

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 PLATINUM EXPLORATION,	)	CASE NOS. 13,400
INC., TO ABOLISH THE SPECIAL RULES AND	)	
REGULATIONS FOR THE SOUTH KNOWLES-	)	
DEVONIAN POOL, LEA COUNTY, NEW MEXICO	)	
	)	
APPLICATION OF PLATINUM EXPLORATION,	)	and 13,401
INC., TO ABOLISH THE SPECIAL RULES AND	)	
REGULATIONS FOR THE KNOWLES-DEVONIAN	)	
POOL, LEA COUNTY, NEW MEXICO	)	
	)	(Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

January 6th, 2005

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, January 6th, 2005, 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  
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## I N D E X

January 6th, 2005  
Examiner Hearing  
CASE NOS. 13,400 and 13,401 (Consolidated)

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

## FOR THE DIVISION:

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## FOR THE APPLICANT:

JAMES G. BRUCE  
 Attorney at Law  
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\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   8:34 a.m.:

3           EXAMINER CATANACH: At this time I'll call Case  
4   13,400, the Application of Platinum Exploration, Inc., to  
5   abolish the special rules and regulations for the South  
6   Knowles-Devonian Pool, Lea County, New Mexico.

7           Call for appearances.

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

11          EXAMINER CATANACH: Call for additional  
12  appearances.

13          MR. BRUCE: And Mr. Examiner, at this time I'd  
14  also ask that the next case, 13,401, be consolidated for  
15  hearing with this matter.

16          EXAMINER CATANACH: Call Case 13,401, the  
17  Application of Platinum Exploration, Inc., to abolish  
18  special rules and regulations for the Knowles-Devonian  
19  Pool, Lea County, New Mexico.

20          Are there any additional appearances in this  
21  case?

22          Okay, Mr. Bruce, do you have two witnesses?

23          MR. BRUCE: Two witnesses.

24          EXAMINER CATANACH: Will the witnesses please  
25  stand to be sworn in?

1 (Thereupon, the witnesses were sworn.)

2 DAVID HOBBY,

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. BRUCE:

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

8 A. David Hobby.

9 Q. Where do you reside?

10 A. Midland, Texas.

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

12 A. Platinum Exploration, Inc., geologist.

13 Q. Have you previously testified before the  
14 Division?

15 A. No, I haven't.

16 Q. Would you please summarize your educational and  
17 employment background for the Examiner?

18 A. I have a bachelor of science in geology from the  
19 University of Georgia. I've been employed in various  
20 capacities as a geologist in the oil and gas business in  
21 the Permian Basin since 1980, almost 25 years experience.  
22 I'm an active member of the American Association of  
23 Petroleum Geologists and a certified geoscientist in the  
24 State of Texas.

25 Q. Have you -- How long have you been with Platinum?

1 A. Two and a half years.

2 Q. And does your area of responsibility at Platinum  
3 include this portion of southeast New Mexico?

4 A. Yes, it does.

5 Q. And are you familiar with the geology involved in  
6 these two cases?

7 A. Yes, I am.

8 MR. BRUCE: Mr. Examiner, I'd tender Mr. Hobby as  
9 an expert petroleum geologist.

10 EXAMINER CATANACH: Mr. Hobby is so qualified.

11 Q. (By Mr. Bruce) Mr. Hobby, if you could look at  
12 our exhibits and just very briefly, what do Exhibits 1A and  
13 1B depict?

14 A. Okay, they depict the outline of the Knowles  
15 South and the Knowles fields.

16 Q. Okay, and these are both Devonian pools?

17 A. They're Devonian, primarily Devonian pools.

18 Q. What is the current well-spacing requirements in  
19 both of these pools?

20 A. They're on 80-acre spacing.

21 Q. Okay. And were these -- and wells are to be  
22 located how far away from the center of a quarter-quarter  
23 section?

24 A. They're supposed to be in the center of the  
25 quarter section, the 40-acre, but they can be within 150

1 feet of that center.

2 Q. Okay. And at this point, Platinum is seeking to  
3 abolish these special pool rules?

4 A. That's correct.

5 Q. Okay. Let's first discuss the Knowles South  
6 Pool. What does your Exhibit 2 depict?

7 A. This is a land plat that depicts laterals that  
8 we've drilled, except for one up in Section 12, in the  
9 southeast quarter, on the east half of the southeast  
10 quarter. That has not been drilled. That was proposed,  
11 but not drilled.

12 Q. Okay. Now, these -- and the yellow outlines  
13 Platinum's leasehold ownings in this area?

14 A. Yes, Platinum's leasehold ownings.

15 Q. Okay. Now, you are seeking to abolish the  
16 special pool rules. Even if you do that, the laterals  
17 would still be spaced on 80s, would they not? Eighty acres  
18 would be dedicated --

19 A. Right.

20 Q. -- to each lateral well?

21 Also on this map, for purposes of notice, in the  
22 northeast quarter of Section 24, there's a well down there  
23 operated by Avra Energy; is that correct?

24 A. That's correct.

25 Q. Is that the only other existing Knowles South-

1 Devonian well in this pool, other than the ones operated by  
2 Platinum?

3 A. Yes, that's correct.

4 Q. Let's discuss the geology in the Knowles South  
5 Pool. Could you move on to your Exhibit 3 and identify  
6 that for the Examiner?

7 A. Okay, this is a subsurface structure map on top  
8 of the Devonian. It shows the approximate original oil-  
9 water contact at minus 8570, oil column being about 230  
10 feet thick. It's a -- There are some faults within this  
11 structure.

12 Q. Okay. What is the drive mechanism within this  
13 pool?

14 A. It's a water drive.

15 Q. And when, approximately, was this pool  
16 discovered?

17 A. It was discovered in the mid-1950s.

18 Q. And although the spacing was 80 acres, was it  
19 essentially developed with one well per quarter-quarter  
20 section?

21 A. It was initially developed on 80s, and then in  
22 the 1970s they began infilling on 40 acres. And what they  
23 would do is abandon the old original Devonian well, and  
24 then on the 40 acre opposite they would drill a new well.

25 Q. Okay. And in this pool, the Avra well is noted



1 in Section 24. That well is a Devonian producer?

2 A. That's correct.

3 Q. But before Platinum came in and purchased leases  
4 there were no other Devonian producers; is that correct, in  
5 this pool?

6 A. There were a couple of marginal producers.

7 Q. Which Platinum purchased?

8 A. That Platinum purchased.

9 Q. Okay. Is there anything else you'd like to  
10 discuss on this map?

11 A. No.

12 Q. Well, why don't you move on to your cross-section  
13 and discuss the reservoir and what Platinum is doing in  
14 this pool?

15 A. This cross-section is a stratigraphic cross-  
16 section. It's to illustrate the heterogeneity of the  
17 Devonian in this area in the Knowles South field. What  
18 we've found, we've -- We're in the process of exploiting  
19 and further developing Devonian -- faults of Devonian  
20 features in Gaines County, Yoakum County and Lea County,  
21 and what we're finding is that the reservoirs aren't  
22 homogeneous, they're complex.

23 In the Knowles South case, there's several shales  
24 that's interbedded, there's shale lenses that inhibit,  
25 restrict the flow of oil, even though it's an oil -- I mean

1 a water-drive reservoir. The water does not come up in a  
2 uniform fashion; it's complex. And we're finding that to  
3 be true in the Knowles South field, that it's one of the  
4 more broken-up structures that we've developed at the  
5 present time.

6 And so what we're finding is that we can go in --  
7 there's lenses, reservoir lenses, in the Devonian dolomite  
8 that haven't really been exploited or they've under-  
9 exploited. And so we feel that we can get in, in some  
10 cases deepen old wells, in other cases drill laterals that  
11 will open up these little reservoir lenses, and enhance the  
12 oil recovery.

13 Q. Do you have a map of the laterals on one of your  
14 wells?

15 A. Yes, I do.

16 Q. And is that marked Exhibit 5?

17 A. Right.

18 Q. Why don't you discuss that particular well and  
19 the results of that well for the Examiner?

20 A. This illustrates what we're doing. The solid red  
21 line indicates an actual lateral that we drilled, and you  
22 can see that as we drilled it we encountered several shales  
23 within our lateral. The red boxes, they indicate mud log  
24 shows that we got as we drilled. And so we targeted the  
25 dolomites which are the reservoir within the Devonian, and

1 we targeted and tried to stay within the -- in between the  
2 shales, within the porous and permeable dolomite. And this  
3 illustrates what laterals we've encountered, in general.

4 Q. And with respect to the well spacing, do you feel  
5 it's better to have 40-acre spacing with the 330-foot  
6 setback requirements on a quarter-quarter section, to be  
7 available for you to adequately develop this old pool?

8 A. Yes, I do.

9 Q. It gives you increased flexibility and well  
10 locations, et cetera?

11 A. Right, it gives us a greater latitude in  
12 orienting our laterals so that we can orient them toward  
13 areas of the field that we feel have been under exploited.

14 Q. Let's move on to your exhibits with respect to  
15 the Knowles pool, and first just briefly identify Exhibit  
16 6.

17 A. Okay, it's a land plat showing Platinum's acreage  
18 outline.

19 Q. Now, you have not re-entered or drilled any new  
20 wells in this pool --

21 A. No, we haven't.

22 Q. -- have you?

23 And on this plat, in the west half, southwest  
24 quarter of Section 35, there's noted a Paladin well. Is  
25 that a producing well?

1 A. Yes, it is.

2 Q. That's the only producing well in this pool at  
3 this point, is it not?

4 A. Yes, it is.

5 Q. And the west half, southwest quarter is dedicated  
6 to that well; is that correct?

7 A. That's correct.

8 Q. Okay, why don't you move on to your Exhibit 7 and  
9 discuss the geology in the Knowles pool?

10 A. This exhibit is a montage that shows two cross-  
11 sections, two structural cross-sections in the Knowles  
12 field. It also has a structure map.

13 The reservoir is the Devonian dolomite with an  
14 oil column approximately 360 feet thick, and we feel that  
15 this is somewhat similar to the Knowles South -- the  
16 proximity of the two fields, they're close, and we feel  
17 that it'll be real similar, that we'll be able to exploit  
18 it better if we can orient our laterals in the directions  
19 we need to get away from old boreholes and be able to open  
20 up porosity lenses, permeability lenses that we could  
21 enhance the recovery and be able to get more reserves from  
22 the field.

23 Q. And because of the heterogeneity of the  
24 reservoir, you feel there are reserves in the pool that  
25 haven't been tapped by the existing wells?

1 A. Yes, that's our belief.

2 Q. And again, even though the spacing is 80 acres in  
3 this pool, to a large extent they were developed one well  
4 per 40; is that correct?

5 A. Yeah, to a large extent, that's correct.

6 Q. And again, with respect to this pool, do you feel  
7 that developing it based on statewide rules will give you  
8 the added flexibility you need to properly locate your  
9 wells to recover remaining reserves?

10 A. Yes, it will.

11 Q. Okay. Mr. Hobby, were Exhibits 1 through 7  
12 prepared by you, under your supervision or compiled from  
13 company business records?

14 A. That's right.

15 Q. And in your opinion, are the granting of these  
16 two Applications in the interests of conservation and the  
17 prevention of waste?

18 A. Yes, definitely.

19 MR. BRUCE: Mr. Examiner, I'd move the admission  
20 of Exhibits 1 through 7, 1A through 7.

21 EXAMINER CATANACH: Exhibits 1 and 1A through 7  
22 will be admitted into evidence.

23 EXAMINATION

24 BY EXAMINER CATANACH:

25 Q. Mr. Hobby, do you know the status of the two

1 producing wells, the Avra well and the Paladin well?

2 A. They're making a lot of water. I think they're  
3 making in the neighborhood of anywhere from 20 to 45  
4 barrels a day.

5 Q. Of oil?

6 A. Of oil.

7 Q. So they're still actively producing. And you  
8 think they're making a lot of water?

9 A. Yes, I do.

10 Q. Have you by any chance talked to these two  
11 companies about your proposal?

12 A. I've talked to Avra and he said that, you know,  
13 was fine, that he wouldn't oppose us, that he didn't have  
14 any problem with going to statewide rules.

15 Q. Do you know what their lease situation is? Is it  
16 a -- Do both of these wells have 80 acres dedicated to them  
17 at this point?

18 A. Yes, they do.

19 Q. Do you know how this changing to 40 acres is  
20 going to affect those two proration units?

21 MR. BRUCE: Mr. Examiner, if I might, the well  
22 units are oriented on a leasehold basis. The Paladin well,  
23 if you look at Exhibit 1B --

24 EXAMINER CATANACH: Exhibit 1B.

25 MR. BRUCE: -- and Mr. Reeves, our next witness,

1 can confirm this -- the Paladin well is the west half,  
2 southwest quarter of Section 35, and it has common interest  
3 ownership, whether you're looking at 40 or 80 acres. So  
4 there's no effect on interest ownership.

5 EXAMINER CATANACH: Okay, that's the Paladin  
6 well?

7 MR. BRUCE: That's the Paladin well. And then if  
8 you look at Exhibit 1A for the South Knowles Pool, the Avra  
9 well is in the northeast quarter of Section 24, and again  
10 the northeast quarter of Section 24 is a single tract with  
11 uniform ownership. And therefore, regardless of how that  
12 well unit is or may be oriented, interest ownership remains  
13 the same in production from the well.

14 EXAMINER CATANACH: Now, did you verify this, Mr.  
15 Bruce, with the interest -- I mean, with the operators  
16 or --

17 MR. BRUCE: I think Mr. Reeves can verify that  
18 Platinum did a bunch of title work out here --

19 EXAMINER CATANACH: Okay.

20 MR. BRUCE: -- on this, when they were out here  
21 purchasing their interests. And I believe Mr. Hobby could  
22 confirm that they actually offered to buy Avra's well.

23 THE WITNESS: Yeah, that's correct.

24 Q. (By Examiner Catanach) Okay. In the South  
25 Knowles-Devonian Pool, you guys are currently developing

1 with laterals?

2 A. Uh-huh, that's correct.

3 Q. Are you re-entering existing wells?

4 A. We're re-entering -- So far we've re-entered five  
5 existing wells and drilled laterals. The toe of the  
6 lateral will be in -- within 150 feet of the center spot of  
7 the 40, in compliance with the present field rules.

8 Q. Okay, the existing wells are wells that have -- I  
9 presume have been depleted at their locations?

10 A. Yes, two of them have, and the other two were,  
11 you know, making about 20-some-odd barrels a day.

12 Q. With respect to the heterogeneous nature of this  
13 dolomite reservoir, is it just that this dolomite just  
14 comes and goes, or are there porosity or permeability  
15 barriers?

16 A. Well, there's -- within the dolomite reservoir  
17 itself, there are lenses of porosity that develop, so  
18 it's -- it could be the old -- the depositional fabric of  
19 the dolomite or of the lime, carbonate, when it was  
20 deposited, that contributed to this. And so we have  
21 lateral changes in the porosity and the permeability, and  
22 in the Knowles south, we're also finding that there's shell  
23 beds and shell lenses that also segregate the reservoirs.

24 Q. Is that how the South Knowles and the Knowles  
25 Pool is going to be further developed? Do you anticipate



1 drilling laterals or --

2 A. It depends. Some of these wells, we feel we can  
3 deepen, and other wells we feel that, you know, drilling  
4 laterals is the best way to exploit them. You know, some  
5 of the wells we may initially deepen them and put them on  
6 production, see how they do, and then go back in and drill  
7 laterals.

8 We have a pooling clause in the Knowles South in  
9 our leases, so that if we can get statewide rules we can  
10 pool it and it will allow us more flexibility in the  
11 orienting of laterals.

12 Q. Now, the laterals, they're still going to be  
13 developed on 80 acres; is that correct?

14 A. As far as their orientation?

15 Q. As far as -- well, I assume that they're -- well,  
16 I don't know for sure how that's going to work with the  
17 laterals. Are you just producing in the bottom portion of  
18 those wellbores?

19 A. Yeah, just in the Devonian is where we're  
20 producing.

21 Q. Okay. Do you know how many more wells you're  
22 going to drill in this area?

23 A. In the South Knowles, we have planned one new  
24 drill, and possibly three to four more laterals.

25 Q. How about the other pool?

1 A. In the Knowles we have three laterals planned.

2 Q. So are you having good success with the laterals?

3 A. Yes, we are.

4 Q. Has the oil-water contact moved up in this  
5 reservoir?

6 A. Since we drilled our laterals?

7 Q. Well, since the original?

8 A. Since the original? It's --

9 Q. If you know.

10 A. Yeah, what we found is that because of the  
11 heterogeneity of the different reservoirs, that in some  
12 cases we're getting kind of an edge drive, we're getting  
13 water, you know, coming up from the edges, possibly  
14 enhanced from the faulting and fracturing of the reservoir.  
15 And so in some cases we're finding that there's a high  
16 water cut, relatively high in the reservoir, whereas below  
17 there's higher oil cuts and -- because it's oil that's been  
18 left behind.

19 Typically, these reservoirs, in the early days,  
20 they would drill all the way through and determine where  
21 the oil-water contact is. And then later, a lot of the  
22 Devonian wells, they just scratch the top of it, thinking  
23 that it's a homogeneous reservoir, that the water's going  
24 to come to you, is going to find you, and so just  
25 scratching to the top and produce the wells, they felt more

1 efficiently, that way.

2 And so in effect, the old deeper wells, where  
3 they plugged back over the years and wound up plugging up  
4 to the very top of the formation, in essence, there's high  
5 water cuts in the very top of these formations. And like I  
6 said, we're finding that we're finding high oil cuts deep  
7 within the reservoir itself.

8 And so if we can get in there and open up the  
9 lower sections and then -- and also open up what we feel  
10 are -- what we found are isolated -- or oil pockets that  
11 have been, you know, somewhat -- there's been a baffling  
12 effect because of a decrease in the permeability or  
13 whatever. If we can get down deeper to the Devonian and  
14 open these reservoirs up, then we have success. And so  
15 that's what we're finding. So it's...

16 Q. So I -- have you guys done some drainage work out  
17 here to determine what these wells are capable of draining,  
18 or --

19 A. That may be something that Mike could better  
20 address, our engineer.

21 Q. Okay.

22 A. But you know, in my opinion it would be real  
23 complex, it would be very complex.

24 Q. It sounds like it.

25 A. Yeah.

1 EXAMINER CATANACH: Okay, I think that's all I  
2 have of this witness.

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

6 DIRECT EXAMINATION

7 BY MR. BRUCE:

8 Q. Would you please state your name and city of  
9 residence for the record?

10 A. James Michael Reeves, I reside in Midland, Texas.

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

12 A. I work for Platinum Exploration, Incorporated.  
13 I'm currently employed as a drilling engineer.

14 Q. Have you previously testified before the  
15 Division?

16 A. Yes, I have.

17 Q. And were your credentials as an expert accepted  
18 as a matter of record?

19 A. Yes, I was.

20 Q. And are you familiar with the engineering matters  
21 involved in these two pools?

22 A. Yes, I am.

23 MR. BRUCE: Mr. Examiner, I'd tender Mr. Reeves  
24 as an expert engineer.

25 EXAMINER CATANACH: Mr. Reeves is so qualified.

1 Q. (By Mr. Bruce) Mr. Reeves, before we get into  
2 your drainage or your production testimony, let's ask a few  
3 of the notice questions. Platinum has been out here buying  
4 acreage now for what, a couple years or so?

5 A. Yes.

6 Q. And it did title work out in this area to  
7 determine who owned what?

8 A. That's correct.

9 Q. And with respect to the Knowles Pool, the Paladin  
10 well unit, the west half, southwest quarter of Section 35,  
11 that is all one tract, is it not?

12 A. They own -- in the south --

13 Q. In the west half, southwest quarter, just that  
14 well unit?

15 A. Yes.

16 Q. That is the well unit for their well?

17 A. Yes.

18 Q. And it has uniform ownership in that --

19 A. Yes, it does.

20 Q. And same thing with -- in the South Knowles Pool,  
21 in the Avra well, that 160-acre tract, again, is one  
22 singular tract --

23 A. That's correct.

24 Q. -- with uniform ownership?

25 A. That's correct.

1 Q. One other thing. With respect to -- There have  
2 been 80-acre laterals drilled already in the South Knowles  
3 Pool?

4 A. Yes, they have.

5 Q. Those 80-acre well units retain the prior  
6 orientation of the well units for the existing -- for the  
7 prior or existing wells, do they not?

8 A. That's correct.

9 Q. So --

10 A. That's the most expedient way to --

11 MR. BRUCE: And that is reflected in the Division  
12 records, Mr. Examiner. So for instance, in Section 18, Mr.  
13 Examiner, all those 80-acre well units for those laterals  
14 are the same as for the prior wells, even if they were  
15 abandoned at some point. So...

16 Q. (By Mr. Bruce) Let's move on to your Exhibit 8,  
17 Mr. Reeves. Could you identify that, discuss production in  
18 the pools to date and what Platinum hopes to recover by way  
19 of its re-entries and directional drilling?

20 A. The technical information I'm given here, we have  
21 very little technical -- actual technical information  
22 available to us. The logs are 1949- and 1950-vintage logs,  
23 so they're not very -- they're hard to use for actual  
24 calculations.

25 The figures I've given you were based on our

1 research in Lea County, what the Devonian has been capable  
2 of recovering, and we based on recovering what we feel has  
3 been recovered successfully in other Devonian reservoirs in  
4 Lea County of about 100 barrels per acre-foot for each one  
5 of those reservoirs.

6 These reservoirs, the Knowles reservoir has  
7 recovered 51 barrels per acre-foot, and the Knowles South  
8 has recovered 34 barrels per acre-foot, approximately.

9 We feel like these lower recoveries are due to  
10 the heterogeneity of these reservoirs, and our lateral  
11 drilling, the heterogeneity has even been borne out more  
12 than we anticipated initially.

13 We have a fault running through in Exhibit 3,  
14 you'll see a fault shown in -- coming through this  
15 reservoir. That was not -- When we initially started the  
16 project, that was not considered a fault. We now feel that  
17 there is a fault there. Our drilling indicates there's a  
18 fault there, and this lateral actually encountered part of  
19 the fracturing next to that fault. And we've got quite a  
20 large water cut from that well. That is a producing well,  
21 this is our Brooks Number 2 well. It's in the South  
22 Knowles in Exhibit 3.

23 Q. In Section 12?

24 A. In Section 18, excuse me.

25 Q. 18.

1 A. Yes.

2 Q. Now -- So with respect to Exhibit 8, you're  
3 predicting essentially doubling the recoveries that --  
4 doubling the existing recoveries?

5 A. We feel like we can easily double the recovery,  
6 because we feel like if the reservoir is produced properly  
7 and the oil is encountered the way it should have been --  
8 and I think in this reservoir, the laterals are really the  
9 only method of recovery that are going to be successful, or  
10 successful in recovering the potential of the reservoir.

11 Q. Now, the -- just looking in general in both  
12 pools, what did good wells in the Knowles or Knowles South  
13 Pool recover originally, roughly?

14 A. Oh, gosh, I didn't bring that. They're  
15 recovering, in a good well, about 120,000 barrels.

16 Q. Okay, and that was for the older wells, the  
17 wells --

18 A. That's for the older wells, yes.

19 Q. -- drilled in the 1950s and 1970s?

20 A. Yes.

21 Q. And at least -- you haven't drilled any wells yet  
22 in the Knowles field?

23 A. No, the Knowles was actually developed on 40  
24 acres, according to the wells that we're trying to work in.  
25 We've got some 330 from the lease line, some -- several 330



1 from the lease line, so it appeared to me that they had  
2 been actually developed on 40-acre spacing.

3 Q. Even though the well spacing was officially 80  
4 acres, they were --

5 A. Yes, sir.

6 Q. -- effectively developed on 40s, with unorthodox  
7 locations thrown in?

8 A. That's my supposition, yes, sir.

9 Q. Okay. Now, the wells that you drilled in the  
10 South Knowles, what type of water production are you  
11 getting from those wells?

12 A. We have a high water cut, which -- that's our  
13 method of production. In the older -- in these older  
14 reservoirs, you move fluid, you're going to get a fairly  
15 decent oil production.

16 For example, in the Number 2 Brooks well, which  
17 is the lateral in Exhibit 3, this Number 2 Brooks well, you  
18 see how close to this fault coming through here we have.  
19 Its initial production prior to our working the well over  
20 was 22 barrels a day, with about 80 barrels of water.

21 Currently, we're producing 130 barrels of oil a  
22 day with about 2500 barrels of water, which is still an  
23 economically viable method of production. That's typically  
24 how we produce our wells.

25 Q. Okay, and that would be what you'd hope to

1 accomplish on these other wells?

2 A. That's exactly right, exactly. The one due south  
3 of this one is the Brooks Number 1. It was a similar 20-  
4 barrels-a-day well, and it's producing at, currently, 160  
5 barrels a day, of oil, with about 2400 barrels of water.

6 Q. Have you been able to calculate the drainage  
7 areas for these wells?

8 A. We don't have the technical information available  
9 to us. The logs were too old to really be usable for --

10 Q. Too old or poor quality?

11 A. Right. And we haven't logged the laterals.

12 Q. Okay.

13 A. I think that's -- So we're going to have to do it  
14 based on just calculating what it could have recovered,  
15 based on the lateral geometry.

16 Q. But the fact that you are getting wells producing  
17 120 or 160 barrels of oil per day indicates there are  
18 undrained reserves in these reservoirs?

19 A. That and the heterogeneity of the reservoir, we  
20 feel like there's some intervals that haven't been drained  
21 at all. They appear to have some pressure reduction in the  
22 reservoir, but the oil cut, like David was saying, is still  
23 very high, much higher than it should have been in a  
24 properly drained reservoir.

25 Q. And therefore you feel that you need the

1 flexibility provided by statewide rules to adequately  
2 develop --

3 A. I think it's --

4 Q. -- these reservoirs?

5 A. I think it's essential in this case, yes.

6 MR. BRUCE: Okay. Mr. Examiner, Exhibit 9 is the  
7 affidavit of notice with respect to the Knowles South Pool.

8 Q. (By Mr. Bruce) Mr. Reeves, for that I notified  
9 Avra Oil Company, which is an operator in the Delaware,  
10 correct --

11 A. That's correct.

12 Q. -- I mean Delaware in the Devon --

13 A. Devon --

14 Q. -- Devonian

15 A. -- Devonian.

16 Q. And I also notified Triumph Exploration and  
17 Fagadau Energy, which were pulled up off the Division's  
18 records, but has Platinum acquired the interests of Fagadau  
19 Energy?

20 A. Yes, we have --

21 Q. Okay, and so that was --

22 A. -- which was previously Triumph.

23 Q. Okay, so it's essentially the same company, so  
24 that was just over-notification. Okay.

25 And Mr. Examiner, Exhibit 10 is the affidavit of

1 notice with respect to the Knowles Pool, and again Paladin  
2 Energy was notified, and because of the lease holding out  
3 here, whether you're on 80 acres or 40 acres, none of the  
4 existing wells would have been -- would have had the  
5 interests and production affected, and therefore we just  
6 notified the operators in these wells.

7 Mr. Reeves, were Exhibits 8 through 10 prepared  
8 by you or compiled from company business records?

9 A. Yes.

10 Q. And in your opinion is the granting of these  
11 applications in the interests of conservation and the  
12 prevention of waste?

13 A. Very definitely.

14 MR. BRUCE: Mr. Examiner, I'd move the admission  
15 of Exhibits 8 through 10.

16 EXAMINER CATANACH: Exhibits 8 through 10 will be  
17 admitted.

18 Mr. Bruce, as far as you could determine, there's  
19 no other Devonian operators within a mile of these pools?

20 MR. BRUCE: Correct, the Division records show  
21 none.

22 EXAMINATION

23 BY EXAMINER CATANACH:

24 Q. Mr. Reeves, within the acreage that your company  
25 has purchased in this area, what types of land is this? Is

1 it all fee land or state land or --

2 A. It's mainly fee land.

3 Q. Fee land?

4 A. We have one 160-acre tract, the east half of  
5 Section 13, the east half of the east half of Section 13  
6 somehow became federal. I'm not certain how that happened,  
7 but the remainder of it is fee land.

8 Q. So you've essentially got a situation where --  
9 are you the only working interest owner?

10 A. Yes, sir.

11 Q. Okay. So the royalty interest owner is going to  
12 be different on the various different leases that you  
13 purchased?

14 A. Yes, sir.

15 Q. Okay. So going from 80 to 40 acres, does that  
16 affect some of the royalty interest owners who will --

17 A. Not on our current development pattern, no.

18 Q. Do you know what's going to happen with the  
19 lateral wells? Are those going to continue to be -- are  
20 those going to go to 40 acres if this is approved?

21 A. No, sir.

22 Q. Those are going to stay on 80?

23 A. They'll stay on 80 or --

24 Q. Because of the nature of the well?

25 A. -- or more. We may go up to 160 acres.

1           Q.    Okay, so those ones are -- those are not going to  
2 be affected by this rule change?

3           A.    No, sir.

4           Q.    And I believe that you said there's going to be a  
5 couple of -- or previous testimony -- some vertical wells  
6 drilled?

7           A.    We have two vertical wells, one already  
8 permitted. Our intent is to drill it vertically and test  
9 and then to drill laterally. That was our original intent.  
10 However, with our success to date of our laterals, we may  
11 go ahead and just drill laterals instead of drilling the  
12 vertical and testing.

13                   It will also allow us to get some real technical  
14 data where I can run some decent log and be able to  
15 identify our reservoir information a little better.

16           Q.    So basically you're going to drill some laterals,  
17 and the actual well spacing is going to remain the same.  
18 They're going to be spaced on 80 acres; is that -- ?

19           A.    Well, the Federal Davis Number 4 in this Exhibit  
20 2, you'll notice a circle for the wellbore position. It  
21 will be more than 180 acres; we'll be drilling that a  
22 little further. And with the new rules, we would capable  
23 of diverting from the older wellbores and getting into  
24 quite possibly areas that have not been drained, which is  
25 our intent.

1 Q. Okay. It sounds to me like development of this  
2 pool is not going to be on 40 acres; it's going to be on  
3 80s or larger units; is that correct?

4 A. Well actually, the development was on 40 acres.  
5 You've got wellbores on every 40 acres out there.

6 Q. But you're not going to have any wells that have  
7 40 acres dedicated to them; you're going to have at least  
8 80 acres --

9 A. You can't drill a lateral and make it economic  
10 for 40 acres, no, sir.

11 Q. Well, what is the advantage of going to 40-acre  
12 spacing?

13 A. It allows us to deviate from the old wellbores  
14 and drain areas that we don't feel have been drained.

15 Q. But can't you do the same thing -- Under the  
16 current rules you can apply for a project area --

17 A. Even with the 80-acre, the most we can deviate  
18 from the current wellbore is 150 feet.

19 Q. Okay, so basically it gives you flexibility in  
20 locating the wells?

21 A. That's correct.

22 Q. That's the advantage?

23 A. And our lateral, and that's all we're really  
24 asking for, is the flexibility to do that.

25 Q. I guess the threshold question is, what do these

1 wells drain? I mean, in your opinion what are these things  
2 draining?

3 A. Well, they haven't drained 80 acres. And whether  
4 the lateral will make them capable of draining the 80  
5 acres, I -- we don't know yet.

6 Q. But a typical vertical well in this pool would  
7 not drain 80 acres?

8 A. No, sir, it would not. It has not.

9 Q. Now, have you looked at some of the production  
10 data and made that determination yourself?

11 A. Yes, sir.

12 Q. When the infill wells were drilled, do you know  
13 what kind of production numbers they got? If I understand,  
14 the original well was drilled on 80, and then they produced  
15 it for a while, and then they came back and drilled infill  
16 wells?

17 A. Actually, yes, sir, they came back and drilled  
18 infill wells, and many times the other producing well was  
19 producing at the same time. In other words, they were  
20 producing two wells in each 80 acres.

21 Q. Okay, but do you know what the results of the  
22 infill wells typically were? Did they get good production  
23 from those wells?

24 A. They didn't get as good a production from the  
25 secondary wells. My estimation is about 80 percent of the



1 original wellbore, which would still make it --

2 Q. -- a producing rate?

3 A. Yes, sir.

4 Q. What about ultimate recoveries, did you look at  
5 those?

6 A. I'm thinking of ultimate recovery, excuse me.

7 Q. Okay. So they recovered about 80 percent of what  
8 the parent well did?

9 A. Yes, sir.

10 Q. Okay.

11 A. Which still, the recovery in the South Knowles is  
12 still extremely low. I mean, 34 barrels per acre-foot,  
13 that's basically 34 percent of what they really should have  
14 recovered. So we've got basically a third of what we feel  
15 like the reservoir should have given up.

16 Q. So you think that you can at least double what's  
17 been recovered in this pool?

18 A. Without a doubt, I do, yes.

19 Q. So you'll get another 15 million barrels?

20 A. Well, I wish I had 15 million to start with.

21 (Laughter)

22 Q. (By Examiner Catanach) Well, isn't that what the  
23 recovered, the cumulative on those?

24 A. The Knowles recovered right at 4 million barrels,  
25 and the Knowles South was 10 million barrels.

1 Q. Yeah, closer -- well, so they've cumulatively  
2 recovered 15 million barrels?

3 A. Yes, sir.

4 Q. So you're saying you can get at least that many?

5 A. I think that's very capable -- we're very capable  
6 of doing that, yes, with the laterals, because what we've  
7 seen in the laterals to date is that we've encountered  
8 areas that were probably never drained. Because of the  
9 shale lamination, the water drive was ineffective, or not  
10 effective at all. And basically all you had was gas  
11 expansion involved in the recovery factor. And that's why  
12 I think you see the 34 per- -- the 30-percent of what we  
13 should have recovered, because of the shale laminations in  
14 there.

15 Q. What are you guys doing with all the water?

16 A. We have disposal wells in the area that we're --  
17 we're also permitting some other disposal wells to be able  
18 to handle all the water production.

19 Q. What are you injecting into; do you know?

20 A. We're injecting below the oil-water contact in  
21 the Devonian.

22 Q. So are you guys producing these wells on  
23 submersible pumps?

24 A. Yes, sir, sure are.

25 Q. Okay. I believe you gave some figures for a

1 well, one of your lateral wells, producing about 120  
2 barrels of oil a day?

3 A. Yes, sir.

4 Q. 2500 barrels of water. Is that typical for one  
5 of these laterals?

6 A. It seems to have been. We've done -- We've got  
7 results from three wells out there that we have actually  
8 had production on, and they've all been in the 120- to 150-  
9 barrel-a-day range, so we feel very comfortable about  
10 continuing our development of the reservoir.

11 EXAMINER CATANACH: Okay, that's all I have.

12 MR. BRUCE: Go ahead.

13 MS. MacQUESTEN: I had a few questions I was  
14 hoping you could help me understand, the notice provisions.  
15 Are you proceeding under the notice provision for special  
16 pool orders regulating or affecting a specific pool? It's  
17 in 1207.A.(4).

18 MR. BRUCE: Yes.

19 MS. MacQUESTEN: And that has two different  
20 provisions. One, if the Application involves changing the  
21 amount of acreage, and a second provision if the  
22 Application hasn't?

23 MR. BRUCE: Correct.

24 MS. MacQUESTEN: Are you proceeding under the one  
25 for changing the acreage?

1 MR. BRUCE: Yes, we were, if we're changing it to  
2 40, yes.

3 MS. MacQUESTEN: And that would require notice to  
4 the operators but also to all owners of interests in the  
5 mineral estate in existing spacing units with producing  
6 wells?

7 MR. BRUCE: That's right, Ms. MacQuesten, and I  
8 recognize that. On the other hand, they're not being  
9 squeezed out of a well, is what I'm saying, because of the  
10 way these -- the two existing wells in the pool. And  
11 actually all wells in the pool, if you look at the  
12 exhibits, all of the existing wells out there are on 80  
13 acres, and they are all -- for instance, if you look at the  
14 existing Paladin well in the Knowles Pool, west half,  
15 southwest quarter of Section 35, that is a single tract.  
16 It was patented by the federal government, and ownership is  
17 uniform in that tract.

18 So whether it is on 80s or 40s, no one will be  
19 cut out of production, Number 1.

20 And the same thing with all of the wells in the  
21 Knowles South Pool, they are on -- None of these tracts  
22 have been pooled with any other tracts at this point. They  
23 are all uniform tracts, each well, and therefore -- I  
24 recognize what the Rule says, and if we have to we can give  
25 additional notice, but what I'm saying is that no one will

1 be cut out of production on any existing well in the pool  
2 because interest ownership in the tracts on which they are  
3 located is uniform. So even if spacing went down to 40  
4 acres, it would be the same interest owners in the same  
5 proportion, whether you're looking at 40 or 80 acres.

6 EXAMINER CATANACH: Well, does that hold true for  
7 the existing wells of your client, that your client owns?

8 MR. BRUCE: Yes, Mr. Examiner, if you look at  
9 Exhibit 3, for instance -- yeah, that one right there --  
10 and compare that with Exhibit 1A, there's two things.

11 First of all, if you look at Section 18, the west  
12 half of Section 18, it is comprised of four separate  
13 tracts. Those four wells, those four wells that Platinum  
14 has re-entered or drilled maintain those 80-acre well  
15 units, and those are the same 80-acre well units that were  
16 initially established when the wells were drilled back in  
17 the 1950s or 1970s, number one. So the well-unit  
18 orientations have not changed.

19 The second thing is that each of those four  
20 tracts -- each of them separately has common interest  
21 ownership. The west half, northwest quarter, which was a  
22 well unit back in the 1950s, is still a well unit, and it  
23 has uniform ownership, uniform mineral interest ownership.  
24 Same thing with the east half, northwest, and then the two  
25 tracts in the southwest quarter.

1           So regardless of whether these were spaced -- if  
2 these were vertical wells and they were respaced on 40s, no  
3 one would be cut out of production.

4           EXAMINER CATANACH: Okay. Now, are those the  
5 only four existing wells that your client operates in the  
6 south --

7           MR. BRUCE: Those four, and then that one in the  
8 southeast quarter of Section 12. And the southeast quarter  
9 of Section 12 is -- 160 acres is a uniform tract. Now  
10 again, the well units originally in that southeast quarter  
11 were standup well units --

12          EXAMINER CATANACH: Okay.

13          MR. BRUCE: -- and that is shown by the  
14 Division's records.

15          EXAMINER CATANACH: Okay, but due to the nature  
16 of these wellbores being laterals, the current plan is to  
17 leave these spaced on 80 acres; is that right?

18          MR. BRUCE: These, yes --

19          EXAMINER CATANACH: Because of the project  
20 area --

21          MR. BRUCE: -- because they're laterals, the  
22 project area would be 80 acres --

23          EXAMINER CATANACH: Okay.

24          MR. BRUCE: -- that is correct.

25          And getting back to your other question, Mr.

1 Examiner, you may be right, leaving them on 80s at this  
2 point may not have any effect. But I suppose there are  
3 chances where they might want to do a lateral that has a  
4 120-acre project area.

5 THE WITNESS: That's what I was pointing out on  
6 the Federal Davis Number 4.

7 MR. BRUCE: Okay.

8 THE WITNESS: It is actually a 120-acre project  
9 area.

10 MR. BRUCE: It would be a 120-acre project area.  
11 There may be chances for that up in the Knowles Pool also,  
12 which would make it easier to form those 120-acre project  
13 areas if the well spacing was 40 acres rather than 80.

14 But getting back to Gail's question, we can  
15 notify those interest owners if you so desire. But once  
16 again, they are not affected. Their interests will not be  
17 reduced by de-spacing.

18 EXAMINER CATANACH: I'll tell you what, Mr.  
19 Bruce, we're going to discuss a little bit, we're going to  
20 leave the record open --

21 MR. BRUCE: Okay.

22 EXAMINER CATANACH: -- in the case for a couple  
23 of weeks and see if we want you to do anything else as far  
24 as notice is concerned.

25 MR. BRUCE: That's fine.

1 EXAMINER CATANACH: Okay, anything else?

2 MR. BRUCE: I don't think so.

3 EXAMINER CATANACH: Okay, there being nothing  
4 further, Case 13,400 and 13,401 will be continued to the  
5 January 20th hearing.

6 And let's take about a 15-minute break here  
7 before we start on the other case.

8 (Thereupon, these proceedings were concluded at  
9 9:29 a.m.)

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I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 13400, 13401  
heard by me on January 6 2005  
David R. Catnach, 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 January 8th, 2005.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2006