

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 GRUY PETROLEUM MANAGEMENT) CASE NOS. 13,567
COMPANY FOR SIMULTANEOUS DEDICATION, LEA) 13,568, 13,569
COUNTY, NEW MEXICO) 13,570, 13,572

APPLICATION OF GRUY PETROLEUM MANAGEMENT) CASE NO. 13,571
COMPANY FOR AN UNORTHODOX GAS WELL)
LOCATION AND SIMULTANEOUS DEDICATION,)
LEA COUNTY, NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

October 20th, 2005

Santa Fe, New Mexico

2005 NOV 3 PM 5 45

These matters came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Thursday, October 20th, 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.

* * *

I N D E X

October 20th, 2005
 Examiner Hearing
 CASE NOS. 13,567, 13,568, 13,569, 13,570,
 13,571 and 13,572 (Consolidated)

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A P P E A R A N C E S

FOR THE DIVISION:

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By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 10:10 a.m.:

3 EXAMINER JONES: Okay, at this time we'll call
4 Cases 13,567, Case 13,568, Case 13,569, Case 13,570, Case
5 13,571 and Case 13,572. These are Applications of Gruy
6 Petroleum Management Company to do simultaneous dedication
7 and, almost all cases, one township, in Lea County, New
8 Mexico. Is that correct, Mr. Carr?

9 MR. CARR: That's correct, Mr. Examiner. One
10 case, Case 13,571, also has an unorthodox well location,
11 and we'll address that when we get to that case.

12 My name is William F. Carr, I'm with the Santa Fe
13 office of Holland and Hart, L.L.P. We represent Gruy
14 Petroleum Management Company in these cases that we request
15 be consolidated, and I have three witnesses.

16 EXAMINER JONES: Okay, any other appearances?
17 We'll consolidate all these cases.

18 And will the witnesses please stand to be sworn?

19 (Thereupon, the witnesses were sworn.)

20 JON P. TATE,

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

23 DIRECT EXAMINATION

24 BY MR. CARR:

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

1 A. My name is Jon Tate. If it makes a difference,
2 my name is spelled J-o-n, no "h".

3 Q. And where do you reside?

4 A. I reside in Midland, Texas.

5 Q. Mr. Tate, by whom are you employed?

6 A. I'm employed by Gruy Petroleum Management
7 Company, which is a wholly owned subsidiary of Magnum-
8 Hunter Production, Inc.

9 Q. And what is your capacity with Gruy?

10 A. I'm a senior landman.

11 Q. Have you previously testified before the New
12 Mexico Oil Conservation Division and had your credentials
13 as a petroleum landman accepted and made a matter of
14 record?

15 A. Yes, sir, I have.

16 Q. Are you familiar with the applications filed on
17 behalf of Gruy Petroleum Management Company in these
18 consolidated cases?

19 A. Yes, sir, I am.

20 Q. Are you familiar with the status of the lands in
21 the subject portions of the Rhodes Gas Pool?

22 A. Yes, I am.

23 Q. And Mr. Tate, you're the land person who's been
24 on the team to put this project together; isn't that right?

25 A. Yes, sir.

1 MR. CARR: We tender Mr. Tate as an expert
2 witness in petroleum land matters.

3 EXAMINER JONES: Mr. Tate is qualified as an
4 expert petroleum landman.

5 Q. (By Mr. Carr) I think it would be helpful, Mr.
6 Tate, if we start by going straight to Gruy Exhibit Number
7 1, and I'd ask you to explain what this exhibit is and what
8 it's designed to show.

9 A. This is a portion of a Midland map covering a
10 section of 26 South, 37 East. It's been expanded, blown
11 up, to where it's easier to see.

12 The yellow acreage as indicated on the map is
13 that of the original Rhodes Federal Unit that is operated
14 by Gruy Petroleum.

15 The red-outlined areas are the subject of these
16 hearings, the 160-acre units for these hearings.

17 And the other colors are indicated at the bottom
18 right-hand corner of the legend. I'm happy to go through
19 those with you all if you would like me to.

20 The green is spacing units operated by Gruy
21 Petroleum Management Company.

22 The purple, area indicated in purple, is actually
23 operated by Doyle Hartman.

24 The three tracts indicated in light blue is
25 spaced and operated or leasehold owned by Ricky Patterson.

1 The orange in Section 23 is spaced and operated
2 or leasehold owned by PermOk Oil, Incorporated.

3 What little we have in brown is owned by Apache
4 Corporation and their partners.

5 And then the dark blue is leasehold owned by
6 Magnum-Hunter Production, Inc., et al.

7 Q. The subsequent pages in this exhibit, what is
8 that?

9 A. That is going to be all of our notifications of
10 the offset operators that were notified in the process of
11 putting this all together.

12 Q. And so what we have is a block for each one of
13 the cases --

14 A. Yes, sir, that's correct.

15 Q. -- that's before Examiner Jones.

16 If we look at this plat, look at this area of the
17 Rhodes Pool, we have a number of irregular spacing units;
18 isn't that correct?

19 A. Yes, sir.

20 Q. And one of the spacing units we're talking about
21 today is a pre-approved nonstandard unit?

22 A. Yes, sir, that's correct.

23 Q. And we also have many multiple-well units?

24 A. Yes, sir.

25 Q. I think initially it would be helpful if, using

1 this exhibit, you briefly, by case, identify what Gruy is
2 seeking in each of these Applications. You might go to the
3 first one, which is Case 13,5~~18~~⁶⁷. What acreage is involved
4 in that?

5 A. That would be the northwest quarter of Section
6 22, and we seek the simultaneous dedication with our
7 existing Rhodes Federal Unit Number 221 and our proposed
8 Rhodes Federal Unit Number 227.

9 Q. The 227 is the new well?

10 A. Yes, sir, that's correct.

11 Q. And it will be at a standard location?

12 A. Yes, sir, it will.

13 Q. The 221 is previously -- it's the existing well,
14 was at a previously approved unorthodox location?

15 A. Yes, sir, that's correct.

16 Q. All right, let's go to Case 13,568. What acreage
17 is involved in that Application?

18 A. That's the northeast quarter of Section 22. And
19 again, we seek the simultaneous dedication with our
20 existing Rhodes Federal Unit Well Number 223 and our
21 proposed Rhodes Federal Unit Well Number 226.

22 Q. Then we go to Case 13,569. What acreage is
23 involved there?

24 A. That's the northeast quarter of Section 9.
25 Again, we received simultaneous dedication of that. We've

1 got our new Rhodes Federal Unit Number 98, and we also have
2 the existing Rhodes Federal Unit Number 95 and Rhodes
3 Federal Unit Number 96.

4 Q. In Case 13,570?

5 A. Again, the simultaneous dedication of the
6 southwest quarter of Section 5, we have the Rhodes --
7 existing Rhodes Federal Unit Number 54, and we have the
8 Rhodes Federal Unit Well Number 56.

9 Q. Now, Mr. Tate, all the spacing units we've talked
10 about so far are standard 160-acre units; is that correct?

11 A. That's true. One thing I might mention, I think
12 there may be a typo back on 13,570. The Rhodes Federal
13 Unit Number 56, as typed -- that's a typo. Our location
14 there will actually be 660 from the south and 660 from the
15 west.

16 EXAMINER JONES: Still in Unit M?

17 THE WITNESS: No, that will not keep it in Unit
18 M.

19 EXAMINER JONES: Okay, what --

20 THE WITNESS: I'll have to --

21 MR. CARR: We have for that well -- the actual
22 application in the legal advertisement was correct.

23 EXAMINER JONES: Okay.

24 MR. CARR: And we do have as a subsequent exhibit
25 the C-102 that shows the actual survey locations for that

1 well, and the Number 56 well is, in fact, 660 out of the
2 south and west corner.

3 EXAMINER JONES: Okay, south and west quarter?

4 MR. CARR: Yes.

5 EXAMINER JONES: So it's still in M, right?

6 MR. CARR: Uh-huh. Yes, it is, it's in M.

7 Q. (By Mr. Carr) Okay, Mr. Tate, let's go to Case
8 13,571.

9 A. This concerns acreage in Section 15. Again,
10 Section 15 and Section 10, we seek the simultaneous
11 dedication of the nonstandard 160-acre gas spacing
12 proration unit with our existing Rhodes Federal Unit Number
13 153 and our proposed well, the Rhodes Federal Unit Number
14 159^X which is an unorthodox well location at 2110^{OK} from the
15 north line and ~~460~~ from the east line. *410 FEET*

16 Q. Okay, we'll come back to that location, but let's
17 now look at Case 13,572. What acreage is involved in that?

18 A. That is the northwest quarter of Section 22, and
19 -- well, about that. This would be in the northwest
20 quarter of Section 10 --

21 Q. Uh-huh, that's correct.

22 A. -- for our Cagle C6 Unit, we call the Cagle C
23 Federal Unit Well Number 6, and that would be dedicated
24 along with the existing Rhodes Federal Unit Number 102.

25 Q. Now, are all of the wells, all of the wells we're

LOST HOLE & SKIPPED 50' EAST

1 talking about here today, in the Rhodes Gas Pool?

2 A. Yes, sir, they are.

3 Q. And what rules govern the development of the
4 Rhodes-Yates-Seven Rivers Gas Pool?

5 A. They're statewide rules, 160-acre gas well
6 spacing with 660 setbacks.

7 Q. Okay. Could you identify for the Examiner what
8 has been marked as Gruy Exhibit 2?

9 A. These are basically what was filed with OCD
10 showing our spacing units, or of the wells which are the
11 subject of this hearing, and shows the survey locations for
12 the wells covered by each Application.

13 Q. And there is a C-102 and a survey plat for each
14 of the wells that's the subject of the hearing?

15 A. Yes, sir.

16 Q. In Case 13,571, Gruy also seeks approval of an
17 unorthodox gas well location for the Rhodes State Com Well
18 Number 157.

19 A. 159?

20 Q. 159. Y

21 A. Yes, sir, in Section 15.

22 Q. And the location on that is -- ?

23 A. 2110 from the north line and ~~460~~ from the east
24 line of Section 15.

25 Q. Why is Gruy seeking this unorthodox location?

1 A. Well, we were -- actually if you look at, I
2 guess, Exhibit Number 3 --

3 Q. Right.

4 A. -- it's a topographic map, and it shows the
5 standard location typically for this well. But what we're
6 actually showing is our location where we're asking for the
7 unorthodox location. If you put it at a standard location,
8 it's right in the middle of the sand dunes. And the BLM --
9 we met with them, and they requested us to move this
10 location so as not to destroy the sand dunes, and they were
11 agreeable to the location that we have now permitted, or
12 are attempting to permit.

13 Q. And if we look at Exhibit 3, the sort of stippled
14 area is, in fact, where that sand dune is located?

15 A. Stippled I like. I was going to say squiggled.

16 Q. And you've moved to the east --

17 A. Yes, sir.

18 Q. -- to get away from the sand?

19 A. Yes, sir.

20 Q. And this puts you 200 feet too close to the east
21 line of the spacing unit?

22 A. Yes, sir, that location is ~~400~~¹ from the east
23 line, and that makes us ~~200~~²⁵⁰ feet too close.

24 Q. Who owns the offsetting tract to the east?

25 A. That would be Ricky Patterson.

1 Q. And has Gruy discussed this --

2 A. Yes, sir.

3 Q. -- with Mr. Patterson?

4 A. Yes, sir.

5 Q. Has Mr. Patterson been notified of today's
6 hearing and the application seeking approval of the
7 unorthodox location?

8 A. Yes, sir, and we received his return receipt, and
9 I believe it's included.

10 Q. I think now, if you could just identify Gruy
11 Exhibits 4 through 9, what are these? Are these notice
12 affidavits?

13 A. Yes, sir, these are all notices of all the
14 affected parties, offset operators, identified on pages 2
15 and 3 of Exhibit Number 1.

16 Q. And you have one notice affidavit for each of the
17 cases?

18 A. Yes, sir, that's true.

19 Q. And they correspond to the second and third page
20 of the --

21 A. Yes, they do.

22 Q. -- first exhibit?

23 The case -- I believe it's 13,570, involving the
24 southwest quarter of Section 5, you only have a notice of
25 publication for that case; is that right?

1 A. Yes, sir, that's correct.

2 Q. And why is that?

3 A. Because we're only offset by ourselves, we are
4 not offset by anybody else.

5 Q. Were Gruy Exhibits 1 through 9 either prepared by
6 you or compiled at your direction?

7 A. Yes, sir, they were.

8 MR. CARR: May it please the Examiner, at this
9 time we'd move the admission into evidence of Gruy Exhibits
10 1 through 9.

11 EXAMINER JONES: Exhibits 1 through 9 will be
12 admitted to evidence.

13 MR. CARR: That concludes my direct examination
14 of Mr. Tate.

15 EXAMINATION

16 BY EXAMINER JONES:

17 Q. So the Rhodes-Yates field is -- or the pool is --
18 is it called Rhodes-Yates Seven Rivers Gas Pool?

19 A. That is my understanding, yes, sir.

20 Q. And no special pool rules?

21 A. Not to my knowledge.

22 Q. Just a 660 setback, and you have one NSL and one
23 weird-shaped --

24 A. Yes, sir, that is kind of strange, and if you'll
25 notice, there's a purple 160-acre tract there that is owned

1 or operated by Doyle Hartman, and that seemed like the --
2 and we actually own the 40 acres in the southeast of 10,
3 and so we were able to put a 160-acre unit together in that
4 sort of backward-L shape.

5 Q. Do you remember the order that approved that?

6 A. No, sir, I'm sorry, I do not.

7 MR. CARR: I can get that, I'll provide it.

8 EXAMINER JONES: I can look it up. Thank you,
9 Mr. Carr.

10 Q. (By Examiner Jones) And the -- I can look up
11 these API numbers too, if you've got them assigned, but
12 these are BLM. They had to be approved by BLM and then --

13 A. Yes, sir, that is correct.

14 Q. -- sent over to our district office and API
15 numbers assigned, so you may not even have them yet.

16 A. My understanding, unless something has changed
17 since we came down, we had most of them but not all of
18 them. But I'm not sure of that. Things could have changed
19 in the past couple of days.

20 Q. Okay. And you want basically two wells in a 160
21 where one well is allowed --

22 A. That is correct, yes, sir.

23 (Off the record)

24 EXAMINER JONES: Okay, I think we're satisfied.
25 We might be forgetting a question for Mr. Tate, but right

1 now we don't have any more. Thank you very much.

2 THE WITNESS: Thank you, sir.

3 MR. CARR: May it please the Examiner, at this
4 time we would Kim Nordstog.

5 KIM NORDSTOG,

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

8 DIRECT EXAMINATION

9 BY MR. CARR:

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

11 A. My name is Kim Nordstog, last name is
12 N-o-r-d-s-t-o-g.

13 Q. Mr. Nordstog, where do you reside?

14 A. Dallas, Texas.

15 Q. By whom are you employed?

16 A. By Gruy Petroleum Management Company, subsidiary
17 of Magnum-Hunter.

18 Q. And what is your current position with Gruy?

19 A. I'm a senior geologist.

20 Q. Have you previously testified before this
21 Division?

22 A. No, I did not.

23 Q. Where did you go to school?

24 A. I have a bachelor's of science from Stanford
25 University and a master of science from University of

1 Colorado.

2 Q. Could you summarize your educational background
3 for Mr. Jones -- I mean your work experience, for Mr.
4 Jones?

5 A. I've worked in the industry since 1980 as a
6 petroleum geologist. I worked for 18 years for Enserch
7 Exploration and for eight years for Gruy and its
8 predecessors.

9 Q. Are you familiar with the Applications filed in
10 each of these consolidated cases for Gruy Petroleum
11 Management Company?

12 A. Yes, I am.

13 Q. Have you prepared a geological study of the area
14 that is the subject of these Applications?

15 A. Yes, I have.

16 Q. And are you prepared to share that work with the
17 Examiner?

18 A. Yes, I am.

19 MR. CARR: We tender Mr. Nordstog as an expert
20 witness in petroleum geology.

21 EXAMINER JONES: Mr. Nordstog is qualified as an
22 expert petroleum geologist.

23 MR. CARR: Mr. Nordstog, let's go to Exhibit
24 Number 10, your structural cross-section A-A', and I would
25 ask you to review the information on the exhibit for the

1 Examiner.

2 A. Yes, sir. This is a structural cross-section,
3 basically northwest to southeast, through the area that's
4 covered by these six cases that we have before you. The
5 index map on the lower left-hand corner shows the well
6 locations that we have before you, flagged by yellow
7 arrows. The cross-section line, A-A', is shown on that
8 index map, A being on the left, A' being on the right and
9 southeast. I chose wells for the cross-section that are
10 close to the proposed locations.

11 The cross-section itself has five wells on it,
12 four neutron density logs and one cased-hole neutron, which
13 is the second from the right. It shows the section from
14 the Tansill to the Seven Rivers. The Yates is below the
15 Tansill, above the Seven Rivers. The porosity on the
16 porosity log is greater than six percent, is colored
17 yellow.

18 Perforated intervals, producing intervals, are
19 also shown on each log with kind of the brown cross-line
20 pattern, and IP gas numbers are shown next to those.

21 Of course, the wells are identified on the top
22 with the API number, operator name, well name, well number,
23 TD, surface elevation. And you can see from the cross-
24 section that all five wells are operated by Gruy Petroleum
25 Management Company.

1 Q. Using this data, you prepared a net porosity
2 isopach, did you not?

3 A. I did.

4 Q. And it's shown down on -- as part of the index
5 map, but you've also taken sections of that and prepared a
6 separate exhibit for each of the wells?

7 A. That's correct.

8 Q. All right, let's go to what has been marked as
9 Gruy Exhibit 11. Would you identify that for the Examiner?

10 A. These next six exhibits will be cutouts,
11 basically, from that cross-section that's mapped, and
12 they're all nine-section plats centered on the proposed
13 location for each case.

14 Exhibit Number --

15 Q. The composite map was 10, and now we're going to
16 11.

17 A. Yeah, I'm mixed up. Let's see. Okay. Okay,
18 Exhibit 11 is centered on Section 22. It shows the
19 location of the Gruy Rhodes Federal Unit Proposed Well 227,
20 flagged by the yellow arrow, and the unit outline,
21 proration unit outline, shown with a dashed blue line.

22 This map has all the surrounding well control on
23 it, and at each well there's posted the operator name, well
24 name, well number and TD. The gas wells on this map are
25 Yates producers.

1 The contours are Yates net porosity greater than
2 six percent, with a 25-foot contour interval. So at the
3 location of the Rhodes Federal Unit Number 227 we expect
4 approximately 175 feet of net pay.

5 Q. Okay, let's go to Exhibit Number 12.

6 A. Exhibit Number 12 is also centered on the same
7 Section 22 and just shifts to the northeast quarter where
8 we have a yellow arrow pointing to the Rhodes Federal Unit
9 Number 226 location in the southwest of the northeast
10 quarter. Again, the contours are the same, the map's the
11 same. We expect approximately 160 to 165 feet of net pay
12 in the Yates at this location.

13 Q. Okay, let's go to the northeast of Section 9,
14 Exhibit Number 13.

15 A. I've just taken a cutout of nine sections
16 centered on Section 9, where we have the location of the
17 Rhodes Federal Unit Number 98 well. It would simultaneous-
18 dedicate with the Rhodes Federal Unit Number 95 and Number
19 96 wells. Again, the 160-acre proration unit is shown in
20 the dashed blue line. At the proposed location we expect,
21 again, between 150 and 175 feet of net pay in the Yates.

22 Q. Exhibit 14?

23 A. Exhibit 14 is centered on Section 5 of 26 South,
24 37 East. The yellow arrow points to Rhodes Federal Unit
25 location -- Rhodes Federal Unit Number 56 location, and the

1 160-acre unit again is shown with a dashed blue line. At
2 this location we expect between 125 and 150 feet of net pay
3 in the Yates.

4 Q. And our last plat, Exhibit Number 16?

5 A. Do I have two more, maybe? That was 14, right?

6 Q. I have Exhibit 15, and have you reviewed that?

7 A. No, that's this one.

8 Q. Okay, let's go for that.

9 A. Okay. Exhibit 15 is centered on Section 15 of 26
10 South, 37 East. It shows the nonstandard location for the
11 Rhodes Federal Unit Number 159 in the southeast-northeast
12 of Section 15, and the 160-acre unit that we've defined for
13 that well with the dashed blue line. At this location,
14 based on the net-porosity isopach, we expect approximately
15 100 feet of net pay in the Yates.

16 Q. All right, and now for the last one, Exhibit 16.

17 A. Okay, Exhibit 16 is centered on Section 10 of 26
18 South, 37 East. The yellow arrow points to the Cagle C Fed
19 Com Number 6 location in the northeast northwest of 10.
20 Again, the dashed blue outline is the 160-acre unit. At
21 this location we expect approximately 75 feet of net pay in
22 the Yates.

23 Q. Mr. Nordstog, what conclusions have you been able
24 to reach from your geologic study of the area?

25 A. Across this area the porosity in the Yates is

1 relatively continuous but variable in thickness, and
2 there's very little risk of not encountering pay at any of
3 these locations, based on very good well control near each
4 of them.

5 Q. Will Gruy also be calling an engineering witness?

6 A. Yes, we will.

7 Q. Were Gruy Exhibits 10 through 16 prepared by you?

8 A. Yes, they were.

9 MR. CARR: May it please the Examiner, we move
10 the admission into evidence of Gruy Exhibits 10 through 16.

11 EXAMINER JONES: Gruy Exhibits 10 through 16 will
12 be admitted to evidence.

13 MR. CARR: That concludes my examination of Mr.
14 Nordstog.

15 EXAMINATION

16 BY EXAMINER JONES:

17 Q. So you're not really making an argument on
18 geology here, you're --

19 A. We're setting the stage for the engineer.

20 Q. The engineer.

21 A. Uh-huh.

22 EXAMINER JONES: Okay. Well, thanks very much.

23 THE WITNESS: All right, thank you.

24 MR. CARR: And at this time we call Michael
25 Swain.

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MICHAEL SWAIN,

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

DIRECT EXAMINATION

BY MR. CARR:

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

A. My name is Michael Swain.

Q. Mr. Swain, where do you reside?

A. Grapevine, Texas.

Q. By whom are you employed?

A. Gruy Petroleum.

Q. In what capacity?

A. As a reservoir engineer.

Q. Have you previously testified before this Division?

A. No, I have not.

Q. Where did you go to school?

A. Texas Tech University.

Q. And can you summarize your work experience?

A. I worked five and a half years as a petroleum engineer. Previous five years was for XTO Energy, and the last half year was for Gruy Petroleum.

Q. Mr. Swain, are you familiar with the Applications in these matters file on behalf of Gruy Petroleum Management Company?

1 A. Yes, sir, I am.

2 Q. Have you prepared an engineering study of the
3 area that's the subject of these Applications?

4 A. Yes, I have.

5 Q. Are you prepared to share that work with Mr.
6 Jones?

7 A. Yes, sir.

8 MR. CARR: Are the witness's qualifications
9 acceptable?

10 EXAMINER JONES: His qualifications are
11 acceptable.

12 Q. (By Mr. Carr) Mr. Swain, let's start by telling
13 the Examiner what your engineering study tells us about
14 Gruy's proposal to drill additional wells and
15 simultaneously dedicate these wells to these existing
16 spacing units.

17 A. That additional reserves would be gotten by
18 drilling another well in the proration unit.

19 Q. In fact, Gruy has had a similar program in this
20 area --

21 A. Yes.

22 Q. -- have they not?

23 A. Yes, last program was in 2002, drilling program.

24 Q. They're basically the same thing?

25 A. Yes.

1 Q. Let's go to Exhibit Number 17, and let's go to
2 the first page of this exhibit, and I'd ask you to identify
3 it and explain to Mr. Jones what this shows.

4 A. This is a production curve of two wells
5 previously drilled by Gruy Petroleum in the same proration
6 unit. It's just a daily rate gas decline curve. And what
7 is shaded in red is the 160-acre well, total cumulative
8 production. And what is shaded in green is the incremental
9 -- is the production of the new well drilled, which
10 represents incremental reserves we got by drilling this
11 additional well.

12 Q. So what you have here is the production off a
13 standard 160-acre spacing unit?

14 A. Yes, sir.

15 Q. The red shows the initial well, the RFU 41?

16 A. Yes, sir.

17 Q. And then the green shows incremental reserves
18 obtained by putting a second well on that unit and
19 simultaneously dedicating --

20 A. Yes, sir.

21 Q. When we look at this, we don't see any
22 significant change, do we, in the production from the first
23 well when the second well came on?

24 A. No, sir, you don't.

25 Q. When we look at the production shaded in green,

1 this is actually incremental production, not just a rate
2 acceleration --

3 A. Yes, sir, it is.

4 Q. Let's go to the second page of this exhibit.
5 What does this show you?

6 A. This is another plot similar to the first one.
7 It is two more wells drilled. It's the Rhodes State Com 18
8 and the Rhodes State Com Number 5 well. And it's a summary
9 plot which, again, the red shading is the original 160-acre
10 well, and the green shading is the production from the 80-
11 acre infill well.

12 Q. And so again we see incremental production from
13 the second well?

14 A. Yes, sir, you do.

15 Q. Both of these samples, these wells, were at
16 standard locations on those spacing units; is that --

17 A. Yes, sir, they were.

18 Q. -- correct? And so they would be representative
19 of what you expect to get with the new drilling program?

20 A. Yes, sir, they are.

21 Q. In the earlier program, as Gruy developed these
22 properties with two wells on these units, was there any
23 indication of interference in any of the wells?

24 A. There has been some interference in other parts
25 of the field, but typically less than .1 of a BCF.

1 Q. So when you did experience interference it was
2 small?

3 A. It was very small.

4 Q. And you still were able to produce incremental
5 reserves by embarking on this program?

6 A. Yes, sir, you are.

7 Q. Let's go to page three. Will you tell me what
8 this is?

9 A. Page three is a production plot for the Jalmat
10 field, which is an offset Yates-Seven Rivers Gas Pool, and
11 basically it's very similar to the first two plots where
12 the red production is shaded on the 160-acre spacing wells.
13 The green shading is the production -- the incremental
14 production gained by drilling the 80-acre wells in the
15 field, and the purple shading is the incremental production
16 by drilling of the 40-acre wells in the field.

17 Q. So what we really have here is, as they have
18 downspaced the Jalmat -- which really is a common reservoir
19 with the --

20 A. Yes, sir, it is.

21 Q. -- Rhodes, is it not?

22 And so this data would predict what you would
23 experience in the Rhodes?

24 A. Yes, sir, it would.

25 Q. And as you've downspaced each time and gone to a

1 greater well density, in fact you have recovered additional
2 reserves?

3 A. Yes, sir, you have.

4 Q. Let's go to the next page in this exhibit. What
5 is this?

6 A. This is a volumetric data sheet that I produced.
7 It shows the finding of the volumetrics for the 160-acre
8 proration unit that I ran. The top number in red is the
9 total gas in place for the 160-acre proration unit. The
10 next number is ultimate recoverable, based off the recovery
11 factor.

12 The third red number is the historical cumulative
13 production for the well in the 160-acre proration unit.
14 And you'll see this one has the asterisk by it, because the
15 Rhodes Federal Unit 221 was a gas storage well. And so the
16 total cumulative production reported for the Rhodes 221 was
17 25 BCF, and most of that gas was injected gas, not
18 naturally productive gas. And so my number of 1.6 BCF is
19 an allocated number of what the well would have recovered
20 under natural conditions, normal conditions.

21 The second red number is the remaining reserves
22 in the 160-acre proration unit. Then you get your recovery
23 factor, is the next number. And our final number is the
24 infill target -- the reserves for the infill well that
25 we're looking to get.

1 Q. And then behind it on the last page of this
2 exhibit, what do we have here?

3 A. That's my volumetric data sheet that shows the
4 reservoir conditions that I used to calculate volumetrics.

5 Q. Basically, Mr. Swain, what does this information
6 tell you about Gruy's plans to drill the RFU 227 and
7 simultaneously dedicate and produce these two wells on that
8 unit?

9 A. That you could gain an additional .4 BCF of gas.

10 MR. CARR: Now, Mr. Examiner, when we originally
11 prepared these exhibits we were doing them as if we were
12 going to present them in separate cases. And so as we look
13 at the next exhibits, the initial three pages on each of
14 these exhibits are exactly the same information, and we can
15 just review.

16 Q. (By Mr. Carr) Mr. Swain, let's go to Exhibit 18.
17 That's for the northeast quarter of Section 22, and let's
18 go back to the fourth page, the volumetrics.

19 A. Yes.

20 Q. And if this is approved, how much additional
21 recovery do you believe you will obtain by simultaneously
22 dedicating the 223 and 226 wells?

23 A. Around .7 of a BCF of gas, by drilling an
24 additional well in the proration unit.

25 Q. And again, you have all the volumetric

1 information on that well, and the backup data is on the
2 next page?

3 A. Yes, sir,

4 Q. Let's go to Exhibit 19, and let's talk about the
5 three-well unit in the northeast quarter of Section 9.
6 What does your study show you on that spacing unit?

7 A. By drilling a third well in the 160-acre
8 proration unit, you could recover around .2 of a BCF of
9 gas, of additional reserves that you would not get with the
10 two wells.

11 Q. Okay, let's go to Exhibit Number 20. Exhibit
12 Number 20 involves the development of the southwest of
13 Section 5, and what does it tell you you can obtain with
14 the additional well on this acreage?

15 A. Around .8 of a BCF by drilling an additional well
16 on the proration unit.

17 Q. Exhibit 21 is the nonstandard unit in Sections 10
18 and 15. And how much additional production can you obtain,
19 do you believe, from drilling and simultaneously dedicating
20 this tract to two wells?

21 A. Around .4 of a BCF of additional reserves.

22 Q. And finally Exhibit Number 22, this is for the
23 northwest of Section 10. How much additional recovery can
24 be obtained from this spacing unit?

25 A. Around .6 of a BCF of additional reserves.

1 Q. Now, these engineering exhibits, from these you
2 can ascertain the current producing rate for the original
3 well on these units. What is the current range of
4 production from the existing wells on these spacing units?

5 A. Around 20 to 50 MCF a day.

6 Q. Is this a prorated pool?

7 A. Yes, it is.

8 Q. And what is the gas allowable assigned to a 160-
9 acre unit in this pool?

10 A. It's 800 MCF a day.

11 Q. So is there any reason to go in now and plug the
12 old well when you put the new well on the unit?

13 A. No, there's not.

14 Q. Both of them together would not produce the
15 assigned allowable?

16 A. No, they would not.

17 Q. What conclusions can you reach from your
18 engineering study of the area?

19 A. By drilling additional wells in the proration
20 unit, you will gain incremental reserves, not accelerated
21 but incremental reserves.

22 Q. And what you have shown here with your
23 engineering work is consistent with the actual Gruy
24 experience from their earlier program where they were
25 drilling additional wells and simultaneously dedicating

1 tracts in this pool?

2 A. Yes, sir, it is.

3 Q. Will approval of this Application, in your
4 opinion, be in the best interest of conservation, the
5 prevention of waste and the protection of correlative
6 rights?

7 A. Yes, it will.

8 Q. Were Exhibits 17 through 22 prepared by you?

9 A. Yes, they were.

10 MR. CARR: May it please the Examiner, at this
11 time we'd move the admission into evidence of Gruy Exhibits
12 17 through 22.

13 EXAMINER JONES: Exhibits 17 through 22 will be
14 admitted to evidence.

15 MR. CARR: That concludes my direct examination
16 of Mr. Swain.

17 EXAMINATION

18 BY EXAMINER JONES:

19 Q. Mr. Swain, the -- you did decline curve
20 analysis --

21 A. Yes, sir.

22 Q. -- for your existing well. And then you also did
23 a volumetric, it looks like?

24 A. Yes, sir.

25 Q. And so your average recovery factor is around 67

1 percent?

2 A. Yes. Due to the low pressure -- the bottomhole
3 pressure here is very low, over -- you know, the gas
4 storage unit -- their original wells that were drilled
5 encountered a very, very low bottomhole pressure, 500 to
6 600 pounds bottomhole pressure, and the recovery factor was
7 just really low, based off of that.

8 Q. Okay, where is that Rhodes Gas Storage Unit in
9 relation to this?

10 A. It is -- it is -- Some of the producing wells are
11 the Rhodes Gas Unit, Storage Unit --

12 Q. You're blowing it down now?

13 A. Yes, sir. And all -- you know, there was a study
14 a couple years ago that all non-native gas has been
15 recovered, and what is producing now is just native gas out
16 of the Rhodes --

17 Q. Oh.

18 A. -- out of the Yates formation.

19 Q. Oh, okay. And so you've almost made a case for
20 40-acre wells here.

21 A. Yes, depending on economics.

22 Q. Yeah.

23 A. You know, drill costs are real high these days.
24 It's tough to drill, you know, 40-acre wells. But yes, you
25 know, in the fields -- the north Eumont and Jalmat, there

1 are 40-acre spacing wells.

2 Q. Well, I guess you'll find out if you have
3 partners in these wells whether they'll go for that --

4 A. Yeah.

5 Q. -- extra well, they'll be out there spudding
6 another well on you.

7 I think you did some good work.

8 Now these decline curves -- Did you do this
9 spreadsheet yourself, this --

10 A. Yes, that was out of Power Tools.

11 Q. Power Tools, okay.

12 A. Yes.

13 Q. And the charts too are Power Tools charts?

14 A. P.I. Dwight's was the charts.

15 Q. Okay.

16 A. Kind of low-tech, but --

17 Q. Well, it works good.

18 A. Yeah.

19 Q. You had to color them in yourself, but --

20 A. I did. That's -- You know, looking at a curve,
21 to me, that's the easiest way to show incremental reserves,
22 is look at the base well and the decline on that and what
23 -- the new well on the proration unit, and that's the
24 easiest way to understand the incremental reserves.

25 EXAMINER JONES: Okay. Well, I think we're

1 happy. Thanks a lot, Mr. Swain.

2 THE WITNESS: Thank you.

3 MR. CARR: And that concludes our presentation in
4 this case.

5 EXAMINER JONES: Thanks, Mr. Carr.

6 With that --

7 (Off the record)

8 (Thereupon, these proceedings were concluded at
9 10:49 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. _____
Record by me on _____

Oil Conservation Division, Examiner

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 October 29th, 2005.



STEVEN T. BRENNER.
 CCR No. 7

My commission expires: October 16th, 2006