STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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

ORIGINAL

CASE 15409

APPLICATION OF OF DEVON ENERGY PRODUCTION COMPANY, LP, FOR POOL CREATION AND SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

November 12, 2015

Santa Fe, New Mexico

BEFORE: WILLIAM V. JONES, CHIEF EXAMINER
GABRIEL WADE, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, William V. Jones, Chief Examiner, and Gabriel Wade, Legal Examiner, on November 12, 2015, at the New Mexico Energy, Minerals, and Natural Resources Department, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico.

REPORTED BY: ELLEN H. ALLANIC
NEW MEXICO CCR 100
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A P P E A R A N C E S

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I N D E X

E X H I B I T I N D E X

Exhibits Offered and Admitted

(Time noted 1:35 p.m.)

EXAMINER JONES: Let's go back on the record, and call case No. 15409, Application of Devon Energy Production Company, LP, for pool creation and special pool rules, Eddy County, New Mexico.

Call for appearances.

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

EXAMINER JONES: Any other appearances?

(No response.)

EXAMINER JONES: Will the court reporter please swear the witnesses.

BRANDON PATRICK

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name and city of residence.

A. Brandon Patrick, Oklahoma City, Oklahoma.

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

A. Devon Energy. I am a landman.

Q. Have you previously testified before the Division?

A. No, sir.

Q. Could you summarize your educational and employment background for the Examiner.

A. Yes. I graduated from the University of Oklahoma with an energy management degree in 2012. And I am currently a second year law student at Oklahoma City University.

Q. And who have you worked for in the business?

A. Devon Energy since I started in May of 2012.

Q. Does your area of responsibility at Devon include this portion of southeast New Mexico?

A. Yes, sir.

Q. And are you familiar with the land matters involved in this application?

A. Yes, sir.

MR. BRUCE: Mr. Examiner, I tender Mr. Patrick as an expert petroleum landman.

EXAMINER JONES: He is so qualified.

Q. Mr. Patrick, briefly, what does Devon seek in this case?

A. We seek to create a new pool for horizontal Bone Spring development in sections ten and 11 of Township 21 South, 27 East in Eddy County.

We are asking for 320-acre spacing and several other special pool rules, which I'll discuss later.

The pool name you request is the Burton Flat Bone

Spring horizontal pool.

Q. And what is the basic reason Devon seeks the creation of this spacing increase in this special pool?

A. Devon plans to drill a number of Bone Spring wells in the area, including infill wells, which would otherwise be unorthodox. By having 320-acre spacing, all interest owners in the 320-acre unit will share in production in three wells or more in a half section of land. Thus correlative rights are protected because there will be no unorthodox locations encroaching on offsetting 160-acre spacing units.

Q. Could you identify Exhibit 1 and describe what it shows.

A. Exhibit 1 is a land plat which highlights sections 10, 11 as well as the Burton Flat Deep unit to the north. Devon operates the unit. Devon's acreage is highlighted. And Devon plans to drill horizontal wells in the area located on the plat.

Q. And so Devon has plans, starting next year, to drill quite a large number of horizontal Bone Spring wells?

A. Yes.

Q. Will Devon's geologist and engineer further discuss developments in this area?

A. Yes, they will.

Q. Now referring to Exhibit 2, are there other Bone Spring pools in this area?

A. Yes. We obtained Exhibit 2 from Paul Kautz of the Hobbs Office. It shows existing Bone Spring pools in this area. The brown represents the planned expansion of these pools.

Q. And this is all from Mr. Kautz's internal division files?

A. Yes, these are direct from Mr. Paul Kautz.

Q. Does Devon request that these existing pools be left in place?

A. Yes. For existing and future vertical wells and also for existing horizontal Bone Spring wells, so that the equities are not readjusted in the existing wells.

Q. And what is the spacing for existing Bone Spring pools?

A. It is 40 acres for oil. And, in addition, there's some Bone Spring gas pools based on 160 acres.

Q. What special rules does Devon request for the new pool?

A. We request a standard spacing and proration unit of 320 acres. The well is to be located no closer than 330 feet to the exterior boundary of a standard well unit, with interior setbacks of ten feet from a quarter, quarter section line.

A special depth frac allowable of 3,500 barrels of oil per day for a standard 320-acre well unit. And a GOR of 5,000 cubic feet of gas per barrel of oil.

Q. And you mentioned 320-acre spacing in the infill wells. If you'd look back to Exhibit 1, if you'd look, like, at the section 10 and 11 acreage, there are a number of -- look at the south half of section 11. There are a number of wells planned there, a couple or maybe more would be unorthodox without the special pool rules, correct?

A. Correct.

Q. And will the technical witnesses discuss -- further discuss the need for the pool rules?

A. Yes.

Q. Regarding the GOR request, what is Exhibit 3?

A. Exhibit 3 is the nomenclature information for the nearest Bone Spring pools. As you can see, two of the three pools are gas pools, which means they had increased GORs.

Q. And that would be the East Avalon-Bone Spring Gas Pool and the MaGruder-Bone Spring Gas Pool, correct?

A. Correct.

Q. And with respect to the East Avalon-Bone Spring Oil Pool, what is the GOR? And I refer you to Exhibit 4.

A. Exhibit 4 is Order No. 58897, which established a GOR of 5,000 to one for that pool. Again, the GORs are elevated in this area.

Q. And what is Exhibit 5?

A. It is a list of operators of Bone Spring wells within a mile of sections 10, 11. Other than Devon, the only operators of active wells are Chevron U.S.A. and Ranger 40 Petroleum.

Q. And were these operators, other than Devon, notified of this hearing?

A. Yes, sir. And that is shown on Exhibit 6.

Q. And were Exhibits 1 through 6 either prepared by you or under your supervision or compiled from company business records?

A. Yes, they were.

Q. And is the granting of this application in the interests of conservation and the prevention of waste?

A. Yes.

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

EXAMINER JONES: Exhibits 1 through 6 are admitted.

(Devon Energy Production Company, LP, Exhibits 1 through 6 were offered and admitted.)

MR. BRUCE: I have no further questions of

the witness.

EXAMINATION BY EXAMINER JONES

EXAMINER JONES: So the proposed pool will be the blue?

THE WITNESS: No. The proposed pool will be the purple, sections 10 and 11.

EXAMINER JONES: So on your notice to other Bone Spring operators, tell me again, did you notice in section 10 and 11 and all surrounding one mile -- within one mile of --

THE WITNESS: Yes, sir, we did.

EXAMINER JONES: Okay. Did you get any comments from anybody or support letters or anything like that?

THE WITNESS: We received no response from either of them --

MR. BRUCE: Mr. Examiner, I did get an e-mail from Ranger 40 Petroleum. And they simply asked where their well was in relation to the pool.

And I e-mailed them the information, and I never heard back from them.

EXAMINER JONES: Do you want the 320s to be -- in other words, if you were going to drill a well, a lay-down well in section 11, would you do a lay-down south half spacing unit there?

THE WITNESS: Yes.
EXAMINER JONES: Or would you do two stand-up spacing units?
THE WITNESS: It would be lay-down 320s.
EXAMINER JONES: Do you want that limited --
MR. BRUCE: Mr. Examiner, I think if you look at the map, Devon is planning on lay-downs for its acreage. Other operators outside of there may want stand-ups, but -- I don't think it should be limited; but, obviously, Devon is doing all of theirs east, west.
EXAMINER JONES: So I meant "limited" in respect to the ability to create a project area of two stand-up 320s or a lay-down well.
MR. BRUCE: I think that is reasonable, I mean, depending on the advances of horizontal technology, sure.
EXAMINER JONES: Just in case you want to drill a longer lateral?
MR. BRUCE: Correct.
EXAMINER JONES: So you really don't want limitations put into --
MR. BRUCE: I don't think laterals should be limited to a mile, is what Devon is looking for.
EXAMINER JONES: So this case is just to create the unit and create the limiting GOR and the

setbacks and the oil allowable; is that correct?

THE WITNESS: Yes.

EXAMINER JONES: Okay. I have no further questions.

EXAMINATION BY MR. WADE

MR. WADE: The operators that you did notice are within the pool only or within the one-mile boundary of the pool that you are, according to your application, seeking to apply special pool rules?

THE WITNESS: We saw every operator within one mile of sections 10 and 11.

MR. WADE: All right. And it was just 10 and 11 --

THE WITNESS: Exactly.

EXAMINER JONES: The rules are noticing the operators, correct? It is not to notice the working interest owners?

MR. BRUCE: It's only to notify the operators of existing wells so long as you're not seeking to change the spacing of an existing well.

EXAMINER JONES: -- of an existing well inside?

MR. BRUCE: Yeah.

EXAMINER JONES: Okay. So you are creating a whole new pool, so you don't have to worry about the

statutes and the rules --

MR. BRUCE: That is correct. We are not seeking to affect any existing well or change the equities in any existing well.

EXAMINER JONES: Okay. Thank you.

SARAH RITTENHOUSE

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name and city of residence.

A. My name is Sarah Rittenhouse and I live in Oklahoma City, Oklahoma.

Q. And who do you work for and in what capacity?

A. I work for Devon Energy as a senior staff geologist.

Q. Have you previously testified before the Division?

A. No, I haven't.

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

A. I graduated with a bachelor of science from the University of Illinois in 1999. And then a master's of science and hydrogeology in 2005. And I worked for

Chevron for six years and then for Hilcorp of Alaska for two and then Devon for one.

Q. And does your area of responsibility at Devon include this area of southeast New Mexico?

A. Yes.

Q. And are you familiar with the geology involved in this application?

A. Yes, I am.

MR. BRUCE: Mr. Examiner, I tender Ms. Rittenhouse as an expert petroleum geologist.

EXAMINER JONES: The University of Illinois, is that the Circle Campus downtown Chicago? Or is that separate?

THE WITNESS: That's UIC. The University of Illinois Urbana-Champaign is upstate.

EXAMINER JONES: And you got your master's there too?

THE WITNESS: Illinois State University.

EXAMINER JONES: She is so qualified.

MR. BRUCE: Mr. Examiner, on these subsequent exhibits, you get a double bonus because not only do you see the geology, but if you look at the upper left hand, it is also a vision exam for you.

If you can read the header, you are a better man than me.

Q. At this point what is the primary zone of interest in this --

A. The Second Bone Spring. We have two targets in the Second Bone, an upper unit and a lower unit.

Q. And is the Third Spring also a potential target as time goes by?

A. Yes, it is. Absolutely.

Q. Let's start with Exhibit 7. Could you identify that and describe what it shows for the Examiner.

A. Exhibit 7 is an isopach of the entire Second Bone Spring Sand. And you see the red and the blue well stakes are -- the red are Second Bone Spring, the lower targets, and the blue are Second Bone Spring, upper targets. So we have a staggered lateral plan of action here. This is sections 10 and 11.

And the Second Bone Spring is continuous across these two sections, not a whole lot of variability.

Q. And what is Exhibit 8?

A. Exhibit 8 is the same two sections with the structure of the top of the Second Bone Spring Sand. Again, not a whole lot of variability, dipping gently from west to east.

Q. Now, when you are looking at the development out here, you're not only looking at, say, in a 320-acre project area or unit, you are looking at not only infill

wells in three wells, being three wells in the Second Bone Spring, but you are looking at potentially two wells at each location, correct?

A. That's correct. And then there are multiple targets also in the Third Bone Spring as well.

Q. So you are looking at potentially six plus wells in a well unit?

A. Yes, that's correct.

Q. Let's move on to the Third Bone Spring. Could you identify Exhibits 9 and 10 for the Examiner.

A. Exhibit 9 is the structure of the top of the Third Bone Spring Sand and some example laterals going within that structure. And Exhibit 10 is the isopach for the Third Bone Spring Sand.

Q. And, again, you are looking at fairly similar thicknesses throughout this area for wells in the proposed depth pool?

A. That is correct.

Q. And, finally, what is Exhibit 11?

A. Exhibit 11 shows a cross section going from west to east across sections 10 and 11. And you see it at three specific targets that we have planned at this time, on the upper landing zone, the lower landing zone in Second Bone Spring, and a landing target in the Third Bone Spring Sand.

And you can see that the thickness is rather -- not variable across sections 10 and 11 in either case.

Q. So both the Second and Third Bone Spring are continuous across this area and they appear to be similar, wherever you are going to drill in this area, there should be similar geology?

A. That's correct.

Q. Were Exhibits 7 through 11 prepared by you or under your supervision?

A. Yes.

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

A. Yes.

MR. BRUCE: I move the admission of Exhibits 7 through 11.

EXAMINER JONES: Exhibits 7 through 11 are admitted.

(Devon Energy Production Company, LP, Exhibits 7 through 11 were offered and admitted.)

MR. BRUCE: I have no further questions for the witness.

EXAMINATION BY EXAMINER JONES

EXAMINER JONES: The Bone Spring as a whole, do you consider it -- why is it called one formation?

THE WITNESS: That's a good question.

Well, the depositional time, I think that they lumped that together, the three different sand packages. Because there's First Bone Spring Sand, too.

EXAMINER JONES: So, basically, in this area, do you have the Abo below you or does it go straight to the Wolfcamp?

THE WITNESS: You will see just below at the base of the Third Bone Spring Sand, the Wolfcamp comes in with two sand packages, the X and the Y.

EXAMINER JONES: Okay. So your Bone Spring is a source itself that's got its own --

THE WITNESS: Also a very good question.

EXAMINER JONES: I will rephrase. What is the source rock for the Bone Spring; is it from the Bone Spring or is it from down below?

THE WITNESS: When we've done the oil typing, it seems that the Second and Third Bone Spring seem to be similar in nature. So we believe that that's coming maybe from some of the strata and maybe in the Wolfcamp.

The First Bone Spring looks more like the Leonard Section. So that's a mystery at the moment.

EXAMINER JONES: I was told we are not allowed to use the word "Leonard" by Paul Kautz. They

use it in Texas.

THE WITNESS: Avalon?

EXAMINER JONES: No -- go ahead. What I'm getting at is why are these sands, carbonate packages linked together so they are all called the Bone Spring; is it --

THE WITNESS: Well, this particular section next to Burton Flat is right on the edge between the basin and you're coming up on the shelf there.

So as the ocean came up and reseated -- I mean this is kind of -- it's very similar. That's why they are lumping them together -- depositionally.

EXAMINER JONES: So it's logical for the geologists to all call this all the Bone Spring?

THE WITNESS: Yes. And the cores look very similar also.

EXAMINER JONES: It is kind of like a single source of supply, you would say?

THE WITNESS: Yes.

EXAMINER JONES: I don't have any more questions.

MR. BRUCE: Okay. Thank you.

PEDRO MORA

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. Pedro --

THE COURT REPORTER: I'm having difficulty understanding your accent. For the sake of the record, please turn so I can hear you as well as possible and please speak up.

A. Pedro Mora, Reservoir Engineer, Devon Energy.

Q. Mr. Mora, have you previously testified before the division.

A. Yes, I have.

Q. And were your credentials as an expert petroleum -- excuse me -- I mean reservoir engineer accepted as a matter of record?

A. Yes, that's correct.

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

A. That's correct.

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

A. That's correct.

MR. BRUCE: I tender Mr. Mora as an expert reservoir engineer.

EXAMINER JONES: He is so qualified.

Q. Mr. Mora, you have several documents, and I have marked them all as Exhibit 12. Without me getting in the way, why don't you run through your exhibits and explain why Devon wants to drill these infill wells and even numerous -- even two wells per Second Bone Spring, for example, and why you need the allowable?

A. All right. Let me just go through Exhibit 12. Page 2 is a map of sections 10 and 11, this, we mark it in red.

If you go to page 3, we have an overview with the current maximum allowable of 142 barrels for 40-acre and 2,000 standard square feet per barrel. So we're requesting another oil increase to 3,500 barrels per day for a 320-acre unit. That's the equivalent of 437.5 barrel of oil per 40-acre unit and the equivalent of 5,000 standard cubic feet per barrel GOR.

So that increase in allowable will allow for increased well density from four wells per section to six wells per section for future development.

And this increase in the well density will allow for optimum for economics and maximize the reserve and the resource recovery.

So numerical modern techniques were used to reach that conclusion and to optimize the spacing and the value of the asset.

Q. Before I go further, Mr. Mora, you are talking about three wells per half section, but, eventually, there will be a lot more wells than that probably?

A. That's correct. We are satisfied there is more than one possible target. So we have the Upper Second Bone Spring and we have the Lower Second Bone Spring. And, as Sarah present before, the maps looks 'continuity' and good potential for landing wells in those areas.

Q. If all these wells were drilled and completed at the same time, you'd need probably a larger increase in the allowable?

A. That is correct.

Q. But the wells would probably be spaced out over a period of time and development?

A. That's correct.

Q. Okay. Move on to page 4, please.

A. Page 4 is just an example. The straight line is the current allowable of 568 barrel of oil per day according to 160-acre spacing. And these three wells surrounding in those two sections, ten and 11, that clearly reach more of that particular allowable. So that is one of the examples that we want to show.

If we move to page 5 in Exhibit 12, you can see a plug and a table. In this particular plug, you can see

how the MPV per section is calculated and then incremental reserves per section.

So you can see that with four wells per section we can have something close to 1.2 million barrels of oil. But when we move to six wells per section, we can increase that reserve to 1.4 million barrels per section.

That's going to increase our MPV value from 6.2 million to 6.5 million. And the NPV also is going to increase. The rate of return decrease but as a group of wells -- reserve per section is going to increase and the MPVT, stand-up well.

Q. So you are kind of balancing rate of return plus reserves per section?

A. That is correct.

Q. Let me ask you, has Devon done this over in Lea County, six wells per section?

A. That is correct. We did that for the Cotton Draw Unit and we presented that before.

Q. And have those wells been drilled?

A. Actually, we drilled -- from the six wells, we drilled four wells already. They are cleaning up right now. With the pressures -- the pressures look good and we are still number 5 or 4, so it's still young to decide, but it looks promising.

MR. BRUCE: And I can give you that case number, Mr. Examiner.

Q. But the results you have to date from over in the Cotton Draw unit support page 5 of this exhibit?

A. That is correct.

Q. Go ahead.

A. So page 6 is just a summary or studies, simulation, that show that the optimum well density is six wells per section based on an MPV 10.

You can increase the reserve per section in 20 -- from 20 to 30 percent. We are expecting peak rates of 1,250 barrels of oil per well in a six-well per section spacing scenario.

That way just consider one landing target. So if we have more than one landing target at the same time, that particular rate could be double.

So there is potential for development in two landing zones within the same (incomprehensible), and that reinforces the need of that increase in the allowable.

So the current maximum allowable is 142 barrels per 40 acres. And we are requesting to increase that allowable to 437.5 barrel of oil per day per 40-acre unit. And that's the equivalent to seventy,fifty barrel of oil per day for 150-acre spacing or 1,157 barrel of

oil per day in 107-acre unit. That's equivalent of six wells per section.

Q. That would be six times 107, so 6,040 acres?

A. Correct.

Q. Was Exhibit 12 prepared by you, Mr. Mora?

A. Yes, it was.

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

A. Yes, it is.

MR. BRUCE: Mr. Examiner, I move the admission of Exhibit 12.

EXAMINER JONES: Exhibit 12 will is admitted.

(Devon Energy Production Company, LP, Exhibit 12 was offered and admitted.)

EXAMINATION BY EXAMINER JONES

EXAMINER JONES: I remember that case where you presented the results of the simulation that you did along with -- and you had a history match --

THE WITNESS: That's correct.

EXAMINER JONES: And I can find that.

THE WITNESS: And we also have history match for surrounding wells in the area for Burton Flat as well.

EXAMINER JONES: Okay. Your MPV really drops off if you hit eight wells.

THE WITNESS: That's correct.

EXAMINER JONES: And is that because of the built-in interference?

THE WITNESS: That's correct. We are expecting some interference -- or more is indicated -- even with four wells per section we have some kind of interference. We didn't see any interference with one, two, or three wells per section.

EXAMINER JONES: Say that first part again -- even with how many wells per section?

THE WITNESS: With four wells per section or more it's indicated that we have some kind of interference. You can see here in the table on page 5 that the reserves per wells are around 324 MBO. And that number is the same for one, two, or three wells per section. That is the equivalent of one well in 640 acres or two wells in -- a well at 320 acres or a well at 228 acres.

And then when we use a well per 160 acres, we start to see some decremental in the reserves per well. And you see that that is as a reducing, we tend to reach 233 MBO per well. By using that, we optimize the MPV and we optimize our reserves per section.

So we know there's going to be some kind of interference, but we are going to drain more of that section in the same time.

EXAMINER JONES: You said four. What about three? Is there a potential that your reservoir parameters could be such that three wells could over time interfere with each other?

THE WITNESS: Our models indicate there is no interference in a 35-year period.

EXAMINER JONES: But you are basing it on a certain geometric mean, porosity, maybe permeability; but you have a range of permeabilities and porosities, right?

THE WITNESS: Our properties are coming from the cores that we have in the area, and --

EXAMINER JONES: Which still shows you a distribution?

THE WITNESS: That's correct.

EXAMINER JONES: So your simulation is built on geometric mean numbers?

THE WITNESS: That's correct.

EXAMINER JONES: Are you going to ask him more questions?

MR. BRUCE: Depending on what you say.

EXAMINER JONES: Can you tell me all the

reasons you can think of why you need 320 spacing for a horizontal well here versus 160?

THE WITNESS: We just run those cases to see we have interference or not.

EXAMINER JONES: Okay.

THE WITNESS: So as I mentioned before, we run one well in a 640 spacing. And then we run one well in 320, one well 228 --

EXAMINER JONES: Right.

THE WITNESS: And then one well in 160 and one well in 107-acre spacing and one well in 80-acre spacing. What we will try to see is how long it is going to take to interfere one well with the other and how much is going to intact in the reserves.

So it looks like with 320, 640, 228 we don't have any interference. And then when we have four, five, six, seven, or eight wells per section --

EXAMINER JONES: You really start picking up interference.

THE WITNESS: Yes, correct.

When we run our numbers in a project, if we optimize our reserve and our MPV, the optimal wells per section is six. And we are doing that pilot right now in Cotton Draw.

EXAMINER JONES: But your surface locations,

it looks like -- you drew straight lines between your surface hole and your bottom hole on Exhibit 1. But there's a reason why you needed surface hole locations or a surface hole at a certain spot there --

MR. BRUCE: Mr. Examiner, page 2 of Mr. Mora's exhibit may be a little more accurate. I'm on page 2 of his exhibit. It shows a little more accurate representation of well locations.

EXAMINER JONES: Okay. So you intend to -- you're a reservoir engineer, you're not a facilities engineer?

THE WITNESS: That's correct.

EXAMINER JONES: Or a drilling guy or completions, either?

THE WITNESS: No. I'm not completions either.

MR. BRUCE: And, Mr. Examiner, if you do have some questions about the surface locations, Mr. Patrick could answer those. That's more of a land deal than a reservoir deal.

EXAMINER JONES: I don't know if there was compelling need to put surface facilities -- I could probably ask Mr. Patrick one more time.

MR. BRUCE: Of course, this is resort territory out here, so we're trying to minimize surface

facilities.

EXAMINER JONES: It's Burton Flat. The Burton Flat area was a -- had some prorated gas pools out there at one time.

MR. BRUCE: More on Strauff.

EXAMINER JONES: Okay. And then they did a little proration. I think they're still named that.

Mr. Wade?

MR. WADE: No more questions. Recall Mr. Patrick.

EXAMINER JONES: Can we recall Mr. Patrick?

MR. BRUCE: Sure.

BRANDON PATRICK

having been sworn, resumed the stand and was further questioned and further testified as follows:

EXAMINATION BY EXAMINER JONES

EXAMINER JONES: Mr. Patrick, your Exhibit 1 shows the location right along the section line for the surface holes. Are they -- is this some kind of a restricted area?

THE WITNESS: Yes. All the surface around here is federal and also there is -- there are a lot of gas lines, existing infrastructure in there. And so picking surface locations, your well pads, battery pads, et cetera, are pretty hard to find.

That is the reason, actually, in section 11 why our surface hole location is off into section 12. There are several lines in that area that caused our pad -- having to go right there. And, also, with archeological areas, we had to move it there as well.

And the straight lines, that was just because of the way this is mapped in our system, the GIS system.

EXAMINER JONES: Okay.

THE WITNESS: And also the reason why we take some of these locations is because we had -- there's a combination of getting drilling completions via land -- everybody was involved in the choice of these surface hole locations because we wanted to optimize -- we just wanted to have the best MPV and we didn't want to increase drilling costs by having to have a big kick out, things like that.

So these were all strategically picked with what was available, left after we took into consideration archeological areas and gas lines.

EXAMINER JONES: Okay. If you did a 160 spacing for your horizontal well in this pool and you needed to actually go to a higher spacing, the only step up would be to a 320; is that correct?

THE WITNESS: Yes, sir.

EXAMINER JONES: Because we can't split 40s.

THE WITNESS: Yes, sir.

EXAMINER JONES: I have been told that many times.

THE WITNESS: Yes, sir.

EXAMINER JONES: I think I have enough information.

MR. WADE: I have no questions.

EXAMINER JONES: Thank you very much. We have just taken case 15409 under advisement.

(Time noted 2:12 p.m.)

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

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

REPORTER'S CERTIFICATE

I, ELLEN H. ALLANIC, New Mexico Reporter CCR No. 100, DO HEREBY CERTIFY that on Thursday, November 12, 2015, the proceedings in the above-captioned matter were taken before me, that I did report in stenographic shorthand the proceedings set forth herein, and the foregoing pages are a true and correct transcription to the best of my ability and control.

I FURTHER CERTIFY that I am neither employed by nor related to nor contracted with (unless excepted by the rules) any of the parties or attorneys in this case, and that I have no interest whatsoever in the final disposition of this case in any court.

Ellen Allanic

ELLEN H. ALLANIC, CSR
NM Certified Court Reporter No. 100
License Expires: 12/31/15