Page 1 STATE OF NEW MEXICO 1 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 2 OIL CONSERVATION DIVISION IN THE MATTER OF THE HEARING CALLED 3 ORIGINAL BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING: 4 CASE NO. 15268 APPLICATION OF ANSCHUTZ OIL 5 COMPANY, LLC FOR A NONSTANDARD OIL SPACING AND PRORATION UNIT 6 AND COMPULSORY POOLING, RIO 7 ARRIBA COUNTY, NEW MEXICO. 8 9 REPORTER'S TRANSCRIPT OF PROCEEDINGS EXAMINER HEARING 10 2015 March 5, 2015 11 12 Santa Fe, New Mexico 13 υ 14 BEFORE: WILLIAM V. JONES, CHIEF EXAMINER MICHAEL MCMILLAN, TECHNICAL EXAMINER 15 GABRIEL WADE, LEGAL EXAMINER 02 16 17 This matter came on for hearing before the New Mexico Oil Conservation Division, William V. Jones, Chief Examiner, Michael McMillan, Technical Examiner, 18 and Gabriel Wade, Legal Examiner, on Thursday, March 5, 2015, at the New Mexico Energy, Minerals and Natural 19 Resources Department, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, 20 New Mexico. 21 Mary C. Hankins, CCR, RPR 22 REPORTED BY: New Mexico CCR #20 23 Paul Baca Professional Court Reporters 500 4th Street, Northwest, Suite 105 24 Albuquerque, New Mexico 87102 (505) 843-9241 25

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1	APPEARANCES		
2	FOR APPLICANT ANSCHUTZ OIL COMPANY, LLC:		
3	JAMES G. BRUCE, ESQ. Post Office Box 1056		
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Page 3 1 TNDEX 2 PAGE 3 Case Number 15268 Called 4 4 Anschutz Oil Company, LLC's Case-in-Chief: 5 Witnesses: 6 Deidre O'Callaghan: 7 Direct Examination by Mr. Bruce 4 Cross-Examination by Examiner McMillan 8 Cross-Examination by Examiner Jones 8 10 Cross-Examination by Examiner Wade 18 9 John Michael Richardson: 10 Direct Examination by Mr. Bruce 20 11 Cross-Examination by Examiner Jones 26 12 Galen R. Brenize, Jr.: 13 Direct Examination by Mr. Bruce 29 Cross-Examination by Examiner Jones 32 Cross-Examination by Examiner McMillan 14 38 Recross Examination by Examiner Jones 39 15 Proceedings Conclude 41 16 Certificate of Court Reporter 42 17 18EXHIBITS OFFERED AND ADMITTED 19 Anschutz Oil Company, LLC Exhibit Numbers 1 and 2 8 20 Anschutz Oil Company, LLC Exhibit Numbers 3, 5 and 6 26 21 REPORTER'S NOTE: Mr. Bruce did not produce these 22 exhibits to the court reporter as of 3/11/15 because of extenuating circumstances, and they are not attached to this record. 23 24 25

Page 4 1 EXAMINER JONES: Call Case 15268, application of Anschutz Oil Company, LLC for a 2 3 nonstandard oil spacing and proration unit and compulsory pooling in Rio Arriba County, New Mexico. 4 5 Call for appearances. MR. BRUCE: Mr. Examiner, Jim Bruce of 6 7 Santa Fe representing the Applicant. I have three 8 witnesses. 9 EXAMINER JONES: Any other appearances? 10 Will the witnesses please stand, and will 11 the court reporter swear the witnesses? 12 (Ms. O'Callaghan, Mr. Richardson and 13 Mr. Brenize sworn.) 14 DEIDRE O'CALLAGHAN, 15 after having been first duly sworn under oath, was questioned and testified as follows: 16 DIRECT EXAMINATION 17 BY MR. BRUCE: 18 19 Q. Will you please state your name for the record? My name is Deidre O'Callaghan. 20 Α. 21 And who do you work for and in what capacity? 0. 22 Α. I work for Anschutz Exploration Company and 23 Anschutz Oil Company as a senior landman. 24 Have you previously testified before the Ο. 25 Division?

I have. 1 Α. And were your credentials as a petroleum 2 0. 3 landman accepted as a matter of record? Α. 4 Yes. 5 Q. Are you familiar with the land matters in this application? 6 7 Α. I am. 8 MR. BRUCE: Mr. Examiner, I'd tender 9 Ms. O'Callaghan as an expert petroleum landman. 10 EXAMINER JONES: She is so qualified. 11 0. (BY MR. BRUCE) Ms. O'Callaghan, you have five 12 exhibits in front of you. They're stapled together. 13 But could you identify what Exhibit 1 is for the 14 Examiner and discuss the initial well unit proposed for 15 this particular well? 16 Α. Sure. This is the initial unit, which was 960 17 acres, was what we permitted for, a lateral that was 18 supposed to be approximately 7,100 feet long. It was the west half of Section 14 and all of Section 15 and 25 19 20 to Rio Arriba County. 21 And what is Exhibit 2? 0. Exhibit 2 is a plat that depicts the well as it 22 Α. 23 was drilled. We drilled the lateral that was 24 approximately 4,114 feet long. We landed the well at 25 the planned landing point approximately -- it was

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Page 6 supposed to be 330 feet or further from the center line 1 2 of Section 14. We landed at 348.6 feet. We drilled a 3 4,114 foot lateral and had some operational issues and chose to stop drilling. So we are looking now at a 4 5 640-acre spacing unit comprised of the west half of 14 and the east half of Section 15. 6 7 And the unorthodox location for the landing 0. 8 point was approved in Case 15234? Correct, in November. 9 Α. 10 Q. And the terminus is orthodox? 11 It is. Α. 12 It is at least --0. 819 feet from the centerline in Section 15. 13 Α. 14 In this case, have all of the working interest Ο. 15 owners in the west half of 14 and the east half of 15 16 joined in the well? 17 Α. They have either joined in the well, farmed out 18 or granted us a term assignment. Yes. 19 Q. So at this point you don't need to --Okay. 20 Force pool? Α. 21 -- force pool any working interest owner. Ο. And 22 we'll have another landman testify about royalty owners. 23 But in looking at the well unit, what type 24 of land is the west half of 14? Fee? 25 Α. It's a combination of fee and federal.

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1	Q. Okay. And the fee land is covered by a pretty
2	old oil and gas lease, I believe?
3	A. Yes.
4	Q. Very old.
5	A. From the '40s, I think.
6	Q. And I can't remember because we've been looking
7	at this so long. It either has no pooling clause or
8	allows pooling to 40 acres?
9	A. I have to let John Michael testify to that.
10	Q. And Mr. Richardson, when he gets up, will
11	testify briefly about about what he has done to
12	locate these people. But only those royalty owners
13	those royalty owners are the only people you seek to
14	force pool into the well?
15	A. Correct.
16	Q. And since they're not cost-bearing interest
17	owners, you're not seeking overhead rates or
18	A. Correct.
19	Q. And so you do not need to present an AFE or
20	discuss well costs?
21	A. Correct.
22	Q. Do you request that Anschutz Exploration
23	Corporation be named operator of the well?
24	A. Yes.
25	Q. And were Exhibits 1 and 2 compiled from company

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Page 8 business records? 1 2 A. Yes, they were. And in your opinion, is the granting of this 3 Q. application in the interest of conservation -- interest 4 of conservation and the prevention of waste? 5 6 Α. Yes, sir. MR. BRUCE: Mr. Examiner, I'd move the 7 admission of Exhibits 1 and 2. 8 EXAMINER JONES: 1 and 2 will be admitted. 9 10 (Anschutz Oil Company, LLC Exhibit Numbers 11 1 and 2 were offered and admitted into 12 evidence.) MR. BRUCE: I have no further questions of 13 this witness. 14 15 EXAMINER JONES: I'm going to let Mike start out with the questions this morning. 16 CROSS-EXAMINATION 17 18 BY EXAMINER MCMILLAN: 19 Okay. The first question I have would be how 0. 20 are you going to address the stranded acreage in the 21 west half of 15? If you look at the Gavilon-Mancos itself, it is a 640-acre pool. So I'm trying to 22 understand why are you creating a new 640 when you 23 already have the 960 dedicated? 24 Well, because the well didn't penetrate the 25 Α.

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1	west half of Section 15, we felt that it was more
2	appropriate to go back to the 640-acre unit.
3	Q. But then you're still not addressing the
4	question of stranded acreage.
5	A. I would suspect that what we'll have to do is
6	either request an exception to to either drill a
7	second well that would include all of Section 15.
8	Again, this was a well that we took on; it had already
9	been permitted and laid out by Hunt. And we had every
10	intention of drilling the 960 but then encountered
11	difficulties that made us cut it shorter. So we feel
12	that the appropriate spacing unit is the west half of 14
13	and the east half of 15.
14	Q. But your well has penetrated the east half of
15	15. Therefore, you're holding the whole section with
16	the well, correct?
17	A. No. The leases in the west half of 15 are
18	different than the leases that are in the east half of
19	15.
20	Q. But the spacing unit is 640. So by penetrating
21	the east half of 15, you are holding the whole section,
22	right?
23	A. I don't think so.
24	MR. BRUCE: I don't think so.
25	A. No. I think we would be we'll do a

Page 10 declaration of pooling and a communitization agreement 1 that covers the west half of 14 and the east half of 15. 2 MR. BRUCE: I understand your concerns, 3 Mr. Examiner, but this -- this isn't the proposed end of 4 5 Anschutz' exploration out there. 6 THE WITNESS: Oh, no. MR. BRUCE: So there is -- they have other 7 8 acreage they could -- they could add to the west half of 9 15, well unit. And one other thing -- and this was 10 11 testified to in the prior two hearings -- you'll see 12 that this well is guite a bit to the north of the well 13 unit, whichever well unit you're looking at, and there 14 is the possibility of additional infill drilling on this well unit or even a 960-acre well unit. And that was 15 testified to at the prior hearings. 16 17 CROSS-EXAMINATION 18 BY EXAMINER JONES: 19 0. Speaking of that, if you did include the west 20 half of 15, you would have to do some compulsory pooling 21 of working interest owners there? 22 We had reached agreement with -- there are Α. No. only three parties who are in the west half of 15 who 23 24 are not somewhere else in the unit, and those three 25 parties -- we reached agreements with two of the

Page 11 unleased owners who leased, and the third party, we 1 2 entered into a term assignment with them. Are those -- the lands in the west half of 15, 3 Q. did you already -- I might have been sleeping. 4 What ownership is there? Is it fee? Is it federal? 5 The west half of 15 is all fee. 6 Α. 7 It's all fee? 0. 8 Α. It is. So it's a whole bunch of fee owners? 9 0. Yeah. It's -- it's pretty busted out. 10 Α. Now, can you point out where they got notice 11 Q. for the -- this is in the -- does that come in this --12 13 or was that part of the application? 14MR. BRUCE: Well, Mr. Examiner, Exhibit 5 -- and I just noticed it should be Number 4, but it's 15 Exhibit 5 -- did give notice to the offset operators or 16 working interest owners. And I -- I think that's all 17 18 that's required. 19 EXAMINER JONES: And that would include the 20 west half of 15? 21 MR. BRUCE: The west half of 15. 22 EXAMINER JONES: Okay. Were they all 23 locatable? 24 MR. BRUCE: Yes. And that's Exhibit 5. There aren't many. And like, for instance --25

Page 12 Ms. O'Callaghan can address this -- Williams Production 1 Company, they're actually in this well -- or Williams 2 3 is. THE WITNESS: Correct. They own -- they 4 own the northeast of 14. Okay? But in Section 15, all 5 the working interest owners are either under other 6 7 acreage in the unit, or -- there are three parties, two unleased and one working interest owner, who we entered 8 9 into separate agreements with, and we have the option to 10 drill additional wells under those agreements. 11 EXAMINER JONES: Okay. Okay. Let's see 12 You haven't talked about the newspaper yet, here. 13 because we just admitted two exhibits. 14 MR. BRUCE: Yeah. I'll get to that with 15 the next witness. 16 EXAMINER JONES: Okay. That sounds good. 17 Are you requesting that R-13945 be totally vacated or annulled or whatever the legal people call 18 19 it? 20 MR. BRUCE: Well, we do need it for the --21 for the most part, but the unorthodox location was 22 approved, is still --23 EXAMINER JONES: So that's the only thing 24 in there you want saved? 25 MR. BRUCE: That's about it, yeah.

Page 13 THE WITNESS: And the force pooling of the 1 2 royalty owners. MR. BRUCE: Yeah. We're taking care of 3 4 this. 5 In that -- okay. Gotcha. THE WITNESS: 6 EXAMINER JONES: And are you asking the 7 NSP-1974 be totally vacated or --8 MR. BRUCE: Well, it is unorthodox. You 9 know, looking at Exhibit 2, the landing point is unorthodox, and so I think the order -- I don't have it 10 11 right in front of me. They were seeking 330 feet from the outside of the well unit. It's actually a little 12 bit more than that, 340- --13 14 THE WITNESS: 48. 15 EXAMINER JONES: Yeah, that's fine. I was asking about the NSP. But you're creating a new NSP to 16 17 this one, so the old NSP has to be completely done away 18 with. 19 MR. BRUCE: Yeah. 20 EXAMINER JONES: Those royalty owners that 21 are being pooled, are they lessees of record or --22 they're all lessees of record? 23 They're all lessors. MR. BRUCE: 24 THE WITNESS: Lessors. 25 EXAMINER JONES: They're all lessors. So

Page 14 1 they're mineral owners? 2 MR. BRUCE: Yes. THE WITNESS: The working interest owners 3 are all lessees of record or assignees. 4 5 EXAMINER JONES: Right. I got it. 6 THE WITNESS: And the royalty owners are 7 all subsequent owners of the royalty under these older leases, including the federal government. 8 9 (BY EXAMINER JONES) Okay. So if you go to the 0. 10 county records or BLM records -- there are no state 11 lands involved here, right? 12 Α. (Indicating.) 13 Ο. If you went to those two sources, these royalty owners that are being pooled, either have the leases --1415 they're mineral interest owners? 16 Α. Correct. Correct. And they are all subject to 17 So there are no unleased owners in this -- in leases. 18 this remaining 640-acre unit. 19 Okay. Okay. And they're listed -- you're Q. 20 going to list those later? 21 I will, yeah. MR. BRUCE: 22 EXAMINER JONES: Okay. That's good. 23 So there's no -- there's no costs, there's 24 no COPAS, and there's no risk? Is that correct? 25 MR. BRUCE: Correct.

Page 15 THE WITNESS: For anybody except for us and 1 the working interest owners who participated. We have 2 nine owners who participated in the well. 3 (BY EXAMINER JONES) Okay. And there won't be a 4 0. situation where they'll back out on you now, I guess, 5 Once they've signed, they've signed? 6 right? 7 They all signed. And actually we've already Α. given notice to them and gave them the option to pick up 8 additional interests because there were some shifts by a 9 percent or something, and we have responses from all 10 those parties, an election to increase or stay the same. 11 EXAMINER JONES: Okay. Are you going to 12 13 have somebody talk about the well? 14MR. BRUCE: Yes. THE WITNESS: 15Yes. 16 EXAMINER JONES: Okay. And --17 MR. BRUCE: What happened. EXAMINER JONES: Whether you can drill 18 north-south or east-west? 19 MR. BRUCE: We've got an engineer here. 20 21 EXAMINER JONES: Okay. You've got an engineer. 22 23 (BY EXAMINER JONES) And as far as the notice 0. 24 for NSP, the only people you're leaving out are the -well, actually, you're leaving out the people in the 25

Page 16 east half of 14 and the west half of 15; is that 1 2 correct? 3 The east half of 14 was never involved. Α. It was never involved, but --4 Ο. 5 Α. We drilled the well in the east half of 14 and landed in the west half of 14, and that was done. And 6 7 then the west half of 15 was included in the spacing 8 unit, the 960-acre spacing unit, and that's been excluded. And as I said, there are three parties there 9 who are not involved in the rest of the spacing unit. 10 11 Right. But in these days of overlapping 0. 12 project areas, you know, you could possibly have an overlapping project area in the east half of 14. 13 But 14 you say there is already a well drilled there? 15Not a Mancos well, I don't think. Α. 16 Oh. So there is no well in the east half of 14 0. 17 in the Mancos? 18 Α. (Indicating.) So that pool is spaced 640, and you didn't --19 0. you don't want your spacing unit to cover the east half 20 21 of 14. 22 Α. Correct. 23 So they're being left out. Ο. 24 So the original spacing unit was 960 acres, Α. 25 which was approved, which was developed by --

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1 But that's thrown out. 0. 2 Gotcha. It was developed by Hunt. And so that Α. 3 led to the drilling of the well in the west half of 14, and it was intended to be all of 15. So the east half 4 5 of 14 was always going to be excluded. 6 It was excluded --0. 7 If you looked at 640 based on a section-by-Α. section basis. 8 9 Well, if you look at 640 spacing in the 0. Gavilon-Mancos pool, it includes -- you would include 14 10 11 and 15, so whatever you leave out -- you're carving out 12 the east side of 14, I mean, and just throwing out 13 everything that's been done so far and starting over 14 here, right? 15 MR. BRUCE: Well, true, Mr. Examiner. But, 16 you know, the inconvenient fact is that the well was 17 drilled with the anticipation of complying with the 18 960-acre unit. And the east half of 14, the working 19 interest owners were notified, Williams, WPX and Reba 20 [phonetic] Company. 21 EXAMINER JONES: Okay. For this 22 proceeding, they were notified? 23 MR. BRUCE: They were notified, and 24 obviously nobody's squawked. 25 EXAMINER JONES: Okay. And when were they

Page 18 notified, or is that going to come later? 1 2 MR. BRUCE: Yeah. I'll bring that up in a minute. 3 EXAMINER JONES: Okay. I don't have any 4 5 more questions. Let me pass this on to these guys 6 again. 7 EXAMINER WADE: I don't have any questions. 8 THE WITNESS: That notification is marked as Attachment A to Exhibit 5. 9 10 EXAMINER JONES: Say that again. THE WITNESS: It's Attachment A to Exhibit 11 12 5. EXAMINER JONES: What is Exhibit A to 13 14 Exhibit 5? 15 EXAMINER WADE: That would be the notice to the working interest owners --16 17 THE WITNESS: Correct. 18 EXAMINER WADE: -- in the east half of 14? 19 THE WITNESS: It was -- actually, no. It's 20 the west half of 15. 21 (BY EXAMINER JONES) But that included the 0. 22 people in the east half of 14? 23 Α. Williams, yes. 24 So Williams owns the east half of 14? 0. 25 Α. They own the northeast quarter. I have to look

Page 19 at a map and figure out if they own the southeast 1 2 quarter. 3 But you're saying -- you're testifying that 0. 4 they had notice, right? 5 Α. The parties were notified, yes. The owners of the southeast quarter are us. 6 I knew it was covered in some fashion. 7 T Sorry. 8 couldn't remember how. 9 So it's under Anschutz Oil Company, LLC? 0. 10 It's actually -- it's actually of record of Α. We have an unrecorded exploration agreement that 11 Hunt. 12 I testified to in the last hearing that provides that we 13 will earn the acreage under the terms of our agreement 14 by drilling the well. 15EXAMINER JONES: Are you asking for the 16 last hearing's record to be incorporated? 17 MR. BRUCE: I was going to ask that -- ask for the records in Cases 15234 and 15246 to be 18 19 incorporated into the record. 20 EXAMINER JONES: Okay. 21 MR. BRUCE: First time I've ever done a 22 three pooling hearing for one well. 23 EXAMINER JONES: And the well moved 24 It moved one time. (laughter). 25 THE WITNESS: Especially with one well that

Page 20 was -- 140-acre spacing unit, which is the standard 1 size. So again, it's --2 MR. BRUCE: It is a nonstandard unit 3 because of the two half sections. 4 5 THE WITNESS: Right. MR. BRUCE: We understand that. And our 6 next witness can address a couple of things about the 7 8 offsets, too. 9 EXAMINER JONES: Okay. I'm ready for the 10 next witness. Thank you for coming down from Denver. 11 THE WITNESS: Of course. Galen did the 12 13 hard work. He drove. JOHN MICHAEL RICHARDSON, 14 15 after having been previously sworn under oath, was 16 questioned and testified as follows: DIRECT EXAMINATION 17 BY MR. BRUCE: 18 19 Would you state your name for the record? <u>Q</u>. John Michael Richardson. 20 Α. 21 What is your occupation? Q. 22 I am a certified petroleum landman. Α. 23 And what is your relationship to Anschutz in 0. 24 this matter? 25 Α. We are independent contractors that represent

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1	them in their land endeavors.
2	Q. Have you previously testified before the
3	Division?
4	A. I have.
5	Q. And were your credentials as an expert
6	petroleum landman accepted as a matter of record?
7	A. They were.
8	Q. And are you familiar excruciatingly familiar
9	with the land owner in this well unit?
10	A. Yes.
11	MR. BRUCE: Mr. Examiner, I tender
12	Mr. Richardson as an expert petroleum landman.
13	EXAMINER JONES: He is so qualified.
14	Q. (BY MR. BRUCE) Mr. Richardson, you did check
15	title to the original did a title search on the
16	original 960-acre unit; did you not?
17	A. That is correct.
18	Q. Now, to get to the question and you were
19	part of the process of getting the application filed for
20	that administrative nonstandard unit?
21	A. Yes.
22	Q. What about 14 and the east half of 13?
23	A. Well, we notified the people initially. Hunt
24	was the operator. Hunt Oil Company was the operator.
25	And the notice went out to cover one well covering the

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1	west half of 14 and all of 15 and the east half of 14
2	and all of 13. And that notice went out to all of those
3	mineral owners apprising them of the fact that we had
4	applied for a nonstandard location and proration units,
5	spacing units.
6	Q. Now, with respect to I believe in the
7	current well proposed well unit, what type of land is
8	the east half of 15?
9	A. The east half of 15 is fee.
10	Q. (Indicating.)
11	A. East half?
12	Q. Is it federal land? I believe.
13	A. The east half of 14 would be federal and fee,
14	and the east half of 15 would be fee.
15	Q. With respect to the east half of 14 again,
16	it's a very old fee lease covering the fee land in the
17	west half of 14 in the west half of 14?
18	A. Yes. That is correct.
19	Q. And just to confirm I don't have a copy of
20	the lease, but it either contained a pooling clause or
21	allowed pooling of 40 acres for oil wells?
22	A. That is correct.
23	Q. What did Hunt and then Anschutz do to attempt
24	to cure that problem?
25	A. We sent out amendments to the old leases

Page 23 allowing us to amend the pooling to the current spacing 1 2 that the OCD would approve. Even if it was in excess of 640 acres? 3 Ο. Α. That's correct. 4 Looking at Exhibit 6, what does that reflect? 5 Q. 6 This reflects a list of the mineral and Α. 7 royalties owners that we contacted or attempted to contact. This is a 1940 lease, and a lot of them 8 9 were -- we were not able to contact. But we did an 10 extensive title search in the county records and the BLM 11 records. We did an Internet search, as well as a 12 LexisNexis search to try to find these folks. The 13 majority of them we were able to contact, and they have 14 assigned -- have executed amendments. And we have those 15 in our -- in our possession. 16 And that's what the third column was? Where it 0. 17 says "Received to be recorded," those are people who 18 signed amendments -- pooling amendments to their leases? 19 Α. That's correct. 20 And I noticed there are a lot of unknown -- or Ο. 21 "address unknown" people. Do you believe you made a 22 good-faith effort to locate all of the fee mineral owners in the west half of Section 14? 23 24 Α. We do. We also contacted operators of wells in 25 the area that had some of the same ownership to help us

try to ascertain the locations -- the current location 1 2 of these people, and they have those in suspense because 3 they can't locate them either. MR. BRUCE: And, Mr. Examiner, Exhibit 3 is 4 5 the Affidavit of Publication as against these fee mineral owners who could not be located. All the other 6 7 ones have signed amendments to the oil and gas leases so they don't need to be notified. They can be pooled 8 9 into --10 EXAMINER JONES: By their leases. 11 MR. BRUCE: By the -- yes. Correct. 12 And then, Mr. Examiner, Exhibit 5 --13 somewhere along the way Exhibit 4 got away from me --14 notified the working interest owners or operators in the east half of 14 and the west half of 15, and that is 15 what is reflected here. 16 17 EXAMINER JONES: Okay. In 5? 18 MR. BRUCE: In Exhibit 5. EXAMINER JONES: So the rule -- the rule 19 20 is, for NSPs, the parties that are being left out is to 21 notify -- if it's all leased, just notify the lessees; 22 is that correct? 23 MR. BRUCE: I believe that is correct. Ι 24 think it's up to the lessee to look after the interest 25 of their royalty owners.

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Page 25 Now, if Mr. Wade requires it, we can 1 certainly give notice to the fee owners in the west half 2 of 15. I haven't presented that. That is in one of 3 those other lease files. There is not near as many fee 4 owners in the west half of 15 as there were in the west 5 half of 14. I'll leave it there. It wouldn't take -- I 6 just -- I have just been in the practice of simply 7 8 notifying the working interest owners, the offset. EXAMINER JONES: Because they should be 9 10 looking after the lessors? 11 MR. BRUCE: Correct. 12 Q. (BY MR. BRUCE) Mr. Richardson, was Exhibit 6 13 prepared by you or under your supervision? 14 Α. Yes, it was. 15 MR. BRUCE: And, Mr. Examiner, I move the admission of Exhibits 3, 5 and 6. 16 17 EXAMINER JONES: Okay. 3 has got a date on 18 it that I might talk to you about, maybe amending that 19 at the next hearing, because the date --20 That's fine. MR. BRUCE: 21 EXAMINER JONES: And 5 -- 5 was sent out --22 wait a minute. Here we are. This is -- this is 23 February 6th, so here we are, March the 5th. How many 24 days ago -- February 19th is -- nine days plus five is 25 14 days ago.

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1	MR. BRUCE: I think the requirement is ten
2	days for location notice.
3	CROSS-EXAMINATION
4	BY EXAMINER JONES:
5	Q. Okay. That's interesting. You could get a
6	reply from those lessors about amending their lease to
7	allow the lessee to pool their acreage. So is that
8	usually pretty successful?
9	A. It was not the easiest thing to explain.
10	Q. I'll bet it wasn't (laughter).
11	A. And sometimes we had to send it out two or
12	three times, and finally on the fourth time, they said,
13	I'm not going to sign this because And then we were
14	able to explain it to them, and the third or fourth time
15	they finally could grasp what we were trying to do.
16	EXAMINER WADE: So publication does only
17	need ten days' notice, so we're okay there.
18	And to make clear for the record, there is
19	no Exhibit 4?
20	MR. BRUCE: Correct. There is no Exhibit
21	4. I meant to type up a list of the offsets, but these
22	are the offsets.
23	EXAMINER JONES: So Exhibits 3, 5 and 6
24	will be admitted.
25	(Anschutz Oil Company, LLC Exhibit Numbers

Page 27 3, 5 and 6 were offered and admitted into 1 evidence.) 2 MR. BRUCE: I have no further questions. 3 (BY EXAMINER JONES) So you concentrated on the 0. 4 unit itself, is that correct --5 Α. Correct. 6 -- the land work on the unit itself? 7 0. So you didn't -- you weren't -- you're not 8 the person testifying about the east half of 14 or the 9 west half of 15, the land situation in there? 10 Ms. O'Callaghan already testified to that? 11 Correct. 12 Α. These leases -- these old leases were very 13 large leases, and a lot of these leases covered the same 14 15 ownership. Back in the '40s, there were some mineral buyers that went through there, and they bought very 16 many tracts. And when they leased these tracts, they 17 18 leased from the same people. So if we had people in the west half of 14, it could be the exact same people in 19 the west half of 15. And in a lot of cases, they were. 20 As far as division of interest between surface, 21 0. is there a lot of split estate out here? 22 23 Α. There is a lot of split estate. Very few of the surface owners own all of the minerals. I would say 24 25 none of them own 100 percent of them.

Page 28 When did that happen and why? 1 0. Back in the '40s, when they were selling these 2 Α. 3 minerals, they -- it didn't affect the surface. They just had the mineral interest, and the surface was a 4 separate estate that ultimately ended up with one person 5 or one -- one person or one family owning 100 percent of 6 7 the surface, but the mineral owners were -- they were very split up and segregated from the surface. 8 9 Was there Navajo allottees out here? 0. There is no tribal or Navajo allottees or 10 Α. allotted lands at all. This is all fee and federal. 11 12 Ο. I seem to remember at the last hearing where there were some -- I thought there were some Navajo 13 14 folks here, but maybe it wasn't for this Anschutz case. 15 Α. I think. 16 MR. BRUCE: I think it was for one of those 17 WPX cases. 18 EXAMINER JONES: Oh, yeah. 19 THE WITNESS: But this is very close to the 20 Jicarilla Reservation. 21 (BY EXAMINER JONES) So not that far from Ο. 22 teepees? 23 Α. No, sir. 24 EXAMINER JONES: You guys have any more 25 questions?

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1	EXAMINER McMILLAN: I don't have any more
2	questions.
3	EXAMINER JONES: Thank you, Mr. Richardson.
4	THE WITNESS: Thank you.
5	GALEN R. BRENIZE, JR.,
6	after having been previously sworn under oath, was
7	questioned and testified as follows:
8	DIRECT EXAMINATION
9	BY MR. BRUCE:
10	Q. Would you state your name for the record?
11	A. Galen Robert Brenize, Jr.
12	Q. How do you spell your last name?
13	A. B, as in boy, R-E-N, as in Nancy, I-Z, as in
14	zebra, E.
15	Q. And who do you work for and in what capacity?
16	A. I work for Anschutz Exploration Corporation,
17	Anschutz Oil Company and AnSweet, LLC. I am the vice
18	president of Engineering and Operations for all three.
19	Q. Have you previously testified before the
20	Division?
21	A. No, I have not.
22	Q. Would you please summarize your education and
23	employment background for the Examiners?
24	A. I have a Bachelor of Science in Mechanical
25	Engineering and a minor in engineering science and

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Page 30 mechanics from the Pennsylvania State University, August 1 2 of 1993. I've been in the industry for 21 years. Eleven or so of those years have been service companies 3 in various areas, various capacities, well construction, 4 well stimulation, well intervention. I've been on the 5 operator side with various companies, on the completion 6 teams, management roles, exploration teams. 7 The main focuses are well stimulation and well construction. 8 And are you familiar with the drilling of this 9 0. well? 10 11 Yes, I am. Α. MR. BRUCE: Mr. Examiner, I tender 12 Mr. Brenize as an expert in either drilling or petroleum 13 14 engineering. 15 EXAMINER JONES: Say your name one more 16 time. 17 THE WITNESS: Galen Brenize. EXAMINER JONES: Brenie. 18 19 THE WITNESS: Brenize. Like brown eyes 20 only bren-eyes. 21 (Laughter.) 22 EXAMINER JONES: Okay. Mr. Brenize is 23 qualified as an expert petroleum engineer. 24 MR. BRUCE: And he brought along some 25 exhibits, which I didn't see until this morning, and

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Page 31 we're certainly happy to give you some exhibits. But 1 rather than occupy too much time, if I can turn it over 2 to him so he can explain what happened in the drilling 3 of the well and why it was cut short. 4 THE WITNESS: When we drilled the lateral 5 section, we encountered two lost circulations zones in 6 the lateral, the second of which was very close to what 7 8 now is the toe of the lateral. We had growing concerns, the further we went in the lateral, that we would have a 9 very low likelihood of success to properly cement the 10 11 liner in the lateral because of the lost zones that we encountered as we drilled the lateral. So the decision 12 was made to cut it short in order to give us the best 13 14 chance, essentially, to construct the well in a 15 responsible manner. (Mr. Wade exits the room.) 16 (BY MR. BRUCE) Has the well been completed at 17 Q. 18 this point? 19 Α. The well has not been completed. And just in case the Examiners want to see it, 20 0. 21 what type of plots did you bring? I have notes here from our well chron. 22 Α. These 23 are my personal well chron [sic; phonetic]. It's 24 verbiage taken verbatim from our drilling reports. Ι 25 brought these to demonstrate that -- we had a concern

Page 32 that we would have difficulty cementing the liner in the 1 lateral, and we were indeed very fortunate to cement the 2 lateral -- or the liner in the lateral. So I brought 3 this information to validate, if you will, our prior 4 5 concern that we could indeed have difficulty. I have our mechanical wellbore diagram. Ŧ 6 7 simply brought this to be prepared to answer whatever questions would be asked. This is a living record of 8 the as drilled, as constructed. 9 I have a copy of the geologist' strat plot, 10 11 which represents the lateral as it was drilled relative 12 to the different stratigraphy. It also includes gas It includes different methane or carbon 13 shows. 14 isotopes, gamma ray, indications of where we saw 15 fractures, indications of where we saw losses. So it's 16 mainly for preparation and support in the event that --17 simply wanted to be prepared for whatever questions you 18 had. 19 CROSS-EXAMINATION BY EXAMINER JONES: 20 21 Okay. The two zones of well circulation, do 0. 22 you have a depth -- measured depth of those? 23 Α. Yes, Mr. Examiner. 24 The most shallow loss zone, my recollection 25 says it was at 9,337 feet. Here it is indicated between

Page 33 9,350 and 9,400. That's measured depth. 1 2 The deepest loss zone, my recollection is 10,511 feet, and that is accurately represented here at 3 something just a little deeper than -- well, about 4 5 10,600 feet. Were you in the sand, or were you in the 6 0. shale -- or the shaley, whatever the geologists call it? 7 So the first loss zone is at the interface of 8 Α. the second -- and I'm an engineer, not a geologist, so 9 at the interface between the first -- the Gallup -- the 10 second Gallup sequence and the first Gallup sandstone 11 sequence. So it was at the interface between the sand 12 13 and the more shallow interval below. 14 The second loss zone was also at a similar 15 interface of shale to sand, perhaps indicating a poor degree of elastic coupling at the bed boundaries. 16 17 So you were trying to stay in the -- above the Q. sands a little bit? 18 19 Well, our intent was to cut various layers or Α. 20 levels of the stratigraphy, it being an exploration 21 In order to determine the most productive layers, well. 22 if you will, it is our intent to test all of the layers, 23 run oil tracers in our completion fluid in order to determine which layers are the most productive, single 24 25 layer, multiple layers, whatever. So we cut the

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1	entirety of the section in order to do that.
2	Q. Okay. What's your casing size before you set
3	your liner, the intermediate casing size?
4	A. The intermediate casing size was 7-inch, 23
5	pound.
6	Q. Did you make the curve and then you set that,
7	or did you set that before you did your curve?
8	A. We actually set the shoe of the 7-inch
9	intermediate at 50 degrees, so we landed it midway in
10	the curve.
11	Q. Oh, boy.
12	A. By design.
13	Q. By design.
14	A. Excuse me. I may have that's where the top
15	of the liner is. The 7-inch is actually landed at 90
16	degrees. I misspoke. I apologize. It is landed
17	horizontally at 90 degrees.
18	Q. And the size of the liner was four and a half?
19	A. The liner is 4-and-a-half inch, 13 5-pound
20	P110.
21	Q. Oh, wow. Strong stuff.
22	A. Yes.
23	Q. Did you have trouble getting your liner down?
24	A. The liner entered the wellbore and the lateral
25	fine. Our issue was lack of returns.

Q. Oh.

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2	A. We lost returns the whole stop displaced
3	incorrectly with pipe at 894 feet from surface. We lost
4	fluid level, and the annulus started dropping with the
5	pipe shoe at 2,770. And bear in mind, we were running
6	in exceptionally slowly essentially out of fear, concern
7	that we would have issues with returns.
8	At some point in the lateral and I have
9	to search for the actual depth we lost returns, and
10	it took what we termed as an eight-stage LCM, loss
11	circulation material, soak in order to regain
12	circulation prior to cementing the lateral in the hole.
13	And that took two days, just the soaks. So it
14	demonstrated to me, specifically, that our concern was
15	valid.
16	Q. Okay. But your cement job went okay?
17	A. The cement job went very well.
18	Q. And when you complete it, are you going to do
19	the chemical tracers, where you do the hydrophobic
20	and the hydro
21	A. We are going to use we are still debating
22	whether or not we are going to use water-soluble
23	tracers. We do have plans to use the oil tracers. We
24	do have plans to tag our profit to determine where
25	where it goes, at least in the near wellbore. So yes to

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1 your questions. However, we're still debating the 2 water-soluble aspect.

Q. As far as whether you -- this fracture -- these two fractures or lost circulation zones, you guys are drilling updip from a show [sic], right? The Hunt well is a mile away or two miles away, was a kind of a disappointment --

A. It was.

8

9 Q. -- and this well was updip a little bit. So 10 you decided to drill a lay-down well. Could you drill a 11 stand-up well here and do just as good?

Mechanically we can do it. The question is 12 Α. would it be just as good. At this time I don't have 13 14 enough information to say with confidence that it would 15 be a responsible decision from a drainage perspective or 16 a responsible decision from an economic perspective. 17 That's not to say that we couldn't. I'm simply saying I, right now, don't have enough information to say that 18 19 that would be the best decision from a drainage standpoint or an economic standpoint. I would be happy 20 21 to expound on that, should you require it.

Q. Well, what I'm trying to get at here is if you could drill a stand-up well in the west half of 15, if you -- if you show on your tracers that the end of your wellbore was the best part, you know.

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		Page 37
1	A. Sure.	
2	Q. Or would you communitize that with so	ome acreage
3	off to the west?	
4	A. I am certainly not qualified to answe	r the
5	communitization question.	
6	Q. What I mean is join acreage and drill	. another
7	lay-down well.	
8	A. So to answer your question, could we,	is it
9	physically possible for us to build the stand-	·up,
10	absolutely.	
11	Q. Okay. So right now you can't you	would
12	probably prefer to drill a lay-down well?	
13	A. I would prefer to see how this well t	reated or
14	how it fracked.	
15	Q. Before you frack?	
16	A. Specifically what we need to determin	le is the
17	preferred fracture plane for our completion.	What we
18	would like is an orthogonal set of fractures s	30
19	orthogonal to the wellbore, if that's the pref	Terred
20	fracture plane that Mother Nature governs.	
21	Q. What logs did you run?	
22	A. We ran sonic logs in order to give us	3 an
23	approximation of downhole stresses and stress	
24	anisotropy.	
25	Q. Did you do the dipole sonic?	

Page 38 We did. We did a new Schlumberger log that 1 Α. 2 incorporated Stoneley-waves as well. 3 Q. Okay. Well, you've got some information then. Α. Yes. 4 I've got the information, so I'll pass this on 5 Q. 6 to the other guys. We've got a geologist here, so --7 CROSS-EXAMINATION BY EXAMINER McMILLAN: 8 9 So how are you going to handle your exploration 0. plans if you drill a well in the south half of 14? 10 Would you -- are you going to -- would you think about 11 12 drilling through the west half of 15? 13 We would think about that, yes. Α. 14 And that would be -- then how would you handle Ο. 15 the land situation? 16 Α. Again, I'm -- I am not the person to handle the 17 land question. MR. BRUCE: Mr. Examiner, from my -- I 18 19 mean, this is -- go to the more common situation where 20 they're drilling the Yeso down in Eddy County or Lea 21 There are a lot of areas out there -- Mewbourne County. 22 Oil Company has done it, where they have a 160-acre 23 horizontal well unit, and then there are two, maybe even three vertical wells. So they're all independent of 24 25 each other insofar as spacing goes. And it's an odd

1 situation, but, you know, it's better to terminate the 2 well at this point. And it can be communitized. It can 3 be pooled in any fashion.

I don't think -- as Mr. Richardson 4 testified, they now have authority from most of their 5 lessors to form oversized units, and the BLM has been 6 approving oversized units, comm agreements for some 7 time. Certainly it affects more of the revenue of the 8 working interest owner, and that might be allocated in a 9 different fashion. But like I said, in the prior 10 11 hearings, there was testimony of additional wells being drilled on this 960-acre unit. As a matter of fact, the 12 initial -- the initial proposed well was in the south 13 14 half-south half, I believe, of the well unit. 15 RECROSS-EXAMINATION 16 BY EXAMINER JONES: 17 Q. If you were going to drill another well in the south half and you needed to offset circulation zones, 18 what would you do differently? 19 Right now we're looking at different mud 20 Α. systems to answer that very question. I've asked my 21 22 team to prepare different options and make sure we 23 understand what other fluid systems could be used. 24 Please bear in mind that we used a synthetic oil-based mud here so we could get our density lower and provide 25

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us with a good, clean hole in a responsible manner. And 1 2 even with that lower mud weight with the synthetic, we had losses. So that's one of the challenges for the 3 So I've tasked my team with that very question. 4 area. 5 The bottom line is you couldn't get the well 0. 6 drilled any further than you did, or you made the 7 decision based on risk? 8 So to answer your very specific question, could Α. 9 we have drilled the well deeper? Physically, I believe that we could have. It was a guestion of should we from 10 11 the standpoint of could we successfully cement our liner 12 in place. So there is a difference -- I'm simply trying 13 to answer your question. There is a difference between 14 could and should, and we went off of should. Okay? 15Ο. I understand. 16 EXAMINER WADE: I don't have any questions. 17 EXAMINER JONES: Okav. We're fine. I'm 18 sorry to delay you so long this morning. 19 It's fun to hear these guys. 20 MR. BRUCE: It's interesting stuff. And I 21 told Ms. O'Callaghan this Gavilon-Mancos won't go away. 22 This is my third round with Gavilon-Mancos stuff in 30 23 years. It's the bad penny that always shows up 24 (laughter). 25 EXAMINER JONES: Well, with that -- that's

Page 40

	"Page 41
1	all, a penny?
2	Could you please do a proposed order?
3	EXAMINER WADE: That way we can make sure
4	the past order is what you think needs to be
5	incorporated, you know, we have an idea of
6	EXAMINER JONES: Could you send that
7	directly to Gabe right here?
8	MR. BRUCE: Yes. But if that's it, I need
9	to go.
10	EXAMINER JONES: Take Case 15268 under
11	advisement. Thank you very much.
12	(Case Number 15268 concludes, 9:11 a.m.)
13	
14	
15	I to hereby certify that the foregoing is a complete record of the proceedings in
16	the Examiner hearing of Case from
17	heard by me on, Examines
18	Oil Conservation Division
19	
20	
21	,
22	
23	
24	
25	

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2	COUNTY OF BERNALILLO
3	
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