| 7 | | | Page 1 | |
|---------|---|--|----------------|--|
| 3 4 | BY THE OIL CO | OF THE HEARING CALL NSERVATION DIVISION F CONSIDERING: | | |
| | | | | |
| 5 6 | FOR A NONSTAN | F OXY USA, INC. DARD SPACING AND T AND COMPULSORY | CASE NO. 15006 | |
| 7 | POOLING, EDDY | COUNTY, NEW MEXICO. | | |
| 8 | | | ORIGINAL | |
| 9 | | | | |
| 10 | RE | PORTER'S TRANSCRIPT | OF PROCEEDINGS | |
| 11 | | EXAMINER HEAR | ING | |
| 12 | | | | |
| 13 | | D K. BROOKS, CHIEF E | | |
| 14 | RICH | ARD EZEANIIM, IECHNIG | | |
| 15 | | June 27, 20 | 13 PECEIVED | |
| 16 | | Santa Fe, New Me | exico de la | |
| 17 | | | P Ö O | |
| 18 | This matter came on for hearing before the | | | |
| 19 | New Mexico Oil Conservation Division, David K. Brooks, Chief Examiner, and Richard Ezeanyim, Technical Examiner, on Thursday, June 27, 2013, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico. | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | REPORTED BY: | Mary C. Hankins, CCP | R, RPR | |
| 24 | | New Mexico CCR #20 Paul Baca Profession | - | |
| 25 | | 500 4th Street, Nort Albuquerque, New Mer | | |
| | | | | |
| | | | | |
| | | an a | | |
| | | | | |

PAUL BACA PROFESSIONAL COURT REPORTERS

÷

İ

Page 2 1 APPEARANCES 2 FOR APPLICANT OXY USA, INC.: GERMAINE R. CHAPPELLE, ESQ. 3 GALLAGHER & KENNEDY, P.A. 4 1233 Paseo de Peralta Santa Fe, New Mexico 87501 (505) 989-7338 5 germaine@gknet.com 6 7 INDEX PAGE Case Number 15006 Called 8 4 9 OXY USA, Inc.'s Case-in-Chief: Witnesses: 10 11 Christopher J. Canon: 12 Direct Examination by Ms. Chappelle 5 Cross/Recross-Examination by Examiner Brooks 14,25 Cross/Recross-Examination by Examiner Ezeanyim 16, 13 26 14 Redirect Examination by Ms. Chappelle 27 Richard J. Erickson: 15 16 Direct Examination by Ms. Chappelle 29 Cross-Examination by Examiner Ezeanyim 39 Cross Examination by Examiner Brooks 17 46 Redirect Examination by Ms. Chappelle 49 18 Bruce A. Gerrard: 19 Direct Examination by Ms. Chappelle 50 20 Cross-Examination by Examiner Ezeanyim 59 21 Proceedings Conclude 63 22 Certificate of Court Reporter 64 23 EXHIBITS OFFERED AND ADMITTED OXY USA, Inc. Exhibit Numbers 1 through 7 24 13 OXY USA, Inc. Exhibit Numbers 8 through 12 38 25 OXY USA, Inc. Exhibit Numbers 13 through 18 59

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 3 (8:21 a.m.) 1 2 EXAMINER BROOKS: Then we will call Case Number 15006, application of OXY USA, Inc. for a 3 nonstandard spacing and proration unit and compulsory 4 pooling, Eddy County, New Mexico. 5 6 Call for appearances. 7 MS. CHAPPELLE: Good morning, Hearing Examiner. My name is Germaine Chappelle, Gallagher & 8 Kennedy, and I'm representing OXY. I have several 9 10 witnesses here. We don't know if anyone is objecting. EXAMINER BROOKS: How many witnesses? 11 12 MS. CHAPPELLE: We have three. 13 EXAMINER BROOKS: Any other appearances? Very good. 14 15 Will the witnesses stand and identify 16 themselves, please? MR. ERICKSON: My name is Richard Erickson. 17 18 EXAMINER BROOKS: Each witness will need to state your name. 19 20 MR. CANON: My name is Christopher Canon. 21 MR. GERRARD: I'm Bruce Gerrard. 22 EXAMINER BROOKS: Witnesses remain 23 standing, and the court reporter will swear the witnesses. 24 25 (Mr. Erickson, Mr. Canon and Mr. Gerrard

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 4 1 sworn.) 2 EXAMINER BROOKS: Okay. Counsel, we need you up here at the counsel table, and we need the first 3 witness at the table on the left, to my left. 4 MS. CHAPPELLE: 5 Chris. 6 EXAMINER BROOKS: Since this is a compulsory pooling case and they're pretty routine, 7 opening statements are not usual, but you have the 8 opportunity to make one if you want to. 9 10 MS. CHAPPELLE: Thank you, sir. What I'd like to do is just get you a copy of our exhibits up 11 12 front, so you can follow through. 13 EXAMINER BROOKS: Okay. That would be helpful. 14 MS. CHAPPELLE: May I approach? 15 16 EXAMINER BROOKS: Yes. 17 Of course, you need a set for the court reporter, but it would be good to have a set for the 18 technical examiner and for myself. 19 20 MS. CHAPPELLE: What I'd like to do first is qualify the witness as an expert. 21 22 EXAMINER BROOKS: That is customary. You may please call the witness for the record, and then you 23 24 may proceed. 25 MS. CHAPPELLE: I call Christopher Canon as

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 5 my first witness. 1 2 EXAMINER BROOKS: Okay. You may proceed. CHRISTOPHER J. CANON, 3 after having been previously sworn under oath, was 4 guestioned and testified as follows: 5 DIRECT EXAMINATION 6 7 BY MS. CHAPPELLE: Mr. Canon, can you please give us your 8 Ο. background; who do you work for, state your name and 9 10 address and your qualifications? My name is Christopher John Canon. 11 Α. I'm a senior land negotiator for Occidental Petroleum. I 12 received a bachelor of business administration from 13 Texas A & M University, 2001; a J.D. from Texas Tech 14 School of Law, 2004, and I've been a landman for eight 15 16 years. 17 Q. Have you ever testified in this hearing examiner's room before? 18 19 Α. No. MS. CHAPPELLE: With that, I tender the 20 witness. 21 22 EXAMINER BROOKS: Okay. You're a geologist, correct? 23 THE WITNESS: I'm a landman. 24 25 EXAMINER BROOKS: A landman.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 6 1 THE WITNESS: Yes, sir. 2 EXAMINER BROOKS: And have you reviewed the land matters related to this case? 3 4 THE WITNESS: Yes, sir. 5 EXAMINER BROOKS: Very good. He is so qualified. 6 7 MS. CHAPPELLE: Thank you, sir. 8 Q. (BY MS. CHAPPELLE) I'd like to direct your 9 attention to what's labeled Exhibit 1, and if you could 10 describe that for the Hearing Examiner, please? Exhibit 1 is a extended map overview of the 11 Α. area where the well lies in relation to surrounding 12 13 townships and within the state. It is in the center of the big blue circle, and this is just to give context. 14 Are you familiar with the status of lands in 15 Ο. the subject area? 16 17 Α. Yes. 18 0. We're going to go to that next. 19 MS. CHAPPELLE: So with that, I'd like to 20 offer Exhibit 1 into the record. EXAMINER BROOKS: Okay. It's customary 21 here to offer all your exhibits after you finish 22 examining the witness. 23 MS. CHAPPELLE: After. 24 Okay. Thank you, Hearing Examiner. 25

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 7 Q. (BY MS. CHAPPELLE) With that, I'd like you to turn to Exhibit 2, please, and could you describe that exhibit?

4 Α. Exhibit 2 is an overview of the subject of our 5 application today. It shows our requested nonstandard spacing of 160 acres in the south half of the south half 6 7 of Section 26, Township 23 South, Range 30 East. It also shows a brief breakdown of working interests, which 8 9 we look, additionally, on a subsequent slide of the area 10 at issue.

The red star on the exhibit is the proposed well, the FNR 26 Federal #4H. Additionally within this 40-acre spacing unit, under a Joint Operating Agreement dated 8/25/98, we have the FNR 26 Federal #1, and highlighted in yellow is shared by OXY and ConocoPhillips, also 50/50, under Federal Lease NM0531277A.

18 Q. Thank you.

19And could we please proceed to Exhibit20Number 3?

A. Exhibit Number 3, as I said, is just a brief breakdown of the shared working interests across the -in the spacing unit, the requested spacing unit. As you can see, OXY and ConocoPhillips share the working interest, 50 percent each.

| - | Page 8 | | | |
|----|--|--|--|--|
| | Q. Thank you. | | | |
| 2 | And let's move now to Exhibit 4. Can you | | | |
| 3 | please discuss the negotiations that occurred between | | | |
| 4 | ConocoPhillips and OXY regarding voluntary | | | |
| 5 | participation? | | | |
| 6 | A. Exhibit 4 is, as the title states, an Event | | | |
| 7 | Timeline. It shows a brief breakdown of our ongoing | | | |
| 8 | negotiations over the last several months in our | | | |
| 9 | attempts to come to an agreement as to the proposed well | | | |
| 10 | with our partner in the well. As you can see reading | | | |
| 11 | through the timeline, OXY has shown diligence in trying | | | |
| 12 | to find a mutually agreeable contract agreement between | | | |
| 13 | the two parties. | | | |
| 14 | Q. And to date, has OXY reached an agreement with | | | |
| 15 | ConocoPhillips? | | | |
| 16 | A. We have not. | | | |
| 17 | Q. So do they remain uncommitted to this proposed | | | |
| 18 | well? | | | |
| 19 | A. Yes. | | | |
| 20 | Q. Please move to Exhibit 5 and describe that. | | | |
| 21 | A. Exhibit 5 shows a Exhibit 5 is a copy of the | | | |
| 22 | original well proposal and AFE that we sent to | | | |
| 23 | ConocoPhillips on March 8th, 2013 giving them notice of | | | |
| 24 | our current plans to spud the well. And additionally | | | |
| 25 | attached is an AFE which breaks down the proposed costs | | | |
| | | | | |

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 9 estimated for the well. 1 And does it also include certification of the 2 Ο. 3 receipt of the --Α. Yes. Additionally attached is a copy of 4 Yes. 5 the, I guess, green card that was returned to us that is 6 the certified return receipt that we received back from 7 ConocoPhillips on April 2nd. We did not hear a response back from them by the 30-day expiration of May 2nd. 8 9 Thank you. 0. 10 And let's turn now to Exhibit Number 6, and please describe that for the Hearing Examiners. 11 Α. Exhibit Number 6 is an overview of the proposed 12 lateral surface and bottom-hole location for the 13 Federal -- or for the FNR 26 Federal #4H. Its purpose 14 is to show you that we are within the state-prescribed 15 16 setbacks of 330. This well lies in the Forty-Niner Ridge Delaware southeast pool. And there are not any 17 prescribed pool-specific rules for spacing, so these 18 default, my understanding is, to the state rules, which 19 is 330. And this is to illustrate that we are staying 20 within normal setbacks. 21 22 Q. Thank you. 23 Do you also have a standard penetration point, as well as a standard bottom-hole location? 24 25 Α. Yes.

Page 10 And what is the status of BLM's knowledge of 1 Ο. this particular forced pooling? 2 They have made no comments as to concerns 3 Α. regarding the forced pool, although we have contacted 4 5 them, and they -- they have no issues that they've 6 raised to date. Do you have a copy of our pre-hearing 7 Q. memorandum in front of you? 8 I do not. 9 Α. MS. CHAPPELLE: May I pass that to the 10 witness? 11 EXAMINER BROOKS: You may. 12 13 MS. CHAPPELLE: Thank you. (BY MS. CHAPPELLE) And if you wouldn't mind 14 Ο. just reviewing the bottom of page 2, onto the top of 15 page 3. 16 EXAMINER EZEANYIM: Which exhibit are we 17 talking about? 18 19 MS. CHAPPELLE: The pre-hearing statement. EXAMINER EZEANYIM: Oh, the one you 20 submitted? The one you submitted, right? 21 22 MS. CHAPPELLE: Oh. Yes, sir. Yes, sir. 23 Α. Okay. (BY MS. CHAPPELLE) So I just wanted to -- do 24 Q. you want to clarify your answer with respect to BLM's 25

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 11 communication on the issue? 1 Α. We did contact the BLM regarding the matter, 2 and they neither oppose nor support this application. 3 Q. Thank you so much. 4 Α. 5 Sure. 6 Q. If you wouldn't mind going back to the AFE for a moment. Are the costs that are reflected on the AFE 7 consistent with what the company has incurred for 8 9 drilling similar wells in the area? 10 Α. Yes. Has the company made an estimate of the 11 0. overhead and administrative costs while drilling this 12 well, if successful? 13 14 Α. Yes. And would you please provide those numbers for 15 Ο. 16 the Examiners? 17 Α. 740 per day for producing, and 6,700 a day for 18 drilling. Are these costs, likewise, consistent with what 19 Ο. the company and other operators in this area charge for 20 similar wells, to your knowledge? 21 Α. 22 Yes. Does the company request that these figures be 23 Ο. 24 incorporated into any order and that the order provide them to be adjusted in accordance with the COPAS, 25

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 12 C-O-P-A-S, guidelines? 1 2 Α. Yes. Now, with respect to the formation of the 3 Ο. nonstandard unit, has the company brought a geologist 4 today to provide technical testimony in support of the 5 6 proposed nonstandard unit? 7 Α. Yes. Referring to Exhibit 7, which I'm going to hand 8 Q. you, it's a draft. 9 MS. CHAPPELLE: And you don't have a copy 10 of that. My secretary is bringing the notarized copy. 11 EXAMINER EZEANYIM: I don't have a 7, do 12 you? 13 14 EXAMINER BROOKS: No. That's what she just said; we don't have 7. 15 MS. CHAPPELLE: But I will provide that to 16 17 you before the end of the hearing. 18 EXAMINER BROOKS: Okay. (BY MS. CHAPPELLE) So could you please describe 19 Ο. Exhibit 7? 20 EXAMINER EZEANYIM: Do we need to see what 21 he's describing? I need to see the plat. 22 23 EXAMINER BROOKS: It's going to be provided later. I think it would be more efficient to go ahead 24 and have him go through it. I take it this is the 25

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 13 Notice of Affidavit? 1 2 MS. CHAPPELLE: It's the notice of affidavit. She just needs to bring the signed -- the 3 notarized copy. 4 5 EXAMINER EZEANYIM: I thought it was a diagram. 6 7 MS. CHAPPELLE: Oh, sorry. Yeah, I 8 apologize. 9 Α. Exhibit 7 is an affidavit that is attesting to 10 the notice requirements under New Mexico rules. (BY MS. CHAPPELLE) For other interested owners. 11 Ο. 12 Can you please read off, on the next page, the interested owners that were notified? 13 Yes. We were notified -- we notified 14 Α. ConocoPhillips and A.G. Andrikopoulos Resources, Inc. 15 16 Ο. And then there is one more. 17 Α. And Wesley Ingram, with the BLM. 18 MS. CHAPPELLE: So as soon as she gets here with that, I'll submit that one. 19 20 So with that, I'd like to admit Exhibits 1 21 through 6, and then admit Exhibit 7 when she gets here. 22 EXAMINER BROOKS: Okay. Exhibits 1 through 7 will be admitted, and subject to furnishing additional 23 24 copies of Exhibit 7. 25 (OXY USA, Inc. Exhibit Numbers 1 through 7

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 14 were offered and admitted into evidence.) 1 CROSS-EXAMINATION 2 BY EXAMINER BROOKS: 3 I quess I'll start at the end and work Q. 4 5 backwards because it's fresh in my mind. 6 The person you noticed -- you noticed 7 ConocoPhillips, and you noticed Wesley Ingram. There is 8 one other person. What's their interest? 9 Α. Wesley Ingram is --10 Ο. Well, I know who Wes Ingram is. 11 Α. Oh, yes, sir. What's the other person you noticed? 12 Q. 13 Α. Oh. A.G. Andrikopolous Resources, Inc. is an overriding royalty interest owner. 14 Are there any other overriding royalty 15 Ο. interests? 16 Α. No, sir. 17 18 Ο. And these are both federal leases, right? It's one federal lease. 19 Α. 20 Okay. And the one in the southwest quarter, is Q. 21 that a private lease? 22 Α. That's under an existing operating agreement 23 between ConocoPhillips and OXY. 24 Q. But it's a lease of some kind, right? It's part of the same lease. 25 Α.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 15 So this whole -- this whole unit is one federal 1 Q. lease? 2 Yes, sir. 3 Α. And this gentleman -- this group you notified, 4 Q. 5 they're the overriding royalty interest owner? 6 Α. Yes, sir. 7 0. Let's see what else I've got here. 8 The dimensions you have given, the location 9 on Exhibit 6, from the left, or the west end, that's the surface location, right? 10 Α. Yes, sir. 11 Q. And on the east, that's the bottom hole, 12 correct? 13 14 Α. Yes. And then on Exhibit 9 --15 Ο. 16 MS. CHAPPELLE: We haven't gotten there 17 yet. 18EXAMINER EZEANYIM: Haven't gotten to 9. 0. (BY EXAMINER BROOKS) Well, I'm just referring 19 to it because it identifies the landing point. 20 Yes, sir. 21 Α. 22 Do you know if the landing point is going to be Q. approximate -- is the first proration going to be 23 24 approximately at that location, or is that something I should ask another witness? 25

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 16 I'm going to defer to our geologist and 1 Α. 2 engineers that will testify. Ο. Very good. 3 Yes. sir. Α. 4 5 ο. Now, the overhead rates that you've proposed, are those the same as you're currently paying -- or 6 7 you're currently receiving under the terms of the joint operating agreement that applies to part of this unit? 8 Α. Yes. sir. 9 10 Ο. I believe that's all I need to know. 11 EXAMINER BROOKS: Mr. Ezeanyim? 12 MS. CHAPPELLE: So I do have Exhibit 7 now. 13 EXAMINER BROOKS: Good. 14 MS. CHAPPELLE: Do you mind if I approach? 15 EXAMINER BROOKS: You may approach. 16 MS. CHAPPELLE: Thank you. 17 CROSS-EXAMINATION BY EXAMINER EZEANYIM: 18 Q. What is your name, again? 19 Christopher Canon. 20 Α. You went to a good school. 21 Q. 22 Thank you. You can just call me Chris. Α. Ah. 23 Okay. I can call you Chris. Thank you. Ο. 24 Α. Yes. 25 Q. Let's go to Exhibit Number 2.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 17 Yes, sir. 1 Α. I know they're going to ask you that question. 2 Ο. In that one 40-acre -- let me find where they are 3 4 located -- there are two wells to be drilled, right? There's one. The blue dot is the FNR 26 5 Α. 6 Federal #1, and it's an existing well. 7 Is it a horizontal well or a vertical well? Q. Yes, sir. Α. 8 Which one is it? 9 0. It's the vertical. 10 Α. It's a vertical well? 11 Q. The blue dot, yes, sir, is the vertical. 12 Α. And you are going to drill -- who drilled that 13 Q. 14 vertical well? We did. 15 Α. You did. Okay. 16 Q. Actually, I apologize. Our predecessor did. 17 Α. Okay. And do you know when it was drilled? 18 Ο. It was drilled in 1998. 19 Α. 20 So it's producing now; it's already fracked, Q. right? 21 22 Α. Yes, sir. Now, do you know the distance between that well 23 Q. 24 and the one you are proposing? 25 MS. CHAPPELLE: If I may, we do have an

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 18 expert to answer that question more thoroughly, if you'd 1 2 like. 3 EXAMINER EZEANYIM: I quess so. Maybe I 4 have asked the wrong person. 5 Ο. (BY EXAMINER EZEANYIM) I wanted to find out ---6 I'll go back to Exhibit Number 2, because it's very 7 important for our consideration here. 8 Α. Yes, sir. 9 Ο. What Township are we talking about here? It's Township 23 South, Range 30 East. 10 Α. I would like you to -- is it possible for you 11 Ο. to give me a pattern of development in that area, in the 12 area of that township, to show me how the development is 13 14 going in that area? I just got this (indicating) from somebody; something like this (indicating), you know 15 indicating with colors which is yours and which is 16 ConocoPhillips in this township? 17 18Α. Yes. I want to look at the development, and I wanted 19 Q. 20 to see the pattern of development in that area. Yes, sir. 21 Α. 22 Can you provide me a map showing that? Q. And are you -- are you getting at as far as 23 Α. 24 direction of the horizontals or --25 I guess, you know, what we are Ο. No. No.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 19 1 looking at --Α. Yes, sir. 2 -- here in this township, tell me which 3 ο. wells -- which wells are in there, and then I will see 4 if they're horizontal -- indicate them by horizontal, if 5 6 they are vertical. I want to see the pattern of 7 development in that township. That's really my interest. It doesn't have any impact on what you are 8 seeking today, but I'm just --9 10 A. Okay. -- asking, so don't think I'm asking you to get 11 Q. something --12 Α. 13 Oh, no, sir. 14 I want you to relax, and get me that Ο. information. 15 Okay. Yes, sir. Would you like me to follow 16 Α. 17 up with that? I mean, I can --18 Q. Yeah, after the hearing. You can't do it now, 19 so maybe you can get it and --20 I'll be happy to. Α. Okay. 21 Q. Just for my information, to see what's going 22 on. 23 Yes, sir. Α. Now, let's go back to your agreement with 24 Q. 25 ConocoPhillips. Both of you have interest in that well,

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 20 1 50/50. I know Conoco has an interest in that, 50/50 plus -- override this interest. 2 Okay. Now, you mentioned a chronology that you were talking about. 3 Did you talk to a person or just e-mail? 4 5 Α. No, sir. I talked to my counterpart, another 6 landman at ConocoPhillips. 7 Q. At ConocoPhillips. What was it? What did he say? Why are 8 9 they not participating in drilling this well? They were in the process of evaluating, and we 10 Α. had placed -- as Exhibit Number 4 shows, we had 11 negotiated a rough agreement subject to management 12 They originally mailed us an offer of that. 13 approval. 14 We reviewed it and counteroffered, and with our counteroffer, we were waiting on a response either as to 15 approval or a counteroffer from ConocoPhillips, and we 16 17 never heard back. 18 Ο. Well, you know, I tend to think OXY and 19 ConocoPhillips are operators. Α. Yes, sir. 20 And here you say you give them 30 days to 21 Q. evaluate, and after the expiration of the 30 days, you 22 23 went ahead and come to hearing. Α. 24 Yes, sir. 25 0. I know you guys are new to the hearing here,

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 21 but I need to say this. It's better for you guys to you 1 2 negotiate this instead of coming to hearing, because, 3 you know -- I mean, you rush to hearing after 30 days. 4 I would prefer you waited and see whether ConocoPhillips intends to drill this, whether it's economic or not, 5 because if it's economic, I don't see why they shouldn't 6 7 participate in drilling the well. Okay? Uh-huh. 8 Δ. Ο. So rushing in here would be to make me work, 9 10 so -- you know, that's why we're here. If you are not in agreement -- of course, you have the right to be 11 12 here. Yes, sir. 13 Α. But I want due process to take place before you 14 Q. finally come here. 15 16 Α. Uh-huh. I agree with you. We tried over the course of several months. 17 And if you look on Exhibit 4, our original spud date for 18 19that well was going to be in early February, and we 20 pushed the estimated spud date of the well back four 21 times in anticipation of ConocoPhillips getting us a response, and they refused to give us a response. 22 We tried with a lot of effort to accommodate them as much 23 24 as possible, but, unfortunately -- and they understand, 25 as an operator, as much as we do, that we have to move

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 22 forward with our rig schedule. And so that's, 1 unfortunately, the situation that we're in right now. 2 We do not wish to be here, but sometimes, unfortunately, 3 you have to, you know, continue to move forward. 4 5 Q. I'm not trying to let you not come here. You can come here as much as you want. 6 7 Α. Yes, sir. But I wanted something to be done before you 8 Q. That's all I'm saying. I'm not saying that to 9 come. 10 be -- as a lawyer, but for my own purposes, you know, if you have agreed to drill this well 50/50 -- you-all own 11 It's not like it's .0025 in that unit and you 12 50/50. have to go nonconsent. And I'm beginning to wonder why 13 there was no consent. They have 50 percent interest. 14 Ι. mean, you know, unless they think it's not a good well. 15 And then that might be why I may not like you to fund 16 this in this project area, and then you come and say, 17 you know, it's a wash. Why would we allow you to waste 18 that money? And we don't want to do that. Then why is 19 20 ConocoPhillips not consenting? If there is more working 21 interest, I can understand why they are letting it go. But 50 percent and they're not doing anything, I begin 22 to wonder why. 23 Α. Uh-huh. 24 25 Ο. Do you understand what I'm saying?

PAUL BACA PROFESSIONAL COURT REPORTERS

1 A. Yes, sir.

2

3

4

Q. 50/50 is a big interest in that unit.

A. I would have to defer to ConocoPhillips --

Q. I know.

5 A. -- yeah, on that.

But I'm just wondering why they are not trying 6 Ο. 7 to participate in the well. Somebody really has to make that decision, I would think. Well, maybe they think 8 9 this unit is not going to be productive. I mean, if 10 they are 50 percent, why would they go nonconsent and then get compulsory pooled at 50 percent? 11 That means that this is a qusher. I mean, what you're looking for 12 definite oil. See what I mean? You know, from my own 13 perspective, I have to ask this question to you as the 14 land person. 15

Of course, if there is an engineer, I would like to talk to the engineer, so he can tell me what you are expecting from this unit, because we can't just form a unit just to form a unit. We want to form a unit that will be productive.

A. Uh-huh. I think that our geologist and engineer will show to you, with their testimony, that we believe that it is -- it does have a lot of potential, the area does, and --

25 Q. Okay. I understand that. Okay.

Page 23

Page 24 1 And then on Exhibit 4, were you talking -you are a land negotiator, right? 2 Yes, sir. 3 Α. Are you a landman, too? 4 Q. Α. Yes, sir. The title that OXY uses for our 5 6 landman -- for our operations landman is land 7 negotiator, so it's an official title, but I'm a landman 8 by trade. 9 Ο. So there is no difference? No, sir. 10 Α. So on Exhibit Number 4, what are the events 11 Ο. that took place? That's all you did with them, right? 12 Yes, sir. 13 Α. 14 Apart from talking to him -- did you talk to Q. him on the phone --15 16 Α. There were several other e-mails, brief one-line correspondences regarding, you know, estimated 17 18 time for response, things of that nature. As far as important or notable moments in the course of our talks, 19 that's what I was trying to do with this exhibit. 20 You know, in the course of negotiations, as you can see, 21 those were ongoing, several phone calls, but I guess the 22 23 culmination of that was in the offer exchanges between 24 the two companies. 25 And don't get me wrong. We're not trying to Q.

Page 25 discourage you. You have the right --1 2 Α. Oh, yes, sir. -- to drill, but I'm trying to -- since you 3 0. came in here, I'm going to ask you questions to see if 4 it's prudent for us to fund that unit or not. 5 6 Α. Uh-huh. 7 Ο. That would be my exercise. You have the right 8 to do anything you want to do, but now, from our own 9 perspective, we have the right to say, Are you sure you want to do that? 10 Uh-huh. Α. 11 Anyway, I think that's all I have. Some of the 12 Q. questions I have may be for a technical person. 13 14 Α. Yes, sir. 15 I forgot one thing. EXAMINER BROOKS: 16 RECROSS EXAMINATION 17 BY EXAMINER BROOKS: 18 Q. Just to be sure I have this right, you said southeast Forty-Niner Ridge Delaware pool? 19 20 Α. Yes, sir. And this is going to be completed in the 21 Q. Delaware Formation? 22 Yes, sir. 23 Α. 24 And are you asking to pool any other formations Q. 25 or just the Delaware?

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 26 No, sir. 1 Α. Just the Delaware? 2 Ο. Just the Delaware, just the Lower Brushy 3 Α. Canyon. 4 ο. 5 You have to watch that it's the appropriate response. 6 7 Α. Yes, sir. 8 Ο. My colleague asked you if that other one was a 9 vertical or a horizontal and you said yes. It's kind of like --10 It can get confusing. 11 Α. -- when they interviewed Al Capp about Li'l 12 Q. 13 Abner and Daisy Mae and the child. And they asked him. if it was a boy or girl, and he said yes. 14 15 (Låughter.) 16 RECROSS EXAMINATION BY EXAMINER EZEANYIM: 17 18 Q. On your producing rate, is it 740 or 745? Is that what -- your is drilling \$6,700. What is your 19 20 producing rate --Producing rate is --21 Α. 22 Ο. -- overhead? Overhead rate is approximately \$740 a day. 23 Α. 24 Okay. And is that -- I know he asked you that Q. 25 but is that normally ten percent -- ten percent of the

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 27 drilling rate? 1 I believe so. 2 Α. But this is not? Ο. 3 Α. Excuse me? 4 But this is not? 5 Q. 6 Α. This is not? 7 Q. This is half? Yes. Under our existing operating agreement, 8 Α. 9 it's adjusted. 10 Ο. Okay. Α. So that's the reason for it being higher. 11 Okay. As long as it's --12 Q. Α. Uh-huh. It's consistent with COPAS. 13 14 Q. Okay. Good. EXAMINER BROOKS: Counsel, anything 15 further? 16 17 MS. CHAPPELLE: I do have just a few 18 follow-up questions, if you don't mind. 19 REDIRECT EXAMINATION BY MS. CHAPPELLE: 20 Mr. Canon, if you can take a look at Exhibit 4, 21 Q. I just want to clarify the record real quick. 22 23 Α. Yes. Can you tell me what date the well response --24 Q. 25 proposal -- I'm sorry -- was due from ConocoPhillips?

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 28 The response was due May 2nd, 2013. 1 Α. Okay. And since you don't have this file, I'm 2 Q. going to hand it to you again. 3 MS. CHAPPELLE: It's our application, 4 5 Mr. Hearing Examiner. 6 Q. (BY MS. CHAPPELLE) And just to make sure I 7 understand, what date -- and this is Exhibit 5. What 8 date was the well proposal sent out, first page of 9 Exhibit 5? The letter is dated March 21st -- 28th. 10 Α. Could you please tell me what date we filed the 11 Ο. application for forced pooling? 12 Α. May 16th, 2013. Excuse me. June 27th. 13 What is it here? 14 15 EXAMINER EZEANYIM: Today is June 27th. 16 Yeah, today is June 27th. Α. 17 0. (BY MS. CHAPPELLE) What's the date on the cover 18letter of the application, that page you're looking at right now? 19 20 Ά. May 16th. Okay. Thank you. That's all I have. 21 Q. 22 EXAMINER BROOKS: Thank you. Are you 23 through? 24 MS. CHAPPELLE: I'm through with this 25 witness.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 29 EXAMINER BROOKS: Okay. The witness may 1 step down. 2 You may call your next witness. 3 THE WITNESS: Thank you. 4 5 MS. CHAPPELLE: I'd like to call our geologist, Richard Erickson, please. 6 7 RICHARD J. ERICKSON, 8 after having been previously sworn under oath, was 9 questioned and testified as follows: 10 DIRECT EXAMINATION BY MS. CHAPPELLE: 11 Mr. Erickson, please state your full name for 12 Ο. 13 the record. My name is Richard John Erickson. 14 Α. And have you ever testified before this 15 Ο. Division before? 16 17 Α. I have not testified in New Mexico before. Ŧ 18 have testified before the Oklahoma Corporation Commission for about 31 years, and I've been found to be 19 20 an expert witness there. MS. CHAPPELLE: If it please the Hearing 21 22 Examiners, I'd like to qualify this witness as an expert. 23 24 EXAMINER BROOKS: Proceed. 25 MS. CHAPPELLE: Thank you.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 30 (BY MS. CHAPPELLE) Please give me your 1 0. background, your work experience, your current position 2 3 and your gualifications. 4 Α. I have a master's degree in geology from 5 Louisiana State University from 1982. I began working in the petroleum industry for Texaco in New Orleans in 6 I started working in Oklahoma in 1980, and I have 7 1978. worked on various geologic projects in New Mexico, 8 Texas, Kansas and Oklahoma for about 30 years. 9 10 MS. CHAPPELLE: If it pleases the Hearing Examiners, I'd like to submit this witness as an expert. 11 EXAMINER BROOKS: Okay. Have you reviewed 12 13 the geologic matters relevant to this application? 14 THE WITNESS: Yes, I have, and I prepared 15 the exhibits. 16 EXAMINER BROOKS: Thank you, sir. The witness is so qualified. 17 18 MS. CHAPPELLE: Thank you, sir. Ο. (BY MS. CHAPPELLE) Mr. Erickson, could you 19 please describe and turn to Exhibit 8? 20 Exhibit 8 is a structure map of the proposed 21 Α. 22 well area. The well that we've got is in the south 23 half --24 EXAMINER BROOKS: Well, Exhibit -- oh, 25 okay. Yeah. I'm sorry. I see.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 31 A. The well that we're proposing is in the south half-south half of Section 26. It will be drilled into the Lower Delaware, specifically into the Brushy Canyon Formation A2 Sand, and the lateral will run through that sand.

6 This map is a structure map drawn on the 7 top of that sand. The structural contours are 20 feet, 8 and looking at this map, you'll see that the structure 9 contours run roughly north-south and that there is a 10 general dip to the east. It dips to the east, and it 11 thickens slightly as you go to the east.

It shows the location of two wells, the 12 existing FNR 26 Federal #1, which is a vertical well in 13 14 the center of the southwest-southwest of 26. It also shows the FNR 28 -- I'm sorry -- 26 Fed 4H well. 15 The 16 surface location is on the western part of that red line, which represents the well course, and the 17 bottom-hole location is on the east end of that line. 18 19 It shows the outline as a dark black-dashed

20 line as the proposed outline for the 160-acre spacing 21 and proration unit, and within that there is a dot-dash 22 green line that shows the outline of the producing zone 23 within that proposed unit, the producing zone being a 24 space not less than 330 feet from the unit boundary. 25 Q. Thank you, Mr. Erickson.

Page 32 If you could please proceed to Exhibit 9 1 and describe that exhibit. 2 Exhibit 9 is a detail of the southwest corner 3 Α. 4 of Section 26, where we have our surface location for 5 the proposed well, which is FNR 26 Fed #4H, and the 6 location of the existing vertical well, the FNR 26 Fed 7 #1. That existing well is 660 from the south line, 660 8 from the west line. Our well will be 373 feet from the 9 west line and 670 -- I'm sorry -- 670 feet from the 10 south line. 11 And it looks like the well goes right 12 through the middle of the existing well. It does not. 13 It passes very close, but it passes within the 14 anticollision tolerances that we use at OXY. So it will 15 not hit or intercept that well. It will pass to the north of it. 16 17 It also shows -- on Exhibit 9, there is a little line called -- it says "build curve," coming from 18 the surface location and building the curve part going 19 from a vertical to a horizontal, but curving the well, 20 21 and we'll build the curve through, and reaching a 22 landing point 1,080 feet from the west line. And from 23 there, the well will be roughly horizontal, crossing to the east part of that section. 24 25 Q. Thank you, Mr. Erickson.

| Page | 33 |
|------|----|
| raue | 55 |

1 If you could please turn to Exhibit 10 and describe that exhibit for the Hearing Examiners. 2 Exhibit 10 is a vertical profile of the well, 3 Α. 4 the proposed well, along the line of the well path. So. 5 basically, that is Exhibit 9 turned 90 degrees. And you 6 can see, on the left-hand side of that exhibit, the 7 surface location. The well will be drilled vertically, down to approximately 3,500 feet below sea level, and 8 9 that will curve. And it will hit a landing point at a 10 depth of minus 4,310 feet subsurface true vertical 11 depth, and it will go to the east. It will -- since the 12 bed dips to the east, it will drop with the bed. It 13 will actually be drilled about 35 feet below the top of 14 the formation, so it will be 35 feet into the formation. 15 And we will follow about 35 feet into the formation downward, as the bed dips to the east, and end up about 16 minus 4,360 feet subsea true vertical depth at the toe, 17 or TD end of the well. 18 19 Ο. Thank you, Mr. Erickson. If you could please proceed to Exhibit 11 20 and describe the cross section. 21 22 Α. Okay. Exhibits 11 and 12 need to go together. 23 It's a cross section. Exhibit 12 is a map showing the 24 location of the cross section. And this is -- the main 25 purpose of this exhibit is to show the vertical well,

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 34 which is right next to the vertical part of the 1 horizontal well. And we can see, in the vertical well, 2 3 FNR 26, the well on the left of the cross section, this cross section is drawn on the top of the A2 Sand, and it 4 5 is the horizontal red line that runs across this cross section. 6 7 And you see about 35 feet in a dark blue line, the A2 proposed lateral, and then the bottom of 8 the main A2 zone is a red line below that. 9 10 The cross section goes from the FNR 26 Federal #1 well at the northwest end, going to the Devon 11 Blackjack well about two miles to the southeast. 12 EXAMINER BROOKS: So this diagonal red line 13 is a cross section. 14 15 THE WITNESS: Yes. The diagonal line on 16 the map is the cross section. 17 EXAMINER BROOKS: Usually they're labeled A 18 to A prime. THE WITNESS: Yeah. I just labeled the 19 wells. 20 EXAMINER BROOKS: That's the reason I 21 didn't recognize it as a cross section. 22 23 THE WITNESS: Yes. 24 EXAMINER BROOKS: Okay. Go ahead. Anyway, if you look from those two wells, 25 Α.

PAUL BACA PROFESSIONAL COURT REPORTERS

| 1 | Page 35 you'll see the southeastern well, the Blackjack well; |
|----|---|
| 2 | |
| | the zone gets a little bit thicker. And we'll stay |
| 3 | pretty much right in the middle of that A2 zone. It |
| 4 | shows that the zone is continuous. I didn't bring in |
| 5 | other cross sections, but I've made many other cross |
| 6 | sections in the area, and it shows that the A2 Sand is |
| 7 | continuous reservoir all across the proposed 160-acre |
| 8 | unit. And our horizontal plan for developing that well |
| 9 | would effectively drain it. It would protect |
| 10 | correlative rights, and it would prevent waste by |
| 11 | drilling this horizontal well in that unit. |
| 12 | Q. (BY MS. CHAPPELLE) Thank you, Mr. Erickson. |
| 13 | Can you please address Hearing Examiner |
| 14 | Ezeanyim's pattern of development question, specifically |
| 15 | the discussion of potash in the area? |
| 16 | A. Yes. I'm glad you brought that up. This is |
| 17 | critical to understanding. If we can go back to Exhibit |
| 18 | Number 8. That's the structure map. This area is an |
| 19 | active area of potash mining. There are active mines |
| 20 | already underground and mining in the northern edge of |
| 21 | that map, and they are mining to the south. And those |
| 22 | mines will eventually come through Sections 23, 26 and |
| 23 | probably down into 35. |
| 24 | So because the mines can't come right up |
| 25 | and mine up to one of our wells, we have to restrict |

Page 36 1 where we are allowed to drill. So we are drilling --2 the current plan for most of the wells in those sections would be to drill from west to east, across those. 3 And the potash is at about 800 feet below the surface. 4 5 These wells are about 7,800 feet. So we are about -we're roughly a mile below the potash vertically, so 6 we're well underneath it. 7 8 Q. Thank you, Mr. Erickson. 9 Did we bring someone here today to discuss 10 well completion and also the issues regarding well proximity? 11 I think we have another witness for that. 12 Α. Yes. If I may add one more thing to address your 13 question about pattern of development. Because this is 14 potash and right out here (indicating) the horizontal 15 wells are fairly new, there are several horizontal wells 16 shown on Exhibit 8. Two, one in the south half of 17 18 Section 24 and one in the north half of Section 25, are off to the east of us. Those are Bone Spring horizontal 19 They are drilled from west to east. 20 wells. They're falling in, basically, the same 160-acre producing unit 21 that we'll be using. 22 23 There are other wells. The Chesapeake 24 Los Medanos in Section 36 and the Chesapeake well in 25 Section 23, those run north-south, but those are for the

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 37 Bone Spring, specifically the 2nd Bone Spring sand. 1 But 2 we anticipate that we will develop this area with a series of east-west wells to develop the Brushy Canyon 3 A2 zone. 4 EXAMINER EZEANYIM: See, that's why I asked 5 that question, because of the potash in that area. 6 Ι 7 wanted to see how you are handling your agreement with the potash in that area. And that's why I requested 8 9 that, you know, map. 10 THE WITNESS: Yes. 11 EXAMINER EZEANYIM: In the area, we have -oil production is going, and then where the potash is 12 and everything. I don't know where exactly you guys 13 are, but this is new -- of course, when we go into the 14 15 process, I can ask you those questions. But that's why I was asking the landman to give me that plat so that I 16 can look at the development in the area, especially in 17 18 relation to what is going on with the mining. That's really why I asked that question. 19 20 THE WITNESS: We have met extensively with 21 BLM in Carlsbad, talking about this development. We'll probably have a drilling island in the northeast corner 22 of Section 26. 23 24 EXAMINER EZEANYIM: They told you that? 25 You have an agreement?

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 38 1 THE WITNESS: Yeah, that's what we're 2 thinking. And you can see, there is a cluster of 3 4 wells in the northeastern corner of 26, extending into the adjacent sections, and they're all starting from 5 right in that little corner. 6 7 And then given the existing wells, for example, the well that we're going to drill, is right 8 next to an existing well, and so that area is limited 9 already by the existing well for potash mining. 10 11 EXAMINER EZEANYIM: Okay. Go ahead. 12 0. (BY MS. CHAPPELLE) With respect to the exhibits 13 you've referred to today, Mr. Erickson, were these 14 exhibits prepared by you or under your direction? 15 Α. I prepared them all. MS. CHAPPELLE: With that, I'd like to 16 17 submit Exhibits 8 through 12 for the record. 18 EXAMINER BROOKS: 8 through 12 are 19 admitted. 20 (OXY USA Exhibit Numbers 8 through 12 were 21 offered and admitted into evidence.) 22 MS. CHAPPELLE: With that, I pass the 23 witness. 24 EXAMINER BROOKS: Very good. I have no 25 questions.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 39 1 Mr. Ezeanyim? 2 EXAMINER EZEANYIM: Okay. Thank you. Ι 3 have some questions. 4 CROSS-EXAMINATION BY EXAMINER EZEANYIM: 5 You said this well is going to be in the Brushy 6 Q. 7 Canyon? Α. Yes. 8 The A Sand? 9 Ο. Yes, the A Sand. 10 Α. 11 Q. For the horizontal well, right? 12 Α. Yes. 13 Q. The vertical well, where is it from the A Sand? 14 Α. If you look at the cross section, which is Exhibit 11 --15 16 Q. 11. -- the existing well has actually commingled 17 Α. from production in Bone Spring lime. The Bone Spring 18 2nd Sand is below this. 19 They're both commingled? They are both 20 Q. commingled? 21 Α. Yes. 22 23 And it is also producing from the A4, which 24 is marked by the A4 red perforations on the left-hand 25 side of that cross section.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 40 Q. 1 Okay. 2 Α. Our perforations -- our lateral will be roughly 90 feet below the existing perforations in the current 3 vertical well. 4 Ο. Okay. You done? 5 Α. Yes, yes. 6 7 Ο. Go back to Exhibit Number 8. That is the structure map. 8 Α. 9 Yes. Do you have any net isopach maps? I needed to 10 Q. see that net isopach map to see what -- can you get 11 12 that? 13 Α. I do not have a net isopach of it. The zone is 60 feet -- well, actually, it's a little more than 60 14 feet thick in this, and it does thicken to the east. 15 Part of the problem with the net isopach map is that 16 there are very few penetrations out there. 17 That's the problem. 18 Q. 19 Α. Yes. That is the problem. 20 I need to see that Q. 21 isopach map. See, you don't want to drill into a 22 pinch-out. 23 Α. And I'm quite sure we won't. I think -- I No. think the cross section establishes the fact that the 24 25 zone is continuous all the way across --

PAUL BACA PROFESSIONAL COURT REPORTERS

Q. Yeah, I can see.

1

2 Α. -- thickens to the west. Other isopach --3 other maps and other cross sections in the area establish that it is definitely there, so I have 4 5 absolutely no concern at all that we pinch-out or lose 6 The established. The present in that -- in our zone. 7 the Devon Blackjack well. It's also present in the 8 Strata Roadrunner well in the northwest-northwest of That well -- that zone is present here 9 Section 25. 10 (indicating). These are all fairly new wells, and the logs have not all been completely released. And some of 11 these horizontals, there are no open-hole logs. 12 13 Q. And why is that? 14 Α. Because the operators felt they were not 15 necessary. Okay. I see -- you know, the way you use the 16 Ο. word "continuous," that's speaking from experience, when 17 you say "continuous." Where you are really going to, 18 19 it's not continuous. And that's why I wanted to see that net isopach map and look at your well and see what 20 you're doing out there. Are you saying that you can 21 22 come back with a net isopach map? Can you do that? 23 Α. I don't have one today. 24 Oh, yeah, but if you can do it --Ο. 25 Α. Oh, yeah.

Page 41

| | Page 42 |
|----|--|
| 1 | Q. I mean, I'd like to have that |
| 2 | A. Okay. |
| 3 | Q so that I can associate it with what you're |
| 4 | saying. This is just a structure map. |
| 5 | A. Yes. |
| 6 | Q. This is just a structure map. And I can say, |
| 7 | Yeah, it looks like it's continuous, but from |
| 8 | experience, when you go you know from experience that |
| 9 | you start seeing pinch-outs everywhere, but if you can |
| 10 | give me a net isopach map, I can I can begin to |
| 11 | understand what is going on there. |
| 12 | A. I can provide that. It would verify really |
| 13 | what nothing more than what that cross section |
| 14 | already establishes. |
| 15 | Q. That would be very informative. |
| 16 | A. I can get that. |
| 17 | Q. I will write down as one of the things you are |
| 18 | going to get, this map this type of map (indicating) |
| 19 | in the production area and also the net isopach map. |
| 20 | A. Okay. Very well. |
| 21 | Q. Okay. I hope your counsel is taking note of |
| 22 | what I need with this, because it's a sensitive area. |
| 23 | And, again, let's go back to that FNR #1. |
| 24 | That vertical well. Of course, when you look at it, it |
| 25 | looks like it crosses what is your tolerance, OXY, |
| | |

Г

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 43 for the well from there to -- you know, your tolerance? 1 You say the tolerance is this many. The tolerance you 2 3 always have between wells, what is that tolerance? Α. The tolerance depends on how well we know the 4 5 position of the well. A lot of these old vertical wells 6 were built with no good vertical survey. We have gone back into the existing vertical well and we ran a gyro 7 survey, so we know exactly where it is. 8 9 Ο. I would like you to have run a microseismic, 10 because, you know -- or even you can do it with a raw 11 simulation to see what -- you know, because you are 12 going to -- you are going to have to frack this well. 13 There is no way you can drill it unfracked. 14 Α. That's true. And I'm concerned about it being close to that 15 Q. vertical well that's producing. 16 I won't speak to it, but we have a witness with 17 Α. exhibits who is prepared to speak to exactly that 18 19 question. 20 Ο. Okay. Very good. That's what I want to hear, because I don't want complications. I have seen 21 complications when they are close like that, and we want 22 to avoid that, you know. I'm not saying you're not 23 going to drill your well, but we need to take 24 25 precautions on drilling that well, you know.

PAUL BACA PROFESSIONAL COURT REPORTERS

| | Page 44 |
|----|--|
| 1 | A. Yeah. |
| 2 | Q. What I'm saying is that oh, he's very hard. |
| 3 | No, I'm not. I'm just trying to point out what I think |
| 4 | we may have to do to be able to approve this nonstandard |
| 5 | unit and maybe compulsory pooling. I don't know. But |
| 6 | my concerns are, I don't know how close that horizontal |
| 7 | well is to the vertical well, which is still producing. |
| 8 | It's not plugged and abandoned. So we still have a |
| 9 | possibility there might be complications to frack this |
| 10 | horizontal well between those two wells. |
| 11 | A. This is a matter of concern that we have |
| 12 | specifically addressed and which a later witness will |
| 13 | discuss. |
| 14 | Q. Okay. |
| 15 | A. Concerning concerning the distance between |
| 16 | the vertical well and the horizontal, I believe it's |
| 17 | like 90 feet, but it's way uphole. It's in the |
| 18 | build. It's way above where we're going to be fracking. |
| 19 | Q. Is that what you are indicating here, 90 feet? |
| 20 | A. Yeah. |
| 21 | Q. It's Exhibit 11? |
| 22 | MS. CHAPPELLE: We've got a better exhibit. |
| 23 | EXAMINER EZEANYIM: What's that? |
| 24 | MS. CHAPPELLE: We have a better exhibit. |
| 25 | A. A better exhibit for that. |
| | |

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 45 EXAMINER EZEANYIM: Okay. Somebody's 1 2 coming. 3 Α. We'll see that. Q. (BY EXAMINER EZEANYIM) Okay. 4 5 Α. But the thing is, where the two wells cross, it's way uphole. It's in the curve. It's not in the 6 7 lateral. So it will be considerably uphole from where we would be doing our treatment and fracking. 8 9 Okay. Very good. Ο. But I'll let the other witnesses testify. 10 Α. One more question. 11 Q. 12 Α. Yes. This is the -- when we talk about potash 13 Q. 14 mining, there are two operators. There is Mosaic and Intrepid. Did you ever talk to them? 15 16 Α. We don't talk to them directly. We talk to --17 at least I don't. We talk to BLM, and they talk to 18 them. The BLM showed them our proposed locations, and the potash had no objections. And that's what the BLM 19 20 told us at a recent meeting. Okay. Very good. I just wanted to get that 21 Ο. out of the way --22 23 Α. Yeah. 24 -- that they have no objection, because they're Q. 25 ambitious over there and not allow you guys to drill,

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 46 1 which is frustrating. But that's okay. At least I am 2 happy they are not objecting. Is that what you said? We have met with BLM, and we have gone 3 Α. Yeah. 4 through the core data on the potash. We know there is a 5 core that's just north of this well that had no potash 6 ore. 7 Ο. Okay. The horizontal well is produced from 8 A Sand, and the vertical well is producing, you said, 9 downhole, commingling with the A Sand -- A2 Sand and what? 10 Α. And Bone Spring. 11 12 Q. Bone Spring. Yeah, two Bone Springs, the Bone Spring 13 Α. 14 carbonate and the 2nd Bone Spring sand. Okay. That's all I have. 0. 15 16 EXAMINER BROOKS: I have just one more 17 question here because of some of the questions that were 18 asked here. 19 CROSS EXAMINATION BY EXAMINER BROOKS: 20 21 Q. The well that's depicted in Section 36 --22 Α. Yes. -- that well is not in the Delaware? 23 Ο. 24 Α. That is producing in the Bone Spring. 25 Q. Okay.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 47 It's also on state land, and BLM has very 1 Α. 2 limited ability to interfere with what they do. 3 Q. Okay. And then the well down in Section 1 4 that's depicted on Exhibit 12, what formation is that 5 in, the horizontal? That horizontal, I'm not -- I don't recall if 6 Α. it's in -- I believe it's in the Delaware. 7 I'm not entirely sure. 8 9 Q. Okay. The Blackjack Federal, the vertical well that's 10 Α. in the cross section, is Delaware. 11 12 Q. Right. Okay. And then you said you had identified 13 14 this same zone and the well up in the east half-east half of 23? 15 16 Α. 25. It's the one labeled. 17 Q. Oh. The north half-north half of 25, Strata 18 Roadrunner Fed #1H? Α. 19 Yes. So, basically, however you depict it, your 20 Q. conclusion is, this zone extends across -- Unit 26 is 21 basically based on what you find in the Blackjack and 22 23 what you find in the Strata Roadrunner, correct? 24 Α. That is correct. And it's also present in 25 wells off the map to the east. It's rather extensive.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 48 We're also developing it to the south. 1 2 Q. Right. 3 Α. So it's a pretty continuous zone. It does not 4 pinch out in this area. It pinches out off to the east, 5 but several miles -- I'm sorry -- to the west, but many 6 miles to the west. 7 Ο. So in your opinion, is it probable that this proposed south half-south half of 26 unit will be more 8 9 or less continuously productive across the proposed 10 unit? That's correct. 11 Α. 12 Q. Thank you. That's all I have. 13 EXAMINER EZEANYIM: We need that isopach 14 map. 15 THE WITNESS: Okay. 16 EXAMINER BROOKS: Anything further from 17 counsel? 18 MS. CHAPPELLE: I do just have two follow-ups, Mr. Hearing Examiner. I did get a note from 19 our previous witness, the landman, to answer the Hearing 20 21 Examiner's question about notice to potash, and I can bring him up to get that on the record if you like. 22 23 EXAMINER BROOKS: I don't think that's 24 pertinent because BLM drilled the well. 25 MS. CHAPPELLE: The other thing pertinent

PAUL BACA PROFESSIONAL COURT REPORTERS

| | Page 49 |
|----|--|
| 1 | to Hearing Examiner Ezeanyim's questioning, we do have a |
| 2 | little more detail on the cross section, if you-all |
| 3 | would like to see that. We can also offer the |
| 4 | supplement with the isopach map, but I can supplement |
| 5 | that as Exhibit 11A, if you would like. |
| 6 | EXAMINER BROOKS: That's up to |
| 7 | Mr. Ezeanyim. |
| 8 | EXAMINER EZEANYIM: Yeah. Oh, yeah, we |
| 9 | accept anything. |
| 10 | MS. CHAPPELLE: I'm sorry. I'll just have |
| 11 | the witness discuss it a little. |
| 12 | REDIRECT EXAMINATION |
| 13 | BY MS. CHAPPELLE: |
| 14 | Q. Mr. Erickson, if you wouldn't mind describing |
| 15 | that exhibit, please. |
| 16 | A. I had to fit everything onto legal paper. The |
| 17 | FNR 26 Federal #1 vertical well got a little bit |
| 18 | squashed, so there is a slightly expanded version of it |
| 19 | that is shown on Exhibit 11A. You can see the BC A4 top |
| 20 | shown on this map just above the perforated interval and |
| 21 | the perforated vertical are shown. Then down deeper is |
| 22 | the BC A2. And our lateral will be about 90 feet below |
| 23 | the existing prorations. It's just a little bigger view |
| 24 | of the same log. |
| 25 | EXAMINER EZEANYIM: And this is the |
| | |

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 50 vertical well. 1 2 THE WITNESS: This is the vertical well, 3 yes. 4 EXAMINER EZEANYIM: Okay. Thank you for that. 5 EXAMINER BROOKS: Ouestions? 6 7 EXAMINER EZEANYIM: No. EXAMINER BROOKS: Very good. The witness 8 may step down. 9 10 Let's take a ten-minute recess. 11 (Break taken, 9:22 a.m. to 9:35 a.m.) EXAMINER BROOKS: Back on the record. 12 13 You may call your next witness. 14 MS. CHAPPELLE: I'd like to call Bruce 15 Gerrard, please. 16 BRUCE A. GERRARD, 17 after having been previously sworn under oath, was 18 questioned and testified as follows: 19 DIRECT EXAMINATION 20 BY MS. CHAPPELLE: Mr. Gerrard, can you please state your name? 21 Ο. Bruce Andrew Gerrard. I'm the senior 22 Α. 23 production operations engineer at OXY. 24 Q. Mr. Gerrard, have you been qualified as an expert or testified before this Division in the past? 25

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 51 1 Ά. No, I have not. 2 MS. CHAPPELLE: I'd like to gualify this witness as an expert, please. 3 4 EXAMINER BROOKS Proceed. (BY MS. CHAPPELLE) Mr. Gerrard, please give us 5 Ο. your background, including education, experience and 6 qualifications for being an expert in this case. 7 All right. I have a technical diploma from the 8 Α. 9 Northern Alberta Institute of Technology in Alberta, 10 Canada, and I also have an engineering degree from the 11 University of Calgary in mechanical engineering, with a 12 petroleum minor. 13 I have a professional status in the province of Alberta, including a professional 14 15 designation. I have 15 years of petroleum engineering 16 experience, touching on production work whether it's 17 facilities, operations, reservoir and completions. And the majority of the experience is completions in 18 production. I've worked in British Columbia, Alberta --19 20 British Columbia, Alberta, Canada and in Wyoming, United 21 States. 22 Do you have knowledge of the subject ο. application, and have you reviewed it? 23 24 Α. Yes, I have, and yes, I do. 25 MS. CHAPPELLE: With that, I'd like to

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 52 tender him as an expert. 1 2 EXAMINER BROOKS: He is so qualified. MS. CHAPPELLE: Thank you. 3 4 EXAMINER EZEANYIM: Can you state your 5. name, again? 6 THE WITNESS: Bruce Gerrard. 7 EXAMINER EZEANYIM: Can you spell that last 8 name? 9 THE WITNESS: G-E-R-R-A-R-D, Gerrard. 10 EXAMINER BROOKS: And one other comment. 11 It's not necessary here to ask for permission to qualify 12 the witnesses. It's customarily done. We always expect it. 13 14 MS. CHAPPELLE: Thank you. I didn't want 15 to presume. (BY MS. CHAPPELLE) Mr. Gerrard, if you could 16 Ο. please turn to Exhibit 13 and describe that exhibit for 17 18 the Hearing Examiners. 19 Α. So Exhibit 13 is the proposed completion scheme for this well. It is a 13-stage packer sliding sleeve 20 completion, with each stage receiving roughly 130,000 21 pounds of sand. Of course, the completion will start at 22 the toe and move back towards the heel. And as we move 23 more towards the heel, we move towards the vertical FNR 24 25 well.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 53 We have a seven-inch casing down to the --1 to the heel section, or the landing point, and this is a 2 3 very standard completion in this area. Thank you, Mr. Gerrard. 4 Ο. 5 Can you please turn to Exhibit 14 and 6 describe that exhibit? 7 Α. Exhibit 14 is just for the detail. It's 8 showing that we've gone through the exercise with our 9 service company, Baker Hughes, showing just a little bit more detail on the completion itself where the ports and 10 the packers are going to be set within the horizontal 11 section, in more detail, the very last packer inside of 12 13 the casing. And then you have the liner top in the vertical section to the far left and then also being a 14 bit more explicit where those sliding sleeves, those 15 16 ports. Thank you, Mr. Gerrard. 17 Ο. 18 Please move to Exhibit 15 and briefly describe that exhibit. 19 Exhibit 15 is the actual proposed survey 20 Α. Okav. of the drilling of the Federal 12 and 4H, and it just 21 shows the build section, the lateral section itself and 22 23 the estimated casing point. 24 Ο. Thank you. 25 Landing point. Sorry. Α.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 54 1 Q. Thank you. 2 Moving to Exhibit 16, Mr. Gerrard, please describe that exhibit. 3 Α. So Exhibit 16 is our estimated production from 4 5 this horizontal well. We're looking at an estimated 380 6 barrels a day of oil. The gas will eventually come on 7 at maybe four MCF. It shows it a little bit higher 8 here. And 2,000 barrels of water a day. 9 EXAMINER EZEANYIM: Excuse me. Could you 10 speak a little louder? THE WITNESS: A little louder? 11 EXAMINER EZEANYIM: Yeah, please. 12 13 Α. We're expecting a peak oil rate of maybe 380 14 barrels a day; a peak water rate of about 2,000 barrels a day. 15 16 EXAMINER EZEANYIM: 380. THE WITNESS: Yeah. 17 18 EXAMINER EZEANYIM: For the four units. 19 THE WITNESS: Yeah, for the horizontal 20 well. EXAMINER EZEANYIM: That's not impressive. 21 I want it to be 1,000 or more. 22 That's 380. THE WITNESS: Well, this is what we submit 23 when do our economics and AFE. 24 25 EXAMINER EZEANYIM: Okay. I mean, if there

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 55 is no oil, there is no oil there. So you can do an 1 I just want them to come on very prolific. 2 adjustment. 3 THE WITNESS: It's somewhat conservative. EXAMINER EZEANYIM: Yeah. Okav. 4 (BY MS. CHAPPELLE) Responsive to Hearing 5 Ο. 6 Examiner Ezeanyim's questioning about the proximity of 7 the well location, I would like to add two exhibits to 8 the packet that you have. 9 MS. CHAPPELLE: If I might approach? 10 EXAMINER BROOKS: You may. 11 0. (BY MS. CHAPPELLE) I've labeled these two 12 exhibits 17 and 18. Mr. Gerrard, would you please 13 describe Exhibit 17? Okay. Exhibit 17. What we've done is, we 14 Α. decided to take a look at both the initial -- the 15 fracture stimulation [sic] that was on the vertical well 16 and also an idea of the drainage radius that we expect 17 on a vertical well, keeping in mind this was dual 18 19 completed in the Bone Spring and the Brushy Canyon. 20 So what you're looking at here is the estimated frack radius for the initial completion, which 21 took 42,000 pounds of sand, and then you have an 22 estimated drainage radius, assuming that the Bone Spring 23 does make no oil and all the oil came out of the Brushy 24 25 So it's a very conservative approach to giving Canyon.

PAUL BACA PROFESSIONAL COURT REPORTERS

1 the largest drainage area.

2 If we were to assume a third of the 3 production comes from the Brushy Canyon Delaware, that drainage radius would actually only be about 100 feet. 4 So it would be less than the estimated frack radius. 5 So 6 if this comes into play, we'll be looking at communication between wells; if you were to fracture 7 8 them, would they be talking to each other. 9 EXAMINER EZEANYIM: Can you repeat that? 10 Repeat what you just said. 11 THE WITNESS: Okay. 12 EXAMINER EZEANYIM: And repeat it so I can 13 hear it. THE WITNESS: Okay. So the frack radius 14 was estimated at 150 feet on the vertical well. 15 What we did when we modeled this is, we assumed all of the oil 16 production on a vertical well came from the Delaware. 17 EXAMINER EZEANYIM: That's your assumption. 18 19 THE WITNESS: Just for -- just for this purpose here, of collision between the fractures 20 21 themselves, to find out the worst case. So what you're seeing here is a worst-case scenario. 22 23 EXAMINER EZEANYIM: Okay. 24 Ο. (BY MS. CHAPPELLE) Mr. Gerrard, just to clarify, would you say that the assumptions that went 25

Page 57 into this with respect to worst case are the most 1 conservative you could use? 2 They are the very most conservative that can be 3 Α. 4 used. 5 Q. How likely is it that this depicted worst case would actually occur? 6 7 Not very likely at all. Α. 8 So, Mr. Gerrard, please give us, as a Ο. comparison, what the likely scenario is with respect to 9 this exhibit. 10 So the likely scenario is that the 11 Α. Okay. Delaware Formation has only got a rough radius drainage 12 area of 100 feet from its wellbore, not to depict the 13 14 245. And with respect to that, Mr. Gerrard, what's 15 Q. 16 the likelihood of these two wells either communicating 17 or interacting in any way? 1.8 Α. It's not very likely at all. 19 Q. With that, I'd like to move to Exhibit 18. EXAMINER EZEANYIM: 20 What? 21 MS. CHAPPELLE: Oh. I'd like to go to 22 Exhibit 18. 23 THE WITNESS: Sirs, was I clear with Exhibit 17? 24 25 EXAMINER EZEANYIM: You have to talk to the

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 58 Examiner. I don't know what's going on. 1 2 EXAMINER BROOKS: Yeah. Go ahead. Proceed. 3 MS. CHAPPELLE: Thank you, sir. 4 5 Q. (BY MS. CHAPPELLE) Could you please describe 6 what Exhibit 18 depicts? Exhibit 18 is trying to depict the side profile 7 Α. of what we're seeing downhole on this completion system 8 and the likelihood that the fractures would intersect 9 10 with each other or the drainage, or the horizontal fractured well would interfere with the drainage radius 11 of the vertical well. And so it's just another way of 12 looking at it, and it's just trying to show you that the 13 likelihood that our horizontal well will interfere with 14 the vertical well is very, very low. 15 16 Q. Thank you. 17 MS. CHAPPELLE: And with that, I'd like to pass the witness with respect to questions from the 18 19 Hearing Examiner. 20 EXAMINER BROOKS: Okay. Are you offering these exhibits? 21 22 MS. CHAPPELLE: Thank you, sir. 23 EXAMINER BROOKS: Which ones? 24 MS. CHAPPELLE: Yes, sir. With that, I 25 offer -- I'm sorry.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 59 (BY MS. CHAPPELLE) Mr. Gerrard, did you 1 Q. prepare or supervise the preparation of exhibits marked 2 13 through 18? 3 Α. Yes, I did. 4 5 MS. CHAPPELLE: And with that, I tender the exhibits and the witness. 6 7 EXAMINER BROOKS: Okay. Exhibits 13 through 18? 8 9 MS. CHAPPELLE: Yes, sir. 10 EXAMINER BROOKS: 13 through 18 are admitted. 11 (OXY USA Exhibit Numbers 13 through 18 12 13 were offered and admitted into evidence.) 14 EXAMINER BROOKS: I have no questions. 15 Mr. Ezeanyim? 16 CROSS EXAMINATION 17 BY EXAMINER EZEANYIM: Well, the question I have -- go back to 17. 18 Ο. How do you determine those frack radius and drainage 19 20 radius? How did you determine that? How did you determine the frack radius and the drainage radius? 21 22 Α. Okay. So the fracture radius, what I did is, I took the existing completion from the well, and I 23 modeled it with a frack program called StimPlan. 24 25 Is that a kind of model? 0.

PAUL BACA PROFESSIONAL COURT REPORTERS

| | Page 60 |
|----|--|
| 1 | MS. CHAPPELLE: Yes. |
| 2 | A. Yes. |
| 3 | Q. (BY EXAMINER EZEANYIM) What do you put into the |
| 4 | model? |
| 5 | A. What do I put into the model? |
| 6 | Q. Yeah. |
| 7 | A. What we've done is, we get a we built the |
| 8 | model based on the area itself, all the rock properties, |
| 9 | porosities, permeabilities, as best we know them, and |
| 10 | put that into the program itself to determine the proper |
| 11 | frack geometry. And what our final determination is, |
| 12 | any fracture that happens out here in the Delaware is |
| 13 | generally round and shaped more like a penny fracture. |
| 14 | Q. So you haven't run any there are no |
| 15 | fractures? You haven't done any fractures at all on |
| 16 | the on the new well, right? |
| 17 | A. No. |
| 18 | Q. Okay. Yeah, because the see, the well will |
| 19 | do that if you can because you are going to use 180 |
| 20 | [sic] pounds of propane [sic]. It would begin I |
| 21 | can't ask you that because you don't know it. If I know |
| 22 | what I know this is a model. I'm not familiar with |
| 23 | that model, but, you know, I can put anything in there |
| 24 | to make it look good. But I assume that that map is |
| 25 | good. That's okay. |
| | |

Page 61 What type of fractionization [sic] do you 1 use, slick-water, gel --2 3 Α. No. No. It's a gelled system. 4 Q. Okay. But do you use some -- some type of 5 nitrogen? 6 Α. No, not at all. 7 Ο. You don't use nitrogen? 8 Α. No. Okay. You're not concerned with sublocation 9 Ο. [sic]? 10 Α. No. 11 It's producing now, right? 12 Q. 13 Α. Yeah. 14 So how do you do sublocation [sic] in there? 0. We have surfactant. 15 Α. It's --You have surfactant? 16 Ο. Yes. Yeah. 17 Α. Ο. I mean, that's your call. I mean, my -- my 18 19 method may not be your method, but, you know, I'm just --20 Yeah. No, but surfactant helps quite a bit in 21 Α. 22 producing the broken gel. 23 Because nitrogen is very costly, right? Ο. Very costly, and I'd have to run simulations to 24 Α. see if we can pump it to this depth. 25

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 62 No, no. You can do whatever you want to do. 1 Q. I'm not telling you what to do, but I wanted to get the 2 hydrocarbon from that --3 It's a very standard completion that's been 4 Α. 5 used out here for years. 6 Q. How do you get 380 barrels of oil per day? How did you get that number? 7 8 Α. That number is coming from an --Offset well? 9 0. -- yeah, an array of offset wells in the area 10 Α. 11 done by our reservoir engineer. 12 Q. Are your spaces [sic] bigger than that? Pardon me? Α. 13 Bigger than 380? 14 Q. In many cases, we do get more than that. 15 Α. Yes. Like I said, it's a conservative number. 16 17 Q. Okay. I assume what you did here in the model is okay to give me that separation between the wells, 18 19 because that was my concern before. 20 Α. Yes, sir. Because the wells seem to be close to each 21 Ο. 22 other. 23 Α. Yes. I will take a look. 24 Q. 25 I'll be sitting in fry pan [sic] --Α.

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 63 1 Q. What did you say? 2 Α. I'll be sitting in a fry pan [sic] when we do 3 complete this well --4 0. Okay. Very good. 5 Α. -- and I will be watching as we get closer to the heel to see if there are any indications that we are 6 getting into a depleted zone, and we may change and go 7 8 smaller or something like that, yeah. Okay. I don't have anything further. 9 Ο. Thank 10 you. 11 Thank you. EXAMINER BROOKS: 12 Anything further, Counsel? 13 MS. CHAPPELLE: NO. 14 EXAMINER BROOKS: Does that complete your 15 presentation? 16 MS. CHAPPELLE: This completes our 17 presentation. 18 EXAMINER BROOKS: Very good. Case Number 15006 will be taken under advisement. 19 20 (Case Number 15006 concludes, 9:53 a.m.) 21 I to hereby centify that the foregoing to a complete record of the proceedings in 22 the Examiner hearing of Case No. 15060, 23 June 27 24 Oil Conservation Division Examiner 25

PAUL BACA PROFESSIONAL COURT REPORTERS

Page 64 1 STATE OF NEW MEXICO 2 COUNTY OF BERNALILLO 3 CERTIFICATE OF COURT REPORTER 4 I, MARY C. HANKINS, New Mexico Certified 5 Court Reporter No. 20, and Registered Professional 6 Reporter, do hereby certify that I reported the 7 foregoing proceedings in stenographic shorthand and that 8 9 the foregoing pages are a true and correct transcript of those proceedings that were reduced to printed form by 10 me to the best of my ability. 11 I FURTHER CERTIFY that the Reporter's 12 Record of the proceedings truly and accurately reflects 13 the exhibits, if any, offered by the respective parties. 14 15 I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or 16 17 attorneys in this case and that I have no interest in the final disposition of this case. 18 19 Mary C. Hankinz 20 MARY C. HANKINS, CCR, RPR 21 Paul Baca Court Reporters, Inc. New Mexico CCR No. 20 22 Date of CCR Expiration: 12/31/2013 23 24 25

PAUL BACA PROFESSIONAL COURT REPORTERS