We  
6 actually have to sort of manually drive the directional, to  
7 hit the formation. But it will be further east, as is  
8 indicated on the cross-section, than the --

9 EXAMINER EZEANYIM: Yeah.

10 THE WITNESS: -- surface location.

11 EXAMINER EZEANYIM: And you -- the notice  
12 requirement, all the notices, right?

13 MR. BRUCE: Yes, sir.

14 EXAMINER EZEANYIM: Okay. Anything further?

15 EXAMINER BROOKS: Nothing further.

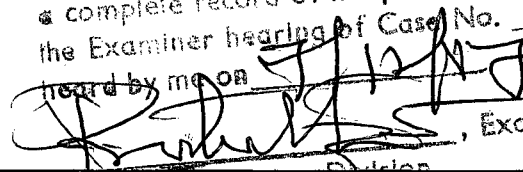
16 EXAMINER EZEANYIM: Anything?

17 MR. BRUCE: Nothing further, thank you.

18 THE WITNESS: Thank you.

19 EXAMINER EZEANYIM: Well, if nothing further,  
20 Case Number 13,951 will be taken under advisement.

21 (Thereupon, these proceedings were concluded at  
22 10:07 a.m.)

23 \* I do hereby certify that the foregoing is  
24 a complete record of the proceedings in  
25 the Examiner hearing of Case No. 13951.  
heard by me on  , Examiner

Oil Conservation Division

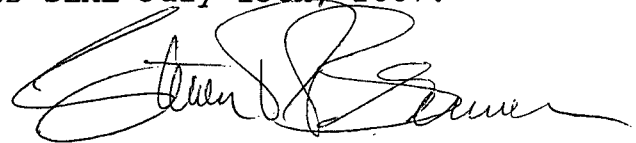
## CERTIFICATE OF REPORTER

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 15th, 2007.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2010