STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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CASE NO. 13,629

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IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF YATES PETROLEUM CORPORATION FOR POOL CREATION AND THE ADOPTION OF SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: RICHARD EZEANYIM, Hearing Examiner

January 19th, 2006

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, RICHARD EZEANYIM, Hearing Examiner, on Thursday, January 19th, 2006, 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.

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

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APPEARANCES

APPLICANT'S WITNESS:

<u>DAVID F. BONEAU</u> (Engineer) Direct Examination by Mr. Carr Examination by Examiner Ezeanyim

REPORTER'S CERTIFICATE

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EXHIBITS

Identified Applicant's Admitted Exhibit 1 8 19 Exhibit 2 9 19 Exhibit 3 10 19 Exhibit 4 10 19 Exhibit 5 11 19 Exhibit 6 11 19 Exhibit 7 11 19 Exhibit 8 11 19 Exhibit 9 14 19 Exhibit 10 15 19 Exhibit 11 15 19 Exhibit 12 15 19 Exhibit 13 16 19 Exhibit 14 16 19 Exhibit 15 18 19 * * *

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

A P P E A R A N C E S

FOR THE DIVISION:

GAIL MacQUESTEN Deputy General Counsel Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505

FOR THE APPLICANT:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR 110 N. Guadalupe, Suite 1 P.O. Box 2208 Santa Fe, New Mexico 87504-2208 By: WILLIAM F. CARR

* * *

1	WHEREUPON, the following proceedings were had at
2	8:51 a.m.:
3	EXAMINER EZEANYIM: At this point I call Case
4	Number 13,629. This is the Application of for pool
5	creation and the adoption of special pool rules, Lea
6	County, New Mexico.
7	Call for appearances.
8	MR. CARR: May it please the Examiner, my name is
9	William F. Carr with the Santa Fe office of Holland and
10	Hart, L.L.P. We represent Yates Petroleum Corporation in
11	this matter, and I have one witness.
12	EXAMINER EZEANYIM: Any other appearances?
13	May the witness stand to be sworn, please?
14	(Thereupon, the witness was sworn.)
15	DAVID F. BONEAU,
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. CARR:
20	Q. Would you state your name for the record, please?
21	A. David Francis Boneau.
22	Q. Dr. Boneau, where do you reside?
23	A. Artesia, New Mexico.
24	EXAMINER EZEANYIM: How do you spell that last
25	name? Boneau?

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THE WITNESS: It has six letters. It starts with 1 B, like baker, -o-n-e-a-u. 2 EXAMINER EZEANYIM: Thank you. 3 MS. MacQUESTEN: I wasn't even close. 4 THE WITNESS: I'm sorry. 5 (By Mr. Carr) Where do you reside? Q. 6 Artesia, New Mexico. 7 Α. By whom are you employed? 8 Q. Yates Petroleum Corporation. 9 Α. And what is your position with Yates? 10 0. It's called engineering manager. 11 Α. Could you review for Mr. Ezeanyim your 12 Q. educational background? 13 Surely. I have a PhD in nuclear physics from Α. 14 Iowa State University in 1969. I worked for Phillips 15 Petroleum from that point until 1980 in research and also 16 17 in field offices. Since 1980 I've been employed by Yates Petroleum in Artesia as an engineer, mostly in the 18 19 reservoir area and a whole bunch of other things that come 20 up at Yates Petroleum Corporation. 21 Are you familiar with the Application filed in Q. 22 this case? 23 Α. Yes, sir. 24 Does your area of responsibility with Yates Q. 25 include the portion of southeastern New Mexico involved in

1	this case?
2	A. Yes, it does.
3	Q. Are you familiar with the Yates Judson AUU State
4	Well Number 2?
5	A. Yes, sir.
6	Q. Have you made an engineering with the area that
7	is the subject of this Application?
8	A. I have done that.
9	MR. CARR: May it please the Examiner, we tender
10	Dr. Boneau as an expert in reservoir engineering.
11	EXAMINER EZEANYIM: Dr. Boneau is so qualified.
12	Q. (By Mr. Carr) Dr. Boneau, could you briefly
13	share with Mr. Ezeanyim what it is that Yates Petroleum
14	Corporation seeks with this Application?
15	A. We're seeking the creation of a Permo-Penn oil
16	pool with 160-acre spacing for oil from the Permo-Penn,
17	usually called Bough "B" in this case, B-o-u-g-h, B, is the
18	common name for the producing reservoir. We're seeking
19	this in a single 160-acre area in the southeast quarter of
20	Section 26 of 10 South, 34 East. And in the line of
21	well, in the line of special pool rules we're seeking the
22	160-acre spacing because it looks like the well will drain
23	that. We're asking for 330-foot setbacks, and probably
24	that deserves a mention.
25	Yates is drilling deep wells in this area. This

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is near Tatum, New Mexico. We're drilling for gas in the
 Morrow and the Atoka or other deep reservoirs at 12,000 plus feet. We don't always find that, and we end up in
 zones above. And in this particular well we found quite a
 productive Bough B oil zone that we were producing.

Okay, what's my point? My -- the 330 -- the gas 6 wells are drilled at 660 setbacks. That's the Morrow, and 7 we're going to continue to drill Morrow wells at 660 8 setbacks and et cetera. The only way 330 would -- We're 9 just trying to cover everything at one time as best we 10 The only way 330s would come up, I think, are in 11 could. the relatively unusual case where we would enter an old 12 well that happened to be at a 330 or something location and 13 end up in this Bough B, and we're just trying to make it 14 general enough to cover that. We are not intending to go 15 16 out there and drill wells -- we're not allowed to -- to the 17 Morrow, at closer than 660 from the lines. This particular well is located 660 from the south and 1980 from the east. 18 19 Current spacing rules would provide for what oil Q. 20 spacing in the area? 21 Α. Oh, the statewide spacing is 40 acres, and it

21 A. On, the statewide spacing is 40 acres, and it
 22 really looks like this well is draining more than 40 acres.
 23 Q. You've prepared exhibits for presentation here
 24 today, have you not?

25

A. Yes, I've tried to outline my calculations in

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those exhibits.

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Q. Why don't we go to what's been marked Yates
Petroleum Corporation Exhibit Number 1, and using this
exhibit, would you summarize what you're going to present
for Mr. Ezeanyim?

A. Yes, surely. So I've told you that this is a deep gas well drilling program. We found the Bough B in this particular well, and we -- it would be nice if we found it in a whole lot of other wells. And I've tried to outline what we seek, 160-acre spacing and those setbacks. We're not asking for anything special in terms of GOR or oil allowable. Those are plenty fine.

Usually when I come here for one of these kind of things, I get accused of Yates doing things to hold acreage, and probably we do that sometimes. But in this case you'll see the map. These are 320-acre leases, these are big leases, and I really don't think that that's an issue, and this well really does drain.

So this is a relatively new well, drilled last summer, came to the Bough B in October, it's been producing since October. It's made 7000 barrels and quite a bit of water. It's currently making 107 barrels of oil a day, gas, and 450 barrels of water a day, so there's water with this.

You'll see that the expected reserves from this

1	well are 51,000 barrels, which comes from 151 acres, which
2	is surely consistent with the spacing that we're asking
3	for.
4	EXAMINER EZEANYIM: Is this in the Morrow or in
5	the Penn? Is that Number 5, is that in the Morrow?
6	THE WITNESS: No.
7	EXAMINER EZEANYIM: I mean, which information are
8	you getting these production
9	THE WITNESS: This oil production is from Permo-
10	Penn
11	EXAMINER EZEANYIM: Okay.
12	THE WITNESS: I call it Bough B, but a Permo-Penn
13	zone. It's This well was tested in the Morrow, tested
14	in the Atoka. Anyway, it does not produce from those. It
15	produces oil from this Permo-Penn zone.
16	Q. (By Mr. Carr) Let's go to Exhibit Number 2.
17	Would you identify that and explain what it shows?
18	A. Sure. Exhibits 2 and 3 are both maps, but this
19	is a map that shows a fairly big area. The red square in
20	the southeast of Section 26 is the area that we're talking
21	about. The Judson well was drilled as a standup 320 in the
22	east half of Section 26. I think the point is that Yates
23	is operating, you know, a lot of acreage. There's a lot of
24	yellow on the map. Yates is operating a lot of acreage in
25	this area. And like I said, they're mostly section leases

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1	or half-section leases. Pretty big leases, for the most
2	part.
3	Q. Dr. Boneau, if we look at Exhibit 3, in the
4	center of this nine-section plat we have the Judson spacing
5	unit, correct?
6	A. Yes, and
7	Q. Everything in this nine sections is operated by
8	Yates; is that correct?
9	A. That is correct, yes, sir.
10	Q. And it's all State of New Mexico land?
11	A. I believe that's right, I
12	Q. So there are no other operators that are affected
13	by this Application?
14	A. No, all the offsets are us.
15	Q. Okay. Let's go to Exhibit Number 4, the daily
16	production plot. Would you review this for Mr. Ezeanyim?
17	A. Okay, so now we're on the trail of calculating
18	that drainage area; that's really what most of this is
19	about.
20	Exhibit 4 is a plot of daily production from the
21	oil zone in this Permo-Penn, and the blue is water
22	production. The water production is 400, 500 barrels a
23	day, and I would call it fairly constant over the period
24	from October to the present. That's the water production.
25	The oil production is shown in green, it's been

1	around 100 barrels a day, and it's not falling off very
2	fast on this scale.
3	The pink is the gas production, and the gas
4	production has been increasing a little as the GOR goes up,
5	but the gas production is about 150 MCF per day.
6	Q. All right, let's now move to Exhibit 5.
7	A. So Exhibit 5 is a monthly plot of production
8	and so there's not very many dots, because there's only
9	been two and a half months plus my projection of how the
10	well is going to behave in the future. And at the moment
11	we have a sort of leap of faith that it's going to decline
12	relatively rapidly, and I'm going to try to convince you
13	that that's a sensible projection.
14	Q. Okay, let's go to the next page, the first of the
15	two computer printouts. What does this show us?
16	A. The computer printouts on pages 6 and 7 are just
17	a mathematical calculation of what oil will be produced .
18	following the decline curve shown in Exhibit 5, and the
19	first page is page 6, Exhibit 6, is just some input
20	information. Exhibit 7 are the answers, and I've
21	highlighted in red the amount of oil that this amounts to,
22	and it's 51,301 barrels, is my projection of what this well
23	will produce from this Permo-Penn zone.
24	Q. Dr. Boneau, Exhibit Number 8 consists of five
25	production plots. Could you first tell us where these

1	wells are located and then what this exhibit shows?
2	A. Okay, this is my effort to help you believe that
3	the kind of projection I've made is reasonable. These are
4	wells that produce from what's called the Vada-Penn Pool.
5	The Vada-Penn Pool is located just north of this area.
6	It's in 9 South and 10 South of 34 East. So it's five
7	miles to the north. It has a bunch of wells.
8	It's called Vada-Penn
9	EXAMINER EZEANYIM: Excuse me, are you looking at
10	Exhibit Number 8?
11	THE WITNESS: I'm looking at Exhibit Number 8,
12	which is five pages stapled together.
13	EXAMINER EZEANYIM: And you are going to use the
14	information to convince me how you get a gradient in
15	Exhibit Number 5?
16	THE WITNESS: Yes, that's the point.
17	EXAMINER EZEANYIM: Okay.
18	THE WITNESS: That's the point. And this pool to
19	the north is called Vada-Penn. Penn is real general. What
20	it is, is oil production from a Bough zone. It's actually
21	what's commonly called Bough C, but it's one of these
22	dolomite zones in the Permo-Penn area, the definition,
23	whatever. We don't need to get into all that. But it's
24	essentially the same zone that our well is producing from,
25	it's a Bough zone, is what produces in the Vada Pool, a big

1	pool with over 100 wells. The rock is similar to our rock,
2	I'm sure of that.
3	Anyway, the five wells and I just pulled out
4	five wells in the idea that hopefully five of them would
5	convince you that it was behavior. I didn't really think
6	we wanted to see 100. Anyway, the behavior, I would claim,
7	is relatively flat for a short time at the beginning and
8	then falling off at decline rates of 50 to 60 percent per
9	year. And if you page through, the first one is 50, the
10	second one is 60, the third one is 50, the fourth one is
11	55, and the last one is 60.
12	And so my I think I actually have 52-percent
13	decline. Anyway, my the decline that I used is an
14	engineering approximation of this kind of behavior, and
15	that's supposed to well, if you look at Exhibit 4, I
16	mean, is the well really going to produce constant for 10
17	years? No, but you know, what information do we So I
18	went looking for some information. This I think makes
19	sense. I used a 52-percent decline in that mathematical
20	equation for the future production of this well.
21	EXAMINER EZEANYIM: The point being using the
22	average; is that what you did? Used the average of what
23	was 50
24	THE WITNESS: Well, it's not exactly the average
25	of the five things I showed you, but it's in that range. I

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1	mean, I could have used 55 or 54, whatever, something
2	between 50 and 60
3	EXAMINER EZEANYIM: Okay.
4	THE WITNESS: I would have gotten about the
5	same answer. My technician did it at 52 and it looked
6	okay, and I said let's go with that. But I'm trying to
7	give you a reason for projecting this behavior similar to
8	the behavior that's been experienced in this nearby Bough
9	area.
10	EXAMINER EZEANYIM: Okay.
11	Q. (By Mr. Carr) All right, Dr. Boneau. Let's now
12	to go the drainage calculation, Exhibit Number 9. Would
13	you review that
14	A. Okay, so
15	Q and then we'll go to the supporting data?
16	A so now that we've hopefully established that
17	around 50,000 barrels is reasonable for this well, the rest
18	of the papers are how much area of reservoir does that oil
19	come from? What is the drainage area? That's what the
20	rest of the papers are.
21	So on Exhibit 9, item 1 is the equation.
22	Item 2, if you look at the logs and we'll do
23	that in detail, but you get that this well has Bough B
24	hydrocarbon pore volume of 0.293 feet, actually.
25	Item number 3 is related to the oil properties,

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1	and it's just from Standing correlation to formation
2	volume factor, called B _{oi} , comes out to be 1.47, and I'll
3	show you a picture of that, just to
4	Item number 4 tries to address how much of the
5	oil in place do we get out. And for a long time I've used
6	these old correlations published, that were run on ancient
7	computers in 1957 by these Magnolia people, but they're
8	just a real clear presentation of what's a reasonable
9	recovery factor. This is a solution gas drive with it's
10	got to have a little water drive, with as much water as it
11	produces. And from those correlations I estimate that
12	recovery factor is 22 percent, so of the oil in place we're
13	going to get 22 percent out.
14	Item number 5, you put all these numbers into the
15	volumetric equation, and it says that we're draining 151
16	acres.
17	Q. All right. Let's go to the log analysis, Exhibit
18	10. What does this show us?
19	A. Okay, so Exhibit 10, and actually 11 and 12, are
20	the logs from which the data comes. It is just a
21	calculation of the what's called the hydrocarbon pore
22	volume, but it goes through each foot of depth through that
23	interval, lists the porosity measurement from the density
24	tool and from the neutron tool and the crossplot porosity,
25	which is about the average. And then from the resistivity

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1	log, you get what's measured as resistivity, and from that
2	water saturation and hydrocarbon pore volume.
3	So it's a foot-by-foot calculation of and
4	there's the answer is this 0.293, which is relatively
5	small, it's a thin you look at the Exhibit 11 is the
6	porosity log. I colored in red the three little porosity
7	peaks that are contributing. You know, one of them is
8	about six feet, one of them is about four feet, and the one
9	at the bottom is very tiny. The maximum porosity is in the
10	7-percent range.
11	So picked numbers off of the logs in Exhibit 11
12	and 12, put them in the spreadsheet in Exhibit 10 and
13	calculated across to get the available volume at this well
14	location.
15	Q. So what does the water analysis, Exhibit 13, tell
16	us?
17	A. Okay, the resistivity calculation depends on
18	knowing what the saturation, et cetera how much what
19	kind of water you're producing. The water analysis in
20	Exhibit 13 shows that the water is 88,000 parts per million
21	total dissolved solids. It's pretty salty water, and that
22	gives the R_w of 0.035 that I used in Exhibit 10. We're
23	just trying to show you all the backup data that exists.
24	Q. Okay, and what is Exhibit 14?
25	A. Exhibit 14 is the same kind of a backup picture.

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1	It's the calculation of the formation volume factor. Lots
2	of times you just throw things into a computer and plot
3	this out. I think it's more descriptive if you use this
4	old chart that a man named Standing, who was a brilliant
5	dude in the old days, derived.
6	Anyway, the oil formation volume factor is a
7	function of the solution gas-oil ratio, the kind of oil you
8	have, the temperature of the reservoir, et cetera. This
9	reservoir has fairly much gas in it. The GOR initially was
10	about 875. Anyway, it has pretty much gas in it, and so
11	you would expect the B _{oi} to be fairly high.
12	Anyway, I drew a blue line here across how you
13	use this nomograph, and it takes right-hand turns three or
14	four times and at the lower right side comes out at a point
15	that's 1.47, and that's the number I used in my
16	calculations.
17	Q. So if we take the data you've just reviewed, they
18	support the input figures in your drainage-area calculation
19	marked Exhibit 9; is that correct?
20	A. Yes, that's exactly, and then just trying to do
21	it in
22	Q. And the calculation
23	A in detail, hopefully, so it's understandable.
24	Q. And the calculation indicates that this well
25	should drain 151 acres?

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1	A. That's what the calculation gives, and it's
2	The answer is clearly bigger than 40. It's got to drain
3	more than 40, even falling off as fast and all that stuff.
4	It's going to drain a large area, and it looks to me like
5	it's a good chance of draining 160s.
6	Just for your information, this Vada-Penn Pool
7	that we're talking about is spaced on 160s. So not the
8	first time in whatever. Lots of these pools are
9	Anyway, the Vada-Penn Pool is spaced on 160s. This looks
10	similar, and it comes out that it seems to me the drainage
11	is pretty similar.
12	Q. Dr. Boneau, has Yates Petroleum Corporation found
13	a new common source of supply in the Bough B oil zone of
14	the Permo-Penn formation?
15	A. Yes, we just don't know how extensive it is. We
16	hope it's relatively extensive.
17	Q. In your opinion, and based on your engineering
18	work, will wells in this pool drain approximately 160
19	acres?
20	A. Yes, sir, they will.
21	Q. In you opinion, will adoption of the proposed
22	special pool rules promote efficient development of the
23	reserves under this acreage?
24	A. Yes, they will help that.
25	Q. Is Exhibit Number 15 a notice affidavit?

That's what it says. Α. 1 And since you are the only working interest owner Q. 2 in the area, notice was really only provided to the State 3 Land Office; is that correct? 4 That's correct. 5 Α. And then behind that is a copy of a legal ο. 6 7 advertisement; is that right? That's what I see here, yes, sir. Α. 8 Dr. Boneau, were Yates Petroleum Corporation 9 Q. Exhibits 1 through 15 either prepared by you or compiled at 10 your direction? 11 Yes, most of them were prepared by me. Α. 12 MR. CARR: May it please the Examiner, at this 13 time we'd move the admission into evidence of Yates 14 15 Exhibits 1 through 15. EXAMINER EZEANYIM: Any objections? Well, 16 Exhibits 1 through 15 will be admitted into evidence. 17 18 MR. CARR: And that concludes my direct examination of Dr. Boneau. 19 20 EXAMINER EZEANYIM: Very good. 21 MS. MacQUESTEN: I just had a question for Mr. 22 Carr. On the affidavit of publication, the copy of the legal advertisement is folded over, so we can't read it. 23 24 MR. CARR: We might replace that. 25 MS. MacQUESTEN: Okay, thank you.

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1	THE WITNESS: We thought you might like that.
2	(Laughter)
3	MR. CARR: We will correct that today.
4	EXAMINATION
5	BY EXAMINER EZEANYIM:
6	Q. Dr. Boneau, yeah, that was a very excellent
7	presentation. I can now follow what you are trying to do
8	here with all the assumptions, you know.
9	I don't know, the .22, the recovery factor, you
10	are using the charts of 1957. Do you think from your
11	experience that they have increased or decreased? You
12	know, I mean, I'm just curious
13	A. Yeah
14	Q to know why you used .22.
15	A. Okay, I'll give you I don't give short
16	answers, I give long answers
17	Q. That's okay.
18	A I'm sorry.
19	The charts that I'm talking about and anyway,
20	are for depletion drive reservoirs
21	Q. Yeah.
22	A and the answers, how much you recover, are how
23	much you will recover, you know, down to the last drop.
24	They're not economic cutoffs; they're all the oil that can
25	be reduced. So by definition, they're a little high to the

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1	real world. Does that make sense?
2	Q. Okay, yeah.
3	A. And so in using them I have, you know, taken 80
4	or 85 percent of the number from that plot and used it as
5	my estimates in other work, I'm saying, not in this.
6	In this case, the correlations I'm referring to
7	give 22 percent. Normally, I would well, so I reduce
8	that to about 20. But this has some water drive component,
9	there's water in it. And in my engineering, you know,
10	approximate thing, I raised it back up to 22 because of
11	that water component.
12	Q. You think that the water is active water drive?
13	A. I think the active water drive will bring out a
14	little more of the oil, and so I used the 22 instead of
15	reducing it for the reason that I tried to talk about
16	there, the way I usually do.
17	Q. Okay, before
18	A. I don't know that it helps you, because
19	Q. Oh, yeah, it helps me a lot.
20	A. And the recovery is fairly high because of the
21	gas in the reservoir. There's just more gas in this
22	reservoir than some dead oil. I mean, it's not a dead oil,
23	it's pretty live. And the gas helps bring out the oil, and
24	the water helps bring out the oil. And 22 is in my
25	experience, is a reasonable number for this type of

1	operation.
2	Q. Okay. Go back to Exhibit Number 1 where you laid
3	out what you are seeking. I'm looking at number 3.e. What
4	is the depth? I thought the depth here is about 10,000
5	feet. If pursuant to 505.A, if I look at it, the ones,
6	I think it's 470, how come you're asking for 515? Do you
7	have a
8	A. Okay, the table for I mean, if I did it wrong,
9	I did it wrong. But I looked at the table for 9000 to
10	10,000
11	Q. Yeah.
12	A and 515 was the number I read. Maybe I
13	Q. Well, let me see. When I looked at this
14	yesterday I thought I saw I may be the person who is
15	A. Well
16	Q 505
17	A just looking I mean, my intention was to
18	have the number from the table on this exhibit
19	Q. Yeah.
20	A and we're not producing anything like 400
21	or 500 barrels a day, and so you can
22	Q. Of course, I know that
23	A say anything you want.
24	Q but, you know, you are asking for something
25	I need to know why

1	A. I looked at the table and I read 515, and that's
2	what I put in. Yeah, my book opens magically to that page.
3	I don't know how else to find it.
4	Q. Okay, are you using 10,000 feet or what?
5	A. 9000 to 10,000.
6	Q. Oh, 9000 to 10,000, okay.
7	A. Yeah, the perforations the top perforations is
8	at 9998 or something like that.
9	Q. Okay, 9 okay, yeah. Okay, that's correct.
10	A. So that Is that the right number? That's
11	Q. Yeah
12	A where I got that number.
13	Q. Because I think in this way you at the Morrow,
14	now you recompleted into the Penn, Permo-Penn, right?
15	A. Yes.
16	Q. What's happening in the Morrow now? Is it Are
17	you doing anything in the Morrow right now?
18	A. In this well or in general?
19	Q. Yeah, in this well, in this well.
20	A. No, we tested the There wasn't very much
21	Morrow on the log. We tested what there was, it was
22	nonproductive, we moved uphole.
23	Q. Okay, that's okay, that's
24	A. No, that's the way the business works sometimes,
25	unfortunately.

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1	Q. Yeah. Bough B. How did you come out with Bough
2	B? I mean, is that what you want to call this pool?
3	A. I would call this pool Sand Springs-Permo-Penn
4	Q. Okay, let me
5	A are the words I would call it.
6	Q write it down. One question, I said what do
7	you want to call this pool.
8	Have you contacted the District 1? You know,
9	because district geologists used to, you know
10	A. Well
11	Q name all these, assign the pool codes. Of
12	course, you can come up with it and discuss it with them,
13	but do you have any effort in dealing with the District
14	geologist?
15	A. I am not No, I have not discussed this with
16	the geologist in District 1.
17	Q. Because they manage pool names and pool codes and
18	everything, so
19	A. Well, that's why I'm not suggesting I'm
20	suggesting that you name it how you want it, but it's
21	Q. No, let me get what you
22	A. Anyway, I would call it Sand Springs-Permo-Penn,
23	or Permo-Pennsylvanian.
24	Q. Sand Springs-Permo-Penn, right?
25	A. Permo-Penn, is what I would call it, but

1	Q. Okay. Well, maybe we'll discuss it with the
2	District geologist. They do that, and maybe they have to
3	try to find the pool code.
4	Then in relation to those I look at your
5	exhibits, there is no other pool within one mile of this
6	well? There is no other pool within one mile?
7	A. There's no pool from anywhere close to these
8	zones, no. The nearest ones are five miles north and five
9	miles west.
10	Q. So I assume that this pool is this pool you
11	are trying to name is distant and separate from all other
12	pools, and that's why we'll have to create it, right?
13	A. Yes.
14	Q. Is that what I understand?
15	A. Yes, sir, that's what I believe.
16	Q. Okay. And these are the special pool rules you
17	are asking?
18	A. The first three are the special pool rules.
19	Items d. and e. are the
20	Q. Of course
21	A the standard, what you would normally do. I
22	just wrote them down so the numbers would be on the paper.
23	Q. Is this a discovery well? Are you going to call
24	it a discovery well? And then one other way to ask it, are
25	you asking for any discovery allowable?

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1	A. You would classify it as a discovery well. We
. 2	don't need, or there is no reason to ask for a discovery
3	allowable.
4	Q. That's what I thought. Okay.
5	This well is producing now, right?
6	A. Yes, it's producing in
7	Q. From the
8	A for the past two or three months, you know,
9	every day, it's pumping away.
10	Q. Are you asking for a retroactive effective date,
11	if that is I don't know when you recompleted uphole and
12	started doing this. Are you asking for a retroactive
13	effective date? Maybe I turn to Mr. Carr?
14	A. If it were effective in October, that would be
15	wonderful. I think if it were effective today, it would
16	solve what we need.
17	Q. Yeah, when did you start producing this well?
18	A. Approximately October 20th.
19	Q. 2005?
20	A. Of 2005.
21	Q. Some of the questions have been answered, so
22	that's why I'm
23	One, do you anticipate drilling an infill in this
24	unit, in this pool? I mean, I think I read in one of the
25	applications that you might drill another well if this well

1	is draining 150 acres. Do you anticipate to drill another
2	well in that pool?
3	A. Well, if you look at Exhibit 3 Can you look at
4	Exhibit 3
.5	Q. Sure.
6	A just for a way to try to answer you?
7	Q. Yeah.
8	A. In the north half of that same section, there's
9	an open circle right under the V.
10	Q. Yeah.
11	A. That's a well we are currently drilling to the
12	Morrow. I mean, it's a well we're currently drilling.
13	Q. What is the name of that well?
14	A. It's called Miranda, M-i-r-a-n-da, I guess.
15	Anyway, we're currently drilling that well. We hope to
16	make a Morrow well there
17	Q. Okay.
18	A but we're really looking close at the Bough B
19	to see if there's a zone.
20	Likewise, to the south in Section 35
21	Q. Uh-huh.
22	A in the northwest quarter there's an open
23	circle.
24	Q. Yeah.
25	A. That well is called East Sand Springs Unit Number

1	9. I don't name these things, I don't
2	Q. Okay.
3	A. But we are currently drilling that well to the
4	Morrow, and in that well we well, in the last few days
5	we have cored the Bough B
6	Q. Uh-huh.
7	A to get some rock-property data.
8	Q. Okay.
9	A. So what I'm telling you is that we are drilling
10	in the immediate area. We hope there are Morrow wells, but
11	in the process we are trying to gain, by this coring and by
12	drilling more wells, information about this Bough B.
13	Q. Okay.
14	A. I hope that answers your question.
15	Q. Yeah. So Well, when we talk about the
16	vertical limits, do we say the vertical limits are the
17	We know the horizontal limit, the southwest quarter of that
18	section. What are you asking for vertical limits of the
19	pool?
20	A. Well, I think I'm really we're really asking
21	for what your geologist would call Permo-Penn.
22	Q. Yeah, but they have to have some they have to
23	have vertical and you have this Permo-Penn, you know,
24	because see, I say now that this Sand Springs is different
25	from other Permo-Penns. Some of them may be at a different

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1	depth, and this might be at a different depth, you know.
2	So I'm wondering whether we should set some limit on the
3	vertical limits of the pool.
4	I know the horizontal limits, which you've just
5	told me, but I need to know where you are I know you are
6	at about 10,002 feet. But I don't know, other Penn may be
7	deeper than that, or shallower than that. I don't know.
8	A. Well, no. I mean, Permo-Penn is a Well, I'm
9	an engineer. Permo-Penn is a geologist's fudge word,
10	because they have trouble identifying where the Division is
11	between Permian and Pennsylvanian. So it's a name that's
12	general enough to
13	Q. Yeah.
14	A to get past the arguments over where the
15	boundary of the Permian and the Pennsylvanian is, you know.
16	So is Bough B in the Permian or is it in the Penn? I
17	you know, you get different opinions. And I'm not a
18	geologist, and we're not going into that, but
19	Q. Well, okay, I you
20	A. I mean, I
21	Q want it to be general enough
22	A. I want it to be general enough. I mean,
23	obviously from our logs you could define Bough B to be from
24	9990 to 10,010 in this well in the equivalent interval.
25	That's more restrictive than Permo-Penn, but

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1	Q. Okay.
2	A you know, you can do what you want.
3	EXAMINER EZEANYIM: Okay. Mr. Carr, do you have
4	any further questions?
5	MR. CARR: No, no further questions.
6	EXAMINER EZEANYIM: At this point, Case Number
7	13,629 will be taken under advisement.
8	MR. CARR: Thank you, Mr. Ezeanyim.
9	(Thereupon, these proceedings were concluded at
10	9:30 a.m.)
11	* * *
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16	I de hereby certify that the
17	the Examiner hearing of the proceedings in
18	heard by me on 19 12629
19	Oil Conservation Dr. Examiner
20	
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22	
23	
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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 19th, 2006.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 16th, 2006

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