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

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

APPLICATION OF CENTENNIAL RESOURCE CASE NOS. 20515, PRODUCTION, LLC FOR COMPULSORY POOLING, 20516, 20517, LEA COUNTY, NEW MEXICO. 20519

## REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

June 13, 2019

Santa Fe, New Mexico

## BEFORE: SCOTT DAWSON, CHIEF EXAMINER DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Scott Dawson, Chief Examiner, and David K. Brooks, Legal Examiner, on Thursday, June 13, 2019, at the New Mexico Energy, Minerals and Natural Resources Department, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico.

REPORTED BY: Mary C. Hankins, CCR, RPR New Mexico CCR #20 Paul Baca Professional Court Reporters 500 4th Street, Northwest, Suite 105 Albuquerque, New Mexico 87102 (505) 843-9241

Page 2 1 APPEARANCES 2 FOR APPLICANT CENTENNIAL RESOURCE PRODUCTION, LLC: 3 KAITLYN A. LUCK, ESQ. HOLLAND & HART, LLP 110 North Guadalupe, Suite 1 4 Santa Fe, New Mexico 87501 5 (505) 988-4421 kluck@hollandhart.com 6 7 FOR INTERESTED PARTIES: CONOCOPHILLIPS COMPANY, Case Number 20515: MRC PERMIAN COMPANY, Case Number 20517: 8 CHISHOLM ENERGY, Case Number 20519: 9 JAMES G. BRUCE, ESQ. 10 Post Office Box 1056 Santa Fe, New Mexico 87504 (505) 982-2043 11 jamesbruc@aol.com 12 13 14 15 16 17 18 19 20 21 22 23 24 25

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Page 5 (8:52 a.m.) 1 2 EXAMINER DAWSON: Moving on down the list, the next case is 20515, and it's Centennial Resource 3 Production, LLC for compulsory pooling, Lea County, New 4 5 Mexico. б Please call for appearances. 7 MS. LUCK: Kaitlyn Luck with the Santa Fe 8 office of Holland & Hart. 9 And we would request that Case Numbers 20515, 20516, 20517 and 20519 be consolidated for 10 11 purposes of hearing. We're presenting the same two witnesses in all of these cases. 12 13 EXAMINER DAWSON: Okay. So Cases 20515, 20516, 20517 and 20519 will be consolidated. 14 15 Other appearances? 16 MR. BRUCE: Mr. Examiner, in Case 20515, Jim Bruce entering an appearance for ConocoPhillips 17 18 Company. 19 In Case 20517, I'm entering an appearance 20 for MRC Permian Company. And in 20519, I'm entering an appearance 21 for Chisholm Energy. 22 23 EXAMINER DAWSON: Okay. Any other 24 appearances? 25 Seeing none, when you're ready, Ms. Luck.

Page 6 1 MS. LUCK: Thank you. 2 EXAMINER DAWSON: Do you have a folder for 3 20519? MS. LUCK: Yeah. I'm going to bring it 4 5 around to you. EXAMINER DAWSON: Okay. Thanks. 6 7 When you're ready, Ms. Luck. 8 MS. LUCK: Thank you, Mr. Hearing Examiner. With that, Centennial will call its first 9 10 witness, Gavin Smith, to the stand. 11 EXAMINER DAWSON: Have your witnesses been 12 sworn in by the court reporter? 13 MS. LUCK: Not today. EXAMINER DAWSON: Can your witnesses please 14 stand and be sworn in by the court reporter? 15 16 (Mr. Smith and Mr. Harper sworn.) 17 EXAMINER DAWSON: Call your first witness. 18 MS. LUCK: Thank you. 19 Centennial calls Gavin Smith. 20 GAVIN SMITH, 21 after having been first duly sworn under oath, was 22 questioned and testified as follows: 23 DIRECT EXAMINATION 24 BY MS. LUCK: 25 Good morning. Q.

Page 7 1 Please state your name and by whom you're 2 employed and in what capacity? I'm Gavin Smith. I'm a landman for Centennial 3 Α. 4 Resource Development. 5 And have you previously testified before the Q. Division? 6 7 I have. Α. 8 Q. And were your credentials as an expert 9 petroleum landman made a matter of record? 10 Α. Yes. 11 0. And are you familiar with the application filed 12 in this case, 20515? 13 Α. Yes. 14 0. And are you familiar with the status of the lands in the subject area? 15 16 Α. Yes. 17 MS. LUCK: And with that, we would tender 18 Mr. Smith as an expert witness in petroleum land 19 matters. 20 EXAMINER DAWSON: Any objections? Okay. Mr. Smith will be admitted to the 21 record as an expert in petroleum land at this time. 22 23 0. (BY MS. LUCK) In Case Number 20515, please turn 24 to Exhibit Number 1 and explain what Centennial seeks in 25 this case.

Page 8 We seek to create a 320-acre proration unit --1 Α. spacing unit for the Cheddar Fed Com 602H well. 2 3 Q. And what is the ownership in this acreage? Both state and federal leases. 4 Α. 5 And please to turn to Centennial Exhibit Number Q. 2 and explain what this exhibit is. 6 7 This is a C-102 plat for Cheddar Fed Com 602H. Α. 8 And what pool is involved in this application? Q. 9 The -- I believe it's the Ho Chito [sic; Α. phonetic] Bone Spring. 10 11 And that would be pool code 5695; is that 0. 12 correct? 13 Α. That's correct. 14 Okay. And will the completed interval for this 0. well comply with the statewide setbacks? 15 16 Α. It will. This is a nonstandard location that we will seek NSL administratively. 17 18 Q. And are there any depth severances in this --19 There are not. Α. 20 And does Centennial Exhibit Number 3 identify ο. 21 the interest owners in the spacing unit? 22 Α. Yes. 23 And it shows the total interest in the spacing 0. 24 unit? 25 Α. Yes.

Page 9 1 It also reflects the parties that Centennial 0. 2 seeks to pool? 3 Α. Correct. 4 And those are only working interest owners? Q. 5 Yes, all working interests. Α. 6 And are there any overrides? Q. 7 There are not, none that we don't have the Α. 8 ability to pool. 9 And were all the interest owners that you seek 0. to pool locatable? 10 11 There were several that we could not Α. No. 12 locate, but we attempted to find them and contact them through mail and phone calls, but we ended up publishing 13 on several. 14 15 Thank you. Q. 16 And please turn to Exhibit Number 4. Is 17 this a sample well-proposal letter, along with the AFE that was sent to the mineral interest owners for each 18 19 well? 20 Α. Yes. 21 Are the costs in the AFE consistent with what Q. 22 Centennial and other operators are charging for similar horizontal wells in this area? 23 24 Α. Yes. 25 And has Centennial made an estimate of overhead **Q**.

Page 10 and administrative costs while drilling this well and 1 2 also while producing the well? Yes, 8,000 and 800. 3 Α. 4 And are these costs similar to what other ο. 5 operators are charging in the area for these types of 6 wells? 7 Α. Yes. 8 Q. And is Centennial also requesting the order include a 200 percent charge for nonconsent? 9 10 Α. Yes. 11 Please turn to Exhibit Number 5. And is this 0. 12 an affidavit prepared by my office with the attached 13 letters of notice of this hearing provided to the 14 parties of whom we're seeking to pool in this 15 proceeding? 16 Α. It is. 17 Q. And is Centennial Exhibit Number 6 a copy of 18 the notice of location for this hearing? 19 Α. Yes. 20 And were Exhibits 1 through 4 prepared by you Q. 21 or compiled under your direction and supervision? 22 Α. They were. MS. LUCK: And with that, Centennial would 23 24 move the admission of Exhibits 1 through 6, which includes my notice affidavit in Case Number 20515. 25

Page 11 1 EXAMINER DAWSON: Okay. So you prepared 2 Exhibits 1 through 6, correct? 3 THE WITNESS: Yes, sir. EXAMINER DAWSON: Okay. I just wanted to 4 5 clarify that. She said 1 through 4. MS. LUCK: He prepared 1 through 4, and 6 7 then our office prepared Exhibits 5 and 6, which are the 8 notice affidavits for the notice of this hearing and the notice of location. 9 10 EXAMINER DAWSON: Okay. 11 Are there any objections? 12 MR. BRUCE: No objections. 13 EXAMINER DAWSON: Okay. At this point Exhibits 1 through 6 will be admitted to the record. 14 (Centennial Resource Production, LLC 15 16 Exhibit Numbers 1 through 6 are offered and 17 admitted into evidence.) 18 MS. LUCK: Thank you. 19 CONTINUED DIRECT EXAMINATION 20 BY MS. LUCK: 21 Q. With that, I'd ask Mr. Smith to turn to the exhibits for Case Number 20516. 22 23 EXAMINER DAWSON: Okay. Is there any 24 objection to the admission of exhibits or any questions? 25 MR. BRUCE: No, no questions.

Page 12 EXAMINER DAWSON: All right. Go ahead. 1 2 MS. LUCK: And I just want to confirm that 3 the hearing examiners have no questions for Mr. Smith on 20515 or if you'd like to take all the questions all at 4 5 once. 6 EXAMINER DAWSON: Do you have any 7 questions, Mr. Brooks? 8 CROSS-EXAMINATION 9 BY EXAMINER BROOKS: 10 Okay. These are federal, right? Q. Yes, sir. There is a mixture of federal and 11 Α. 12 state leases. 13 Well, yeah. Q. 14 EXAMINER BROOKS: Which particular case are 15 we on now? 16 EXAMINER DAWSON: 20515. 17 Q. (BY EXAMINER BROOKS) All these wells are in the same vicinity, all four? 18 19 20515 and 20516 are in the same area, but then Α. 20 the remaining cases are in a different area. 21 Q. Okay. Very good. 22 515 -- this is 515. 515 is state and 516 23 is federal, right? 24 Α. They're both a mixture of state and federal. 25 Okay. What about overrides? Q.

Page 13 No overrides that we don't have the ability to 1 Α. 2 pool. 3 Q. Okay. So you have contractual right to pool all the overrides? 4 5 Yes, sir. Α. 6 Even though there is not a pooling clause in Q. 7 federal or state leases, right? 8 Α. Yes, sir. 9 Okay. And I believe you said there were no Q. 10 depth severances, and these are Bone Spring wells? 11 Correct. The 515 is a Bone Spring well. Α. 12 0. 516 is a Wolfcamp? Yes, sir. 13 Α. 14 Q. Okay. Thank you. Okay. So we'll take 15 EXAMINER DAWSON: 16 20515 under advisement? 17 MS. LUCK: Not quite yet. I'd ask that the Division hear our geology expert after we present the 18 19 testimony of our land expert in all four of our cases. 20 EXAMINER DAWSON: Okay. Sounds great. So 21 we'll go on to 20516 at this point. 22 MS. LUCK: Thank you. 23 And, again, in Case Number 20516, we're 24 asking that Mr. Smith be tendered as an expert witness 25 in petroleum land matters. And I just want to confirm,

Page 14 Mr. Hearing Examiner, whether I need to go through his 1 2 qualifications again or if he's been accepted in all four cases. 3 4 EXAMINER DAWSON: Mr. Smith's 5 qualifications have been accepted in all four cases, б 20515, 20516, 20517 and 20519. 7 MS. LUCK: Thank you, Mr. Hearing Examiner. 8 EXAMINER DAWSON: Any objections? 9 MR. BRUCE: No objection. 10 EXAMINER DAWSON: Okay. 11 CONTINUED DIRECT EXAMINATION 12 BY MS. LUCK: 13 Mr. Smith, please turn to Exhibit Number 1 and 0. 14 identify what this is? This is a map of the Cheddar Fed Com 701H 15 Α. 16 spacing unit comprised of the west half-west half of Section 32 and the west half-west half of Section 5. 17 And in this case, is Centennial seeking a 18 Q. 19 horizontal spacing unit comprised of the Wolfcamp 20 Formation? 21 Α. Yes. 22 0. And the ownership of this acreage is both state 23 and federal; is that correct? 24 Α. Correct. 25 Please turn to Exhibit Number 2 and identify 0.

Page 15 1 it. This is a C-102 plat of the Cheddar Fed Com 2 Α. 701H. 3 4 And what pool is involved in this application? Q. 5 Is it a wildcat Wolfcamp, 98166? 6 Α. Yes. 7 ο. Please turn to Exhibit Number 3 and identify 8 this exhibit. 9 Α. This is a list of the owners to be pooled in this application. 10 11 And does it also show the total interest in the 0. 12 proposed spacing unit? 13 Α. Yes. 14 And it shows the parties that Centennial seeks Q. 15 to pool? 16 Α. Yes. 17 Q. And these are only working interests? 18 Correct. Α. 19 And are there any overrides? Q. 20 There are not. Α. 21 Q. And were all the interests that you seek to 22 pool locatable? 23 Yes. Marathon, we're working with them on a Α. 24 JOA currently. 25 And will Centennial notify the Division if it's Q.

Page 16 able to reach an agreement with Marathon? 1 2 Α. Yes. 3 Q. And just briefly returning to Exhibit Number 2 4 quickly, will this well comply with the Division setback 5 requirements? 6 Α. Yes. 7 ο. So is Centennial Exhibit Number 4 a sample 8 well-proposal letter, along with the AFE that was sent 9 to all the mineral interest owners of this well? 10 Α. It is. 11 And are the costs in the AFE consistent with 0. 12 what Centennial and other operators are charging for similar horizontal wells? 13 14 Α. They are. 15 And has Centennial made an estimate of overhead ο. 16 and administrative costs? 17 Yes, 8,000 and 800. Α. And are these costs similar to what other 18 Q. 19 operators are charging? 20 Α. Yes. 21 Does Centennial also request that the order Q. 22 incorporate a 200 percent charge for the risk against 23 nonconsenting parties? 24 Α. We do. 25 And finally turning to Exhibit Number 5, is 0.

Page 17 this an affidavit prepared by my office with the 1 2 attached application for the parties you are seeking to 3 pool in this case? 4 Α. Yes. 5 And were Exhibit 1 through 4 prepared under Q. your supervision or direction? 6 7 Α. They were. 8 MS. LUCK: With that, Centennial would move the admission of Exhibits 1 through 5, which includes my 9 notice affidavit. 10 11 And we have nothing further on this case. 12 We'll stand for questions on Case Number 20516. 13 (Centennial Resource Production, LLC 14 Exhibit Numbers 1 through 5 are offered into evidence.) 15 16 EXAMINER DAWSON: Are there questions from the other attorneys? 17 18 MR. BRUCE: No questions. EXAMINER DAWSON: This one wasn't 19 20 contested, right, or there weren't any other appearances on this one? 21 22 No. 23 MS. LUCK: I can double-check. 24 EXAMINER DAWSON: I didn't hear any from 25 Mr. Bruce on this 20516.

Page 18 MS. LUCK: Mr. Hearing Examiner, I only 1 2 have an entry for Mr. Bruce in Case Number 20515, Case Number 20517. 3 20519. 4 EXAMINER DAWSON: 5 MS. LUCK: I don't have that one in front of me, but I'll defer to the hearing examiner on that. 6 7 EXAMINER DAWSON: Do you have any 8 questions, Mr. Brooks? 9 EXAMINER BROOKS: Yes. 10 CROSS-EXAMINATION 11 BY EXAMINER BROOKS: 12 0. What is the spacing in this pool? What pool is 13 it? I didn't see that. It's a wildcat Wolfcamp pool. 14 Α. 15 Okay. So the spacing is 40 acres? ο. 16 Α. Yes, sir, statewide. You said was dedicated -- to be dedicated to 17 Q. 18 the west half-west half spacing unit, and what you're 19 doing is taking the east half -- well, these wells are 20 going to be -- going to -- it's going to bring in the 21 Units D, E, I -- D, E -- D, E, K and L as proximity 22 tracts? On the 701H? 23 Α. 24 602H is what I'm looking at. 0. 25 The previous case, 515? Α.

Page 19 1 Oh. This case is --Q. 2 EXAMINER DAWSON: 20516. 3 EXAMINER BROOKS: Okay. 20516. 20516 and 20517 -- okay. So there are no proximity tracts in 4 5 20157. Let's be sure I'm -- this is 20517. It's the west half-west half of Sections 6 and 7. And so 6 7 that's -- that's okay. 8 (BY EXAMINER BROOKS) And 20515 was the one I Q. 9 was looking at, and that's -- that's the east half-west 10 half? 11 Yes, sir. Α. 12 0. Section 32 and Section 5? Yes, sir. 13 Α. 14 Q. Okay. I'm straight. I'm sorry for the confusion. 15 16 Α. No, you're -- that's fine. 17 EXAMINER DAWSON: Okay. 18 MS. LUCK: If there are no further 19 questions on 20516, we'd ask to turn to Case Number 20 20517. 21 CROSS-EXAMINATION 22 BY EXAMINER DAWSON: 23 Well, I have a question on all these cases. 0. On 24 your letter that you sent to the interest owners 25 requesting their participation in the well --

Page 20 1 Α. Yes, sir. 2 -- it says "7,500 per day [sic] for drilling 0. 3 and 750 per day [sic] for producing"? Yes, sir. 4 Α. 5 And you're asking 8,000 and 800; is that Q. 6 correct? 7 Α. Yes, sir. That's an oversight on my part. Ιf 8 that's -- if that's an issue, we can -- we can request 9 7,500 in the application, since that's what we noticed 10 for, since these were sent out so long ago. 11 0. Okay. So it will be for all four cases, 7,500 12 and 750? 13 Yes, sir. We can change that. Α. 14 Q. Okay. I apologize for that. 15 Α. 16 No problem. I just noticed that. Q. 17 EXAMINER DAWSON: Okay. I have no further questions of your witness. 18 19 MS. LUCK: Thank you. 20 And turning to Case Number 20517 --21 EXAMINER DAWSON: Okay. When you're ready, 22 Ms. Luck. 23 MS. LUCK: Thank you, Mr. Hearing Examiner. 24 25

Page 21 1 CONTINUED DIRECT EXAMINATION BY MS. LUCK: 2 3 Q. On Exhibit Number 1, please explain what 4 Centennial is seeking in this application? 5 We are seeking to create a spacing unit Α. comprised of the west half of the east half of Section 6 6 7 and the west half of the northeast quarter of Section 7 8 for the Carne Asada State Com #501H. 9 And is the ownership of this acreage state Q. 10 only? 11 Yes, all state. Α. 12 Q. And then please turn to Exhibit Number 2 and 13 identify this exhibit. This is the C-102 plat for the Carne Asada 14 Α. State Com #501H. 15 16 And is this well located in the Ojo Chiso; Bone Q. Spring Pool? 17 18 Α. Yes. 19 And will the completed interval of these wells Q. 20 comply with the statewide setback requirements? They will. 21 Α. 22 Q. And are there any depth severances? 23 There are not. Α. 24 Does Centennial Exhibit Number 3 identify the 0. 25 interest owners in the spacing unit?

Page 22 1 Α. Yes. 2 And it shows the total interest in the spacing 0. 3 unit, as well the parties that Centennial seeks to pool? 4 Α. Correct. 5 And Centennial only seeks to pool the working Q. interest owners in this case? 6 7 Α. Yes. 8 Q. And there are no overrides? Correct, no overrides. 9 Α. 10 Were all the interest owners that you seek to Q. 11 pool locatable? 12 Α. Yes. 13 And have you undertaken any efforts to reach an 0. 14 agreement with those interest owners? We're currently working on a JOA with Matador 15 Α. 16 and Chevron. 17 Q. And will Centennial notify the Division should it reach an agreement? 18 19 Α. Yes. 20 Is this a sample well-proposal letter, along Q. 21 with an AFE sent to the mineral interest owner? 22 Α. Yes. 23 Are the costs in the AFE consistent with what 0. 24 Centennial and other operators have incurred for 25 drilling similar horizontal wells?

Page 23 1 Α. Yes. 2 And is Centennial requesting that 0. 3 administrative and overhead costs be incorporated into 4 the order? 5 It's 7,500 per day [sic] and 750. Α. Yes. 6 And does Centennial also request that the order Q. 7 include a 200 percent charge for the risk against 8 nonconsenting operators? 9 Α. Yes. 10 Is Centennial Exhibit Number 5 an affidavit 0. prepared by my office with the attached letters 11 12 providing notice of this hearing to the parties that you 13 seek to pool in this case? 14 Α. Yes. 15 And were Exhibit Numbers 1 through 4 prepared ο. 16 by you or compiled under your direction and supervision? 17 Α. They were. 18 And in this case, is Centennial requesting an Q. 19 expedited order? 20 Α. We are. We have a critical date of October 21 lst. 22 MS. LUCK: And with that, Centennial would move the admission of Exhibits 1 through 5, which 23 24 includes my notice affidavit. 25 EXAMINER DAWSON: Any objections? No

Page 24 objections? 1 2 Mr. Bruce, you did enter an appearance for 3 MRC in this case; is that correct? MR. BRUCE: That's correct. 4 5 (Centennial Resource Production, LLC Exhibit Numbers 1 through 5 are offered 6 7 into evidence.) 8 EXAMINER DAWSON: Any questions? 9 MS. LUCK: I have no further questions. 10 CROSS-EXAMINATION 11 BY EXAMINER BROOKS: 12 0. You said there was a critical date of October 13 1st. Is that a lease expiration? A. Yes. That is a state lease expiration. Yes, 14 sir. 15 16 Q. Okay. And this is a west half-east half 17 spacing unit in these sections? Correct. Correct, 240 acres. 18 Α. 19 Q. Yeah. 20 I believe that's all I have. EXAMINER DAWSON: Okay. I have no further 21 22 questions of this witness. MS. LUCK: Thank you, Mr. Hearing Examiner. 23 24 With that, we'll turn to Case Number 20519 25 with this witness.

Page 25 EXAMINER DAWSON: Okay. When you're ready, 1 2 Ms. Luck, 20519 will be heard at this time. 3 MS. LUCK: Thank you. CONTINUED DIRECT EXAMINATION 4 BY MS. LUCK: 5 Turning to Exhibit Number 1, could you please 6 Q. 7 identify what Centennial seeks with this application. 8 Α. Seeks to create a spacing unit for the west half -- for the Hagberry 9 State Com #501H comprised of 9 the west half-west half of Section 9 and the west half 10 11 of the northwest quarter of Section 16. 12 0. And this is a stand-up horizontal well? 13 Α. Correct. 14 Q. And is the ownership of this acreage state? 15 Α. Yes. 16 And this map also reflects Centennial's Q. interests as well as the other interests in this tract? 17 18 Α. Yes. 19 Turning to Exhibit Number 2, please identify Q. 20 this exhibit. This is the C-102 for the Hagberry 9 State Com 21 Α. 22 #501H. 23 And is this well also located in the Ojo Chiso; 0. 24 Bone Spring, South Pool? 25 Α. Yes.

Page 26 1 And will the completed interval for this well 0. 2 comply with statewide setback requirements? 3 Α. Yes. 4 Are there any depth severances in this acreage? Q. 5 There are not. Α. Please turn to Exhibit Number 3. Does this 6 Q. 7 exhibit identify the interest owners in the spacing 8 unit? 9 Α. It does. 10 And it also shows the total interest, as well 0. 11 as the parties that Centennial seeks to pool? 12 Α. Yes. 13 And does Centennial seek to pool both working 0. 14 interest owners and overrides? 15 Α. We do. 16 Were all of the override -- sorry. Were all of Q. 17 the interest owners you seek to pool locatable? 18 Α. They were not. 19 What efforts have you undertaken to reach an Q. 20 agreement with the uncommitted working interest owners? 21 Α. After well proposals were sent, we attempted to contact all parties. Some, we made contact with, and 22 23 we're working on JOAs, and others were noticed or 24 published. 25 And will Centennial notify the Division should 0.

Page 27 it reach an agreement with any of the parties it seeks 1 2 to pool? 3 Α. Yes. Turning to Exhibit Number 4, is this a sample 4 Q. 5 well-proposal letter, along with the AFE that reflects the mineral interest owners? 6 7 It is. Α. 8 And are the costs on the AFE consistent with ο. what Centennial and other operators have incurred for 9 drilling similar horizontal wells? 10 11 Α. Yes. Has Centennial made an estimate of overhead and 12 0. 13 administrative costs while drilling this well and also 14 while producing this well? 7,500 per day [sic] and 750 per day [sic]. 15 Α. 16 And does Centennial also request the order Q. 17 include the 200 percent charge for the risk? 18 Α. We do. 19 Turning to Exhibit Number 5, is this an Q. affidavit prepared by my office with the attached 20 21 letters providing notice of this hearing to the parties 22 whom you seek to pool? 23 Α. Yes. 24 And is Centennial Exhibit Number 6 a copy of 0. 25 the Notice of Publication of the hearing?

Page 28 1 Α. Yes. 2 And were Exhibit Number 1 through 4 prepared by 0. 3 you or compiled under your direction or supervision? 4 Α. They were. 5 And in this case, is Centennial also requesting Q. 6 an expedited order? 7 Α. We are. 8 MS. LUCK: And with that, I would move the 9 admission of Centennial Exhibits 1 through 6, which includes my notice affidavit and the Affidavit of 10 11 Publication in this case. 12 EXAMINER DAWSON: Any objections? 13 MR. BRUCE: No objection. EXAMINER DAWSON: Okay. At this point 14 Exhibit 1 through 6 will be admitted to the record. 15 16 (Centennial Resource Production, LLC 17 Exhibit Numbers 1 through 6 are offered and 18 admitted into evidence.) 19 MS. LUCK: Thank you, Mr. Hearing Examiner. 20 EXAMINER DAWSON: At this point you can 21 call your next witness. 22 There are no more questions. Thank you 23 very much. 24 THE WITNESS: Thank you. 25 MS. LUCK: Thank you.

Page 29 And with that, Centennial will call John 1 2 Harper. 3 EXAMINER DAWSON: Okay. 4 JOHN HARPER, 5 after having been previously sworn under oath, was questioned and testified as follows: 6 7 DIRECT EXAMINATION BY MS. LUCK: 8 9 Good morning, Mr. Harper. 0. 10 If you could please state your name and 11 identify who you're employed by and in what capacity. 12 Α. My name is John Harper. I'm a geologist for Centennial Resource Development. 13 14 Q. And have you previously testified before the Division? 15 16 Α. I have. 17 And were your credentials as an expert in Q. 18 petroleum geology accepted and made a matter of record? 19 Α. They were. 20 Are you familiar with the application filed by 0. 21 Centennial in these cases? That would be Case Numbers 22 20515, 20516, 20517 and 20519. 23 Α. Yes. And have you conducted a geologic study of the 24 Q. 25 formation underlying these proposed spacing units?

Page 30 1 Α. I have. 2 MS. LUCK: And with that, we would tender 3 Mr. Harper as an expert witness in petroleum geology in these four cases. 4 5 EXAMINER DAWSON: Any objections? MR. BRUCE: No objection. 6 7 EXAMINER DAWSON: Mr. Harper will be 8 admitted as an expert in petroleum geology at this time. 9 MS. LUCK: Thank you, Mr. Hearing Examiner. 10 EXAMINER DAWSON: You're welcome. 11 0. (BY MS. LUCK) Mr. Harper, please turn to 12 Exhibit Number 7 in Case Number 20515 and identify this 13 for us. It's a location map for the Cheddar Federal Com 14 Α. 602H. The surface-hole location is highlighted in this 15 16 blue box, and the bottom-hole location is highlighted in that empty circle. And I've identified all producing 17 18 Bone Spring wells in the area. 19 Q. And turning to Exhibit Number 8, please identify this exhibit and let us know what it shows. 20 21 Α. This is a structure map on the base of the Bone Spring Formation. Contour intervals are 50 feet, and 22 contours are in subsea depths. Data points have been 23 24 highlighted by well, as --25 And does this subsea structure map show the **Q**.

Page 31 direction the formation dips in this area? 1 Yes, it does. It dips slightly to the 2 Α. southeast. 3 4 And you do you identify any geologic hazards? Q. 5 Α. I do not. Turning to Exhibit Number 9, can you explain 6 ο. 7 what this exhibit shows? 8 Α. Exhibit 9 is a cross-section map that we'll see 9 on the next -- on the next exhibit. This goes from A to A prime, which is roughly north and to the south along 10 11 the proposed wellbore. 12 0. Thank you. 13 And did you prepare a cross section of the 14 logs relative to the thickness and porosity of the Bone 15 Spring Formation in this acreage? 16 Α. I did. 17 And do you consider these wells to be Q. 18 representative of the Bone Spring for the area near the 19 proposed spacing unit? 20 Α. I do. 21 And can you please turn to what's been marked Q. 22 as Exhibit Number 10 and identify the logs on the exhibit? 23 This is the cross section from north to south, 24 Α. 25 which is A to A prime, left to right. The gamma ray

Page 32 track is in track number one. The resistivity is in 1 2 track number two in this green curve. I've hung this cross section on the top of the Wolfcamp, which is the 3 4 base of the Bone Spring Formation. And you can see that 5 our lateral target has been highlighted in the red box, which is the basal 3rd Bone Spring Sand. 6 7 And do you observe continuity throughout the ο. 8 landing interval? 9 Α. T do. And is the Bone Spring in this area suitable 10 Q. 11 for development by horizontal wells? 12 Α. It is. 13 Is the proposed orientation of the horizontal 0. 14 well appropriate for this area? 15 Α. Yes. 16 And do you expect each quarter-quarter section Q. 17 of the proposed standard spacing unit to contribute more 18 or less equally to production from the wellhead? 19 Α. I do. 20 And in your opinion, is the granting of Q. 21 Centennial's application in the best interest of 22 conservation, the prevention of waste and the protection 23 of correlative rights? 24 Α. Yes. 25 MS. LUCK: And with that, Centennial would

Page 33 move the admission of Exhibits 7 through 10. 1 2 EXAMINER DAWSON: Any objections? 3 MR. BRUCE: No objections. EXAMINER DAWSON: Exhibits 7 through 10 4 will be admitted to the record at this time. 5 (Centennial Resource Production, LLC 6 7 Exhibit Numbers 7 through 10 are offered 8 and admitted into evidence.) 9 EXAMINER DAWSON: Any questions? 10 MR. BRUCE: No questions. 11 EXAMINER DAWSON: Any questions, 12 Mr. Brooks? 13 CROSS-EXAMINATION BY EXAMINER BROOKS: 14 I don't believe I've asked about overrides in 15 ο. 16 all of these cases. Do you have any overrides in these wells? 17 MS. LUCK: And I would defer to our land 18 witness on that question, if we can call him back at the 19 20 end and have him answer. EXAMINER BROOKS: Yeah. I should have 21 asked in each case, but I didn't. 22 23 MS. LUCK: Okay. If that would be okay 24 with the hearing examiners, we would call him back at 25 the end and question him to depth severances.

Page 34 EXAMINER DAWSON: That's fine. 1 2 MS. LUCK: Thank you. 3 And if there are no further questions from the hearing examiners on 515, I'd ask to turn to 516. 4 5 EXAMINER DAWSON: I have one question of б the geologist on 515. 7 CROSS-EXAMINATION 8 BY EXAMINER DAWSON: 9 Your horizontal landing area interval on the Q. 602н --10 11 Yes, sir. Α. 12 Q. -- that's at the base of the 3rd Bone Spring? Yes, sir. 13 Α. 14 And that will not communicate with the Q. 15 Wolfcamp? 16 Α. Not that we are aware of. The next case is a Wolfcamp well that coincides with this well. We'll be 17 18 drilling both together to ensure there is no 19 communication. 20 Is that an Upper Wolfcamp well? Q. 21 Α. Yes, sir. 22 All right. We'll continue with that. Q. 23 All right. Α. 24 Thank you. Q. 25 MS. LUCK: Thank you, Mr. Hearing Examiner.

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1	EXAMINER DAWSON: Thank you.
2	CONTINUED DIRECT EXAMINATION
3	BY MS. LUCK:
4	Q. And with that, we would turn to Case Number
5	20516, Exhibit Number 6. And, Mr. Harper, if you could
6	identify Centennial Exhibit Number 6 in this case and
7	explain what this exhibit shows?
8	A. This is a location map for the Cheddar Fed Com
9	#701H. I've highlighted the surface-hole location and
10	the bottom-hole location, and this well is a two-mile
11	lateral drilling south to north in the Wolfcamp.
12	Q. And does this exhibit also show Centennial's
13	acreage in this development?
14	A. It does.
15	Q. Turning to Exhibit Number 7, please explain
16	what this exhibit shows.
17	A. Exhibit Number 7 is a Wolfcamp structure map in
18	subsea depths. Contour intervals are 50 feet, and I've
19	shown data points on the vertical wells that shows a
20	slight dip to the southeast of this Wolfcamp well.
21	Q. Thank you.
22	And does this map also identify the
23	surface-hole, bottom-hole locations of the proposed
24	Wolfcamp well?
25	A. It does.

Page 36 1 And are there any geologic hazards that you 0. 2 observe on this map? 3 Α. No. 4 Please turn to Centennial Exhibit Number 6 and ο. 5 explain what this map shows. Exhibit Number 8? 6 Α. 7 ο. I'm sorry. Exhibit Number 8. 8 Α. Exhibit Number 8 is a cross-section map showing 9 from A to A prime, which is north to south along our 10 proposed wellbore. 11 0. And did you prepare a cross section of logs to 12 determine the relative thickness and porosity of the Wolfcamp in this area? 13 I did. 14 Α. 15 And do you consider these wells to be ο. 16 representative of the Wolfcamp for the area near this proposed spacing unit? 17 I do. 18 Α. 19 Could you please turn to what's been marked as Q. 20 Centennial Exhibit Number 9 and identify the logs on 21 that exhibit? 22 Α. Exhibit 9 is a cross section from A to A prime, 23 which is north to south along our proposed wellbore. 24 I've hung this cross section on the Wolfcamp top highlighted in this blue color. Track number one is the 25

Page 37 gamma ray. Track number two is the resistivity curve. 1 2 And I've highlighted the Cheddar Federal Com #701H 3 target interval, which is the Upper Wolfcamp. 4 Q. And do you observe continuity throughout the 5 landing interval? I do. 6 Α. 7 And have you concluded that the Wolfcamp in ο. 8 this area is suitable for development by horizontal 9 wells? 10 Α. Yes. 11 And is the proposed orientation of the 0. 12 horizontal well appropriate for this area? 13 Α. Yes, it is. 14 0. Do you expect each quarter-quarter section 15 within the proposed standard spacing unit to contribute 16 more or less equally to production from the wellbore? Α. I do. 17 18 In your opinion, is the granting of Q. 19 Centennial's application in the best interest of 20 conservation, the prevention of waste and the protection 21 of correlative rights? 22 Α. Yes. MS. LUCK: And with that, Centennial would 23 move the admission of Exhibits 7 through 9. 24 25 EXAMINER DAWSON: Exhibits 7 through 9 will

Page 38 be admitted to the record at this time. 1 (Centennial Resource Production, LLC 2 Exhibit Numbers 7 through 9 are offered and 3 admitted into evidence.) 4 5 MS. LUCK: Thank you. 6 EXAMINER DAWSON: Do you have any 7 questions, Mr. Brooks? 8 EXAMINER BROOKS: No. 9 CROSS-EXAMINATION 10 BY EXAMINER DAWSON: 11 0. I just have one question. You have these --12 the Bilbrey 33 Feds. Those wells are depicted on the 13 map as producing Bone Spring wells? Yes, sir. 14 Α. 15 Are those pretty good wells? Q. 16 Α. They are newer wells. Yes. They are in the 17 2nd Bone Spring Sand. They're pretty good. 18 Q. They're commercial wells? 19 Α. Yes. 20 And you expect these wells to be commercial Q. 21 wells? 22 Yes, sir. Α. 23 That's all the questions I have. Thank you. 0. 24 MS. LUCK: With that, I'd ask the witness 25 to turn to Case 20517.

Page 39 1 EXAMINER DAWSON: When you're ready, 2 Ms. Luck. 3 MS. LUCK: Thank you. CONTINUED DIRECT EXAMINATION 4 5 BY MS. LUCK: Mr. Harper, please identify Exhibit Number 6 6 Q. 7 and tell us what it shows. 8 Α. Exhibit 6 is a location map of the Centennial 9 acreage in yellow. I've also shown the bottom-hole location for the proposed lateral for the Carne Asada 10 11 State Com #501H. I've also highlighted other producing 12 Bone Spring wells in the area. 13 And this map shows the surface-hole and 0. 14 bottom-hole locations for this as well? 15 Α. Yes. 16 Please turn to Exhibit Number 7 and explain Q. 17 what this map shows. 18 This is a subsea structure map on the 3rd Bone Α. 19 Spring Carbonate, which is directly below our target 20 interval. The dip is roughly to the southwest, and I've highlighted data points on the associated vertical 21 22 wells. 23 And do you observe any geologic hazards on this 0. 24 well? 25 Α. I do not.

Page 40 1 Please turn to Centennial Exhibit Number 8 and 0. 2 identify it. Exhibit Number 8 is a cross-section map showing 3 Α. A to A prime, which is roughly north to southeast, that 4 5 traverses our proposed lateral. 6 And could you identify what have been used as Q. 7 the data points on this map? 8 Α. Data points are still associated with the 3rd Bone Spring Carbonate structure map of the previous 9 exhibit. 10 11 0. Thank you. 12 And did you prepare a cross section of logs 13 to determine the relative thickness and porosity of the 14 Bone Spring in this area? I did. 15 Α. 16 And do you consider these wells to be Q. 17 representative of the Bone Spring for the area near the 18 proposed spacing unit? 19 Α. I do. 20 Can you please turn to Exhibit Number 9 and Q. 21 identify those logs on this exhibit? 22 Α. Exhibit 9 is a cross section from A to A prime 23 to roughly north to southeast. I've hung this cross 24 section on the 3rd Bone Spring Carbonate, which is what 25 the structure map was associated with in the previous

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1	exhibits. Track number one is a gamma ray. Track
2	number two is a resistivity curve. And I've highlighted
3	the proposed target interval for the Carne Asada State
4	Com 501H in red.
5	Q. And do you identify [sic] the continuity
6	throughout the landing interval?
7	A. I do.
8	Q. And have you concluded that the Bone Spring in
9	this area is suitable for development for horizontal
10	wells?
11	A. Yes.
12	Q. And is the proposed orientation of this
13	horizontal well appropriate for the area?
14	A. Yes.
15	Q. And do you expect each quarter-quarter section
16	within the proposed standard spacing unit to contribute
17	more or less equally to production from the wellbores?
18	A. I do.
19	Q. And in your opinion, is the granting of
20	Centennial's application in the best interest of
21	conservation, the prevention of waste and the protection
22	of correlative rights?
23	A. Yes.
24	MS. LUCK: And with that, I would move
25	admission of Centennial Exhibits 7 through 9 in this

Page 42 1 case. 2 EXAMINER DAWSON: Any objections? 3 MR. BRUCE: No objection. EXAMINER DAWSON: Okay. At this point 4 Exhibit 7 through 9 will be admitted to the record. 5 (Centennial Resource Production, LLC 6 7 Exhibit Numbers 7 through 9 are offered and 8 admitted into evidence.) 9 MS. LUCK: Thank you, Mr. Hearing Examiner. 10 EXAMINER DAWSON: Do you have any 11 questions, David? 12 EXAMINER BROOKS: No questions. 13 MS. LUCK: And with that, I'd ask to turn to the final case with this witness, 20519, if there are 14 no further questions. 15 16 EXAMINER DAWSON: Okay. When you're ready. 17 No further questions. 18 CONTINUED DIRECT EXAMINATION 19 BY MS. LUCK: 20 Mr. Harper, please turn to Exhibit Number 7 and Q. 21 identify what is shown on this exhibit. 22 Exhibit 7 a location map highlighting Α. 23 Centennial's acreage in yellow in the proposed Hagberry 24 9 State Com 501H. I've highlighted the surface-hole 25 location and the proposed lateral, which is drilling

Page 43 from north to south. I've also highlighted other 1 producing Bone Spring wells in the area. 2 3 Q. Thank you. 4 Please turn to Exhibit Number 8 and explain 5 what this map shows. Exhibit 8 is a subsea structure map on top of 6 Α. 7 the 3rd Bone Spring Carbonate. I've highlighted the 8 data points used here in blue along the verticals. The 9 structure is dipping slightly to the southwest. 10 Thank you. Q. 11 And the contour interval is 50 feet? 12 Α. Oh, yes. Sorry. Yes, 50 feet. 13 And do you observe any geologic hazards on this Q. 14 map? I do not. 15 Α. 16 Please turn to Exhibit Number 9 and identify Q. what is shown here. 17 18 Exhibit Number 9 is a cross-section map from A Α. 19 to A prime, which is roughly north to southwest. This 20 cross section will traverse our proposed lateral. 21 Q. Thank you. 22 And did you prepare a cross section of logs 23 to determine the relative thickness and porosity of the 24 Bone Spring in this area? 25 Yes, I did. Α.

Page 44 1 Did you consider these wells to be 0. 2 representative of the Bone Spring for the area near the 3 proposed spacing unit? I do. 4 Α. 5 Could you please turn to Exhibit Number 10 and Q. 6 identify those logs on this exhibit? 7 Exhibit 10, this is a cross section from A to A Α. 8 prime, which is roughly north to southwest. I've hung 9 this cross section on the 3rd Bone Spring Carbonate, which the subsea structure map was associated with 10 previously. Track number one is a gamma ray track. 11 12 Track number two is a resistivity track. I've also 13 highlighted the proposed target interval for the Hagberry 9 State Com 501H in red. 14 And the interval is also continuous throughout? 15 ο. 16 Α. Yes. 17 Q. And have you concluded that the Bone Spring in 18 this area is suitable for development by horizontal 19 wells? 20 Α. Yes. 21 And the proposed orientation of the horizontal Q. 22 well is appropriate in this case? 23 Α. Yes. 24 And do you expect each quarter-quarter section 0. 25 to contribute more or less equally to the production

Page 45 1 from this wellbore? I do. 2 Α. 3 Q. And in your opinion, is the granting of Centennial's application in the best interest of 4 5 conservation, the prevention of waste and the protection 6 of correlative rights? 7 Α. Yes. 8 Q. Thank you. MS. LUCK: And with that, I would move the 9 admission of Centennial Exhibits 7 through 10 in this 10 11 case. 12 EXAMINER DAWSON: Any objections? 13 MR. BRUCE: No objection. EXAMINER DAWSON: Okay. At this point 14 Exhibits 7 through 10 will be admitted to the record. 15 16 (Centennial Resource Production, LLC 17 Exhibit Numbers 7 through 10 are offered and admitted into evidence.) 18 19 MS. LUCK: Thank you, Mr. Hearing Examiner. 20 And if there are no further questions, we'd 21 ask the case be taken under advisement. 22 EXAMINER DAWSON: Do you have any further questions, Mr. Brooks? 23 24 EXAMINER BROOKS: No. 25 EXAMINER DAWSON: I just have a couple of

Page 46 1 questions -- or one question. 2 CROSS-EXAMINATION BY EXAMINER DAWSON: 3 4 Q. On your maps --5 Yes, sir. Α. 6 -- do you have your CDEV operating acreage? Q. 7 That's short for Centennial Resource Α. Yes. 8 Development. 9 On this map, it's a 240-acre horizontal spacing 0. unit. 10 11 320-acre. Α. 12 Q. Oh, it's 320? 13 Α. I believe so. 14 Hagberry. MR. SMITH: Hagberry? It's 240. 15 Sorry. 16 Q. (BY EXAMINER DAWSON) Yeah. The map is kind of 17 confusing here because it's -- that's your acreage? 18 It's not the horizontal spacing unit of the wells, is my 19 question? 20 Yes, sir. Yes, sir. That's our acreage. Α. 21 So the horizontal spacing unit, the well is the Q. 22 west half of the west half of 9 and the west half of the 23 northwest quarter of 16, correct? 24 Α. I believe so. Yes. 25 Okay. I was just a little confused because the Q.

Page 47 operating -- the maps, but I understand what you're 1 2 trying to depict here. 3 Α. Yes. Sorry. 4 That's all the questions I have. Thank you. ο. 5 MS. LUCK: Thank you, Mr. Hearing Examiner. And if you'd like, we can ask Mr. Smith to 6 7 return to the stand to answer any questions about --EXAMINER BROOKS: Yes. 8 Thank you, Mr. Harper. 9 EXAMINER DAWSON: Mr. Smith, if you could come back on the 10 11 stand for a minute. 12 GAVIN SMITH, 13 after having been previously sworn under oath, was re-called and testified as follows: 14 MR. SMITH: The question was to override 15 16 owners. Case 20519 is the only case we're pooling override owners. All the others, we have either no 17 override owners or authority to pool them already 18 19 throughout their agreements. 20 CROSS-EXAMINATION 21 BY EXAMINER BROOKS: 22 Q. And in 20519, where you have override owners, 23 they're included on your interests schedule? 24 Α. Yes, sir. 25 And you've given notice to all of them? 0.

Page 48 Yes, sir. 1 Α. 2 Or each of them? 0. 3 Α. Yes, sir. 4 Thank you. Q. 5 Α. Thank you. EXAMINER DAWSON: Seeing no further 6 7 questions, you may be excused. Thanks, Mr. Smith. 8 MS. LUCK: Thank you, Mr. Hearing Examiner. And with that, we would ask that all four 9 cases be taken under advisement. And, again, we're 10 11 requesting for an expedited order in Case Number 20519 and Case Number 20517. 12 13 EXAMINER DAWSON: Okay. All right. And 14 you're requesting --MS. LUCK: For the case to be taken under 15 16 advisement. 17 EXAMINER DAWSON: Yes. I think you said that. 18 19 At this point Case Numbers 20515, 20516, 20 20517 and 20519 will be taken under advisement. MS. LUCK: Thank you, Mr. Hearing Examiner. 21 22 EXAMINER DAWSON: Thank you. 23 (Case Numbers 20515, 20516, 20517 and 20519 24 conclude, 9:33 a.m.) 25 EXAMINER DAWSON: Can we take like a

Page 49 ten-minute break? MS. LUCK: That sounds great. EXAMINER DAWSON: Come back at 9:45, and at 9:45, we will continue with Case Number 20518. (Recess, 9:33 a.m. to 9:53 a.m.) б 

Page 50 1 STATE OF NEW MEXICO 2 COUNTY OF BERNALILLO 3 CERTIFICATE OF COURT REPORTER 4 5 I, MARY C. HANKINS, Certified Court Reporter, New Mexico Certified Court Reporter No. 20, 6 7 and Registered Professional Reporter, do hereby certify 8 that I reported the foregoing proceedings in 9 stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings that 10 were reduced to printed form by me to the best of my 11 12 ability. 13 I FURTHER CERTIFY that the Reporter's Record of the proceedings truly and accurately reflects 14 the exhibits, if any, offered by the respective parties. 15 16 I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or 17 18 attorneys in this case and that I have no interest in 19 the final disposition of this case. DATED THIS 30th of June 2019. 20 21 22 MARY C. HANKINS, CCR, RPR 23 Certified Court Reporter New Mexico CCR No. 20 Date of CCR Expiration: 12/31/2019 24 Paul Baca Professional Court Reporters 25