Page 1 1 STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 2 OIL CONSERVATION DIVISION 3 ORIGINAL IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR 4 THE PURPOSE OF CONSIDERING: 5 APPLICATION OF DEVON ENERGY PRODUCTION 6 Case 14936 COMPANY, LP, FOR POOL EXPANSION AND 7 SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO 8 9 10 REPORTER'S TRANSCRIPT OF PROCEEDINGS 11 12 EXAMINER HEARING 13 RICHARD EZEANYIM, Presiding Examiner BEFORE: DAVID K. BROOKS, Legal Examiner 🚫 14 15 November 29, 2012 16 Santa Fe, New Mexico 17 18 This matter came on for hearing before the New Mexico Oil Conservation Division, RICHARD EZEANYIM, 19 Presiding Examiner, and DAVID K. BROOKS, Legal Examiner, on Thursday, November 29, 2012, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South St. 20 Francis Drive, Room 102, Santa Fe, New Mexico. 21 22 REPORTED BY: Jacqueline R. Lujan, CCR #91 23 Paul Baca Professional Court Reporters 500 Fourth Street, N.W., Suite 105 24 Albuquerque, NM 87103 505-843-9241 25

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Page 2 1 APPEARANCES 2 FOR THE APPLICANT: 3 JAMES BRUCE, ATTORNEY AT LAW 4 P.O. Box 1056 Santa Fe, New Mexico 87501 (505)982 - 20435 6 7 WITNESSES: PAGE · 8 Ken Gray: 9 Direct examination by Mr. Bruce 3 10 Raleigh Blumstein: 11. 12 Direct examination by Mr. Bruce 8 Examination by Examiner Ezeanyim 14 13 Jeff Bentley: 14 15 Direct examination by Mr. Bruce 15 Examination by Examiner Ezeanyim 21 16 17 INDEX PAGE 18 EXHIBITS 1 THROUGH 4 WERE ADMITTED 7 19 EXHIBITS 5 THROUGH 10 WERE ADMITTED 13 EXHIBITS 11 AND 12 WERE ADMITTED 20 20 21 REPORTER'S CERTIFICATE 31 22 23 24 25

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Page 3 1 EXAMINER EZEANYIM: We call the last case, 2 Case 14936, application of Devon Energy Production 3 Company, LP, for pool expansion and special pool rules, Eddy County, New Mexico. Call for appearances. 4 5 MR. BRUCE: Mr. Examiner, Jim Bruce, of Santa Fe, representing the applicant. I have three 6 witnesses. 7 8 EXAMINER EZEANYIM: Any other appearances? 9 Okay. Will the three witnesses stand up, 10 state your name and be sworn, please? 11 MR. GRAY: Ken Gray. 12 MR. BENTLEY: Jeff Bentley. 13 MR. BLUMSTEIN: Raleigh Blumstein. 14 (Three witnesses were sworn.) 15 EXAMINER EZEANYIM: You may proceed. 16 KEN GRAY Having been first duly sworn, testified as follows: 17 18 DIRECT EXAMINATION BY MR. BRUCE: 19 20 Would you please state your name and city of Ο. 21 residence? 22 Α. Yes. Ken Gray. I live in Oklahoma City, 23 Oklahoma. 24 Who do you work for, and in what capacity? Q. 25 Α. I work for Devon Energy Corporation, landman.

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Page 4 Have you previously testified before the 1 Ο. 2 Division? 3 Α. Yes. Were your credentials as an expert landman 4 Ο. 5 accepted as a matter of record? Yes, they were. 6 Α. 7 Are you familiar with the land matters Ο. involved in this case? 8 9 Ά. I am. 10 MR. BRUCE: Mr. Examiner, I tender Mr. Gray as an expert petroleum landman. 11 12 EXAMINER EZEANYIM: Mr. Gray is so qualified. 13 14 (By Mr. Bruce) Mr. Gray, could you identify ο. Exhibit 1 for the Examiner and describe what Devon seeks 15 16 in this case? 17 Exhibit 1 shows an outline of the existing Α. boundary of the Northwest Fenton-Delaware Pool boundary. 18 The red dotted line is the proposed extension or 19 20 expansion of the pool boundary that we're seeking to obtain. 21 22 We re-completed the Lonetree 14 State Com Number 1, which is on that map, located in the southeast 23 24 quarter of the northeast quarter of Section 14. We drilled -- are in the process of completing the Lonetree 25

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1	Page 5 Draw 13 State 2H, which is in the west half/west half of
2	Section 13. And we have re-completed the Lonetree Number
3	1. The name of it is not on here, but it's in the
4	northeast of the southwest of Section 13.
5	And we are seeking to expand the pool the
6	boundaries of the pool and increase the allowable from
7	the existing 80 barrels of oil per day to 200 barrels of
8	oil per day.
9	Q. Do you seek the approval retroactive to the
10	date of first production from the Lonetree 14 State Com
11	Number 1?
12	A. That would be approximately one year ago.
13	Yes.
14	Q. Does the pool currently have any special
15	rules?
16	A. No.
17	Q. It's statewide rules?
18	A. Yes.
19	Q. And what is Exhibit 2?
20	A. Exhibit 2 is a list of the OCD's records of
21	the current operators in the Northwest Fenton-Delaware
22	Pool.
23	Q. What is Exhibit 3?
24	A. Exhibit 3 is an email from me to the operators
25	in the pool, dated November 15th, when we I guess when

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Page 6 you decided to fast track this, we gave them notice by 1 email so they would have plenty of opportunity to have 2 3 notice of the hearing. Ο. And so we had an emergency hearing, I believe, 4 5 on the 13th or 14th of --6 A couple of weeks ago, yes. Α. 7 Ο. And because of a shortened notice period, you sent emails to each of the operators listed on Exhibit 2? 8 That's right. 9 Α. 10 Was notice given by Certified Mail to all of Ο. the operators? 11 12 Α. Yes. Is that reflected in Exhibit 4? 13 Q. 14 Α. That's correct. 15 MR. BRUCE: Mr. Examiner, when you look at it, they all received notice. I have not gotten a green 16 17 card back from Ranger 40 Petroleum, LLC. That white Certified Mail receipt was copied, together with a page 18 from the Division's list of operators, just to show we 19 gave notice to the address listed in the Division's 20 records. So I believe proper notice has been given to 21 22 everyone. 23 (By Mr. Bruce) Mr. Gray, were Exhibits 1 Ο. through 4 prepared by you or compiled from company 24 records? 25

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Page 7 Α. Yes, they were. 1 In your opinion, is the granting of this 2 Ο. 3 application in the interest of conservation and the prevention of waste? 4 5 Α. Yes. MR. BRUCE: Mr. Examiner, I move the 6 7 admission of Exhibits 1 through 4. 8 EXAMINER EZEANYIM: Exhibits 1 through 4 will be admitted. 9 (Exhibits 1 through 4 were admitted.) 10 MR. BRUCE: I have no further questions of 11 12 the witness. 13 EXAMINER BROOKS: No questions. EXAMINER EZEANYIM: Mr. Gray, you are the 14 land person? 15 16 THE WITNESS: Yes. 17 EXAMINER EZEANYIM: I've talked to you 18 before. I don't think I have any questions I want to ask. If you need to be recalled, I may recall you. But 19 20 we may have a geologist or engineer to answer the 21 questions. You are excused. 22 THE WITNESS: Thank you. 23 EXAMINER EZEANYIM: Call your next 24 witness. 25

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	Page 8
1	RALEIGH BLUMSTEIN
2	Having been first duly sworn, testified as follows:
3	DIRECT EXAMINATION
4	BY MR. BRUCE:
5	Q. Would you please state your name and city of
6	residence for the record?
7	A. Raleigh Blumstein; Oklahoma City, Oklahoma.
8	Q. Who do you work for, and in what capacity?
9	A. Devon Energy. I'm a senior geologist.
10	Q. Have you previously testified before the
11	Division?
12	A. No, I have not.
13	Q. Could you briefly summarize your educational
14	and employment background for the Examiner?
15	A. A BS at the University of Oklahoma in
16	Petroleum Geology, a Master's degree from the University
17	of Oklahoma in Geology.
18	I worked for two years with Baker Hughes, six
19	and a half years with Hess Corporation, and a year and a
20	half with Devon Energy.
21	Q. In your job at Devon, are you familiar with
22	the geology involved in this case?
23	A. Yes.
24	Q. And 21 South, 27 East, in that general area,
25	your area of responsibility at Devon as a geologist?

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Page 9 1 Α. Yes. 2 MR. BRUCE: Mr. Examiner, I tender Mr. Blumstein as an expert petroleum geologist. 3 EXAMINER EZEANYIM: He's so qualified. 4 5 Ο. (By Mr. Bruce) Let's just run through your What is Exhibit 5? exhibits. 6 Exhibit 5 is a gross isopach of what we call 7 Α. the A1 Sand. It's shown on here. It shows that it 8 pinches out to the west, just west of our Lonetree 14 Com 9 1 re-completion in Section 14. 10 As we move to the east, the sand thickens to a 11 greater interval in our second re-completion, which is 12 the Lonetree Number 1 in Section 13. And I've also 13 identified on there a four-well cross-section from west 14 to east, which I'll refer to on Exhibit 7, if we can do 15 that. 16 Yeah. Why don't you move on? Q. 17 Α. Exhibit 7 shows that four-well cross-section. 18 The sand of interest for our re-completion in those two 19 wells is highlighted in yellow. 20 You can see the Lonetree 14 State Com 1 is the 21 second well from left to right, and we perforated at 22 23 10-foot intervals. You can see the perforations are the pink intervals within that thin, yellow highlighted sand. 24 In the downdip well, Lonetree 1, we perforated both that 25

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Page 10 sand and slightly above that. 1 2 Ο. Was that also a re-completion? 3 Α. Yes, it was. 4 And the cross-section is just to highlight 5 that that sand pinches out updip and is isolated to the west. 6 7 Exhibit 6 that I skipped is a net sand isopach 8 of that same unit, same sand. The net isopach is defined by a porosity cutoff of 15 percent. It shows a similar 9 10 pattern in that net isopach. 11 Ο. So the Delaware is continuous across this 12 area? 13 Α. The Delaware is a thick section, roughly 2,500 14 feet thick, in this area. 15 These are Brushy Canyon completions? Ο. 16 Ά. Yes. Correct. 17 Ο. Now, also on your Exhibit 6, certain wells were mentioned. The wells on the cross-section, the one 18 19 in the northeast quarter of Section 14 and the one in the 20 southwest quarter of 13, again, are the re-completions; 21 correct? 22 Α. Correct. 23 Ο. And the one horizontal well in between, that 24 well was drilled. Has it been completed yet? 25 It has been completed just recently. Α.

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Page 11 And then the other well in the east half of 1 Q. 2 Section 13, is that a proposed well by Devon? 3 Α. That is a proposed well. What is Exhibit 8? Ο. 4 Exhibit 8 shows the wells that constitute the 5 Α. Fenton-Northwest Delaware Pool, highlighting the top of 6 7 the perf interval in blue and the base of the perf 8 interval in red. It's just showing that there's a large 9 difference between what is the historical pool perforation interval and what we have targeted in the two 10 re-completions and the recent horizontal well. 11 12 This is also highlighted in the cross-section labeled A, B, C, that's shown in Exhibit 9. Exhibit 9 is 13 14 a cross-section through our two re-completions. And well C, which is the Big Eddy 98, was the well that defined 15 16 the Fenton-Northwest Pool originally. And you can -- what I'm highlighting is that 17 the original pool was defined by sands in and around 29-18 to 3,100 TVD. And we've re-completed to sands 19 20 approximately 1,900 feet deeper in the Brushy interval on wells A and B. 21 22 So when looking at your exhibit, most of the 0. completions were right around 3,000 feet? 23 24 That's correct. Α. 25 Is that a Cherry Canyon interval? Q.

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Page 12 1 Α. That's the top of the Cherry Canyon. 2 Ο. But there are several that also had completions 2,500, 2,700 feet deeper than that; is that 3 4 correct? Α. There are some that include, it looks 5 Yeah. like, perforations in the Avalon sand. The Bone Spring, 6 7 that was down at 5,600 feet. Ο. What is Exhibit 10? 8 Exhibit 10, it was my understanding that there 9 Α. 10 was a question about the permeability of the reservoir that we re-completed. This is a CMR log that we ran in 11 the recent horizontal, the pilot hole for that, the 12 13 Lonetree Draw 13 State 2H, and -- I'm losing my voice. 14 EXAMINER EZEANYIM: Do you need a break? 15 THE WITNESS: Yes. 16 EXAMINER EZEANYIM: Let's take a 17 five-minute break. 18 (A recess was taken.) 19 EXAMINER EZEANYIM: We are going to go 20 back into the record concerning Case 14936, after giving you time to collect yourself. 21 22 So you may proceed. (By Mr. Bruce) And again, Mr. Blumstein, what 23 0. 24 does Exhibit 10 reflect? 25 Exhibit 10 is a/CMR Α. And there was some log.

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Page 13 question, I quess, about the permeability at the 1 reservoir, the quality that it was. 2 And the third tract is all I'm trying to 3 4 highlight. The blue shaded curve is the calculated permeability. And I've just highlighted -- you see the 5 20, 45 and 30, these are in millidarcies. So this is the 6 7 reservoir we are targeting. On average, it's in the 20 to 40 millidarcy permeability. And that is all. 8 Were Exhibits 5 through 10 prepared by you or 9 Ο. under your supervision? 10 11 Α. Yes. In your opinion, is the granting of this 12 Q. application in the interest of conservation and the 13 prevention of waste? 14 Α. 15 Yes. MR. BRUCE: Mr. Examiner, I move the 16 17 admission of Exhibits 5 through 10. EXAMINER EZEANYIM: Exhibits 5 through 10 18 will be admitted. 19 20 (Exhibits 5 through 10 were admitted.) MR. BRUCE: I have no further questions of 21 22 witness. 23 EXAMINER BROOKS: No questions. 24 EXAMINER EZEANYIM: Have you testified 25 here before?

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Page 14 1 THE WITNESS: No, I have not. 2 EXAMINER EZEANYIM: No wonder you are 3 getting choked up. We are not bullies. We are very friendly here. 4 5 EXAMINATION BY EXAMINER EZEANYIM: 6 What is the average porosity we are talking 7 Ο. about? You mentioned something about the Cherry Canyon? 8 9 I thought you were talking about Fenton. Which pool are we talking about here? 10 11 Α. Referring to the log that I just spoke of, 12 this is the new well that we drilled, which is currently 13 assigned to the Fenton-Delaware Northwest Pool. This loq 14 is from a new drill. We drilled the final hole and then 15 a lateral that we --16 EXAMINER EZEANYIM: Maybe your engineer 17 will answer this, because I want you to go now and rest. Do you have an engineer to testify today? 18 19 THE WITNESS: Yes. 20 EXAMINER EZEANYIM: Very good. You may be excused. 21 22 MR. BRUCE: Mr. Examiner, in response to 23 one of your questions, it's just that the original 24 completions in this pool were Cherry Canyon-Delaware 25 completions. These more recent ones are in the Brushy

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Page 15 1 Canyon. 2 EXAMINER EZEANYIM: Okay. Call your next 3 witness. JEFF BENTLEY 4 Having been first duly sworn, testified as follows: 5 DIRECT EXAMINATION 6 7 BY MR. BRUCE: Please state your name and city of residence. 8 Ο. 9 Α. Jeff Bentley, Oklahoma City. Who do you work for, and in what capacity? 10 Ο. Devon Energy. I'm a reservoir engineer. Α. 11 Have you previously testified before the 12 Q. 13 Division? Α. No, I have no. 14 15 Ο. Would you summarize your educational and 16 employment background? 17 A. Education is a petroleum engineering degree, Colorado School of Mines. What was the other part? 18 And employment. 19 Q. Devon Energy, four and half years. 20 Α. Does your area of responsibility include this 21 Q. portion of Southeast New Mexico? 22 23 Α. Yes. 24 Ο. Are you familiar with the reservoir engineering involved in this application? 25

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Page 16 1 Α. Yes, I am. 2 MR. BRUCE: Mr. Examiner, I tender Mr. Bentley as an expert reservoir engineer. 3 EXAMINER EZEANYIM: He is so qualified. 4 (By Mr. Bruce) Mr. Bentley, let's move on to 5 Ο. one of your two exhibits. Exhibit 1, what does this 6 7 reflect? This is reflecting the production performance Α. 8 9 from the first well that we re-completed. It was a 10 little 10-foot interval that we perforated and put a small 27,000-pound frack on. 11 12 EXAMINER EZEANYIM: You're talking about 13 Exhibit 11? 14 MR. BRUCE: Yes. 15 EXAMINER EZEANYIM: You said "1." 16 MR. BRUCE: I'm sorry. 17 Α. As you can see, the oil production rate came in really well, higher than what we anticipated. 18 We anticipated something like a barrel range per day kind of 19 20 This came in at several hundred barrels. rate. We thought this would fall fairly quickly, but it has not. 21 22 It has hung around in, I guess, around a 200-barrel-a-day 23 range for over a year now. 24 This well was originally drilled to the 0. 25 Morrow --

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Page 17 1 I believe so. Α. 2 Q. -- and then re-completed uphole? 3 And this was one of your last efforts to keep 4 the well active? Α. 5 Yes. 6 Ο. And this is what initiated the reason for 7 seeking the pool rules in this area? Α. 8 Yes. 9 Q. Now, you appeared -- we had an emergency 10 hearing on this case, and you were talking about the amount of fluids involved. Really, there's only a couple 11 hundred barrels of fluids being produced from this well; 12 correct? 13 At the current rate, yeah. Total fluid coming 14 Α. out of this well is about 200. 15 And so it is not voluminous, in your opinion? 16 Ο. 17 Α. No. It just has a really high oil saturation, 18 which exceeds the allowable of 80 barrels per day. 19 Ο. Let's move on to your Exhibit 12 and discuss what well this is. 20 This is another re-completion. We moved over 21 Α. to the east in Section 13. And again, you can see the 22 oil rate there came in at about 70 to 80 barrels. 23 The water rate was significantly higher. I'm trying to show 24 25 that the total fluid volume coming out of this well is

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Page 18 1 roughly 150 to 200 barrels per day, also. So they're 2 fairly equivalent. It's just that this second Lonetree 13 K State 1 Well, its oil saturation is less. 3 4 Q. So you're not withdrawing a lot of fluids out of the reservoir? 5 6 Α. No. I'm not concerned to where we're damaging 7 the reservoir in any way. So even producing at above the current 8. Ο. allowable is not damaging the reservoir? 9 10 Α. NO. And it won't lead to a decreased recovery of 11 Ο. reserves in the future? 12 13 Α. It will not. Insofar as -- at this point, the well is 14 Ο. overproduced. Why do you not want to shut in the well or 15 16 try to reduce the well down to 80 barrels of oil per day 17 or less? 18 Α. Currently, we don't have any electricity out 19 there, and we're pumping this on an old Ajax pumping unit 20 at about seven strokes per minute. In talking with the 21 field production guys out there, it's hard to run that 22 thing at anything less than five strokes per minute. То 23 get this down to a stroke per minute that will just produce the 80 barrels would, I think, be -- it would be 24 25 difficult. It would be really hard to keep that thing

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Page 19 1 running. It would be shutting itself off. It will be intermittent. 2 So in order to, I quess, keep this thing 3 flowing, it's best just to keep it running at its current 4 5 rate. 6 Ο. Is it your concern that if you did have to 7 shut in the well for an extended period of time, that the well could be damaged? 8 For an extended period of time, I do believe 9 Α. we could damage the wellbore. 10 And again, you don't -- you stated there is no 11 Ο. harm to the reservoir from producing at 200 barrels a 12 day. Is that another reason not to shut in the well, 13 since there's no harm to the reservoir? 14 15 Α. Yeah. There's no harm to the reservoir. Again, we had the emergency hearing and got a 16 Ο. 15-day order. Do you request an extension of the 17 emergency order so that while the Division is considering 18 this application, you do not need to shut the well in? 19 Yes, I request that. 20 Α. 21 Q. Again, to avoid damage to the wellbore? 22 Α. (Witness nods head.) 23 Do you see any harm to any offsets from Ο. producing the well at 200 barrels a day? 24 25 No, I do not. Α.

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Page 20 Ο. And again, the previous exhibits by the other 1 2 witnesses show that Devon has re-completed offset wells or is drilling offset wells to protect that acreage? 3 Α. Yes. 4 Were Exhibits 11 and 12 prepared by you? 5 0. A. Yes, they were. 6 And in your opinion, is the granting of this 7 Ο. application in the interest of conservation and the 8 prevention of waste? 9 10 Α. Yes MR. BRUCE: Mr. Examiner, I move the 11 admission of Exhibits 11 and 12. 12 EXAMINER EZEANYIM: Exhibits 11 and 12 13 will be admitted. 14 (Exhibits 11 and 12 were admitted.) 15 16 MR. BRUCE: I have no further questions of 17 the witness. 18 EXAMINER EZEANYIM: Do you have any questions? 19 20 EXAMINER BROOKS: No questions. EXAMINER EZEANYIM: Let's address some 21 22 something you said about extending the emergency order. I want you to address that. We heard the case today. I 23 don't think we need to extend that. 24 25 MR. BRUCE: Whatever. I'm just playing it

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1	safe.		
2	EXAMINER EZEANYIM: We need to		
3	EXAMINER BROOKS: We're not going to issue		
4	a final order today.		
5	EXAMINER EZEANYIM: No.		
6	EXAMINER BROOKS: So yes, I think we need		
7	to if we deem it appropriate, after the hearing, we		
8	need to issue an interim order that will extend the		
9	emergency order until a final order is issued. And I		
10	think we have the authority, under the Oil and Gas Act,		
11	to do that. Because only an order issued without a		
12	hearing is subject to the 15-day limitation.		
13	EXAMINER EZEANYIM: So the interim order		
14	can last as long as		
15	EXAMINER BROOKS: It can as long as we		
16	want it to.		
17	EXAMINER EZEANYIM: Until we issue the new		
18	order?		
19	EXAMINER BROOKS: Right.		
20	EXAMINER EZEANYIM: Okay. I would like		
21	that to happen, because I don't want the well to be shut		
22	in. But I need to get some data.		
23	EXAMINATION		
24	BY EXAMINER EZEANYIM:		
25	Q. On this one I made a comment in the morning		

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Page 22 1 about overproduction. There's nothing like 2 overproduction. Did you hear what I said? I said, 3 "There's nothing like overproduction." I'm concerned you 4 are not damaging the reservoir, there is no correlative 5 rights issues, and we are going to get all the oil we are 6 going to get using primary production.

7 If we can do that, in my book, I don't think 8 there is anything like overproduction. The way we do it 9 and what is that way, that's why we're here. As I said 10 in the morning, that's what prompted me to do this. And 11 I didn't know how many of the operators there did what 12 you did and continue to do it. It's not appropriate.

13 What we want to do is during the one-month 14 test allowable, you know your AIPs. You know what you're 15 doing to do. You know what you have to do. You come in for an increased allowable. And we do it, as long as 16 17 those three things don't happen. Somebody saying correlative rights being impaired, we might take a look 18 at it again. If you do what you are trying to do and 19 20 the well is going to be damaged, we are not going to 21 issue it to you.

Most of them are solution gas drive. I'm going to ask some questions about that. I don't think your reservoir is going to be harmed if we produce at the daily rate that we give you. The point I'm making here

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Page 23 1 is I don't want overproduction. Don't say, "I'm 2 overproducing." Just come in and say, "It looks like 3 this well is going to do well, and we love it, " instead 4 of you hiding something, and we go back to hearing and get you some relief. 5 Now, let's go back to the question I'm asking. 6 7 What is making it and driving this reservoir production-wise? 8 This is a depletion drive/solution gas drive 9 Α. 10 reservoir. How many mechanisms? That's gas drive? 11 Q. There 12 is no gravitation or segregation? 13 Α. No. It's just gas drive? 14 Ο. Α. 15 Yes. Because it's solution gas drive; is that what 16 Q. 17 you're telling me? 18 Α. Yes. 19 Ο. We can call this also a depletion drive? 20 A depletion drive is another name for it. Α. Do you happen to know the bubble point? 21 Q. I do not. 22 Α. 23 Do you know the reservoir pressure? Ο. 24 Α. Off the top of my head, the reservoir pressure is probably -- it's normally pressured, so --25

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Page 24 1 Ο. Normal pressure at the depth? And it's 4,900 feet down, so we get back 2 Α. Yes. into something around 2,900, 3,000 psi. 3 4 Ο. I know you don't know the bubble point. Are you still above the bubble point? 5 I believe these things, the Delaware wells in 6 Α. 7 particular, are probably right around bubble point. Ι don't see anything that suggests that we're falling 8 9 through and seeing any kind of GOR kind of increase. This has been fairly stable for the life of this well for 10 over a year. 11 12 Ο. I can see you are still low there, which is 13 good. 14 Α. This is a pretty -- I'm sure the pressures 15 dropped quite a bit with the amount of fluid that has 16 been pulled out. And I'm not seeing a spike in GOR, so I 17 imagine this was already below bubble point or right at 18 bubble point when we produced it. 19 Q. Interesting. I need to follow the progress of 20 that well to see -- you know what happens when you are 21 below bubble point. But if you are below bubble point and it's still very prolific, that's interesting. As you 22 23 produce this well, I'm going to keep the API number and 24 start looking at it and see what it does. 25 You might get your increasing allowable, but I

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Page 25 want you to produce it. I don't want you to shut it in 1 or curtail it. If you curtail it, you might lose the oil 2 production there. There's no need to curtail it. 3 Look at the gas/oil ratio. It's very low. 4 5 Α. Yes. It's typical for a Delaware well. 6 0. What is the thickness of this production interval, about 10 feet? 7 8 Α. For this well, it's about 10 feet. But as we moved out -- from the exhibits, the geology exhibits, you 9 10 see that it does increase as we move to the east. 11 Ο. Okay. The depth increases? It thickens up. So this is kind of a little 12 Α. pinchout point. 13 14 Ο. It's still doing well? 15 Α. Yes. 16 Q. You're asking also to expand the pool; right? 17 Α. Yes. You're expanding the pool. And you have three 18 0. wells in those pools; right? I'm not trying to get you. 19 I'm asking questions. 20 21 Α. I'm trying to understand. 22 Ο. You have drilled some new wells in this pool? 23^{-1} Α. Yes. 24 Now, your geologist says you have completed Ο. 25 it. How is it doing?

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		Page 26
1	Α.	It's doing well.
2	Q.	When did you complete it?
3	Α.	We completed it about a little over a week
4	ago.	
5	Q.	So you are still testing the
6	Α.	It's still early.
7	Q.	So that was just a week ago, even before we
8	issued the	emergency order?
9	Α.	Yes.
10	Q.	So you don't know what it's going to do?
11	Α.	I don't know what it's going to do. But I can
12	tell you n	ow that it's going to probably exceed the
13	80-barrel	allowable per 40 acres.
14	Q.	I like that. Is it going to exceed 200
15	barrels, y	ou think? Is it going exceed 200 barrels a
16	day?	
17	Α.	Yes.
18	Q.	Is it going to?
19	Α.	Yes.
20	Q.	This new well?
21	Α.	Yes.
22	Q.	Then why are you asking for 200 barrels a day?
23		MR. BRUCE: It would be 200 per 40 acres.
24	And the ne	w well is
25		THE WITNESS: I thought you were asking

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Page 27 1 200 all in. 2 EXAMINER EZEANYIM: No. 3 THE WITNESS: You were asking per 40? 4 EXAMINER EZEANYIM: Yes. THE WITNESS: No, I don't think it's going 5 6 to exceed that. 7 EXAMINER EZEANYIM: That's what I mean. 8 You should ask for more. And if you ask for more, we do it, because I want you to get it out. But you understand 9 what I'm saying? Okay. 10 11 You have two wells. One is not completed. The other one was completed just last week. The other 12 one is still coming on. And in that portion of the 13 14 acreage, you want to add to that pool; right? Is that 15 correct? 16 MR. BRUCE: Mr. Examiner, if you look at 17 Exhibit 1, the land plat --18 EXAMINER EZEANYIM: I see where you want to add, those dark lines. 19 20 MR. BRUCE: -- there are actually now 21 three wells in that expansion acreage. 22 EXAMINER EZEANYIM: And one has already produced for one week? 23 24 MR. BRUCE: The two vertical wells have 25 been completed and producing for -- well, the one in

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Page 28 Section 13, the vertical well, as shown on Exhibit 12, 1 has been completed for a couple of months or two now. 2 THE WITNESS: Yeah, I think two months. 3 MR. BRUCE: A couple of months. 4 And then 5 that horizontal well is the new well. So there are wells 6 in the west half of 13 and the northeast quarter of 14. 7 (By Examiner Ezeanyim) Okay. These are Ο. vertical wells? 8 9 Α. Two verticals and one horizontal. 10 Ο. Which one is horizontal? The one right between the two verticals. 11 Α. 12 It's not producing yet? Q. It's been producing for about a week. It's 13 Α. still early. 14 15 Q. Okay. I see. What type of decline are you expecting? 16 Type of decline on that? Typically, I see 17 Α. decline rates of about 80 percent per year. 18 So it's normal decline? 19 Q. 20 Α. Yes. 21 Ο. Okay. So you are saying it's normal decline, 22 it's not going to be hyperbolic? 23 It is hyperbolic. Α. 24 Ο. It is? 25 Α. Yes.

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Page 29 1 Q. Okay. Again, with only a week, this is what we see 2 Α. 3 out here for typical Delaware wells, characteristic hyperbolic shaped, kind of high IPs, falling off at about 4 80 to 85 percent per year for a year or two. And then we 5 6 have them going into exponential decline at about, I don't know, 8 to 10 percent after that. 7 On the well that you plugged back, is that 8 Q. going to be hyperbolic or exponential, too? 9 10 Α. The well that I plugged back? The one that you plugged back that brought us 11 Q. 12 here. 13 MR. BRUCE: The 14. 14 Α. Oh, this one? 15 0. Yeah. This one is just -- I don't know. This is 16 Α. exponential. To me, this isn't hyperbolic. This is on 17 an exponential decline. 18 Q. Okay. And you concur with the average 19 20 effective porosity as 14 percent; right? 21 Yes, in tens of millidarcies. Α. What is it? 22 Q. 23 Α. Somewhere 10 to 50 in the millidarcy range. 24 Porosity, from our logs, shows 12 to 20 percent, the 25 average being probably around 16 percent.

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Page 30 Gas/oil ratio is about less than 1,000? Ο. 1 It comes on a little bit less. And then as Α. 2 these things produce, they creep up to about 1,000, 3 usually a one-to-one, with your oil. 4 5 EXAMINER EZEANYIM: I'm happy with that. If this is below bubble point, I'm happy with the gas/oil 6 7 ratio. Okay. I have nothing further. 8 9 MR. BRUCE: I have no further questions of the witness. 10 EXAMINER EZEANYIM: Okay. Very good. 11 You may step down. 12 Well, at this point, Case 14936 will be taken 13 under advisement. And I think that is it for today. 14 Thank you. 15 16 EXAMINER BROOKS: Okay. We're going to 17 want a draft of the extension order this afternoon. 18 MR. BRUCE: You want me to email you something tomorrow morning? 19 20 EXAMINER BROOKS: That would be good. Ι 21 won't be here, but you can send it to Richard. 22 MR. BRUCE: Okay. I'll email it. 23 EXAMINER BROOKS: It should be very EXAMINER EZEANYIM: eDy Okry of thank work. simple. We just extend the existing order. 24 a complete record of 25 Examiner h

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OII

1	Page 31 REPORTER'S CERTIFICATE
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4	I, JACQUELINE R. LUJAN, New Mexico CCR #91, DO
5	HEREBY CERTIFY that on November 29, 2012, proceedings in
6	the above captioned case were taken before me and that I
7	did report in stenographic shorthand the proceedings set
8	forth herein, and the foregoing pages are a true and
9	correct transcription to the best of my ability.
10	I FURTHER CERTIFY that I am neither employed by
11	nor related to nor contracted with any of the parties or
12	attorneys in this case and that I have no interest
13	whatsoever in the final disposition of this case in any
14	court.
15	WITNESS MY HAND this 11th day of December,
16	2012.
17	
18	
19	\bigcirc \land \land \bigcirc \bigcirc
20	Jacquelline R. Lujan, CER #91
21	Expires: 12/31/2012
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