STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

ORIGINAL

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

CASE NO. 14271

APPLICATION OF VANGUARD PERMIAN, LLC FOR A NONSTANDARD GAS SPACING AND PRORATION UNIT AND AN UNORTHODOX GAS WELL LOCATION, LEA COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

April 16, 2009
Santa Fe, New Mexico

BEFORE: DAVID BROOKS: Hearing Examiner
TERRY WARNELL: Technical Advisor
RICHARD EZEANYIM: Technical Advisor

This matter came for hearing before the New Mexico Oil Conservation Division, David Brooks Hearing Examiner, on April 16, 2009 at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Room 102, Santa Fe, New Mexico.

REPORTED BY: Peggy A. Sedillo, NM CCR NO. 88
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I N D E X

A P P E A R A N C E S

FOR THE APPLICANT:	JAMES BRUCE, ESQ. Attorney at Law P. O. Box 1056 Santa Fe, NM 87504
FOR TECHSYS RESOUCES, LLC:	BRAD BLISS, PRO SE Techsys Resources, LLC Houston, TX 77024

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HEARING EXAMINER: We call Case No. 14271, the Application of Vanguard Permian, LLC for a nonstandard gas spacing and proration unit and an unorthodox gas well location, Lea County, New Mexico.

Call for appearances.

MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe representing the applicant. I have one witness.

MR. BLISS: Brad Bliss. I'll be representing myself and my company.

HEARING EXAMINER: And what is the name of your company?

MR. BLISS: Techsys Resources, LLC of Houston, Texas.

HEARING EXAMINER: Okay. And that's spelled differently from the way Texas is normally, is that right? Would you spell it for the record?

MR. BLISS: Techsys is spelled T-e-c-h-s-y-s Resources, LLC.

HEARING EXAMINER: Okay. Would the witness please stand to be sworn? State your name.

MR. PENCE: Douglas Britt Pence.

HEARING EXAMINER: Okay, you may take the stand, unless Mr. Bruce has an opening statement?

MR. BRUCE: No, I don't.

DOUGLAS BRITT PENCE,

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

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Mr. Pence, where do you reside?

A. Houston, Texas.

Q. And who do you work for?

A. Vanguard Natural Resources.

Q. And what is the relationship between Vanguard Natural Resources and Vanguard Permian, LLC?

A. Vanguard Natural Resources is the sole owner of Vanguard Permian, LLC.

Q. And is Vanguard Permian, LLC the operator of the Vanguard Natural Resources wells?

A. Yes.

Q. Okay. Have you previously testified before the Division?

A. No.

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

A. Okay. I'm working at Vanguard Natural Resource as Vice President of Engineering, which I -- for the last couple years. Prior to that I was working for --

Q. Let's start out with, where did you go to

college?

A. I graduated in 1983 from Texas A&M with a BS in Civil Engineering, and started work after graduating with the Superior Oil Company and worked for them for a year. And then Mobile bought Superior and I worked at Mobile as a production engineer, civil engineer, reservoir engineer from '85 to '91. At that time I left Mobile and went to work at Greenhill Petroleum and worked as a senior reservoir engineer.

Q. Did your area of responsibility at Greenhill encompass some of the areas of Lea County that we're talking about today?

A. Yes. At Greenhill Petroleum, my area of responsibility was the Permian Basin. Most of our production was in the Farmington/Lovington area where we operated some water floods.

And then in '97, Greenhill Petroleum was bought by Mesa, and at that time I went to work for Anadarko. I'd been there for ten years. I then left Anadarko two years ago to work at Vanguard Natural Resources.

Q. And in all of those companies, you've been employed as a production engineer, reservoir engineer, and petroleum engineer?

A. Yes. Most of the time in reservoir and engineering-type responsibilities and management.

Q. Okay. And your area of responsibility at Vanguard includes this area of southeast New Mexico?

A. Yes, sir.

Q. And are you familiar with the engineering matters related to this application?

A. Yes, sir.

MR. BRUCE: Mr. Examiner, I tender Mr. Pence as an expert petroleum engineer.

HEARING EXAMINER: Any objection?

MR. BLISS: No.

HEARING EXAMINER: He is so qualified.

Q. Mr. Pence, have you assembled a package of exhibits with respect to the application today?

A. Yes, sir.

Q. And is that marked as Exhibit 1?

A. Yes, sir.

MR. BRUCE: Mr. Examiner, although I think in some of the packages there might be some pages that are turned upside down. We have numbered the pages.

Q. Referring to Page 2, Mr. Pence, just briefly state what Vanguard seeks with respect to this case.

A. Okay, what we're seeking is the OCD's approval for a nonstandard gas spacing and proration unit in the Queen formation, Byers-Queen gas pool, comprised of the north half of the northeast quarter of Section 32,

Township 18, Range 38 East.

And an unorthodox gas well location in the Queen formation for the State A Well No. 7 located 760 feet from the north line and 500 feet from the east line of Section 32.

MR. BRUCE: And Mr. Examiner, the Byers-Queen gas pool is an old gas pool that was just developed on the Division's statewide 460 acres spacing.

Q. Please turn to Page 3 and discuss the contents for the Examiner.

A. Okay. These are the two key wells that we'll probably be talking about for most of today, in essence. The State A No. 7 is the well that we operate at the location as described before also shown on the little map to the right where it has 760 feet from the north line and 500 feet from the east line of Section 32 that our -- Vanguard's well perforating the Queen and the perforation as shown on the exhibit.

We frac'ed the well with 60,000 pounds of grade sand. And so that frac job was performed in June of 2008. The well that Techsys operates is shown on the map, and it's 330 feet from our acreage shown on the map.

And I wanted to point out, too, that the distance between the No. 4 and the No. 7 is approximately 3,570 feet. It's almost -- roughly about a half a mile.

And it's perforated in the Queen.

And No. 4 is a relatively old well. 1947, I believe, is when it was drilled. And a lot of history there.

There's a lot of commingling between zones, so I'm not sure exactly how much production over the entire time has come out of the Queen. But what we do know from the records is as of May of 2000, it was reperforated and completed in the Queen and stimulated.

What I'm going to talk about through this packet for that well is just saying from that point forward, how much gas is coming out of the Queen from that well.

MR. BRUCE: Before you go on Mr. Pence, Mr. Examiner, I would ask the Division to take administrative notice of this well file. I only brought one copy with me, but if you look at the well file, there is an acreage plat from the Division's well file from 1953 showing that it was completed in the Byers-Queen pool.

Now, as Mr. Pence said, he's only been looking at production since 2000 or so. But I have -- apparently from the Division's file, it has produced from the Queen for quite some time.

HEARING EXAMINER: Any objection to taking administrative notice of the contents of the well file?

MR. BLISS: I have no objection.

HEARING EXAMINER: We will do so then.

Q. Now, one other item on this map, you have highlighted the north half northeast of Section 32. Is that a single State of New Mexico leased land?

A. Yes.

Q. And is Vanguard the sole owner of the operating rights in that?

A. Yes, we have 100 percent of the working interest.

Q. Now, there was acreage -- you proposed to exclude acreage from the well unit, the south half northeast quarter of Section 32. Is that a separate State of New Mexico lease?

A. To the best of my knowledge, there is -- State of New Mexico and Occidental is the operator for that.

Q. Okay, so it's a separate state lease and Occidental Petroleum is the operator of that?

A. Yes.

Q. Okay. Do you have anything else on Page 3, Mr. Pence?

A. No, just -- I guess some of the other operators around us we have -- Occidental is to the east of the shaded acreage, and to the north, Texland -- not Techsys -- is the operator to the north of us.

Q. Well, let's get into that. Texland is to the

north in Section 29, correct?

A. Yes.

Q. Have you received notice of a similar application to this one from Texland?

A. Yes, I received it roughly three weeks ago. And I noticed to complete in the Byers-Queen, offsetting our acreage in the well at an unorthodox location 330 feet from our acreage. And it's more located to the west end of our acreage, roughly about the same distance as Grimes No. 4 would be to our No. 7 well.

And so Vanguard has no intention of objecting to that proposal for a couple of reasons. We're going to get into details here soon.

First of all, Vanguard does not believe that Texland's well is going to impact our well for the same reason that we don't think that our well is going to impact Techsys' No. 4 well. They're both about the same distance.

And secondly, Vanguard has no intention of drilling in that westerly portion of our acreage because the Grimes No. 4 has already benefited by draining some of our acreage in that area and we don't feel that it's economical to drill in that area.

Q. Okay. Let's move on to Page 4 of the exhibit. What is that?

A. This is a structural map and it's on the top of the Queen-Byers sand. It's not the top of the Queen but where the sand pick that has been picked consistently for the wells that are shown here.

The subsea depths, which just happens to be very close to our subsea zero here, shows the well data that we used in creating this map. And you can see that the No. 7, it shows that it's 32 feet above subsea, and the Grimes Well No. 4 is above subsea. So our wells are essentially a little higher.

This reservoir is a depletion-dried reservoir, it is not a water-dried reservoir. And so that's -- that's what the conflict is shown here on the structural map.

Q. Okay. What does Page 5 reflect?

A. Okay, Page 5 shows the volumetric calculations that was performed on the drainage of the State A No. 7. The assumptions are shown first with the gas gravity of .74.

The nitrogen content of 10.1 percent, that's relatively high, but that's what the gas analysis shows, which is -- you know, the Queen has a tendency to have some nitrogen.

Initial formation pressure, we're estimating it to be 1,650. Reservoir temperature, 100 degrees

Fahrenheit.

Water saturation estimated to be 20 percent. We don't produce any water and I'm not aware of any water being produced from the Byers-Queen.

The pay using 8 percent crossplot porosity cutoff in our well is 34 feet. And that's based on log calculations. And average porosity of pay over that 34 feet is 10.7 percent. That's based on log calculations. So those are the assumptions that were behind -- that were included in the calculation of the drainage.

In addition to that, we calculated the -- or Vanguard has calculated the estimated ultimate recovery for the No. 7 to be 181 million standard cubic feet. And we're estimating 75 percent recovery factor.

Using those assumptions, the calculated drainage is 14.5 acres. And the calculated drainage radius is 448 feet. And so over on the little map to the right is an approximate drainage area of the State A No. 7. And what's illustrated is that we don't anticipate to -- Vanguard doesn't anticipate to drain any gas off of our -- other than what's on our lease.

Q. Okay, so you would have no affect on the Techsys well?

A. Correct.

Q. And you would have no affect on the offsets who

the well encroaches to the east?

A. Correct.

Q. And you would also have no affect on the interest owners, the State and Occidental in the south half northeast quarter?

A. That's right, correct.

Q. What is Page 6?

A. Page 6 is a very similar approach to calculating the volumetrics for the Grimes No. 4. The assumptions we used, Vanguard used the same gas analysis, pressure, temperature, pay, porosity values that we did on the No. 7. That's because we didn't have the data to work with.

The old well, you know, we just didn't have the contemporary logs to do the exact same analysis, so we just assumed the same type of parameters. The difference is going to be on the EUR.

The EUR for the Grimes No. 4 is 513 million standard cubic feet. And again, that's based on production from May 2000 going forward. And again, 75 percent recovery factor and calculated drainage area is 40.6 acres, which is 750 radius around the well.

And if you go over and look at the map on the right, there's an approximate drainage circle around No. 4, and you can see that they are benefiting from the

gas on our lease by -- they have drained off -- they are and will drain gas off of Vanguard's piece.

Q. And assuming there was Queen gas production before 2000, this drainage area would be larger?

A. That's correct.

Q. What is Page 7?

A. Okay, Page 7 is the well bore diagram of State A No. 7. And it shows that --

Q. Go into a little bit of the history of this well and how it was drilled and how you acquired it.

A. Okay. Vanguard acquired this well, among others, from Apache. We closed in January of 2008, and we took over operations in March of 2008.

When we took over operations, during the process of getting bonds, we had to get special bonds for temporary abandoned wells, which State A No. 7 was a temporarily abandoned well.

Basically, the well bore diagram, we picked it up and it looks like the exact same thing as this except it did not have the Queen perf in it. So it had a cast-iron bridge plug in it and it was temporarily abandoned.

During the process of talking to District 1 personnel, the supervisor, he said that one of his goals was, he wanted to reduce the number of 2A wells on his

list. Pretty admirable goal.

Now, this is something that we feel like there's some opportunity to recomplete and we were encouraged to -- you know, get it done. So we proceeded to evaluate that opportunity to recomplete this well to the Queen.

And then there was a -- there was some miscommunication. We were outsourcing our regulatory work to a consultant in Hobbs that -- He was working not only on getting a permit for this well, but he was also working on getting a permit for three other wells we ended up drilling in the Lovington area.

And he thought we -- he told us that he had completed the permit process and it was approved and it was ready to recomplete this well. And so we recompleted the well in June -- early June of 2008 and began producing the well June 15, 2008.

And we followed up with the sundries and the completion reports in early August and we didn't receive a -- you know, we didn't receive notification that, you know, it was all finalized.

So we followed up in late August to find out, you know, hey, did we get all the paperwork done? And we found out, first we need a permit. So we did not have a permit.

And so talking to Chris Williams, the supervisor

of District 1, we said, "Okay, what do we do?" He said, "What you need to do is, get the permit first and then the rest can be recorded."

And so that's when we contacted Jim Bruce to represent us in getting a permit for producing this well and completing this well.

And so we contacted you, Bruce, September 2, 2008, and then it was protested. He made notice. It was protested by Techsys, and there have been some delays, and so here we are today.

So that's kind of a chronological history of what's happened to this well.

Q. But the long and short is it has been produced even though you didn't have the proper permits?

A. That's right.

Q. Just as a practical matter based upon the data that you have, has anyone been harmed by the production of this well?

A. No. And that's illustrated in some of previous exhibits. We feel like that, you know, the production is not impacting Techsys, or anyone else for that matter, and so, you know, there should not be any interference or impact to Techsys.

Q. Let's move on with your exhibits. We've got remaining Pages 8 through 18. Are those essentially

backup data for the initial part of your Exhibit 1?

A. Yes. And I can highlight --

Q. Just very briefly.

A. -- so that we don't get bogged down. But in No. 8, that's just a gas analysis from the State A 7 that shows the 10 percent nitrogen and the rest.

Going to Page No. 9 -- actually, 9 through 13 is a copy of the State A 7 log, and this first page is just the header with the information about the State A 7 log. It's a porosity log which we used to determine pay.

And if you go to Page 10, it shows that the -- you know, the header for the porosity log. And what we used for a cutoff was an 8 percent cutoff on the porosity crossplot, which is -- you know, crossplot of the neutron density log.

Moving on to Page 11, that just shows the top of the Queen pit. And going on to Page 12, you should start seeing some -- I colored up what is considered pay using that cutoff, and it also shows where the perfs are. And we're including all the pay in the calculation that is highlighted in red. This well was frac'ed and the calculated frac is within what is considered pay.

And then No. 13 is just showing the bottom half of the log that -- it shows additional pay at the top of that log. So that's the State A 7 exhibit.

Page 14 is a copy of the Techsys Grimes No. 4. And it's showing a date of September 27, 1947, and it shows the perfs for that log.

And you can see a lot of the logs don't -- That was the reason why we couldn't use the same methodology to calculate pay in the drainage calculations for the well, we just used our numbers off of our log.

Moving on to Page 15, that shows the production for the State A No. 7. It began producing June 15th, and it is currently producing 76 MCF a day.

HEARING EXAMINER: I think there's a discrepancy between the page numbers that I have and what you have, because it appears that from what I have, Pages 12 through 15 are all working on the State A well, and it looks like the log from the Grimes well is on Page 16, and then the pages are 17 and 18.

MR. BRUCE: Mr. Examiner, if I could reclaim that and give you this.

THE WITNESS: Okay, Page 15.

HEARING EXAMINER: Page 15, okay.

A. It should be a production log for State A 7. And it's currently producing 76 MCF a day. It's cum'ed 33 million standard cubic feet. And the calculated EUR based on the reported gas shown there is 181 million standard cubic feet.

And if your eyes are good enough, you can see some of the assumptions on the production plot. We're using an abandonment rate of 50 MCF a month. So you're talking about, you know, a couple MCF, really, less than 2 MCF a day, which is -- with prices at where they are today, that's pretty aggressive. So the EUR may be actually a little less than what is shown here.

And the number of years from today, you're looking at 47 years of projection for this well. So that's fairly aggressive, but it's just showing that -- you know, you could actually if -- you adjusted some parameters, you could probably come up with less EUR which would result in less drainage.

Moving on to Page 16, that's the production plot of the Grimes No. 4, and it is currently producing 58 MCF -- as least that's what the average is for 2008. Because you can see it looks like there's some loading occurring in the well. And so they're having to blow it down periodically, is what I'm assuming.

But the cum since 2000 is 193 million. EUR calculated is 513 million. And I'd also like to note on this that if you look at the production in the latter part of 2008, there's no indication of any interference from the State A 7 when it was brought on production.

And then moving on to Page 17, this is a

volumetric calculation that was used for the State A 7 that -- What I used to basically back into the 14.58 acres. It shows on the top part all the assumptions that are used, and then on the bottom part of the table it just shows what the -- from the initial reservoir pressure down to 100 percent pressure depletion, what the D factor, the BCG, the gas in place and the volumetric unit recoveries and the volumetric recovery on the BCF.

And to really -- to back into that acreage number, you take your EUR, divide it by the 75 percent recovery factor to get a gas-in-place number that you're contacting, and then you would divide it by the initial BCG, which is 132.9 standard cubic foot, reservoir cubic foot shown on this table in the top row, divide it by your pay, your porosity, your gas saturation, and then also by the 43,560 to get it converted over to acres.

This is showing a lot more numbers than probably what is really needed, but -- The reason why I used a spreadsheet is because it calculates that BCG a lot easier. The D factor can sometimes be difficult to come up with, but this had it all built in. So this shows how the State A 7 arrived at the 14.5 acres.

And then on the final page, Page 18 of Exhibit 1, shows that the Grimes No. 4 calculates to 40.9 acres using the same methodology.

Q. Mr. Pence, do you see any harm to any offset operator or interest owner from the granting of Vanguard's application?

A. No, sir.

Q. Was Exhibit 1 prepared by you or under your supervision?

A. Yes, sir.

Q. And in your opinion, is the granting of this application in the interest of conservation and the prevention of waste?

A. Yes, sir. If this well is not produced, then there will be reserves lost.

MR. BRUCE: Mr. Examiner, I hand you as Exhibit 2 simply my notice affidavit to Techsys. A number of people were notified of the administrative application. Techsys is the only one that objected, so Techsys is the only one I notified of the application.

HEARING EXAMINER: Okay.

MR. BRUCE: The letter was returned unclaimed, but obviously, Techsys knows of the hearing.

HEARING EXAMINER: Yes, I believe any defect notice is waived when the party appears.

MR. BRUCE: I move the admission of Vanguard's Exhibits 1 and 2.

HEARING EXAMINER: Any objection to the

exhibits?

MR. BLISS: No, sir, no objection.

HEARING EXAMINER: Exhibits 1 and 2 are admitted.

MR. BRUCE: There is one issue before Mr. Bliss begins. Mr. Examiner, I -- you know, the only party that entered an appearance is Techsys, which is a limited liability company, and I do not believe Mr. Bliss is an attorney.

I think under New Mexico law, a corporation or a company, a separate entity has to be represented by an attorney. So.

HEARING EXAMINER: Well, that is true in a courthouse. I think we've got it fairly well established, though, that we do not apply that rule in the Oil Conservation Division despite a 1958 Attorney General opinion suggestion that we should. So I will overrule the objection. Mr. Bliss, do you wish to question the witness?

MR. BLISS: Yes, sir.

HEARING EXAMINER: You may proceed.

CROSS-EXAMINATION

BY MR. BLISS:

Q. Mr. Pence, reading off of the application that was filed, can you read back to the Examiner and myself

what the reasons are for wanting the 160 acre nonstandard spacing? Or if you know it by heart, tell me what the reasons are, please?

A. Is that an exhibit or --

Q. I guess my question is, are one of the reasons that Vanguard is presenting to convince the Examiner that Vanguard should get 160 acre spacing in the Byers pool?

A. Well, the -- as presented, the drainage area of State A No. 7 is less than 15 acres. It's not going to impact any acreage off of our lease. We have 80 acres. So that's why we're -- you know, we're recommending an 80 acre exception.

Q. Okay. From the application that I'm referring to here, Mr. Examiner, the first reasons stated, number one, is that the applicant desires to produce the well on a leasehold basis. That's the only reason presented.

And Paragraph 2 following that, there's a statement that says that the well is capable of producing less than 200 MCF per day. And then it goes into more statements about the Byers-Queen gas pool. It was prorated at one time.

And then I think Mr. Bruce attached to the application some exhibits talking about proration was terminated, and references a Paragraph 8, and then goes

on. But there's no real reason there. And I guess I would like to get some clarification from Vanguard technically why -- what does this mean?

MR. BRUCE: And if I could interject, Mr. Examiner, I take what -- what I've been given. And I think Mr. Pence just stated they wanted to produce it on a leasehold basis. Administrative applications are not necessarily as technical as presented in a hearing.

MR. BLISS: I guess my question here is, I don't understand -- you know. The regulations, the rules that I see say that you need to provide the reasons that you're asking for the nonstandard spacing.

And here following your letter, it says the reasons the applicant is filing for this nonstandard are the following. One is their desire to produce on a leasehold basis. Which is self-explanatory.

The second one says that because the -- it doesn't even say because, it just says the State well is capable of producing less than 200 MCF per day.

MR. BRUCE: It's not a prolific well, which I think Mr. Pence testified about.

HEARING EXAMINER: What is the question?

Q. Okay, the fact that this well in your opinion is not a prolific -- ah. How does that affect -- or how is that reason for wanting to change the rules?

A. First of all, we're not trying to change the rules, we're just asking for an exception to the rule for this well.

Q. Okay. Well, I'll move on. So the reasons are as explained in the letter and the additional reason that the drainage area is less than 15 acres?

A. Right.

Q. Okay. As far as exhibits go and your calculations, starting with, I guess, Page 4, the structure, you make the case that the No. 7 well is up 32 feet versus the No. 4, 25 feet. So they're off 7 feet of difference?

A. Right.

Q. Over half a mile?

A. Right.

Q. Okay. So that's the slope. And from the previous one, you said your top portion was 36.24?

A. Yes, 36.24 right.

Q. Okay. Thank you. On Page No. 5 on the calculations, did you calculate these yourself or did go to an outside engineering firm?

A. No, I calculated these myself.

Q. Can you tell me what scientific evidence or what historical data you used in order to determine 1650 PSI initial formation pressure?

A. It's estimated based -- as shown on the exhibit, it's based on a .45 PSI per foot. So it's an estimate. And the 4.5 is approximately equivalent to applying a water pressure gradient. For shallow reservoirs, it's a reasonable estimate. So if you take the 36 plus feet there times .45, you should get pretty close to 1650.

Q. Let's go to the numbers. Basically, the calculations on No. 4 and No. 7 are based on assumptions, right?

A. That's right, there are some assumptions.

Q. They are assumptions. So based on your knowledge and experience of the Byers-Queen pool; is that correct?

A. Yes.

Q. Okay. Have you reviewed any of the drilling information from the other wells or from looking into any geological structural maps, well logs from any of the other wells, have you looked at gas analysis from any of the other wells to basically say -- and looking at porosity to basically support your calculations?

A. Most of the assumptions were based on the information from the State A No. 7, because we did not have access to the data in other areas. So it's just -- so it's primarily the State A 7 with limited information through some log data and what was recorded in -- you

know, from some of the other offset wells.

Q. Okay. With respect to upslope, if -- with upslope, you mean higher -- that doesn't mean that the gas from the No. 4 would migrate towards your well?

A. If you're -- all things being equal, if you're up depth, gas would have a tendency to -- you know, actually go toward the No. 4. You have -- because of the gradient. You know, you have -- If you're higher up on structure and you got a well that's lower on structure whether -- and everything being equal, you're going to have pressure gradient of the gas, rather small, because it's gas and gas doesn't have a lot of density to it.

Q. And it will favor the higher?

A. No, it would actually favor the lower well. The other thing, too, as far as gas migration, fluid flow goes from high pressure to low pressure. So the No. 4 has been producing longer, it's drained more, it's got a larger cum, it has a lower bottom-hole pressure.

There's a pressure sink there. So there's going to be -- there would be more of a tendency for gas to go toward a low pressure point than it would be to a high pressure. In fact, it's physically impossible to go in the opposite direction.

Q. Okay. I understand that. Thank you. Did Vanguard attempt to try to obtain 160 acre spacing units?

A. No, we didn't.

Q. Did not? So did you not encounter any obstructions or any obstacles whatsoever that would have impeded your ability to get 160 acre spacing?

A. We recognized from the way the well was producing that it was going to drain a small area. And so we went through the process of notifying offset operators that we wanted an exception to the 160 acre field rule.

Q. But I guess my question is, did you receive any objections, any reasons whatsoever physically or from any other operator -- is there anything geologically or anything else that warrants not obtaining the 160 acre spacing that the rules currently have on this pool?

A. No. Techsys is the only -- was the sole protestor and --

Q. Can I make a comment on that?

A. Okay.

Q. Techsys is not objecting to Vanguard obtaining a 160 acre lease at all. And if Vanguard would obtain a 160 acre lease, it's in your prerogative to move forward with your lease. So my question, I think you answered very well, thank you.

When you look at a reservoir and you look at a reservoir's energy -- And you said that this reservoir is a depletion-driven reservoir?

A. Right.

Q. Is the reservoir energy a function of volume?

A. Energy? What times are you talking about energy?

Q. Does reservoir energy go up or down as the volume changes? As the volume in the reservoir changes, does that effect the amount of energy driving the reservoir?

A. At a point in time, it depends on -- There's a number of factors involved as far as -- If you're talking about the energy of the flow of gas, produces gas, you have -- it has to -- you know, pressure --

Q. Pressure within ideal gas laws is directly --

A. Well, yes, the pressure of your reservoir, the -- it has to do -- really, it has to do with the delta pressure, the pressure in the reservoir and your pressure in your well bore and how much -- you know. That's one piece of determining how much gas you're going to be able to produce. There is a -- it does depend -- size might come into where -- how far out your -- what you're producing across, but it --

Q. I'm just talking in its clearest and simplest form because --

A. I think what might help for you to understand is that this is a very low permeability log. So it is very

difficult to produce economically a long way away from your well bore, because you have a pressured gradient from the -- you know, the tip of what you're impacting to your well bore. And with the very lower perm like what we see in the Queen, you -- And you just don't get the -- you can't push the gas through that low permeable rod, it's not like a pipeline.

MR. WARNELL: I think we're getting beyond -- you know, in the interest of time. I appreciate that and maybe you could help me on that later, but I do have quite a -- my background is in engineering, so it's --

THE WITNESS: Okay, that wasn't my --

HEARING EXAMINER: Okay, we need to talk one at a time because it makes it very difficult for the court reporter to get everything down.

Q. Are you aware that there are currently five wells producing in the Byers-Queen, all within a half mile radius circle, and then by putting the No. 7 well on line would put a sixth well all within a one-half acre radius with the center of that circle being Techsys Resources No. 4 well?

HEARING EXAMINER: I think you might have misspoken. You mean a one mile radius, don't you? You said one acre.

MR. BLISS: I'm sorry, I did misspeak.

Q. If you take a one-half mile radius circle with the center at the Techsys Well No. 4, there are currently five wells already producing in the Byers-Queen. If you add State No. 7, that would make it six because it's within in a half mile radius.

And Texland, as you are aware of, is looking to do the same thing even closer to us than you are. That puts seven wells -- all seven wells all within a half mile radius of each other. I just wondered if you were aware of that density?

A. I know there are other Byers wells producing, but I haven't sit down to see how close the density spacing is.

Q. I didn't know if you were aware of that or just... Have you looked at the historical data from the other -- the No. 4 well, I think you touched on it, and the No. 1 well, which is due west of the No. 4, the Occi well, which is southeast of your well, which is all part of the original development of Byers-Queen.

Are you aware that those three wells have each, prior to 1960, conservatively saying -- and this is in the Commission's records -- have each produced -- No. 1 has produced over 5 BCF, and No. 4 has produced over 4 BCF, and State A and the Occi well have produced over 5 BCF, and these production rates, these large production rates

are -- I didn't know if you were aware of that and if it can be that that doesn't support the data that these are such tight -- this reservoir is so tight that you can only extend out 500 feet and produce in such a small area.

And as you pointed out, the No. 4 well, I don't know -- as you've done calculation here, I can't argue whether they are right or wrong, but I can say, you know, we've been producing the No. 4 well for eight years with very little decline. It's probably not even with -- you know, it's scientifically insignificant. The No. 1 well to the west of us has been producing since 1996, I believe.

HEARING EXAMINER: Excuse me, Mr. Bliss, do you have a question for the witness?

Q. My question is, are you aware of these other wells and their what tend to be historical data supporting very good flow conditions, I would say, in layman terms?

A. What Vanguard looked at primarily was No. 4, and it was unclear how much production might have been produced prior to 2000, that we just couldn't -- you know. We could have taken a guess, but we decided to take a really conservative approach, if you will, and go from May 2000 forward.

And if -- I was unaware of the -- that the Grimes No. 1 and the Grimes No. 4 are producing both from

the same 160 acre proration unit. So... I thought -- So you all -- I guess Techsys received not only an unorthodox location but also an exception to the 160 acre field rules.

Q. My final final question, when you did your calculations and you try to quantify rate well recovery, did you take into account in any of your calculations the element -- or the factor of time?

A. In the EUR, there is a forecast of the production and -- you know, the production rate over time is a volume. So I guess there's time there.

Q. So the drainage area is independent of time, is that what you're saying?

A. No. I thought I said the production -- the EUR is the way -- The way the reserves are calculated is depending on the amount of time. You got a rate over a period of time, is volume. So -- I mean, to answer your question, time is included because of the EUR.

Q. Okay. That's all the questions I have.

HEARING EXAMINER: Okay. Mr. Bliss asked you about the reasons for requesting this nonstandard unit, and he was reading, I take it, from your application.

And the first reason given was the configuration of the ownership, right? That you owned the north half of the northeast quarter and you do not own the south half of

the southeast quarter, Vanguard?

THE WITNESS: That's correct.

HEARING EXAMINER: It would be implicit in that reasoning that Occi would also be entitled to an 80 acre unit consisting of the south half of the northeast quarter, would it not?

THE WITNESS: Yes.

HEARING EXAMINER: So if you followed that logic, then you would have to grant a nonstandard unit whenever the ownership was -- did not correspond to the prescribed spacing pattern, correct, if that were a reason for granting a nonstandard unit.

THE WITNESS: Okay, yes.

HEARING EXAMINER: Okay. I'm being a little bit argumentative here, which I usually chastise attorneys for being. So basically, the case you're making here in your calculations is that you're saying that you will not drain outside that 80 acre unit, correct?

THE WITNESS: That's correct.

HEARING EXAMINER: Okay. That's what I thought. I really don't have any other questions. Mr. Warnell?

MR. WARNELL: I just have, I think, one question. On Page 7, the well diagram, I believe you mentioned that you purchased that well in March of --

THE WITNESS: Well, we closed on the acquisition

with Apache in January of 2008. We took over the operations in March of 2008.

MR. WARNELL: So when did you drill the well?

THE WITNESS: We did not drill this well. It was drilled by -- well, back in 2002, I believe. It's on the log header.

MR. WARNELL: Yeah, I thought I saw that on there. Okay. I have no other questions.

HEARING EXAMINER: Okay. Mr. Bruce?

REDIRECT EXAMINATION

BY MR. BRUCE:

Q. Mr. Pence, also, when you went and did the work reworking the well or completing it, Vanguard did that by itself and spent all of its own money on that recompletion, correct?

A. Yes, sir.

Q. And it took the risk involved in that recompletion?

A. Yes, sir.

Q. And if you had spent money and hadn't gotten a completion in the Queen, you wouldn't be here today?

A. That's correct.

Q. And you wouldn't have asked Occi to share in that failed venture?

A. Yes, sir.

Q. Would it be -- just looking at today if you had to go out and drill a new Queen well in the northeast quarter of Section 32, in your opinion, would it be economical?

A. No, sir.

Q. 483 MCF reserves?

A. No, sir.

Q. And I didn't quite catch what Mr. Bliss was talking about with respect to the Grimes No. 4 about producing substantial amount of gas even before 2000?

A. I'll be honest with you, it was unclear to me. It was more -- I thought that Mr. Bliss was -- I know he was clearly stating the No. 1, which is in the same 160 acre quarter there, had produced a significant amount, but I wasn't sure about how much gas had been produced by the No. 4.

Q. If it had produced substantially more gas from the Queen, the No. 4 well, that drainage area would extend even further into your acreage, would it not?

A. Yes.

MR. BRUCE: That's all I have, Mr. Examiner.

HEARING EXAMINER: Well, apparently Texland thinks it's worthwhile to drill a new Queen well not far from here, correct? I understand they had proposed one.

THE WITNESS: Oh, Texland. They're planning to

recomplete a well, yes.

HEARING EXAMINER: Okay. It's a recompletion, it's not a new drill?

THE WITNESS: That's right.

HEARING EXAMINER: Okay. Thank you. That's all I have. The witness may step down. Does that conclude your presentation in chief?

MR. BRUCE: Yes, sir.

HEARING EXAMINER: Okay, Mr. Bliss, you may -- Do you wish to testify?

MR. BLISS: Yes, sir.

HEARING EXAMINER: Okay, I did not get you sworn. Please stand and be sworn.

(Note: The court reporter placed Mr. Bliss under oath.)

HEARING EXAMINER: Okay. And I see no reason to make you pick up all your documents and move over here unless the court reporter feels it's necessary. So you may present your testimony from your seat.

MR. BLISS: Thank you. I'd like to hand out some exhibits.

HEARING EXAMINER: Very good.

MR. BLISS: I'd begin my testimony with a couple of objections. My objection as owner and operator of the 160 acre due west of Vanguard is based on, Vanguard has

not acquired a 160 acre spacing unit, which is what the Byers-Queen gas field currently has on the state rules, to my understanding.

They also have failed to provide sufficient reasoning to warrant, in my opinion, the Commission's approval to grant them the nonstandard spacing.

The reasons that they have given are they don't think that they will drain the No. 4 well. They desire to produce on a leasehold basis, and then they give an indiscernible reason about -- something about not being able -- that their well is unable to produce more than 200 MCF a day and references some proration rules.

Those reasons to me are weak at best. Essentially what we have here -- I'd better just tell the story. The testimony we have here, we have four operators. And if you look at Exhibit A and you look at all the black dots on here, all the black dots on here except for five currently are oil producing properties that -- If you look at the green station line that kind of outlines the entire Queen -- Byers-Queen per the commission's definition of what the pool extent is, all those black dots on there are oil operators.

And it's very clear and I think it's obvious to everybody why an oil operator who has a temporarily dry oil well would like to come up and produce on their 40

acre spacing and take ownership of the gas.

But I would argue, and I could give some reasons here soon why I think that's a detriment to the State of New Mexico and the people, as well as any entrepreneurial-driven gas operator who is competing on the rules that the Commission has provided that the gas that other operators are attempting to develop and produce in this Byers-Queen gas pool, they should operate under the same rules.

If you allow -- I don't understand. They haven't given any reason why they think -- You know, it's clear why an oil operator ought to be able to produce a gas pool on 40 acre spacings. And as you can see, the applications are very quick.

Texland, as soon as they got the application from Vanguard, turned around and thought, "What a great idea. We'll do the same thing. We'll find an old abandoned oil well, we'll just perforate some holes, and we'll produce the gas pool reserves."

Texland thought it was such a good idea they took the exact word-for-word application that Mr. Bruce filed and just switched out their names. They didn't even go to the -- It's so easy for them to now go and say, "Wow, what a great opportunity," you know.

For some odd reason which Vanguard has not demonstrated here, for some reason, the Byers-Queen field

now needs to be treated as a oil field for some reason.

HEARING EXAMINER: Let me interrupt you. Has Texland also filed for a nonstandard unit?

MR. BLISS: Yes, sir, they sure have. Exactly the same word for word as -- it's the exact same application document that Vanguard did. And I know Vanguard and Texland have actually talked to each other about mutually not wanting to object to the other's if the previous didn't object to them. So I know that. I've been told that.

So bottom line, it's a bad idea if you're a gas developer. And I think it's a bad idea for the State of New Mexico. And here's why. I put -- The reason I'm here -- I'm not an oil or gas producer but my dad is. He's 80 years old. He couldn't be here today for health reasons.

But I was raised in Hobbs, New Mexico five miles from this area. My dad worked for Gulf. This used to be a Gulf lease. The reason we know the WD Grimes No. 1 and the No. 4 and the old Occi well produced so many BCF a day is because Gulf operated those wells and they used that well -- they used that gas for their camps, and they ended up using that to drive the gas engines to drive all the oil pumps in the area.

He knows that like the back of his hand. My

dads knows -- he knows everything about that. And that's why I say it's historically -- the historical data disputes clearly that these porosity figures -- And these are tight holes that you can only extend out to certain areas.

And the bottom line is, I think the -- I make testimony here based on historical data of all the production of the wells that are out there, that Byers-Queen is a common reservoir, is a common reservoir with common reservoir energy.

And so on that, I think that any of these oil operators that desire to produce out of that are actually producing from the same reservoir as everybody else that has been there that is trying to do that.

MR. BRUCE: Mr. Examiner, I would have to object if he's testifying on reservoir engineering matters because he's not a reservoir engineer or a petroleum engineer.

HEARING EXAMINER: Do you have any training in petroleum engineering, Mr. Bliss?

MR. BLISS: No training other than the fact that I've developed and operated this well and I've known it intimately for eight years. Plus I studied this well for two years, and I studied the Byers-Queen for two years prior to it to be able to convince investors that it was

worth their time and their risk and their money to go after the reserves on this particular field.

So the only training I have is specific to the Byers-Queen gas field. And it was taught to me by my father who is a petroleum engineer with 35 years experience. And the only reason he couldn't be here today is he had to go to Lubbock for medical reasons.

HEARING EXAMINER: Well, I will overrule the objection and consider the witness's qualifications as going to credibility rather than admissibility. You may continue.

MR. BLISS: Thank you. Before I go on in this statement of record, Vanguard has admitted here today, they are currently producing their No. 7 well from the Byers-Queen, which from my reading of the rules violates Rule No. 19.15.15.11B, which says that they have to obtain a permit. It says,

> "For nonstandard spacing units, an operator shall not produce a well that does not have the required amount of acreage dedicated to a pool or proration for which it has completed until the Division has formed and dedicated the standard spacing unit for the well or approved a nonstandard spacing unit."

And if the Commission agrees that that is a violation of the rule, I would ask that the Commission ask Vanguard to stop immediately producing until the Commission rules otherwise on the matter.

The next point I have here is that Vanguard seems to make -- presenting -- implying that because this is a depleted gas field, that 160 acre spacing is no long merited. I argue -- totally disagree with that. I argue it's just the opposite.

Because small entrepreneurial companies like me would not and could not get financing to buy 160 acres. Had we only known that every well operator out there on a 40 acre spacing, whether a producing or an abandoned well bore penetrating to the Queen could for $100,000 and no effort go after a lease -- the sweat equity of going out there and getting a 160 acre spacing, can punch a hole into the same reservoir.

And I'd argue that according to the definitions given in the State's rules for correlative rights, which are,

> "Correlative rights means the opportunity afforded as far as it is practical to do so to the owner of each property in a pool to produce without waste the owner's just and equitable

share of the oil or gas in the pool, being an amount so far as can be practically determined and so far as can be practically obtained without waste substantially in the proportion that the quantity of recoverable oil or gas under the property bears to the total recoverable oil or gas in the pool and for the purpose to use the owner's just and equitable share of the reservoir energy."

This talks to reservoir energy and it talks to fair and equitable share of the pool, which is contradictory to the notion that we're only -- our 160 acres are restrained. At least this doesn't say we're restrained by the lines on the map. It doesn't say that at all. And so I argue that for them -- well, that's enough on that.

My next point, the 160 acres standing spacing rule is important to us. It also has certainly withstood the test of time. You've probably heard it hundreds of thousands of times, challenges by one guy saying it's a good idea and the other guy saying it's a bad idea.

Presumably, all legal, technical, physical, commercial issues and matters, including property rights, oil operators' correlative rights, oil versus gas

operators, waste prevention and conservation of oil and gas have all been thrown at you in the past.

The fact that it has withstood the test of time, I think, is pretty good testimony to the fact that no matter what their engineering claims are, no matter what an oil producer says is the restriction, it doesn't rule away the fact that the -- that the rule should be thrown out. Not for a desire, not due to drainage and not due to some unclear 200 MCF per day inability of this well to produce.

So I think the 160 acres should stay for all operators. Vanguard has not provided any reason why they could not do 160 acre spacing. They haven't tried. 160 acres spacing was nonexistent when I came into this.

As you pointed out, the well to the left of us was already producing. I went to them, I went to the guy to the south of us, and I went to everybody out there, and spent many days over in Chevron's office and arguing and providing cases and paying for the 160 acquisition so that I could stay within the rules.

There's nothing preventing them from doing the same thing. And if they do get the 160 acres, then the case is closed, in my opinion. I have no objection.

Vanguard has said in Mr. Pence's testimony that there is no physical waste -- well, I don't know if that

was his exact words, but he said their drilling the well does not produce waste. I guess that's subject matter for debate.

If I was a developer, I cannot go and get more investment dollars to produce my 160 acres if I'm competing against oil operators out there on 40 acre spacing. That, I would never have been able, like I said, make this deal, put this deal together if every black dot on here could actually produce based on the reasons that Vanguard is giving.

That would have left over half a billion cubic feet of gas in the ground because I wouldn't be able to produce this. No other operator besides HRC to the west of us, no other operator, gas or oil, think the Byers-Queen is worthy of their investment dollars.

Vanguard doesn't think it's worthy of it, Texland doesn't think it's worthy of it. They've told me that. It is also demonstrated by the fact that no one else has punched a hole in there.

The only people that are going to punch holes in here are the people -- are very small entrepreneurial guys that feel like they have a very good understanding of this particular pool. There's probably hundreds of these pools out there in the state. I don't know.

If the state -- if all the similar gas bills

allow the oil operators to produce on 40 acre spacing and just come up-hole whenever their well goes dry -- their oil well goes dry and grab gas out of the other pool without following the rules, then that eliminates competition and it dries out the little guy.

Vanguard has not proven that their well isn't in the same geologic strata and we aren't sharing the same reservoir energy of the other wells.

With that, I'd like to go real quickly to Exhibit B. The shaded area in gray is the Byers-Queen gas field. This is coming off of the State's online data base. The legend down there, the blocks in green are Texland oil leases. The red ones are Vanguard's leases. The yellow is my 160 acre gas lease. And the two blue 40 acre tracts are Occi's.

The five red dots that are all red are currently producing. Texland already has done what they've asked to do, which we weren't aware of. Texland has come up and produced in the Byers-Queen old oil wells over those two red dots.

HEARING EXAMINER: Let me interrupt you just a minute. That red dot that's on the Occi acreage, is that a well that's completed in the Byers-Queen?

MR. BLISS: Yes, sir. That's one of the original Byers-Queen wells that Occi came up -- Occi holds

the oil lease, but they came up on this well.

HEARING EXAMINER: And is that currently producing?

MR. BLISS: Yes, sir, it sure is.

HEARING EXAMINER: Okay. Continue.

MR. BLISS: They are. And that's within 160 acres, as you can see. HRC, the red dot to the left of us, is producing. But we still have the 160 acres.

Vanguard, if you look at the little black dot to the east of the No. 7, Texland is just right off catty-corner just a little bit to the northeast of the No. 4. The No. 4 is in the circle, that all-black dot, that's the No. 4 well. That circle is a half mile radius circle.

All five wells right now -- it's very dense. All five wells producing in the whole Byers-Queen field are all producing within that half mile radius. Vanguard wants to produce in there as well. Texland also now wants to drop another well in there as well. The only reason, I believe, is because those are dry oil wells.

HEARING EXAMINER: Is there a well in the north half of the -- you don't have section numbers on here.

MR. BLISS: Yes, I do. There are section numbers on here. Nos. 29, 30, 31, and 32.

HEARING EXAMINER: Okay, yeah. Is there a well

in the north half of the southeast quarter of Section 29, is there a Byers-Queen well in that?

MR. BLISS: Not yet.

HEARING EXAMINER: That would be the other half of the unit in which Texland is --

MR. BLISS: To my knowledge, there are not any out there at this point.

HEARING EXAMINER: Okay. Go ahead.

MR. BLISS: So the reason I think this slide is important is this shows a very densely produced area and that there are plenty of operators that are actively and prudently trying to recover the reserves in the Byers-Queen and that there isn't any waste going to occur in this field.

And if you -- again, going back to the 160 acre space -- And there had to be some rhyme or reason technically and physically to say that gas spacings need to be 160 acres. It can't be that if you go well by well and just say, hey, guys, a well can only drain 400 feet and therefore -- because just -- It seems to me that -- so if you look at this at a higher level than what they are doing, you say, look at the 160 acre spacings, if you look at Section 32, Occi is already covering the upper half of Section -- well, the northeast quarter, and HRC, another operator and myself, are covering the northwest quarter.

And so, if you're looking at it in terms of 160 acres and there's already -- there isn't waste, those wells being there, they're already producing.

Exhibit C is just a snapshot picture of Lea County, but basically it shows the Byers-Queen and how small it is. It's a very small gas drilling.

Exhibit D is a partial printout of the State's data base of all the existing gas pools in the whole state of New Mexico. And I didn't print it out because it -- I printed out five pages, but in order to capture all the pools, there's 30 pages. So I just gave you a snapshot.

And the fourth page of this exhibit includes the Byers-Queen, and it's highlighted a little bit in gray, and it shows 160 acre standard spacing. But the reason I put this in here, there are 1,800 gas pools on the New Mexico Oil Conservation Division's data base here. It takes 30 pages. None of those are less than 160 acre spacing that I could find on that list.

And I don't think there's any merit for making the Byers-Queen less than 160 acre spacing. I don't think Vanguard has proven with any compelling reason or even at all why we should not stick to the 160 acre spacing.

The next exhibit, Exhibit E -- I apologize for the quality of it -- again shows in black, that's the Byers-Queen reserve per the Conservation Division's data

base. Vanguard has five well bores already. What I list there, you can see one, two, three, four, five, they already have five well bores that penetrate the Queen and they're all on 40 acre -- held by 40 acre spacing. They're oil wells. But they all penetrate the Queen, the Byers-Queen.

And I think the precedent here is terrible, that -- you know. And if you look at Texland, it has 33 wells in that Queen area, but they're oil wells. And then they've got two gas wells. But if the precedent goes forward where these oil operators can whenever they want for little dollars and no risk -- They did not target the Queen, they did not target the Byers-Queen, they did no analysis, they did no risk assessment.

They didn't come to the Byers-Queen for the Byers-Queen, they came in for the oil. And if it's allowed for all oil operators to come up-hole, you'd have the potential here for 38 more penetrations of popping holes into the Queen. And to say that doesn't harm the gas producers in the Queen is wrong and based on self-evidence.

Exhibit F shows all the producing wells right now in the Byers-Queen. I have not been able to find data on the attempted oil and gas, but at least on the State's well log, they show that these are active wells in the

Byers-Queen gas field. If Vanguard is allowed to proceed, they will be added to that list.

The next exhibit, Exhibit G, is a list of all the well bores, proving simply that Vanguard -- Each one is basically -- I'm sorry, I didn't have time to highlight it.

If you go down the Section column, which is the fifth column of Exhibit G, you look basically for the ones in Sections 32 or 29, those are the ones that Vanguard has 40 acre oil wells on, but they all penetrate the Queen, the Byers-Queen.

So, I can sum and you and give conclusions now, or do I do that at a later time?

HEARING EXAMINER: Well, whatever you want to do, actually, is okay.

MR. BLISS: I could just wait and then just conclude at the end.

HEARING EXAMINER: Okay. Does that conclude your testimony?

MR. BLISS: Yes, it does, unless anybody would like to ask me any questions.

HEARING EXAMINER: Okay. Do you tender your exhibits?

MR. BLISS: Yes, sir, I'd like to.

HEARING EXAMINER: Okay. Any objections?

MR. BRUCE: No, sir.

HEARING EXAMINER: Exhibits A through F will be admitted. Do you wish to question the witness?

CROSS-EXAMINATION

BY MR. BRUCE:

Q. Mr. Bliss, your testimony was geared toward the nonstandard unit. Do you object to the unorthodox location?

A. The unorthodox location?

HEARING EXAMINER: Yeah. The well is 500 feet from the east line, whereas the pool rules would require applicable -- spacing rules would require at least 660 feet from the east line of Section 32.

A. If it is 160 acre spacing, then I have no objection to the unorthodox location.

Q. Looking at your Exhibit B, Mr. Bliss, what you're showing me -- Let's turn first to your acreage -- Is the Grimes No. 1 still producing?

A. Yes, sir.

Q. And so is the Grimes No. 4?

A. Yes, sir.

Q. What is the footage location of the Grimes No. 1 well, do you recall?

A. I don't understand footage location.

Q. How many feet from the north line of Section 32

and how many feet from the west line?

A. I don't have that information with me. It's supposed to be represented on the -- In fact, if you look at Exhibit No. 1, I could point to it. And I could point to the No. 4 if anybody wants me to.

Q. Well, that's okay. What I'm getting at Mr. -- And so the No. 1 well is producing, and the No. 4 well is producing?

A. Yes, sir.

Q. On your lease. So you, in essence, have two wells on 160 acres, or one per 80 acre?

A. That's correct.

Q. And it also looks -- I know that Grimes No. 4 is unorthodox, 330 feet from the north line, and I believe 2,310 feet from the west line of the section. That's an unorthodox location, is it not? These Queen wells are supposed to be 660 feet in a quarter section.

A. It is an unorthodox in the rules of the Queen, yes.

Q. And it looks like the Grimes No. 4 is also an unorthodox location. It looks like it's 330 feet from the west line of the section.

A. Yes, it is. And I can speak to the No. 4, not the No. 1, but I can say that No. 4, nobody objected when we applied for the 160 acre spacing.

Q. Okay. So what you did, even though the rules ask for 660 feet out for the quarter section line, you asked for an exception to the rule for the No. 4 well?

A. To the unorthodox location rule, yes. Specifically, yes.

Q. So you're not changing the rules in the Byers-Queen pool, you just asked for an exception to the rules?

A. That's correct.

Q. Isn't that what Vanguard is doing, asking for an exception to the rules?

A. They're asking for a specifically different exception. There's more --

Q. Well, now, wait a minute. You said there's going to be 160 acre units, but you've got two wells for 160 acres. What's the difference between two wells on 160 acres and having an 80 acre unit for one well in the Queen pool?

A. I think you're mixing it and I think I heard earlier maybe -- Are you saying that prorationing and spacing are the same thing, is that what you're --

Q. No, there's no prorationing in this pool. I'm going to well spacing. I'm just asking you as a practical matter, what is the difference between having two Queen wells on your unit and allowing Vanguard to have an 80

acre tract with one well on there as a practical matter?

A. Can you repeat the question? Are you trying to make a distinction based on legal merit, or are you trying --

Q. I'm saying what is the difference between --

A. I understand what you're --

(Note: The court reporter interrupted the proceedings due to multiple speakers.)

Q. I'm just saying, you have two wells per 160 acres on your tract, correct, two producing Queen wells?

A. That's correct.

Q. So you have the functional equivalent of one well per 80 acres, correct?

A. No, I disagree with that.

Q. Okay.

A. You're looking at a map and I don't think that --

Q. And -- Okay --

A. You're looking --

HEARING EXAMINER: Excuse me. You can go ahead with your question. I think he's finished his answer.

Q. And then the same thing to the north on Texland's lease in the southwest quarter Section 29, they have, according to your records, two wells on a 160 acre unit?

A. They don't have a 160 acre unit. They don't have the 160 acre lease.

Q. You show -- I'm looking at the southwest quarter -- Exhibit B. Please bear with me. Section 29, the southwest quarter.

A. This has one well in 40 acres.

Q. That's not what your plat shows. The southwest quarter of Section 29 is shown to have two Queen wells on it.

A. I'm not following it. And if you have a specific question, please ask it.

Q. I mean -- That's the question. You're complaining that -- Mr. Bliss, you're complaining that Vanguard should have 160 acres dedicated to its well, but you show actually the northwest quarter of Section 32 your acreage, 160 acres, and the southwest quarter of Section 29, Texland's acreage, and even the northeast quarter of Section 32 which belongs to Vanguard and Occi, each of them has two Queen wells on a quarter section.

If that's the case, how are you being adversely affected by Vanguard's well?

A. Well, I understand where you're going, but that has no merit. And the reason it doesn't is simply because if Vanguard had a 160 acre lease, I don't care if they had 12 wells in there, you guys are welcome to do that.

Q. Now, do you realize that under Division rules, you can have one well -- and this is what we're seeking an exception to -- you can have one gas well for 160 acres, do you know that?

A. Unless the Commission agrees not to allow it to happen, which is the case, now -- point --

Q. So in other words, you got an exception not only for an unorthodox location, you got an exception to the rules to allow two gas wells on your well unit.

A. The simple --

Q. Is that correct?

A. You're putting words in my mouth that I don't agree with. The simple --

HEARING EXAMINER: Well, I believe that's a yes or no question, is it not? I was wondering about the same thing myself. Do you have a simultaneous dedication exception permitting two wells in the northwest quarter of Section 32?

MR. BLISS: I would have to look. But we went through the process and we did not -- We went to the Commission, just as Vanguard went to the Commission. Nobody objected and the Commission granted us whatever we have.

And you're right. And I don't care -- I guess my point is, I'm yielding to the Commission. I don't have

the -- You know, I'm not trying to make a claim here of -- The only difference between what I have in comparison to what you guys have is, I have no one objecting to what I did, but now I'm objecting to what you are doing for the reasons I have given. And it's up to the Commission --

Q. Could you provide us after the hearing with, number one, the unorthodox location order for the Grimes No. 4 well; number two, the unorthodox location order for the Grimes No. 1 well; and number three, could you provide us with the Division's order approving two wells on your well unit?

A. The details, I --

Q. Just the order numbers. Could you do that for me, please?

A. That, I don't know. I can give you what we were given when we got the permit.

Q. What cumulative production figures did you give for the Grimes No. 1 and the Grimes No. 4?

A. The original wells that were produced here, they were all over 4 million cubic feet, I'd estimate, up until about 1960. Then Chevron shut them all in. They weren't selling gas.

Q. Do you think that that production has drained reserves -- at such an orthodox location has drained reserves from Vanguard's acreage and from Occi's acreage

and from Texland's acreage?

A. I don't have an opinion on that. What I do think, though, is it demonstrates the hydraulic capacity of the formation.

Q. So it's okay for you, for Techsys to get exceptions to the Division's rules regarding unorthodox locations and for number of wells per well unit, but it's not okay for Vanguard to seek a single exception to the acreage requirement? Is that your basic opinion?

A. The -- I don't have an opinion on that. I'll leave that to the Commission to decide.

MR. BRUCE: Mr. Examiner, I don't think I have anymore questions of Mr. Bliss. I would -- and I maybe have a couple closing comments, but I would like to be able to -- I always have trouble digging up the NSP and NSL orders for a particular well off the Division's website.

HEARING EXAMINER: I do too.

MR. BRUCE: And I would like to require Mr. Bliss to provide the unorthodox location orders for the No. 1 well and the No. 4 well, and any order that approved two wells on the northwest quarter of Section 32.

HEARING EXAMINER: Well, it's a reasonable request if he has them in his file. At the same time, you probably have -- as difficult as it is for you to find

them in the Division's records, it's probably easier for you than it is for Mr. Bliss. Might be easier for you than it is for me because of your many, many years of experience in doing that.

MR. BRUCE: I will look for those myself also. And I would also -- One other thing, because I don't want to bring Mr. Pence back up to the stand, but I think he looked at the data and I looked at the data and we don't have any knowledge of an Occi producing Queen gas well in the south half northeast of Section 32.

HEARING EXAMINER: I was going to ask you about that, because it would seem that if there is such a well, it would presumably be dedicated to the northeast quarter unit, and it would raise the issue that -- What you probably should have is you and Occi jointly requesting two --

MR. BRUCE: That's what I would do on Vanguard's behalf if that is, indeed, the case.

MR. BLISS: I have a printout of the production. Not with me here, but I can -- I mean, it's easy to find. Just look up the well by name and you'll see it.

MR. BRUCE: And perhaps the confusion is, that is a well dedicated to the --

HEARING EXAMINER: Well, yeah, if it's not producing from Byers-Queen, it wouldn't be relevant, of

course.

MR. BRUCE: But I will look at that and --

MR. BLISS: If you refer to this Exhibit F, there's an Occidental well which references it on there and it shows it.

MR. BRUCE: Yeah. I'll double check that also, Mr. Examiner.

HEARING EXAMINER: I will also, because that is a very relevant issue. And I think you -- Would all parties agree that we can take into account whatever the well file shows with regard to an Occi well --

MR. BRUCE: Yes, sir.

HEARING EXAMINER: We'll take administrative notice of what the OCD's well files show?

MR. BRUCE: Yes, sir.

HEARING EXAMINER: Okay. Very good. I think then we'll close the testimony. You indicated you had some closing arguments, and Mr. Bliss indicated that he did also.

I do have one issue, though, that -- Mr. Bliss raised the issue, and I think this is a valid issue, that the testimony seemed to indicate that this well is producing currently even though it does not have a permit -- did not have a nonstandard unit or unit dedicated to it; is that correct?

MR. BRUCE: That is correct. And my witness has informed he would comply with whatever the Division so requires.

HEARING EXAMINER: Okay. I will have to defer that matter to the Director. I'm just a Hearing Examiner and I'm not going to make orders from the bench. I will report that situation to the Director and the Director will take whatever action he feels is appropriate.

Okay, you may make your closing comments.

MR. BRUCE: I would ask that Mr. Bliss go first.

HEARING EXAMINER: Well, if we were in court, I would think that the movants would have to go first. But if Mr. Bliss has not objections going first --

MR. BLISS: I would prefer he go first.

HEARING EXAMINER: Then the other side of that is, he gets a chance to respond.

MR. BLISS: Okay. Well, I'm not a lawyer.

HEARING EXAMINER: Well -- Okay, you may go ahead.

MR. BRUCE: Mr. Examiner, as I think Mr. Pence said, we're not seeking to change the rules, we are seeking an exception to the rules. And the fact of the matter is, there are at least three exceptions to the rules that Techsys has gotten or should have gotten with respect to its own well unit.

We fail to see the difference between getting an exception for the number of wells on a unit -- two wells on a well unit as opposed to seeking an 80 acre well unit.

Insofar as the data goes, I think the data is incontrovertible that Vanguard's well is only going to drain about 14 or 15 acres, has no adverse effect on anyone.

The case prior to this is Fruitland Coal Gas -- which thank God I'm not extremely involved in anymore, but, you know, that pool -- that spacing in effect has gone down over the years -- and not that many years -- from 320 acres to 160 acres. And now you have any number of operators who are seeking to -- although the well unit remains the same, they're seeking infill drilling, just as what was done with the Grimes No. 1 and the Grimes No. 4 wells.

There's nothing wrong with that. It's perfectly legitimate. The statutes and the rules allow nonstandard units and allow an operator like Vanguard to apply for a nonstandard unit.

The thing is, if what -- As Mr. Pence testified, he only went back to the year 2000 to look at production. Mr. Bliss is talking about four and five BCF wells, for crying out loud, from wells that are severely encroaching on Vanguard's acreage, yeah, depletion has occurred, and

perhaps that's the very best reason to grant a nonstandard unit.

There's just not that much left anymore. And as Mr. Pence testified, no one's going to drill a well here for a cum of 180 units CF, it's just not -- It's just ridiculous to do so. And despite the rules exceptions that Techsys has gotten, if there was anyone adversely affected, it would be Occi -- all of the northeast quarter of State acreage -- but it would be Occi's as operator of the south half northeast quarter.

They apparently don't care. They were notified not only as an offset operator of the administrative application, but they were notified as the working interest owner in the south half northeast quarter.

And finally, the thing on correlative rights. Well, you know, correlative rights is the opportunity to produce the reserves under your acreage, the opportunity. Vanguard purchased this well just a year ago then immediately took steps to bring the well out of TA status and recompleted the well.

It took the opportunity to produce that to -- spent its own money to take the opportunity to try to produce the reserves.

We just fail to see how Techsys is harmed by this application. No one is harmed by this application.

And we would ask that the case be granted with the proviso that if there is another Queen well in this well unit, I would get together with the local Occi attorneys and seek to amend the application.

HEARING EXAMINER: Okay. Thank you. Mr. Bliss?

MR. BLISS: Yes. I'd like to say that 160 acre spacing is more than just words on paper. I mean, it has, again, physical -- It's withstood the test of time against all arguments, physical, geological. It has withstood the test of time of commercial and economic competition.

And to reduce and change that to -- for the Byers-Queen on the notion that the Byers-Queen, nobody was producing into it, as they make a point that's the reason we should do that, I would contradict that, completely disagree with it and say no, there are people like myself that will produce and will benefit the State of New Mexico by producing wells as long as the rules are known and as long as the oil operators can't come up and all of a sudden just start producing gas under their oil acreage.

Which is what they have. Not the gas acreage, because they have not even tried to obtain the gas acreage, okay? How -- Okay.

Mr. Bruce also -- I disagree with the comment that he said correlative rights give you the -- I think, quote, "give you the right to produce under your acreage."

The definition here basically says -- it doesn't say "under your acreage." And I think a big part of the flaw here that Vanguard and Mr. Bruce are presenting here, is they're looking at lines on a paper.

Nobody has proven that -- They treat the reservoir and well recovery around their well bore like a cylinder, like a perfect cylinder. They can only -- it's going to extend out 500 feet.

But they have not done the research to figure out what the real delineation on this pool is. They don't have any idea whether or not that all of their 181 cumulative recovery might come from a narrow sliver. They might be out on a peninsula, who knows? They have not looked at it. You know why? Because they made a claim.

They don't care about this gas field. They don't care -- It's isn't economical to them. So they don't know what this pool -- It's not a cylinder. I can tell you that one thing they're wrong about, it's not a 500 foot radius perfect cylinder 35 feet high that they're recovering from, it is a highly porous, highly productive reserve demonstrated by the recoveries of the four or five BCF a day on the well.

Now, contrary to their idea that this is a tight hole, only 14 1/2 acres, I'm not a petroleum engineer, but they have not demonstrated the case that this is a perfect

cylinder and that it can only hit that 14 1/2 acres.

They haven't talked about the element of time and they haven't -- And if you look at Exhibit B again, I think that historical data will definitely prove that this is a common reservoir, very simple, no obstructions, that they're competing for the same energy that we're competing for, and that all the other operators are competing for.

And by competing for the same energy that -- If you put seven wells in a half mile radius circle, you deplete the -- Your volume extraction is going to me more than if you had five wells in there.

So how are we harmed? When we go from having a one-fifth interest in the correlative rights definition of our equitable share of the reservoir energy, we go from one-fifth -- if they're approved, we go to one-sixth. That's a 16 percent loss in our equitable share if it's allowed. And when Texland goes in there, we go from one-fifth to one-seventh. So we drop 30 percent -- our equitable share will go down 30 percent.

And again, you lose the ability for companies like myself to -- to take on -- We love these depleted fields, and I think we've benefited the State of New Mexico by being a prudent operator and going after this.

And yeah, we may not know all the rules, we may not know all the engineering that this gentleman has

given, but we know one thing, nobody else would have been in this field trying to get the gas out of this field like we have unless we have the economic justification of a certain spacing to justify the economics.

And with that, I -- Like I said, I'd just like to make a little statement, you know. Me talking to the Commission right now is like me going to Jacques Cousteau and telling him, "Salt water is salty." I mean, I really don't have the experience to do it.

So I look to the Commission to whatever decision that you think is fair. But I also would like to say that the implications that I think go here, since they have not demonstrated that Byers-Queen is a terrible gas field that is different from all 1,800, I think the implication here of allowing spacing changes on these types of reasons should also apply to every other operator in every other gas pool out there equally.

And don't treat the Byers-Queen on these notions that it's a -- because it's so bad and because we got imprudent operators and because of all these other reasons that they try to make claims for, please treat it as if it is an important reservoir and it's also that the implications of your decisions should also apply to Exxon's more prolific 160 acres of gas pool out there.

I think it should be equal. I don't understand

why they don't give any distinctions why this gas pool on the rules should be treated differently. And I would like to yield to the Commission to keep that in mind when you're looking at this.

And with that, I do appreciate the time, and I apologize for the inefficiencies of my presentation and lack of legal wherewithal. But with that, I conclude my testimony.

HEARING EXAMINER: Any rebuttal, Mr. Bruce?

MR. BRUCE: I guess what I don't understand is -- I guess what Techsys is saying, is once it gets its well established, no one is allowed to complete against it. That's the bottom line of its presentation.

One other matter, Mr. Examiner. No one objected to the unorthodox location portion of the application, and I don't know if it could be referred back to the administrative docket or simply an interim order issued.

HEARING EXAMINER: I think it would be incorporated into whatever order we issue. In order to make the well a lawful well at this time, you would have to have both the NSL and the NSP -- Of course you could always -- unless you want to elect to dedicate it to a standard unit. If you choose to do that, then notify us and we'll just dismiss the case and issue an administrative nonstandard location. But otherwise, we'll

just rule on both in the same order, would seem to be the most efficient way to do it.

MR. BRUCE: Okay.

MR. BLISS: Well, since he put words in my mouth, can I have rebuttal?

HEARING EXAMINER: Well, I think all he said was, wasn't it, that -- I think the answer to that is no. Because if we let every attorney have surrebuttal, we would never get through with a case.

But I think all he said was that you didn't object to the nonstandard location, and then I heard you say exactly that. So if you're modifying that, let me know.

MR. BLISS: That wasn't what he said, though. I mean, I'm okay with that, but he also said that Techsys Resources is of the opinion that now that we have our well in the ground, that we don't want any other competition out there? That's absolutely not the case. Competition is great on the level of a fair playing field.

HEARING EXAMINER: Well, as I heard Justice Greenhill, the Chief Justice of the Supreme Court say to an attorney one time, "The Court advises you that your time is up."

Case No. 14271 will be taken under advisement and this docket will stand adjourned.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. _____ heard by me on _____.

_____, Examiner
Oil Conservation Division

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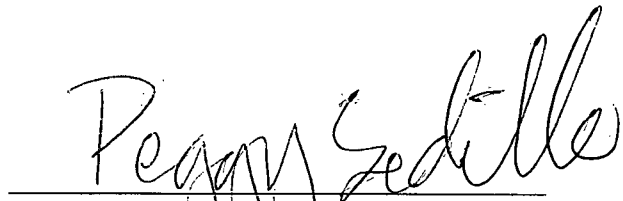
STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

REPORTER'S CERTIFICATE

I, PEGGY A. SEDILLO, Certified Court Reporter of the firm Paul Baca Professional Court Reporters do hereby certify that the foregoing transcript is a complete and accurate record of said proceedings as the same were recorded by me or under my supervision.

Dated at Albuquerque, New Mexico this 25th day of April, 2009.



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