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3 IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR			
4 THE PURPOSE OF CONSIDERING:			
5 APPLICATION OF ENCANA OIL & GAS (USA), INC. FOR APPROVAL OF THE	CASE NO. 15154		
6 PINON UNIT, CREATION OF A NEW POOL FOR HORIZONTAL DEVELOPMENT	ORIGINAL		
7 WITHIN THE UNIT AREA, AND FOR ALLOWANCE OF 330-FOOT SETBACKS			
8 FROM THE EXTERIOR OF THE PROPOSED UNIT, SAN JUAN COUNTY, NEW MEXICO.			
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10 REPORTER'S TRANSCRIPT OF PROC	EEDINGS		
11 EXAMINER HEARING			
12 May 29, 2014			
13 Santa Fe, New Mexico	RECEIVED OCD 1011 JUN -2 P 3 4		
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15 BEFORE: SCOTT DAWSON, CHIEF EXAMINER GABRIEL WADE, LEGAL EXAMINER			
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18 This matter came on for head New Mexico Oil Conservation Division, Sco	-		
19 Chief Examiner, and Gabriel Wade, Legal 1 Thursday, May 29, 2014, at the New Mexico	Examiner, on		
20 Minerals and Natural Resources Department Building, 1220 South St. Francis Drive, 1	tment, Wendell Chino		
21 Room 102, Santa Fe, New Mexico.			
22 REPORTED BY: Mary C. Hankins, CCR, RPR New Mexico CCR #20			
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1 **APPEARANCES** 2 FOR APPLICANT ENCANA OIL & GAS, INC.: 3 ADAM G. RANKIN, ESQ. HOLLAND & HART 110 North Guadalupe, Suite 1 4 Santa Fe, New Mexico 87501 (505) 988-4421 5 agrankin@hollandhart.com 6 7 FOR INTERVENOR PRO NM ENERGY, INC.: J. E. "GENE" GALLEGOS, ESQ. 8 GALLEGOS LAW FIRM, P.C. 9 460 St. Michaels Drive, Building 300 Santa Fe, New Mexico 87505 10 (505) 983-6686 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

Page 3 INDEX PAGE Case Number 15154 Called Encana Oil & Gas, Inc.'s Case-in-Chief: Witnesses: Mona L. Binion: Direct Examination by Mr. Rankin Cross-Examination by Mr. Gallegos Cross-Examination by Examiner Dawson Jennifer W. Graf: Direct Examination by Mr. Rankin Cross-Examination by Mr. Gallegos Cross-Examination by Examiner Dawson Redirect Examination by Mr. Rankin Recross Examination by Mr. Gallegos Daniel J. Camper: Direct Examination by Mr. Rankin Cross-Examination by Mr. Gallegos Cross-Examination by Examiner Dawson Redirect Examination by Mr. Rankin Closing Statement by Mr. Rankin Closing Statement by Mr. Gallegos Proceedings Conclude Certificate of Court Reporter

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Page 5 (9:38 a.m.) 1 2 EXAMINER DAWSON: Good morning. Today is Thursday, May 29th, 2014. We're located at Porter Hall 3 in the Wendell Chino Building, at 1220 South St. 4 5 Francis, Santa Fe. My name is Scott Dawson. I'm the deputy director for the Oil Conservation Division. I 6 7 will be the Hearing Examiner for Cases 15153 and 15154. To my right is Gabriel Wade. He's general 8 counsel for EMNRD and representing the Oil Conservation 9 10 Division. I have had a chance to read the draft order 11 of the Cases 15153 and 15154. 12 13 And I will ask, Mr. Rankin, do you wish to separate or consolidate these cases? 14 15 MR. RANKIN: Thank you, Mr. Examiner. We prefer to present these cases separately, and if it 16 pleases the Examiner, we prefer to do Case 15154 first, 17 18 since that's the case in which Mr. Gallegos has entered 19 an objection to. We'd like to address that case first 20 and then proceed with Case 15153. 21 EXAMINER DAWSON: Okay. I'd please ask for 22 appearances and witnesses. 23 MR. RANKIN: Thank you, Mr. Examiner. Adam Rankin, of Hollard & Hart here in 24 25 Santa Fe, on behalf of Encana Oil & Gas. And today I'll

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Page 6 1 have three witnesses in Case 15154 and three witnesses in Case 15153. 2 3 EXAMINER DAWSON: Mr. Gallegos? MR. GALLEGOS: Yes, Mr. Examiner. 4 Gene 5 Gallegos appearing for Pro NM Energy, Inc. And we appreciate the cooperation of counsel taking Case 15154 6 7 at this time. 8 EXAMINER DAWSON: Are you here to oppose or 9 protest this case? 10 MR. GALLEGOS: No. We're simply intervening. We don't stand in opposition, but we 11 12 question the setback aspect of the case, the 330-foot 13 setback. We do not oppose formation of the unit or the other portions of the application. 14 EXAMINER DAWSON: Okay. Well, I'm hoping 15 16 that your concerns will be addressed at the hearing. 17 MR. GALLEGOS: Thank you. 18 EXAMINER DAWSON: Okay. Mr. Rankin, do you 19 have an opening statement? 20 MR. RANKIN: Mr. Examiner, no, I don't. Ι 21 prefer to proceed with witnesses at this point. 22 EXAMINER DAWSON: Okay. We can swear in the witnesses at this time. 23 24 MR. RANKIN: Thank you. 25 You guys want to stand up?

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Page 7 1 EXAMINER DAWSON: Please raise your right hand and -- state your name, please. 2 MS. GRAF: Jennifer Graf. 3 4 MR. CAMPER: Daniel Camper. MS. BINION: Mona Binion. 5 EXAMINER DAWSON: Do you have any exhibits 6 that you wish to enter? 7 MR. RANKIN: We will have -- we do have 8 exhibits, I think a total of 15 exhibits. 9 10 EXAMINER DAWSON: The court reporter needs to swear them in. I'm sorry. 11 12 (Ms. Graf, Mr. Camper and Ms. Binion 13 sworn.) MR. RANKIN: Mr. Examiner, I'd like to call 14 my first witness, Ms. Mona Binion, please. 15 16 EXAMINER DAWSON: Go ahead. 17 MONA L. BINION, after having been first duly sworn under oath, was 1.8 19 questioned and testified as follows: 20 DIRECT EXAMINATION BY MR. RANKIN: 21 Good morning, Ms. Binion. How are you? 22 Ο. 23 Good morning. Α. For the record, can you please state your full 24 Q. 25 name?

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Page 8 Mona Binion. 1 Α. And by whom are you employed? 2 Q. Encana Oil & Gas. 3 Α. Ο. And in what capacity? 4 As a land negotiator for the San Juan Basin. 5 Α. And have you previously testified before the 6 Ο. 7 New Mexico Oil Conservation Division? 8 Α. I have. 9 Ο. And have your credentials as an expert in land petroleum management been made a matter of record and 10 certified by the Division? 11 12 Α. It has. And are you familiar with the status of the --13 Q. are you familiar with the applications -- application 14 that's filed in this case? 15 16 Α. I am. 17 And are you also familiar with the lands that Q. 18 are the subject of this application? I am. 19 Α. 20 Mr. Examiner, I would tender MR. RANKIN: 21 Ms. Binion as an expert in petroleum land matters. 22 EXAMINER DAWSON: She is so accepted. 23 MR. RANKIN: Any objections? 24 MR. GALLEGOS: No objection. 25 EXAMINER DAWSON: Do you have any

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1 objections, Mr. Gallegos?

2

MR. GALLEGOS: No, Mr. Examiner.

3 Q. (BY MR. RANKIN) Ms. Binion, can you please 4 briefly state what it is that Encana seeks with this 5 application?

A. Encana seeks the approval of the Pinon Unit as a voluntary federal exploratory undivided unit and the creation of a new pool for horizontal development within the unit boundaries providing for 330-foot setbacks from the exterior boundary of the unit.

Q. Ms. Binion, will you please turn to what's been marked as Exhibit Number 1 in your exhibit packet, and can you please just review this exhibit and explain what it shows for the Examiner?

Exhibit 1 shows the outline of the Pinon Unit 15 Α. boundary in bold black outline, which depicts 16 approximately 800,000 [sic] acres. It's a mixture of 17 18 federal, state and Indian allotted mineral acres. Ιt 19 includes a portion of the Basin-Mancos gas pool, which contains 320-acre spacing unit rules, with a 660-foot 20 21 setback. It also contains a portion of the Bisti Lower Gallup pool, which contains 80-acre spacing and 330-foot 22 23 setbacks.

Q. And just for the record, would you mind Clarifying the approximate acreage for the unit again?

Page 10 The acreage of the Pinon Unit is about 8,005.44 1 Α. acres exactly. 2 Q. Thank you. 3 Α. Okay. 4 Thank you. 5 0. Now, also in this application, does Encana 6 7 seek to -- seek to create -- combine these pools into one pool creating a new pool; is that correct? 8 9 Α. Correct. Rather than having a mixture of two 10 separate pools, it's our intention to create a new pool, which will be one combined pool, which would extend to 11 the exterior boundary of the Pinon Unit area. 12 And it would be one pool with a uniform setback of 330 feet up 13 to the exterior boundary of the unit. 14 Now, was there an omission in the application 15 Ο. before the Division with respect to the description of 16 17 the unit area? 18 Α. Yes. When the application was filed, there was a typographical error in the typing of the application. 19 The south half -- the north half of Section 28 was 20 inadvertently omitted in the typing of the application, 21 but the parties that were noticed when the application 22 was filed included the parties that were surrounding the 23 north half of 28. 24 Okay. And so how many parties -- how many 25 Ο.

1 parties was that?

A. There were only three working interest parties
that were surrounding the north half of 28 that received
notice.

5 Q. Of those three, were any of those parties part 6 of the unit itself?

7 A. Two of those three parties were also within the8 unit boundary.

9 Q. So they're aware of the unit formation?
10 A. That's correct. They were also in the unit, as
11 well as outside the unit.

12 Q. As a consequence of that omission, what did 13 Encana do to reach out to talk to -- to notice those 14 parties?

15 A. We contacted all three of those parties, and we 16 asked them whether or not they had -- we asked for a 17 waiver of the notice provision and asked if they had any 18 objection to the application itself so that we could 19 proceed with the hearing today.

Q. Exhibit 2, Ms. Binion, is that a copy -contain copies of the waiver request letters that were sent to each of those three parties?

23 A. Yes.

Q. And did you have any subsequent conversationsor communications with those parties regarding the

Page 11

1 request for waiver?

A. Yes. Dugan Production returned a written waiver saying that they had no objection to the application and the requests that were being filed in the application.

Fullerton sent an e-mail saying -- they
were out of the country and were just returning today,
and they sent an e-mail back saying they had no
objections, and they would sign the waiver and return it
to us upon their return inside the country.

And then Cross Timbers said that to their knowledge, they had no objection to the application, but they not been able to send the waiver back. They were sending it on to their management.

Q. So with respect to each of these three entities, none of the parties raised any objections to the creation or formation of the unit or proposed conditions for the unit creation?

19 A. No.

Q. Ms. Binion, moving on to the next exhibit, will
you please identify for the Examiners and explain what
is Exhibit Number 3 in the exhibit packet?
A. Exhibit 3 is the Federal Exploratory Unit
undivided format federal unit -- I'm sorry -- unit
agreement form that complies to incorporate federal,

Page 12

Page 13 state and allotted Indian minerals. 1 Is this a standard federal form for a unit 2 Ο. 3 agreement? It's -- the base form is standard. It's been Δ Α. 5 modified to incorporate the development of horizontal drilling. б 7 So when you say that, you mean the unit Ο. agreement proposes only horizontal development for 8 purposes of the unit? 9 It's limited for horizontal development, and it 10 Α. is also limited to incorporate just one formation or one 11 interval of the unitized area. 12 We'll talk about that particular unitized 13 Q . interval in a moment. 14 Turning to the next exhibit, Exhibit Number 15 16 4, is this an attachment to the unit agreement? Α. This is Exhibit A to the unit agreement. 17 Yes. 18 It depicts the lands contained within the unit area on a tract-by-tract basis, each tract which describes each 19 individual oil and gas lease. It also describes the 20 serial number by either the BIA or the state or the 21 federal serial number. It describes the number of acres 22 23 and the record lessee on the state, BIA or federal 24 record. 25 And does this Exhibit A correctly reflect the Ο.

1 exterior boundaries of the unit?

A. It does.

2

Ο. And it includes that north half of Section 28 3 that was otherwise omitted from the OCD application? 4 It does. It also -- at the bottom of the map, 5 Α. it shows the percentage of acres that are combined that 6 7 are reflecting the allotted acres -- total number of allotted mineral acres versus the total number of state 8 mineral acres versus the total number of federal mineral 9 acres. 10

11 Q. With respect to the mineral interests at issue 12 here, are those identified in the next exhibit, Exhibit 13 Number 5?

A. Exhibit Number 5, yes, is the Exhibit B to the unit agreement, which, in correspondence with Exhibit A, also reflects on a tract basis the respective oil and gas leases that are reflected on Exhibit A. And it further reflects the ownership of the working interests, the basic royalty, the overriding royalty and the working interests on each tract.

Q. And, Ms. Binion, does Encana expect to have 100percent commitment to this unit?

A. We expect to have each lease, each tract 100percent committed to this unit, yes.

25 Q. And at this point in time, are there any

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1 uncommitted interests?

We have not had anyone indicate that they would 2 Α. 3 not commit their interest to the unit. That's right. Now, speaking about -- earlier you testified 4 Ο. 5 regarding the unit -- the limitations of this unit to a specific interval -- geologic interval. Is that 6 7 identified in the next exhibit, Number 7 -- rather, Number 6. Forgive me. 8 Α. Yes Exhibit Number 6 is Exhibit C to the unit 9 agreement, which is a type log that was provided by our 10 11 geologist that depicts the interval on this type log, which is considered the unitized -- reflects the 12 unitized substances to be committed to this unit. 13 Ιt 14 reflects the unitized interval. 15 Ο. And your geologist who will be testifying 16 subsequently will give further testimony on this type log? 17 That's right. 18 Α. 19 Now, with respect to the proposed unit Ο. agreement, has Encana had discussions with the State 20 21 Land Office and the BLM regarding approval of this unit 22 agreement? 23 Α. Yes. 24 0. And have the BLM and the State Land Office both 25 indicated their preliminary approval for this unit?

Page 16 We have received preliminary approval from both 1 Α. the State Land Office and the BLM. 2 Are those identified in Exhibit Number 7? 3 Ο. Α. 4 Yes. And the first being the preliminary letter --5 Ο. preliminary approval letter from the State Land Office? 6 7 Α. May 20th is the date of the letter from the state -- or Commissioner of Public Lands, which 8 indicates their preliminary approval to the Pinon Unit. 9 10 Q. And following that letter in the same exhibit is a letter from the BLM indicating the same; is that 11 correct? 12 Α. Correct, a letter dated April 21st from the BLM 13 indicating their approval to the formation of the Pinon 14 Unit. 15 You indicated previously that this unit 16 Q. includes allotted Indian lands; is that correct? 17 Α. That's correct. 18 So did you also have conversations with the 19 Ο. Federal Indian Minerals Office as well? 20 We did. The former director of the Federal 21 Α. Indian Minerals Office attended the meetings that we had 22 with the Bureau of Land Management, where we presented 23 the area and depth materials in the initial formation of 24 the Pinon Unit, and they were in favor of formation of 25

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Page 17 the unit. And at the time, the allotted minerals were 1 then unleased, and they were in favor of leasing the 2 minerals and committing them to the unit. Oh, I'm 3 sorry. I retract that statement. That was our other 4 That is for the next unit, the Nageezi Unit. 5 unit. These are all -- these are all leased 6 7 minerals. They were -- the former director was in attendance at this area and depth meeting, and they were 8 9 in favor of the formation. Those minerals are leased under existing producing allotted leases, but they were 1.0in favor of committing those leases to the unit. 11 12 Q. Thank you, Ms. Binion. 13 Now, with respect to the BLM's approval, did you also discuss with them a proposal to create a 14 15 single participating area within this unit? The undivided federal lease form creates 16 Α. Yes. a single participating area, and that creates undivided 17 sharing of the royalty interest -- the overriding 18 royalty interest and the working interest throughout the 19 area producing unit area. 20 21 Ο. What is the effect of creating a single participating area within the unit with respect to the 22 Division rules regarding project areas? 23 Under the Division rules, under -- by creation 24 Α. 25 of one undivided participating area, the unit area

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becomes one single project area under the Division
 Horizontal Well Rules.

And what is the benefit of that condition? 3 Ο. Well, the benefit of that condition is all of Α. 4 the parties within the participating area and now the 5 new project area, all parties participate informally 6 [sic] in all operations within the unit area. 7 There is no undivided -- there is no divided sharing. There is 8 no -- there is no undivided, disproportionate sharing 9 across the unit. 10

11 Q. I understand.

12 And with respect to the operations side, 13 what is the -- Encana having flexibility with their operations having just a single project area? 14 They're easier to locate the laterals in a 15 Α. more -- there is more flexibility in locating laterals 16 because you're able to put them either north-south, 17 east-west, west-east or transverse without worrying 18 about whether or not the project areas are rectangular 19 20 in shape, and they conform to 80-acre stand-up, lay-down, 160, 320 or any combination of the above 21 because they are adhering to separate pool rules if the 22 23 lateral penetrates more than one pool. So that's also a benefit of consolidating these 24 Ο.

25 pools into one pool just for the horizontal development;

Page 18

1 is that correct?

2 A. Correct.

Q. That gives you the flexibility to operate the unit in a way that is most effective and efficient to produce the unit?

6 A. Correct.

Q. Now, speaking about the background and the discussions that Encana had with the State Land Office and with the Oil Conservation Division, did either the State Land Office or the Division have concerns about how this unit would have been operated under separate pools?

Α. There was also a concern -- under the ONGARD 13 System, it was -- there was a concern that the ONGARD 14 15 System was unable to handle the management of the production reporting when there was going to be multiple 16 pools being reported under multiple wells being drilled 17 within the unit area on an undivided ownership basis 18 19 where the actual penetration of the well would not 20 necessarily have penetrated each of those multiple And that was a concern of the Division, where 21 pools. the possible resolution of that would have been, again, 22 to form one simple unified pool across the unit area. 23 For reporting purposes, it would have also resolved that 24 25 concern.

Page 19

Page 20 So Encana met previously with the Division and 1 Ο. with the State Land Office, and those concerns were 2 brought to Encana's attention? 3 Α. Right. 4 And what was the proposed resolution for 5 Ο. addressing that concern? 6 7 Was the formation of a single pool across the Α. unit area. 8 That would resolve all the reporting problems 9 Q. for purposes of the State Land Office and the Division? 10 11 Α. That's correct. Correct. And just for clarification for the record, you 12 Ο. mentioned ONGARD. What is that? 13 ONGARD is the Division's reporting system. 14 Α. For production? 15 Q. For production, correct. 16 Α. Now, with respect to Encana's proposal to 17 Q. create a new pool, a single pool, combine these pools 18 19 into one, did the company identify and provide notice to the operators and the lessees in the surrounding acreage 20 21 around the proposed unit? 22 Α. Correct. We identified the operators of all 23 Gallup-Mancos wells within the exterior boundary of the entire unit area. And where there were no existing 24 25 Gallup-Mancos wells, we identified the lessees of the

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Page 21 Gallup-Mancos operating rights. And where the lessee 1 was Encana, as the Applicant, we identified the mineral 2 owners, and we noticed all those parties. 3 Now, Exhibit A, is that a copy of an affidavit Ο. 4 5 from my law firm indicating that we provided notice to the affected parties that you've identified? 6 7 Α. Yes. 8 Q. And does that exhibit also contain a copy -- a 9 sample copy of the letters that were sent out to those entities? 10Α. Yes. 11 As well as the green card receipts indicating 12 Ο. that these notice letters were sent out by certified 13 return receipt? 14 15 Α. Yes. Now, Ms. Binion, I'd like you to just flip back 16 Ο. 17to Exhibit Number 1 for purposes of just discussing a little bit further the notice issue. You indicated that 18 operators surrounding the unit were provided notice in 19 this case; is that right? 20 21 Α. Yes. And did you distinguish between operators who 22 Q. were within a pool that already had 330-foot setbacks? 23 24Α. We did not distinguish. We noticed all parties 25 surrounding the entire unit boundary, whether they were

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Page 22 within a pool that already had a 330-foot setback or 1 within a pool that had a 660-foot setback. We noticed 2 all parties. 3 Ο. And was it necessary for you, under the 4 Division rules, to notice all parties, even those who 5 are already subject to the 330-foot setback? 6 It's my understanding we were only required to 7 Α. notice parties that would have been encroached under a 8 9 660-foot setback because we were not encroaching against 10 parties that would have already been under a 330-foot setback, because we were asking for the same setback 11 that we were already under. But we noticed them anyway. 12 13 Ο. And that would have included Mr. Gallegos' parties, though? 14 15 Under the South Bisti Gallup pool, correct --Α. I'm sorry -- the Bisti North Gallup pool. 16 17 Ο. And that is Pro NM -- Pro New Mexico Energy; is 18 that correct? Correct. 19 Α. So they received notice even though they're in 20 Q. 21 a 330-foot setback pool? 22 Α. Correct. Also, Ms. Binion, did Encana also publish 23 Ο. notice in the newspaper providing notice of its 24 intention to create a new pool --25

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Page 23 1 Α. Correct. -- in this proposed unit? 2 Ο. Α. Yes. 3 Ο. Is that identified at Exhibit Number 9? 4 Α. Correct. 5 6 Ο. And does Exhibit Number 9 contain an Affidavit 7 of Publication from the Daily Times? Yes. And it's listed as Ad Number 70266. 8 Α. Ms. Binion, were Exhibits 1 through 9 either 9 Ο. prepared by you or under your supervision? 10 Α. 11 Yes. MR. RANKIN: Mr. Examiner, I'd move to 12 13 admit Exhibits 1 through 9 for the record. 14 EXAMINER DAWSON: Any objection? 15 MR. GALLEGOS: No objection. 16 EXAMINER DAWSON: So admitted. 17 (Encana Oil & Gas, Inc. Exhibit Numbers 1 through 9 were offered and admitted into 1.8evidence.) 19 MR. RANKIN: Mr. Examiner, I pass the 20 witness. 21 22 EXAMINER DAWSON: Mr. Gallegos, do you have any questions? 23 24 MR. GALLEGOS: I do. Thank you, 25 Mr. Examiner.

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Page 24 1 CROSS-EXAMINATION 2 BY MR. GALLEGOS: Ms. Binion, reqarding the Mancos pool, are you 3 Ο. aware of when the pool rules were established? 4 5 Α. I can't recall the exact date of the order, but 6 yes, I have read the order, so I can vaguely -- yes, I am familiar. 7 8 Ο. Fairly recent, would you say? Α. Yes. 9 10 Q. And for that pool, the rules provide for a 660-foot setback, correct? 11 Yes, sir. 12 Α. 13 And is Encana developing -- operating wells Ο. under those pool rules at other locations than the 14 subject land here? 15 16 Α. Yes. In fact, a number of wells in western Sandoval 17 Ο. County under those pool rules are being developed by 18 Encana; is that true? 19 Α. 20 Yes. Now, let's turn to the Lower Bisti Gallup pool 21 Ο. 22 rules. Are you aware from the inception of that pool in 23 1958, until 1976, the setback requirement was 660 feet? I can't tell you the history of that pool, no. 24 Α. I wasn't here in '58. 25

Page 25 Let me represent to you and ask the Examiner to 1 Q. take administrative notice that in 1976, Order R-1069-G 2 changed the spacing in the Lower Bisti Gallup pool to 3 40-acre spacing, and at that time, changed the setback 4 to 330 acres -- 330 feet. Were you aware of that? 5 6 Α. No, sir. I was not aware of that. 7 Ο. You would agree that once the Commission had allowed 400-acre spacing, a 660-feet setback would be 8 unworkable? 9 Α. That's logical. 10 And so the 330-feet setback that's come Ο. 11 about is a result of that spacing, as far as your 12 investigation has indicated; is that not true? 13 That sounds logical, Mr. Gallegos. But can I Ά. 14 also make a statement that that's vertical wells? 15 Ο. Understood. 16 17 Α. Okay. Q. Exactly. 18 19 And as I understand it, your recommendation, basically, is that Encana would like 20 uniformity as to the setback requirements? Is that the 21 position? 22 23 Α. Encana can also make a statement that that's oil wells. 24 I'm sorry? 25 Q.

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Page 26 That's oil wells, right? You're talking about 1 Α. uniformity, but we're talking about oil wells, before I 2 answer the question. 3 Ο. We're talking about the wells that Encana 4 Yes. 5 proposes to develop here. 6 Α. But I am also asking you to clarify your 7 question. You're asking me to answer a question. I'm 8 asking you to clarify the question. Encana's testimony here is all related to oil wells. 9 Yes, ma'am. 10 Ο. So I'll clarify the answer. Yes, Encana is Α. 11 asking for uniformity in its application, and it's 12 asking for uniformity in the setback rules for oil 13 wells, yes. 14 15 Ο. I think we're communicating. 16 Α. That's correct. Okay. I just wanted to 17 clarify that. 18 Ο. I think we're definitely communicating. 19 Α. Okay. 20 And you took note of the fact that as far as Q. ONGARD is concerned, reporting would be simplified if 21 there is uniformity as to the particular pool that 22 23 Encana seeks to develop, correct? 24 A. Correct. 25 And otherwise, Encana would like for there to Q.

Page 27 be uniformity as to the setback requirement for other 1 reasons? Just for practical operating reasons? 2 3 Α. Not practical operating reasons. For being able to locate wells, being able to follow the rules, to 4 5 have a single set of rules and to be able to locate 6 wells in that single set of rules, rather than having to 7 be -- you know, having to follow rules that don't mesh 8 with each other to be able to locate wells. It's almost impossible -- virtually impossible to locate wells. 9 10 Q. Understood. And if the setback requirement was 660 for 11 12 this entire pool, you would have uniformity? In other words, it can be -- 660 can be uniform as easily as it 13 can be 330 and achieve uniformity? 14 15 Α. Uniformity isn't the only reason. There is 16 also -- you lose reserves if you don't have -- well, I'm 17 not going to talk about reserves because I'm not qualified. 18 I was not going to ask you about communication 19 Q. or those kind of things. I figured that's not your end. 20 That's somebody else. 21 22 But from the land standpoint, you would 23 achieve the uniformity if you have a 660-foot setback or 24 a 330 setback? 25 Α. Uniformity, that's correct.

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Page 28 1 Q. Thank you. That's all my questions. 2 MR. GALLEGOS: CROSS-EXAMINATION 3 BY EXAMINER DAWSON: 4 Ms. Binion, on your exhibits, you were talking 5 Ο. about, on Exhibit Number 1, the Basin-Mancos gas pool. 6 7 I don't see it on this exhibit. 8 Α. I apologize for that not being identified with 9 a tag, but the yellow -- anything yellow is the Basin-Mancos gas pool. I apologize for that. It wasn't 10 flagged that way. 11 All right. Thanks. 12 Ο. Everything not identified as an oil pool was a 13 Α. 14 gas pool. Q. On the allotted lands --15 16 Α. Yes, sir. 17 Ο. -- were you able to get signatures from the allottees from those lands? 18 Α. Yes, sir. 19 20 Q. That's all the questions I have of you. Thank 21 you. 22 (Consultation between Examiner Dawson and 23 Examiner Wade.) 24 Ο. (BY EXAMINER DAWSON) Okay. The question is on the notice -- is the notice reflective of the correct 25

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1 land description --

MR. WADE: That would be the public lands? Q. (BY EXAMINER DAWSON) -- the proposed unit area? It looks like the notice has the 8,005 acres, more or less, the federal lands, on the notice, and when we look at the proposed -- the adjusted application of the proposed area is 7,900, I believe. I have to look back at that exhibit.

MR. RANKIN: Mr. Examiner, the notice as 9 10 provided included the application, which would have included that omission on the north half of Section 28. 11 However, because this is a unit formation -- formation 12 13 of a unit, under normal Division rules, notice isn't required for a voluntary unit, because all the 1.4 individuals participating in the unit would be -- would 15 have been contacted anyway for voluntary commitment to 16 the unit. 17

18 So the only reason that notice is provided 19 is for the offsetting interest owners for the 330-foot 20 setbacks. For that reason, we proceeded to seek waivers 21 and provided notice to the individuals affected and not 22 received proper notice for those 330-setback changes. 23 THE WITNESS: The application described the

24 correct number of acres. It just -- the actual written 25 description that was listed in the application, it just

Page 29

Page 30 did not say the north half of Section 28. That 1 particular part of the description was left off. 2 But it described the words "8,005.44 acres. 3 EXAMINER WADE: And, again, this is for the 4 benefit of the offset mineral interest owners? 5 THE WITNESS: Correct. And we notified 6 7 those parties that we had made that omission. They were noticed of the application. And two of those three 8 9 parties were already in the unit and had received the unit materials. So they knew they were in the unit. 10 They were outside of the unit. 11 (BY EXAMINER DAWSON) So your adjusted acreage 12 Q. calculation included all acres since it was less than 13 14 the actual application? 15 Α. The acres were never adjusted. The acreage has 16 never been changed. The acres were always correct. It's just we didn't -- we left off that last 17 description. It was a typo when we described the lands. 18 19 If we would have attached a map, it would have been 20 correct. The map wasn't attached. It was just a typo in the written application, but the acres were always 21 correct in every publication. 22 23 Ο. Are there any wells currently producing within 24 the unit boundary in the Basin-Mancos pool? There is the Good Times L10. 25 Α. Yes. And that's

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Page 31 1 a horizontal well that we drilled before the unit was 2 proposed, and that well is going to be excluded from the 3 unit. 4 Q. Okay. Α. And that's written in the unit agreement. 5 The unit agreement excludes the well from unit 6 7 participation. Ο. Did you provide the offsetting mineral owners 8 the same 330-foot setback? Was that -- I believe you 9 answered that question. I just wanted to verify that. 10 MR. RANKIN: That's correct. Yeah, in 11 terms of the application, include that provision of the 12 rules, and they were notified of that proposed change. 13 EXAMINER DAWSON: I have no further 14 15 questions. Thank you. 16 MR. RANKIN: Thank you, Ms. Binion. 17 I'd like to call my second witness. Mr. Examiner, my second witness today is Ms. Jennifer W. 18 19 Graf. 20 21 JENNIFER W. GRAF, 22 after having been previously sworn under oath, was 23 questioned and testified as follows: 24 25

1	DIRECT EXAMINATION
2	BY MR. RANKIN:
3	Q. Ms. Graf, you've already been sworn in,
4	correct?
- 5	A. Yes.
6	Q. And would you mind, please, stating your full
7	name for the record?
8	A. Jennifer Shundy [phonetic;sic] Graf.
9	Q. Would you please spell your last name?
10	A. G-R-A-F, as in Frank.
11	Q. Thank you.
12	And by whom are you employed?
13	A. Encana Oil & Gas.
14	Q. And what is your position with Encana?
15	A. I'm a geologist in the San Juan Basin group.
16	Q. And have you previously testified before the
17	Division?
18	A. No, I have not.
19	Q. Would you mind recounting for the Examiners
20	your background educational background?
21	A. I received my bachelor's of science degree in
22	geology from West Virginia University, and I have a
23	master's degree in science, in geology, from the
24	University of Wisconsin.
25	Q. And would you please review for the Examiners

Page 33 your background in petroleum geology? 1 I have previously been employed at 2 Α. Sure. 3 Anadarko Petroleum Corporation, where I worked deep water Gulf of Mexico, and for the last five-and-a-half 4 years, I've worked at Encana, working on the New 5 Ventures Group, as well as the Piceance [phonetic] 6 7 Development Group before joining the San Juan 8 Development Team. 9 Ο. And are you familiar with the application that's filed in this case? 10 Α. 11 I am. Have you conducted a study of the geology of 12 Q. area and the lands that are the subject of this 13 application? 14 I have. Α. 15 MR. RANKIN: Mr. Examiner, I would tender 16 17 Ms. Graf as an expert in petroleum geology. 18 MR. GALLEGOS: We have no objection. 19 EXAMINER DAWSON: She is so accepted. 20 Ο. (BY MR. RANKIN) Ms. Graf, are you familiar with the proposed geologic interval that would be included in 21 this proposed unit? 22 23 Α. I am. 24 Q. And that is identified in an exhibit, Exhibit Number 10, correct? 25

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1 A. It is.

2 Q. Would you please review for the Examiners 3 Exhibit Number 10?

Α. Sure. Exhibit Number 10 is the type log for 4 This is the Rodeo Rosie #1 well. 5 the proposed unit. It's located in the southeastern portion of our proposed 6 7 unit area. This log that we're looking at here has a gamma ray log in the leftmost tract, followed by a 8 9 resistivity log and a porosity log in the third tract to 10 the far right.

11 On this log, I have identified the major 12 horizons, and I've also bracketed the unitized interval, 13 which goes from 100 feet below the base of the Mesaverde 14 to the base of the Greenhorn limestone, which is also 15 identified as the top of the Graneros Shale.

And I would just like to clarify, from the image on Exhibit Number 10, that the lower-most bracket should be right at the top of the Graneros Shale. It's just a graphical misrepresentation that the bracket goes slightly further deeper in the section.

The unitized interval is 100 feet below the base of the Mesaverde to the base of the Greenhorn limestone. In this Rodeo Rosie #1 log, this is about 1,800 feet of total section that we're proposing for unitization. In this, we have the Gallup Formation,

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Page 35 which is about 300 feet of sand bodies interbedded by 1 shale. We also have the Juana Lopez, the Carlile and 2 the Greenhorn. 3 And just to be totally clear, the bracket on Q. 4 the left-hand side of this type log, as you indicated, 5 was meant to actually connect up with the line 6 designated with the Graneros Shale at the base of the 7 8 Greenhorn? 9 Α. That is correct. 10 Ο. Now, Ms. Graf, you also prepared some additional exhibits on your study of the geology in the 11 area, correct? 12 13 Α. We did. So if you'll just proceed, and if I have any Ο. 14 questions, I'll interject. 15 Α. Exhibit Number 11 is a structure contour map at 16 the top of the Mancos Shale. So we have here contour --17 18 at a contour interval of 20 feet. We also have, for reference, the outline of the proposed unit in black. 19 20 Also depicted on this map are two cross sections, a 21 north-south cross-section line, A to A prime represented in red, and a west-to-east cross section represented by 22 23 the blue line, B to B prime. There is also a green star 24 locating the type log that was just discussed, the Rodeo 25 Rosie #1 well.

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Page 36 So to discuss the structure contour of the 1 Mancos Shale, you can see that the beds are dipping 2 gently to the northeast at a gradient of about one 3 degree. We're having about 320 to 370 feet of 4 5 structural relief from the southwest portion of our proposed unit interval to the northeast portion of the 6 7 unit. Moving along to the following exhibit, 8 9 Exhibit Number 12, we have very much the same thing, but this is the top of the Gallup interval. This is a 10 structure contour map showing the top of the Gallup at a 11 contour interval of, again, 20 feet. You can see, 12 again, that the structure is dipping to the northeast at 13 14 about a one-degree dip. 15 So between these two exhibits, Exhibit Number 11 and Exhibit Number 12, there is no indication 16 that there are any major faults or structural 17 18 impediments to the development of this unit. 19 Moving on to Exhibit 13, this is the north-to-south cross-section line, A to A prime, which 20 is represented by the red line. The northernmost well 21 is actually outside of the unit boundary. The second 22 and third wells are within the unit boundary, and the 23 southernmost well, the Gold Medal #1 well, is outside, 24 25 again, the unit boundary.

Page 37 We have the same log curves depicted as the 1 We have a gamma ray log, a resistivity log 2 type log. and porosity log represented for each of these wells. 3 Again, the unitized interval is bracketed. 4 5 You can see from where the tops have been 6 placed on each of these wells that there are no major 7 thickening or thinning episodes. This is relatively continuous in thickness from the north to the south. 8 You can also -- in the Gallup Formation, the sand bodies 9 that we discussed in the Rodeo Rosie #1 well are present 10 from the north, within the unit boundary, as well as to 11 the south. 12 13 Moving to the following exhibit, Exhibit Number 14, this is the B to B prime cross section going 14 from west to east. It's set up exactly as the previous 15 16 cross section. Again, you can see that there are no major thinning or thickening episodes among our horizons 17 outside the unit or within the unit, so stratigraphy is 18 unchanging through that. We also see the same sand 19 bodies within the Gallup present outside of the unit, 20 inside of the unit and, again, outside of the unit. 21 22 Ο. Now, based on your studies, Ms. Graf, just to 23 be clear, have you identified any faults or pinch-outs that would prevent an impediment to the efficient and 24 25 effective development of this area as a unit?

Page 38 1 Α. I have not. In your opinion, will the formation of this 2 Ο. 3 unit provide the most efficient and effective development of the reserves in this area? 4 5 Α. It will. 6 Q. And in your opinion, will the approval of the application be in the best interest of conservation, the 7 prevention of waste and the protection of correlative 8 rights? 9 Α. It will. 10 Were Exhibits -- let me get the right numbers. Q. 11 Were Exhibits 10 through 14 prepared by you or under 12 your direction or supervision? 13 14 Α. They were. 15 MR. RANKIN: Mr. Examiner, I would move to admit Exhibits 10 through 14 for the record. 16 17 MR. GALLEGOS: No objection. EXAMINER DAWSON: They are so admitted. 18 (Encana Oil & Gas, Inc. Exhibit Numbers 10 19 20 through 14 were offered and admitted into 21 evidence.) 22 MR. RANKIN: I have no further questions. Pass the witness. 23 24 EXAMINER DAWSON: Mr. Gallegos? 25

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Page 39 1 CROSS-EXAMINATION 2 BY MR. GALLEGOS: Ms. Graf, are you able to tell us what will be 3 Ο. the target of development within this interval -- within 4 this unitized interval? 5 Currently, our target would be the Gallup. 6 Α. Which is a sandstone? Ο. 7 Α. Yes. 8 And concerning the wells to the east that 9 Ο. Encana is developing, what is the formation that's being 10 developed by those horizontal wells? 11 12 Α. By east, do you mean outside of our unit? 13 Q. Yes, to the east --14 Those are also Gallup. Α. Those are also Gallup? The Sandoval County 15 Q. 16 wells? Α. 17 Yes. Do you have familiarity with the facts 18 Ο. 19 concerning the well referred to by Ms. Binion? I think she referred to it as the Good Times #10. 20 The Good Times L10-2410 IH well. 21 Α. And is that a producing vertical well within 22 Ω. the proposed Pinon Unit? 23 It is a producing horizontal well within the 24 Α. 25 unit -- within the proposed unit, yes.

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Page 40 Who is that well operated by? 1 Ο. Encana. 2 Α. When was that well developed? Q. 3 Α. Early 2013. 4 5 Ο. And is that well completed horizontally in the 6 Gallup? Α. It is. 7 If the target is the Gallup, what is the 8 Ο. rationale for unitizing the Greenhorn, which I believe 9 10 to be a shale in the Mancos, which is a shale? À. Sure. Well, we're always collecting data and 11 12 formulating analyses of other targets, and so this is -this is part of that in case new technologies makes 13 these more promising or our data begins to formulate 14 15 that as an additional target. 16 Q. The projections for development by Encana could be achieved out of the unitized interval and just 17 confined to the Gallup for present purposes? 18 I would -- I would say for our current targets, 19 Α. where we put our current targets, yes, but we are always 20 undergoing scientific analysis of other prospective 21 22 horizons which are ongoing. And as many in the industry 23 know, it takes several years to develop, so this 24 provides for that. 25 Q. Are you acquainted with the fact that federal

Page 41 exploratory units participate in areas -- are formulated 1 by producing formations? That is, for example, you 2 would have a Mesaverde participating area, a Gallup 3 participating area and so forth? 4 Α. I'm not familiar with a lot of land 5 technicalities. Maybe if you could clarify your 6 7 questions. Are you familiar with the procedure that those 8 Q. 9 participating areas are formulated only after a so-called paying well -- in other words, the well is 10 developed in that particular formation that is a paying 11 well, commercial well? 12 13 Α. I would say that my expertise is not involved in the participating areas. 14 15 Ο. I just have one other question. It's a matter 16 of curiosity more than anything. 17 On your Exhibit 11, for example, do you see 18 the light green lines, some of them sort of a horseshoe line and some of them straight lines? 19 20 Α. Uh-huh. What does that reflect? 21 Q. Those are horizontal wells -- existing 22 Α. 23 horizontal wells showing --24 Q. Existing horizontal wells? 25 Α. Yes.

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Page 42 -- showing the path of the wellbore, bottom 1 hole as it was drilled. 2 So we would understand the one that's within 3 Ο. the proposed unit boundaries, that is the Good Times 4 well? 5 Α. Yes, sir. The surface is in Section 10 denoted 6 7 by a solid black dot, and the toe of the well is in Section 9. So it was drilled from the east to the west. 8 9 Ο. And are you prepared to tell the Examiner where the proposed development wells will be located within 10 the unit, or is that something for Mr. Camper? 11 I don't know if either one of us could say that 12 Α. with certainty because we are constantly evaluating 13 where we will be placing our wells, so that has not been 1.4 finalized. 15 16 Ο. What are the candidate locations? Let's put it 17 that way. Well candidate locations would be horizontal 18 Α. wells of varying lengths and -- yes. 19 But within the -- within the unit, what are 20 Ο. 21 the --Well, I mean, our intention is to drill the --22 Α. that whole unit, so I don't know for what purpose laying 23 out those wells sequentially -- where we would start and 24 25 finish, I don't know if any of us has that answer right

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Page 43 1 now. Will the laterals be on an east-west basis 2 Ο. similar to the Good Times well, or are you 3 considering --4 I cannot say that with certainty. Again, we 5 Α. have a lot of studies going on right now as to 6 7 optimal -- optimal spacing and orientation of our wells. It is in Encana's interest, as it is everyone here, to 8 9 produce this reservoir as efficiently as possible and effectively as possible. So that is our strategy as far 10 as laying out a development plan for this unit. That is 11 our objective. 12 13 Ο. Thank you. 14 Α. Uh-huh. 15 CROSS-EXAMINATION 16 BY EXAMINER DAWSON: 17 Ο. Good morning, Ms. Graf. 18 Has Encana prepared reservoir data regarding the setbacks or worked on that? 19 20 Α. By reservoir data --The reservoir engineers, did they ascertain why 21 Q. 330-foot setbacks -- or the geologists, have they 22 ascertained why the 330-foot setbacks are preferable 23 from 660? 24 I would defer that question to our reservoir 25 Α.

Page 44 engineer who is with us here today. 1 Q. All right. 2 On wells that are -- future wells that are 3 drilled within the unitized area, would Encana -- would 4 5 they be okay, Encana, if they provided the OCD with data 6 on -- so we can review it for our setbacks on pool --7 future pool hearings that we may have for nomenclature? 8 Α. I don't know if I can speak to that. I don't 9 know if I'm authorized to promise data. Well, I'm just asking if that would -- you 10 Q. know, that's something we may want in the future. 11 Α. 12 Okay. It's based subject to confidentiality, but 13 Ο. that's just for our needs in order for us to develop the 14 15 new pool that needs to be developed for the Basin-Mancos 16 Shale. Uh-huh. 17 Α. Ο. And we had a hearing recently on a super comm 18 agreement that -- it was WPX, and they said that was 19 fine, that they would give us data if we needed it 20 21 subject to confidentiality. That's the reason I was 22 asking. It would be for our purposes. 23 Α. Sure. I understand. I just don't know if I'm authorized to make that decision. 24 25 Okay. I have no further questions. Q. Thank you,

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Page 45 1 Ms. Graf. MR. RANKIN: Mr. Examiner, if I might have 2 3 a few questions on redirect? EXAMINER DAWSON: You may. 4 MR. RANKIN: Thank you. 5 REDIRECT EXAMINATION 6 7 BY MR. RANKIN: Ms. Graf, what was your involvement in the 8 Ο. 9 discussions with the BLM and the State Land Office regarding proposed unitized area and depth? 10 What details are you looking for? 11 Α. Q. Well, were you involved in discussions? 12 I was involved. I met with them for several Α. 13 hours going over, essentially, the same exhibits that 14 I've just shown. 15 And at the time you met with the BLM, did they 16 Ο. express any concerns over the identification proposed 17 unitized interval? 18 They did not. Α. 19 And did you discuss with them at that time what 20 Ο. your likely target zones were going to be? 21 We did. 22 Α. So they were aware that you were focusing on 23 Ο. the Gallup, but you were also seeking to unitize above 24 and below? 25

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Page 46 1 Α. Yes. And they expressed no concerns about that at 2 Ο. that time? 3 Α. They did not. 4 Is that the same case for the State Land Office Ο. 5 as well? 6 7 Α. Yes. So neither the State Land Office or the BLM 8 Q. 9 expressed any concerns reqarding the standardized unitized interval for this well? 10 No, they did not. 11 Α. And is there very much data available on the 12 Ο. proposed unit interval -- I mean -- yeah. Is there very 13 14 much data available to Encana on the proposed unit area within the unitized interval? 15 So I'll repeat your question to make sure that 16 Α. 17 I understand. 18 Ο. Yeah, please. Are you asking is there a comprehensive amount 19 Α. 20 of data within our proposed unit, within the unitized I would say no, there are not a lot of 21 interval? 22 completed wells within our unitized interval. We are relying a lot on wells outside of our agreement, but we 23 don't have a lot -- a lot of wells having a complete 24 well unitized --25

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Page 47 If you look at, say, Exhibit 11, for example --1 Ο. 2 Α. Yes. -- within the unit area, which is depicted in 3 Ο. 4 the black outline --5 Α. Uh-huh. 6 -- what symbols on this map depict wells? Q. 7 Α. Well, all of the wells are represented by some form of dot. The varying symbols are representing the 8 status of the well, whether or not it's an oil well. 9 That's a green dot. If it was plugged and abandoned, 10 it's the darker circles with a cross through it, such as 11 you see in Section 5 within the proposed unit interval. 12 You also have several plugged and -- well, yeah, plugged 13 and abandoned wells. 14 15 Everything on these maps in Exhibits 11 and 16 12 are only showing those wells that penetrated the 17 horizon that's represented by the structural maps. That does not indicate that well logs were present. It only 18 means that the wellbore TD'd at a depth greater than the 19 20 structural contour that you see here. So within our 21 unit, we do not have very many wells with actual log 22 data. 23 And so Encana has an idea about what it wants Ο. to develop, but there may be additional zones within the 24 25 unitized area that prove to be economically viable?

Page 48 That is true. 1 Α. 2 Q. And is that the reason why Encana is looking at its proposed unitized rule, as it has proposed? 3 Yes. Our data would not suggest that we would 4 Α. 5 rule out the additional horizons. Q. 6 So it's entirely possible that Encana will, in 7 the development of this unit, find additional zones that it would like to produce? 8 9 Α. That is -- that is entirely possible, yes. No further questions. 10 Q. 11 MR. GALLEGOS: May I? 12 EXAMINER DAWSON: Yes. 13 RECROSS EXAMINATION 14 BY MR. GALLEGOS: 15 Q. Ms. Graf, my calculations may not be very good so I'll defer to yours, but it appears that the unitized 16 interval is roughly 1,700 feet? 17 I have 17-, 1,800 feet, yes. I've stated 1,800 18 Α. feet. 19 I probably missed that. 20 Q. 21 But the target, Gallup, is approximately 200 feet? 22 23 I have said 300 feet. That was my --Α. You said 300 feet? 24 Q. 25 Α. Uh-huh.

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Q. Well, 300 feet, then.

•1

So 1,400 feet, roughly, including two 2 shales and several other sandstone formations, that you 3 are asking be unitized, while, at most, 300 feet are 4 5 targeted in your development. That's a fact; is it not? Α. Uh-huh. Well, to that point, I would say, you 6 7 know, our wellbore is, you know, only four inches. It's not 300 feet. So when we're targeting the Gallup, you 8 know, we're only targeting a specific zone within the 9 10 Gallup, but yet we all think that it is logical to include the entire Gallup, you know, what you're 11 suggesting here. 12

13 So I would say that yes, while this does --14 while we are targeting sands in the Gallup and within 15 the unitized interval there are extensive shales 16 included in those unitized intervals, that that is not 17 to say that at some point those shales would become 18 commercial. So shales are targeted all of the time. 19 It's not something that we would want to rule out.

20 Q. You do understand, though, that if the Unitized 21 Formation in the request was confined to the Gallup, 22 there is no impediment to, at a later time, coming back 23 before the Commission or the Division and saying, We 24 think there is reason to now include, let's say, the 25 Greenhorn part of the unitized --

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Page 50 1 I suppose that is possible. Α. 2 Q. Thank you. 3 EXAMINER DAWSON: No further questions. Thank you, Ms. Graf. 4 5 Mr. Rankin, you want to call your third 6 witness? 7 MR. RANKIN: I'd like to call my third 8 witness, Mr. Daniel Camper. 9 EXAMINER DAWSON: Mr. Camper, please state your name -- your full name and qualifications. 10 11 THE WITNESS: My name is Daniel J. Camper. I'm a reservoir engineer with Encana Oil & Gas. 12 DANIEL J. CAMPER, 13 14 after having been previously sworn under oath, was 15 questioned and testified as follows: 16 DIRECT EXAMINATION BY MR. RANKIN: 17 Mr. Camper, have you previously testified 18 Q. before the Division? 19 20 Α. I have not. Would you mind, please, reviewing for the 21 Q. 22 Examiners your educational background and then your work 23 experience? 24 Α. Not a problem. Yes. I graduated in 2007 from 25 Louisiana State University with a BS in petroleum

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Page 51 engineering, and I've been with Encana about seven years 1 now, five of that as a reservoir engineer. 2 3 Q. And, Mr. Camper, are you associated with any professional affiliations or professional --4 5 Α. Just SPE, Society of Petroleum Engineers. And are you familiar with the application filed 6 Ο. in this case? 7 Α. 8 Yes. Have you conducted a study of the lands in this Ο. 9 10 case? Α. Yes. 11 MR. RANKIN: Mr. Examiner, I would tender 12 Mr. Camper as an expert in petroleum engineering. 13 No objections. 14 MR. GALLEGOS: EXAMINER DAWSON: No objection? 15 16 He is so --17 Q. (BY MR. RANKIN) And, actually, if I might just specify, Mr. Camper, your work has been in reservoir 18 engineering, correct? 19 That is correct. I've been a reservoir Α. 20 engineer for the past five years. 21 MR RANIN: I just wanted to specify that. 22 23 I'd move to tender Mr. Camper as an expert in reservoir engineering, just to be specific. 24 25 EXAMINER DAWSON: Any objections?

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Page 52 No objections. MR. GALLEGOS: 1 EXAMINER DAWSON: He is so accepted. 2 Ο. (BY MR. RANKIN) Mr. Camper, are you familiar 3 with the purpose of an exploratory unit? 4 Α. Yes. 5 Ο. What is your understanding of the purpose of an 6 exploratory unit? 7 Really, you know, the purpose of the Α. 8 exploratory unit is when we don't have enough data to 9 really deem this area, say, as economic right off the 10 bat, so we want to be able to go in and develop as we 11 see fit. So, again, we don't have a lot of data, and 12 this is a test-type well for the area. 13 Ο. So this unit agreement is an exploratory unit 14 agreement; is that correct? 15 That is correct. Α. 16 Q. Is that one of the reasons why the BLM and the 17 State Land Office are interested in approving such an 18 agreement, to allow Encana flexibility to explore 19 potential productive zones within the area? 20 That is correct. Α. 21 Including beyond what might be your initial or 22 Q. primary target zone? 23 That is correct. Yes. Α. 24 Mr. Camper, are you familiar with the pools 25 Q.

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Page 53 that are currently in existence within the proposed unit 1 area? 2 Α. Yes. 3 4 Q. And have you prepared an exhibit for discussion today with the Examiners? 5 6 Α. I have, yes. Is that Exhibit Number 15 in the exhibit 7 Ο. packet? 8 Α. That is correct. 9 Would you mind, please, reviewing for the 10 Ο. Examiners what this exhibit shows? 11 Not a problem. So this exhibit shows in black 12 Α. our proposed Pinon Unit to the northwest portion of 13 14 that. If you look at the orange line, that's going to be the outline of the Bisti Lower Gallup pool. And if 15 you look at the blue line, which does not affect the 16 Pinon, that's going to be South Bisti Gallup pool 17 outline. Then everything in between is going to be your 18 Basin-Mancos gas pool. So really here, just stating --19 20 so every well on here, every horizontal -- you can see the horizontals. You can see the surface location. 21 Ιt will be the blue dot, and the bottom-hole location is 22 going to be the green dot. And you can see throughout 23 24 this area -- close to the Pinon Unit, you can see all the wells we have in this area. 25

Page 54 The red numbers above the green dot, the 1 bottom-hole location, are going to be our BTU of our 2 3 gas, and then the blue number below the -- below the green dot, it's going to be our API, or our oil. 4 So right here it's stating all the oil -- if you're in the 5 Bisti Lower Gallup pool or if you're in the Mancos gas 6 pool, the fluid is the same in the reservoir. 7 It's relatively consistent as you move throughout the unit 8 and throughout the different pools. 9 Mr. Camper, tell us what Encana is proposing --Q. 10 looking at the target area being the Gallup, is Encana 11 12 expecting these wells to be oil wells? 13 Α. Yes, we are. 14 Ο. Now, with respect to the pools that you 15 identify within the proposed Pinon Unit, is it your 16 opinion that the technical aspects, the technical characteristics of the hydrocarbons within those pools 17 is essentially identical? 18 Α. That is correct. Yeah. The hydrocarbons 19 within the Gallup and Mancos are consistent. 20 21 Ο. And is that largely because in effect -- in 22 effect them being within the same vertical horizon? 23 Α. That is true, and it's also part of migrating 24 around the same time period. 25 Q. Now, with respect to the -- to the expected,

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Page 55 anticipated pressure gradients across these pools, is it 1 your understanding that the pressure gradients are going 2 to be roughly the same across this area? 3 That is correct. So, yeah, the pressure Α. 4 gradients will be relatively the same -- or will be 5 consistent within the Mancos and Gallup Formation, so 6 there won't be any high-pressure zones commingling with 7 low-pressure zones, so no issues with cross-flow. 8 Ο. And in your analysis and opinion, is there any 9 issue with compatibility of the hydrocarbon fluids you 10 have proposed in this area? 11 There are no concerns of compatibility of 12 Α. No. fluids from one pool to the other. Again, you know, the 13 oil gravity from one end of the Pinon Unit to the other 14 end is consistent, so -- and it migrates at the same 15 time, so it's essentially the same oil or hydrocarbon. 16 And in your opinion, will the combining of the 17 Ο. Bisti Lower Gallup pool with the other -- I stated that 18 19 incorrectly. I don't want to mess it up. It's the Basin-Mancos pool; is that correct? 20 That's correct. 21 Α. Will the combination of those pools into one Ο. 22 single pool for purposes of this horizontal well 23 development result in any waste or loss of reserves --24 It will not. 25 Α.

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1	Q in your opinion?
2	And in your opinion, will the combination
3	of the exploration of a single pool reduce the value of
4	reserves in these pools?
5	A. It will not.
6	Q. Is it your opinion that Encana's application
7	will result in waste at all with respect to combining
8	these pools?
9	A. No, it will not. It will actually prevent
10	waste by drilling multiple directions, east-west,
11	north-south and so forth.
12	Q. And the way it will reduce waste is it will
13	allow you to effectively and efficiently drain the
14	entire area?
15	A. That is correct.
16	Q. And in your opinion, Mr. Camper, is it
17	appropriate to create a single pool for horizontal
18	development within this proposed unit area?
19	A. Yes, it is.
20	Q. Now, I just want to talk a little bit about
21	Encana's proposal to set the setbacks at 330 feet. Is
22	it your understanding that 330-foot setback is the
23	default statewide rule for oil development?
24	A. Yes, it is.
25	Q. Have you conducted any studies with respect to

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Page 57 drainage specific to this Pinon Unit area? 1 No, I have not. 2 Α. And the reason you have not is because it's a 3 Ο. standard default setback? 4 That's correct. Α. 5 6 And is there any reason that you have to 0. 7 believe that a 330-foot setback would not be protective of offsetting interests? 8 9 Α. Not at this point in time, not without being able to do -- or having done a study to prove that it's 10 otherwise. 11 12 Q. Do you understand that the State has set a 13 330-foot default setback because it's protective of offsetting interests who are producing oil? 14 Α. 15 Yes. Have you looked at the geology in this area? Q. 16 I've looked at it with a geologist. Α. Yes. 17 So the geology with respect to the Gallup zone, 18 Q. in particular, what is -- what is the geology there? 19 20 Α. So it's a tight rock, lower porosity. It's a 21 tight rock as far as permeability goes, which obviously, 22 you know, leads to the fact that while we frack the 23 wells, it's access to the oil and gas reserves. 24 Q. So as a consequence of the tightness of that 25 zone and the protectiveness of the 330-foot setbacks,

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Page 58 you have no reason to believe at this point there is any 1 2 likely impairment to any offsetting interests due to the 330-foot setbacks? 3 Α. That is correct. 4 MR. RANKIN: Mr. Examiner, I would ask to 5 move Exhibit Number 15 into the record of evidence. 6 7 MR. GALLEGOS: No objection. MR. RANKIN: And I have no further 8 questions of the witness at this time. Pass the 9 witness. 10 EXAMINER DAWSON: Exhibit 15 is admitted. 11 12 (Encana Exhibit Number 15 was offered and admitted into evidence.) 13 14 EXAMINER DAWSON: Mr. Gallegos, do you have questions? 15 16 MR. GALLEGOS: I do. Thank you, Mr. Examiner. 17 CROSS-EXAMINATION 18 BY MR. GALLEGOS: 19 20 Q. Mr. Camp, look at Exhibit 15. I have a couple 21 of questions. There are a couple of entries about the middle of the exhibit. It says on the legend "Bisti 22 23 Lower Gallup pool, 330, 80-acre" lay-downs, and in the lower, left-hand corner, a similar kind of entry. What 24 25 is the reference to the 80 acres?

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Page 59 That is given by the State of New Mexico. 1 Α. That's something that was provided to us by the State, 2 just pool rules. З 4 Ο, So you are not aware that the pool rule that allowed, as of 1976, a 330-feet setback -- foot setback 5 in the Gallup pool was initiated in connection with the 6 7 allowing 40-acre spacing? I'm not aware of that. I'm aware of the 330 8 Α. 9 setback, and, you know, the data I have is the 80-acre. 10 Ο. But you were not aware that the 330-foot setback was a companion when the Commission, in 1976, in 11 12 Order R-1069-G allowed 40-acre spacing in that Gallup 13 ?loog I'm not aware of that. Yeah, I'm not aware of 14 Α. 15 that. But you understand that would have been for 16 0. vertical wells? 17 That's for that pool. That's my understanding. 18 Α. 19 That's for that pool. 20 Q. And Encana is not proposing vertical wells, is it? 21 22 Α. We -- at this time, no. And you're not proposing that each well will 23 0. only be dedicated to 40 acres, are you? 24 25 Α. No, we're not.

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Page 60 Let's take a look at the indication in the 1 Ο. proposed unit, up at what I call the northwest corner of 2 Exhibit 15, the Good Times well. Tell us about that in 3 terms of its relative location to the -- to the section 4 end lines. 5 What do you -- will you rephrase the question, 6 Α. please? What are you looking for? 7 Ο. What setback was observed in terms of the 8 development of the Good Times well, this horizontal 9 well? 10 And honestly, I can't speak 100 percent on that 11 Α. So I can't speak for that well specifically. 12 well. Ιt looks like it's outside of the Bisti Lower Gallup pool, 13 so -- it looks like it's in the Mancos -- Mancos gas 14 pool. 15 But Ms. Graf testified that that is a Gallup 16 Q. 17 Formation well? It is. 18 Α. 19 Do you have any information to the contrary? Q. 20 Α. I don't. It's a Gallup well, yes. And we don't have available a plat here that 21 Ο. 22 would show its relative location to the end lines of the section or sections in which it's located, do we? 23 Α. I do not. 24 25 Do you have a type well diagram for what Encana Q.

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proposes to drill and develop this unit if it's
permitted?

As far as the target within the 1,700 feet? 3 Α. Ο. No, not the target, but the well. In other 4 words, what can we expect in terms of the vertical 5 portion of the well, casing size? And then what do we 6 7 expect in terms of the horizontal portion of it and the location of fracture stimulations in the horizontal 8 9 portion?

You know, obviously, I can't speak to the size 10 Α. of the hole and so forth, but, I mean, this -- we're 11 currently in the process of, you know, developing this 12 unit. We don't know how we're actually -- we're still 13 in the talking phase of how we're actually going to put 14 the layout [sic] within this unit. So it's not a done 15 16 deal on that so far.

17 Ο. Well, let's say that you have a wellbore. And you expect your horizontal lateral to be what length? 18 It really depends. So it depends on our 19 Α. 20 layout. So if it's an east-west, it will be one lateral length. If it's north-south, it will be one lateral 21 22 length. If it's transverse, it can be another. So it 23 really depends on the location of that lateral. Well, would you expect that whatever the length 24 Q. of the lateral is, that you will have stage-frack 25

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Page 62 stimulation jobs? In other words, you will fracture 1 stimulate one portion, and then move along the way so 2 3 maybe 12 or 14 stimulations will take place? I can't speak to the specific number, but yes, 4 Α. that will be the way we will frack the well. We will 5 frack and then move further -- we'll start at the toe 6 and move to the heel. 7 So, for example, let's say that the surface 8 Ο. location of the wellbore is within 330 feet of an end 9 10 line. Your first fracture in the horizontal lateral could be 600 or 7- or 800 feet from the well line, 11 depending on the requirements and what is permitted by 12 13 the Division, correct? 14 Α. That is correct. But we will stay 330 off of 15 that boundary, so we will not frack, obviously, within 16 the setback. You will not -- you will not --17 Q. We won't frack --18 Α. -- frack within 330 feet? 19 Q. -- within the given setback for the oil pool. 20 Α. 21 But you will frack within 660 feet? Ο. 22 Α. Well, the setback is 330, so we'll abide by the 23 guidelines of the pool rules. 24 Ο. But in terms of consideration of communication 25 with offsetting acreage, what would be important,

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Page 63 wouldn't you agree, where the -- where the closest 1 fracture stimulation occurs to the end line? 2 So when it's all said and done, you know, with 3 Α. the 330 rules and what will be put in place, you know, 4 to kind of say, Hey, we'll protect any offset 5 interests --6 That's not my question, Mr. Camper. 7 0. Let me -let me restate the question. 8 9 Α. Please rephrase it, then. 10 Ο. As far as any effect on offsetting acreage, what is important, critical is where from the end line 11 the first fracture stimulation occurs. 12 Do you not 13 agree? 14 MR. RANKIN: Mr. Examiner, I would object to any further line of questioning. We're here to 15 16 approve the formation of a unit, not individual wells or individual completions. So I would object to further 17 18 questioning on that line with respect to specific completion plans because we haven't -- obviously, we 19 haven't gotten that far yet in the planning and 20 21 formation of the unit. 22 MR. GALLEGOS: Mr. Examiner, this is 23 directly relevant to the setback -- the setback issue. 24 We're not talking about the formation of the unit. 25 We're talking about the setback, what is -- what is

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Page 64 appropriate and allowable for the setback. 1 2 EXAMINER DAWSON: I think he's answered 3 that question by saying that they have the 330-foot setbacks outlined. That's what they're requesting. 4 It's overruled. The objection is overruled. 5 You may continue. 6 (BY MR. GALLEGOS) As far as the effect of 7 Ο. offsetting acreage, it depends on where your closest 8 9 fracture stimulation occurs in relation to the end line. 10 Do you agree, Mr. Camper? I would agree that yes, your fracture -- your 11 Α. drainage and your fracture is going to be -- it's 12 going -- yeah, depends on the setback. 13 14 Ο. Now, you are familiar, are you not, with the wells developed by Encana, horizontal wells, in the 15 Gallup Formation to the east of this unit, in western 16 Sandoval County? 17 Α. I am, as far as a production standpoint, yes. 18 And those wells have all been developed 19 Ο. 20 honoring pool rules that require a 660-foot setback; do 21 they not? 22 Α. My understanding is some wells are at 330, some wells are at 660. 23 24 Can you give us any more information on that? Ο. 25 Approximately how many wells are we talking about?

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Page 65 So Encana has drilled 40 to 50 wells so far 1 A within the Gallup but only one well, obviously, within 2 the Pinon Unit. 3 No, but as far as the horizontal wells, say, 50 4 Ο. 5 or 60 wells? Α. I'd say 40 or 50, yes. 6 7 Ο. 40 or 50. 8 And you can't give us a number, I suppose, but a good many of those were drilled honoring the 9 10 660-foot setback rules? 11 Α. Yes. We abide by the pool rules. And have you come to the Commission to ask that 12 Ο. 13 those pool rules with 660 setbacks be developed and those wells be modified? 14 15 Α. My understanding, yes, we have. 16 Ο. You have such an application? I do not, no. That's out of my realm. 17 Α. I'm a 18 reservoir engineer, and regulatory and land deal with 19 that. 20 Ο. What can you tell the Division will be the design of your fracture stimulations on horizontal wells 21 that will be developed in this unit? 22 23 Α. When you say design, like what -- how detailed? 24 MR. RANKIN: Again, I object to the 25 question because, you know, we're here for approval of

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Page 66 1 the unit agreement, and with respect to the specific 2 wells, it's beyond the scope of the application and 3 beyond the scope of what we're seeking approval for 4 here.

5 MR. GALLEGOS: But, Mr. Examiner, they're 6 seeking to change a pool rule from 660 feet to 330 feet, 7 and this goes exactly to the question of communication 8 effect on offsetting acreage.

(BY MR. GALLEGOS) So what I'm asking about is 9 Ο. what is the design of your stimulations. Let's take the 10 ones in Sandoval County. How many pounds of sand --11 12 Α. Well, I'm not going to get into specifics of 13 how many pounds of sand, but one thing to note is that this Bisti Lower Gallup is 330 setback. So we're 14 combining a 330 existing setback with a 660 and going by 15 the oil pool setback. So your comment that it's all 660 16 is not accurate. You know, again, 330 -- some of it's 17 330, and some falls into the 660 portion of the rules. 18 Ο. So what you're saying is you're really 19 20 indifferent to any of the rest of this interval because 21 you're just going direct to the Gallup, and that's 22 already 330, so the Division can forget about the rest of the interval? 23 24 Α. That is incorrect. 25 Q. Well, what can you tell us about reports of

Page 67 communication with offsetting acres that has occurred in 1 2 the Sandoval County horizontal wells developed by Encana? 3 EXAMINER DAWSON: Mr. Gallegos, I don't 4 think that's affiliated -- or related or relevant to 5 this hearing. I think the hearing is more relevant to 6 what's requested by the operator, and I don't think 7 that's a relevant question. 8 9 MR. GALLEGOS: Well, I understand your 10 view, but I disagree when we're talking about communication. That's why you have setback rules, for 11 12 the protection of offsetting reservoirs. That's the So if we have some idea of what can be 13 very purpose. 14 expected, then it's pertinent to the Division, and 15 that's why I'm asking the question. MR. RANKIN: I would object to the 16 question, Mr. Examiner. I think it goes beyond the 17 scope of specific incidents that may have occurred in 18 19 the past in areas, different geology, different completion. 20 As testified by Mr. Camper, it has not been 21 decided how they're going to complete these wells, and 22 they're not here to seek approval for any specific 23 completions. Simply, the application requests the 24 formation of a unit and establishment of the state 25

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Page 68 1 default rule for the 330-foot setbacks for oil pools. 2 So the questioning is outside the scope of what we're 3 seeking here.

MR. GALLEGOS: Well, Mr. Examiner, I'll 4 5 just make this comment. To come before this Division, 6 ask for a change in the setback rules and be unwilling 7 to provide any information as to why that's justified concerning the risk to offsetting acreage, you would 8 9 expect that the Applicant would come forward and say: Here's what our plan is. Here's what we're doing, and 10 here's what the effect will be and not will be. 11 To sav, 12 Oh, well, ignore it because they're proposing a unit be formed, we don't propose -- we don't oppose the 13 formation of the unit. In fact, we encourage it. 14 In 15 the San Juan Basin, it's certainly needed, but my question is directly relevant to the setback issue. 16 EXAMINER DAWSON: I think we could sustain 17 the objection and allow you to make a statement in 18 closing argument. 19 20 MR. GALLEGOS: I have no further questions. 21 CROSS-EXAMINATION 22 BY EXAMINER DAWSON: Good morning, Mr. Camper. On the well that was 23 Ο. 24 drilled, the Good Times well, did Encana drill that 25 well?

Page 69 We did, yes. 1 Α. Can you tell me about that well, how it's 2 Ο. performing to this date and when it was drilled? 3 Α. As far as rates and so forth? 4 Ο. 5 Yes. So the rates, I mean, on that well are anywhere 6 Α. 7 from 160 to 170 barrels of oil, and currently, you know, no forecast on it. I can't give you the forecast on it, 8 but currently it's down to maybe 50, 60 barrels per day. 9 That can all be obtained through the State Website for 10 production, sold and so forth. 11 Do you know roughly how many barrels that well 12 Ο. has cumulatively produced? 13 Off the top of my head, I do not. Α. 14 15 MR. RANKIN: Mr. Examiner, just to interject here, I can recall one of our prior witnesses 16 to further address the current status of that well. 17 18 EXAMINER DAWSON: Okay. 19 MR. RANKIN: If that's appropriate, I'd like to address that. 20 She can address the way that well 21 is doing. I think that would be helpful. 22 EXAMINER DAWSON: Okay. We might call her back for those questions. 23 24 (BY EXAMINER DAWSON) Do you anticipate that Ο. 25 some of these wells drilled within the unitized interval

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Page 70 1 will be dual-stacked or triple-stacked laterals? At this point in time, we do not anticipate 2 Α. 3 that, but as we learn more about the reservoir within the unit -- within the unit, that could be an option. 4 But as of right now, the plan is to drill one well in 5 6 the Gallup, and that's that. But again, it's always on 7 the table depending on what we realize when we do all our science and so forth about the other intervals. 8 9 Q. Do you anticipate that if you have a dual-stacked or triple-stacked well within the Gallup 10 Formations, within the sands, that there will not be any 11 issues with cross-flow, since you think the reservoirs 12 are pretty much the same with pressures and --13 I do not think that -- I do not 14 Α. Yeah. 15 anticipate any issues with cross-flow even with stacked laterals. 16 17 Ο. The pressures are similar? 18 Α. The pressure is the same. The gravity and the oil are similar, so we 19 Ο. 20 have, basically, more or less, one pool? That is correct. Yeah. The gradients are 21 Ά. 22 similar, so obviously your pressures will be a little bit different just based on the depth you go up. But as 23 24 far as the gradient of the fluid in the reservoir, it's 25 consistent.

Page 71 Do you anticipate in the future that you may 1 Ο. have a dual lateral; one may be possible in the Gallup 2 and one in the Greenhorn? 3 That could be a possibility. Α. 4 But you feel that the pressures and the Ο. 5 gradients within the Gallup and the Greenhorn are pretty 6 7 similar, too? 8 A. That's correct. Gradients are similar. Within the other shales? 9 Ο. Α. Yes. 10 11 Q. Do you have a feeling whether a 330 versus 12 660-foot setbacks, which one may adequately drain the 13 reservoir? For oil wells, I would think that a 330-foot 14 Α. setback would be the most adequate way to drain the 15 reservoir. 16 And you really can't answer any questions 17 Q. regarding communication at this time because there 18 hasn't been any wells drilled in the area? 19 20 Α. Yeah. We only have that one well within the 21 area. 22 Q. So you really can't answer any questions. I can't. 23 Α. 24 That well had no communication --Q. 25 Α. Yeah. I can't answer that.

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Page 72 1 Q. All right. I have no further guestions. I'm sorry. One more question. 2 Do you feel that the unit will be fully 3 4 developed with either lay-downs, stand-ups, diagonals or transverse? You know, you think that you'll eventually 5 6 get to full development within the boundaries? 7 With this being an exploratory unit, the goal Α. is to develop this -- this whole unit, but as we go 8 through, you know, economics, you know, will determine 9 to a certain extent of how we develop the acreage as far 10 as lateral lengths and so forth. 11 Do you anticipate that there will be any future 12 Q. vertical wells drilled within the unit? 13 14 Α. I do not anticipate that. So on the corners of the unit, you think you 15 0. 16 can -- there will be no strand reserves left within the unitized area? 17 I don't anticipate that. With the fact that we 18 Α. don't have a full development plan currently that we're 19 20 100 percent sold on, I can't answer that 100 percent, but I would anticipate we're going to put laterals in 21 22 there to effectively drain the 8,000 acres. 23 No further questions. Thank you, Mr. Camper. 0. 24 MR. RANKIN: Mr. Examiner, just a few 25 questions on redirect.

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1	EXAMINER DAWSON: Okay.
2	REDIRECT EXAMINATION
3	BY MR. RANKIN:
4	Q. Mr. Camper, just a few questions.
5	Are you aware of any rules under the State
6	Oil Conservation Division rules or other regulations
7	that govern where a fracture may be located within the
8	approved setback locations?
9	A. No.
10	Q. So as long as completions are within the
11	approved setbacks, an operator is in compliance with the
12	rules, correct?
13	A. That is correct.
14	Q. And so are you familiar with the company that
15	Mr. Gallegos is here representing today?
16	A. I am not.
17	Q. Are you aware that the company is within one of
18	the offsetting pools?
19	A. Yes, I do [sic].
20	Q. Are you aware that his company has the benefit
21	of the 330-foot setback?
22	A. Yes.
23	Q. So Mr. Gallegos and the company he's
24	representing has the benefit of making completions up to
25	the 330-foot setback line in his pool; is that correct?

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Page 74 I would assume they would take advantage of 1 Α. 2 that, yes. And that pool is actually within the proposed 3 0. unit area; is that correct? 4 That is correct. 5 Α. And that pool area is within the same vertical 6 Ο. 7 interval of your proposed unit area, correct? As far as within the Gallup they're producing 8 Α. 9 from? 10 Q. (Indicating.) I would assume so, especially in this area with 11 Α. the Bisti field just north of our acreage. 12 And what Encana is seeking here is just for the 13 Q. same setback requirements for itself; is that correct? 14 15 Α. That is correct. And you just touched on this a little bit, but 16 Q. I want to make sure it's clear for the record. 17 In your opinion, would waste result for development of the oil 18 wells in this proposed unit area if you do not have 19 330-foot setbacks? 20 Yes. If we do not have 330-foot setbacks, yes, 21 Α. we would have waste. 22 Thank you, Mr. Camper. I have no further 23 Ο. 24 questions. 25 EXAMINER DAWSON: Do you have any recross,

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Page 75 Mr. Gallegos? 1 2 MR. GALLEGOS: No, I do not. Thank you. EXAMINER DAWSON: At this time, the witness 3 4 will be excused. Thank you, Mr. Camper. 5 MR. RANKIN: Thank you, Mr. Examiner. Ι 6 have no further questions, no further witnesses. 7 EXAMINER DAWSON: Do you have a closing 8 statement? 9 CLOSING STATEMENT 10 MR. RANKIN: Mr. Examiner, I didn't prepare a closing statement, but just to sum up what you've 11 heard today, today what we're seeking is an application 12 for the formation of a unit limited to a certain depth 13 14 within the -- from 100 feet below the Mancos down to the Greenhorn Shale, and also to combine the existing pools 15 16 into one pool, which would be limited to horizontal 17 development only. 18 And as to the testimony you've heard today, uncontroverted is that the -- in order to effectively 19 20 produce that unit area, we need to have 330-foot 21 setbacks, which is already existing in portions of the 22 pool surrounding -- within the proposed unit area. And 23 in order for this exploratory unit to be effective and efficiently drained, the oil, which is what the 24 25 anticipated production would be, we need to have those

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1 330-foot setbacks.

2 Moreover, as you've just heard from 3 Mr. Camper, there is no indication that any of the technical characteristics of the hydrocarbons within 4 5 these proposed pools are incompatible in any way, nor are there any concerns about the pressure gradients 6 7 within the proposed pools, and, therefore, combination of these pools into one with the 330-foot setbacks is in 8 the most interest of protecting correlative rights, 9 10 preventing waste and proceeding with production in this 11 area. 12 CLOSING STATEMENT 13 MR. GALLEGOS: Mr. Examiner, to begin with, as far as Pro's concerned, there's no intention to take 14advantage of the 330-foot setback. That's a red 15 herring. If there is any Gallup development, it can 16 17 happily be done with a 660-foot setback or whatever is required. 18 19 Let me point out what the situation is. In 20 2008, the Commission defined the Mancos Shale pool 21 660-foot setbacks reasonable and appropriate. It protects the correlative rights of offsetting owners. 22 23 So now Encana comes forward and points to

the 330-foot setback rule that has no analogous
connection with what is proposed here. The 330-foot

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setback came, as we pointed out, in 1976, in connection 1 2 with 40-acre oil well spacing. It's a totally different situation, and it's totally different as to what the 3 development of those wells would be and the intensity of 4 the stimulation and the technology in the 1970s, when 5 6 now you're talking about the kind of horizontal 7 development intense stimulations that we know are performed in connection with these horizontal well 8 9 developments.

So the 330-foot setback is an aberration 1.0 when it's applied to what the circumstance is here. 11 And if the idea is uniformity, uniformity for reporting 12 purposes, uniformity for other purposes, 660 provides 13 14 uniformity, and that's the Mancos Shale setback, and 15 that's included. I'm not sure why that is included in 16 the interval, but it is. And if that's the case, you achieve uniformity -- we're only talking about moving 17 away from offsetting acreage, you know, one football 18 field farther away from it to have 660 feet. 19

So to come forward and say, Oh, we've got 330 feet and ignore the circumstance of that 40-acre spacing and that circumstance is just inappropriate. What the Division's duty and obligation is here is to allow development --`and that's fine, and

25 that can be developed obviously on 660-foot spacing --

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Page 78 and at the same time protect the correlative rights of 7 offsetting owners. 2 So we encourage the formation of the unit. 3 We have no problem with that. We just simply say, Let's 4 5 keep the stimulation process, the development of the reservoir at a distance, where we can hopefully avoid 6 communication and drainage of offsetting acreage. 7 And that would be with a 660-foot uniform setback 8 9 requirement. EXAMINER DAWSON: So the Mancos pool that 10 you're speaking of, are you talking about the Mancos gas 11 pool? 12 MR. GALLEGOS: I'm talking about the Mancos 13 Shale oil pool --14 EXAMINER DAWSON: It's 660 from the Mancos 15 gas pool? 16 MR. GALLEGOS: Yes, sir. It's the Mancos 17 Shale. It is the gas pool. Yeah, it is a gas pool. 18 19 Yeah. EXAMINER DAWSON: I just wanted to clarify 20 21 that. MR. GALLEGOS: Yeah. 22 EXAMINER DAWSON: Anything further? 23 24 MR. GALLEGOS: No. Thank you. 25 EXAMINER DAWSON: Okay. If you could just

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1	Page 79 please provide conclusions and findings within two weeks
2	from this day, which will be June 12th, 2014, and also
3	please provide a proposed order draft order within
4	two weeks of this date, which is, again, June 12th,
5	2014.
6	This case will be taken under advisement,
7	and this concludes today's hearing for Case Number
8	15154.
9	(Case Number 15154 concludes, 11:17 a.m.)
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17	I do hereby certify that the foregoing to a complete record of the proceedings of
18	the Examiner tworing of Case No
19	
20	Oll Conservation Division
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1 STATE OF NEW MEXICO

2 COUNTY OF BERNALILLO

3 CERTIFICATE OF COURT REPORTER 4 5 I, MARY C. HANKINS, New Mexico Certified 6 Court Reporter No. 20, and Registered Professional 7 Reporter, do hereby certify that I reported the 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 13 Record of the proceedings truly and accurately reflects 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 attorneys in this case and that I have no interest in 17 the final disposition of this case. 18 19 20 HANKINS, CCR, RPR MARY 21 Paul Baca Court Reporters, Inc. New Mexico CCR No. 20 22 Date of CCR Expiration: 12/31/2014 23 24 25

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