Page 1

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 HILCORP ENERGY COMPANY CASE NOS. 20697, FOR AN EXCEPTION TO THE WELL DENSITY 20703 REQUIREMENTS OF THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL, SAN JUAN COUNTY, NEW MEXICO.

APPLICATION OF HILCORP ENERGY COMPANY CASE NOS. 20707, FOR AN EXCEPTION TO THE WELL DENSITY 20709, REQUIREMENTS OF THE SPECIAL RULES AND 20711 REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL, RIO ARRIBA COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

August 8, 2019

Santa Fe, New Mexico

BEFORE: LEONARD LOWE, CHIEF EXAMINER MICHAEL McMILLAN, TECHNICAL EXAMINER DANA Z. DAVID, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Leonard Lowe, Chief Examiner; Michael McMillan, Technical Examiner; and Dana Z. David, Legal Examiner, on Thursday, August 8, 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 HILCORP ENERGY COMPANY: 3 ADAM G. RANKIN, ESQ. HOLLAND & HART, LLC 110 North Guadalupe, Suite 1 4 Santa Fe, New Mexico 87501 5 (505) 988-4421 agrankin@hollandhart.com б 7 8 INDEX 9 PAGE 10 Case Numbers 20697, 20703, 20707, 20709, 20711 Called 3 11 Cases Presented by Affidavit 3 12 Proceedings Conclude 13 13 14 Certificate of Court Reporter 14 15 16 EXHIBITS OFFERED AND ADMITTED 17 Case Numbers 20697, 20703, 20707, 20709 and 20711: 18 Hilcorp Energy Company Exhibits A, B and C for each case 12 19 20 21 22 23 24 25

Page 3 1 (2:55 p.m.) EXAMINER LOWE: Call Case Number 20697, 2 application of Hilcorp Energy Company for an exception 3 to the well density requirements of the special rules 4 5 and regulations of the Blanco-Mesaverde Gas Pool, San Juan County, New Mexico. 6 7 Call for appearances. 8 MR. RANKIN: Mr. Examiner, Adam Rankin, 9 with the law firm of Holland & Hart, appearing on behalf of the Applicant in this case. 10 11 As there were no other appearances or prehearing statements filed, I would ask these cases be 12 13 presented by affidavit. 14 EXAMINER LOWE: Any other appearances? 15 Okay. Please proceed. 16 MR. RANKIN: Mr. Examiner, as done in the past, I'd ask that we be able to just walk through one 17 18 of the cases and then incorporate each of the affidavits 19 and exhibits in each of those cases separately for the 20 record. EXAMINER LOWE: We can probably do that. 21 22 MR. RANKIN: So turning to the first case 23 in your exhibit packet, which is Case Number 20697, 24 which relates to the Lefkovitz Gas Com B 001 well, in 25 this case Hilcorp is seeking an exception to the well

PAUL BACA PROFESSIONAL COURT REPORTERS 500 FOURTH STREET NW - SUITE 105, ALBUQUERQUE, NM 87102 density rules under the Blanco-Mesaverde special pool rules, which pool rules are governed by these special pool rules which provide for 320-acre spacing and proration units on which as many as four wells may be drilled. The pools limit the number of wells in the spacing unit to four and the number of wells in a half section to two.

8 The special rules also provide that 9 well-density exceptions can be approved only after notice of hearing. In each of these cases, Hilcorp is 10 11 seeking an exception under those special pool rules. In some cases they're seeking a fifth well or a sixth well 12 with three wells in a half section, sometimes multiple 13 wells -- or two wells in a quarter-quarter section. 14 So each case is slightly different, but in all cases, 15 16 they're seeking an exception to the well-density 17 requirements. 18 I'll just review for you briefly the

19 sequence of the affidavits, and in this case, they're
20 all the same, in the same order.

The first exhibit, A, in each case is the affidavit of the landman with exhibits reflecting the notice area and the notice parties that were required to receive notice under the Division rules and special pool rules.

Page 5 Exhibit B is a copy of the affidavit 1 2 prepared by me and my office reflecting that notice was provided to each of the parties identified by Hilcorp by 3 certified mail, return receipt requested, as well as an 4 Affidavit of Publication reflecting that each of the 5 parties affected by these application were given notice 6 7 -- constructive notice by publication. 8 Exhibit C is the affidavit of an engineer 9 reviewing his engineering analysis supporting the requested well-density exception. 10 11 I'll review each of those exhibits, in 12 turn, for this first case, Case 20697. 13 The first exhibit in that case, Exhibit A, is the affidavit of Mr. Brad Pearson. He is a landman 14 employed by Hilcorp. He previously has testified before 15 16 the Division and has his credentials as an expert in petroleum land matters accepted as a matter of record. 17 18 He's familiar with the status of the lands at issue in 19 each of these cases. He's the same landman for all of 20 these cases. He notes that Hilcorp is seeking an 21 22 exception to those special pool rules. In this first 23 case, they're looking to drill -- or, rather, recomplete 24 a fifth well within the spacing unit where there are 25 already four existing wells completed within the

Blanco-Mesaverde Pool. The fifth well will be the --1 will also be the third well in the same quarter section, 2 thereby exceeding the well-density limits imposed by the 3 special pool rules. His affidavit identifies each of 4 5 the four existing wells and the location of the proposed б fifth well completion. And, in addition, he identifies 7 the area of notice that is required under the special 8 pool rules, which is reflected in Exhibit 1 to his affidavit. 9

Behind Tab 1, you'll see there is a map 10 11 showing the proposed subject spacing unit highlighted in green, along with the four existing wells that are 12 dedicated to that Blanco-Mesaverde Pool. The proposed 13 recompletion is reflected by the triangle. 14 It's the Ludwig -- I'm sorry. That may be the wrong exhibit for 15 16 this. I think they have gotten switched. One moment. 17 My apologies, Mr. Examiner. I will take a 18 moment before I leave to make sure each of the exhibits 19 are in the right location.

But if you flip to the next case, 20703, to Exhibit Al, you'll see the correct exhibit here reflects the Lefkovitz well. And as I was saying, there are four existing wells in the spacing unit, which is identified by the green boundary. The fifth well would be the -the fifth well of the spacing unit, a third-and-quarter

PAUL BACA PROFESSIONAL COURT REPORTERS 500 FOURTH STREET NW - SUITE 105, ALBUQUERQUE, NM 87102

Page 7 section, is identified by a triangle. The area 1 2 surrounding the subject spacing unit is reflected by the dashed -- or the hatch marks. Each proration unit 3 surrounding the subject spacing unit reflects the area 4 of notice required by the special pool rules. 5 The next exhibit, Exhibit A2, is a copy of 6 7 the notice parties that are identified in each of those 8 offsetting spacing units. And in this case, the 9 Lefkovitz, it is just BP -- BP American Production Company. That's the only offsetting operator that is 10 11 required to receive notice for this exception to the 12 well-density rule. 13 Exhibit B is a copy of the affidavit as prepared by me reflecting that we provided notice of 14 this application by certified mail, return receipt 15 16 requested to the notice parties identified to us by 17 Hilcorp. 18 Exhibit D1 is a copy of the letter that was 19 sent reflecting the date that was sent. The next page 20 is a copy of the certified mail receipt, U.S. Postal Service tracking information showing that the one party 21 was mailed a copy of the notice letter on 7/16/2019. 22 23 The next page shows the status of the certified mail. 24 The last page of that exhibit is a copy of the tracking 25 information showing that the recipient, BP, signed and

received the notice. And out of an abundance of caution, it's our practice to go ahead and publish each of these applications, and that's reflected in Exhibit B2 showing that we received an Affidavit of Publication for this application reflecting that the notice parties were identified by name in the publication.

7 Exhibit C is a copy of the affidavit of the 8 engineer in this case, Mr. Tyler Teykl. He has 9 previously testified before the Division and had his credentials as an expert petroleum engineer accepted as 10 a matter of record. Mr. Teykl's affidavit reviews his 11 12 methodology. He analyzed the propriety of the existing well density under the pool rules for the spacing unit. 13 He reviews the same analysis in each of these cases 14 using an expert comparison of the original -- original 15 16 gas in place compared to the gas that has been produced, and then he reviews how they calculated their remaining 17 18 gas in place. And his analysis reflects the calculation 19 for how much gas is remaining in this area and that the 20 existing well density is not adequate to properly fully drain the spacing unit. 21 22 Exhibit C1 is a copy of a bubble map, which

is a cartoon representation of the drainage for each of
the wells existing in the spacing unit in the
surrounding area, as well as the Dakota well that

they're proposing to recomplete in this shallower 1 Blanco-Mesaverde Pool, which is reflected with the blue 2 circle. That's the well they're proposing to 3 recomplete. And as Mr. Teykl reflects in this exhibit, 4 they expect that this additional recompletion will help 5 б drain the spacing unit to the east where there is not 7 adequate drainage at the time -- at this time under the 8 existing well density -- under the existing well 9 density.

Exhibit C2 is sort of a pictorial depiction 10 11 of the original gas in place for this area. The red star that you can see in sort of the middle of the 12 Mesaverde Pool near the -- wet line is the location of 13 the proposed spacing unit. And the colors here 14 represent -- the cooler colors represent smaller or 15 16 lower original gas in place. The warmer colors, hotter colors, represent a larger amount of gas in place 17 18 originally.

The next exhibit is a depiction of their calculation of estimated recovery and drainage radius for each of the wells in the Blanco-Mesaverde Pool. Again, the existing -- or the proposed spacing unit is identified by the red star. And the larger the radius, the more that well is able to drain. And you'll see in the area here, the radii for the drainage area is

PAUL BACA PROFESSIONAL COURT REPORTERS 500 FOURTH STREET NW - SUITE 105, ALBUQUERQUE, NM 87102

Page 10 smaller than other places reflecting -- indicating that 1 there is not as much drainage in the spacing unit here. 2 Exhibit 4 is also a pictorial depiction of 3 the -- their calculation -- Mr. Teykl's calculation for 4 5 remaining recoverable gas. Again, the warmer colors 6 indicate that there is a larger amount of gas remaining 7 in place, and the cooler colors are -- reflect there is 8 less remaining gas in place. Again, the red star reflects the spacing unit in an area where there is 9 still a significant amount of remaining gas in place. 10 11 Exhibit 5 is their -- is Mr. Teykl's 12 calculations reflecting his analysis here. Each of the columns -- each of the rows in this spreadsheet are a 13 separate calculation on different scales. And as 14 Mr. Teykl testifies in his affidavit, he just kind of 15 16 confirms that no matter what scale you look at here, the remaining -- the recovery factor, the RF percent, is 17 18 lower than expected for a gas pool of this type. And he 19 testifies that expected recoveries are on the order of 20 70 to 80 percent, and here in this spacing unit, it's down around -- you know, less than -- around 33 percent. 21 22 Based on that analysis, Mr. Teykl testifies 23 that the existing well density is inadequate to drain 24 the reservoir in this area and recommends approving the 25 application and allowing the fifth well and the third

1 well in this same quarter section.

2 The last exhibit in Mr. Teykl's affidavit is a copy of a wellbore schematic which represents the 3 existing condition of the proposed well for 4 recompletion. This wellbore schematic reflects the most 5 6 updated information known to Hilcorp at the time. As 7 has been the practice in the past when Hilcorp proceeds 8 to recomplete this well, it will provide and conduct a 9 more thorough cement analysis and the condition of the well and work with the district office to ensure that 10 11 the well meets the integrity and mechanical requirements of the district office. 12 13 With that, Mr. Examiner, I'll just note that each of these cases that we're consolidating here 14 for notice purposes -- for purposes of hearing, Case 15 16 Numbers 20703, 20707, 20709 and 20711 all have the same sequence of exhibits and reflect the same analysis by 17 18 the landman and by the petroleum -- the reservoir 19 engineer. 20 With that, Mr. Examiner, I would ask that Exhibits A, B and C in each of the cases be admitted to 21 22 the record. And with that, if there are no questions 23 from the Division at this time, I'd ask that these cases 24 25 be taken under advisement.

Page 12 EXAMINER LOWE: What about Case Number 1 2 20697? 3 MR. RANKIN: That's case as well. The exhibits for those cases, we ask that they be entered 4 into the record and that that case be taken under 5 advisement as well. 6 7 EXAMINER LOWE: Okay. Exhibits A, B and C 8 for Cases 20703, 20707, 20709 and 20711 will be accepted 9 for the hearing. 10 (Hilcorp Energy Company Exhibits A, B and C 11 are offered and admitted into evidence.) EXAMINER LOWE: Any questions, Michael? 12 13 EXAMINER McMILLAN: All I'm going to ask you to do is get one set of exhibits perfect and bring 14 it back to us because Will will write all these orders, 15 16 and they need to be right. 17 MR. RANKIN: Yeah. I just need to switch out that one map. 18 19 EXAMINER DAVID: Counsel, do you want to 20 take my book and if you can fix this one, you can give it to the Division, and they'll be really happy. 21 22 EXAMINER LOWE: Get it all straightened out and submit the email to us as well. 23 24 MR. RANKIN: We'll do the exhibits. 25 EXAMINER LOWE: Yeah.

PAUL BACA PROFESSIONAL COURT REPORTERS 500 FOURTH STREET NW - SUITE 105, ALBUQUERQUE, NM 87102

	Page 13
1	MR. RANKIN: I'm done, I think.
2	EXAMINER LOWE: Do you want it taken under
3	advisement?
4	MR. RANKIN: Yes. We'd ask that all five
5	cases be taken under advisement at this time.
б	EXAMINER LOWE: Case Numbers 20703, 20707,
7	20709 and 20711 will be taken under advisement.
8	(Case Numbers 20697, 20703, 20707, 20709
9	and 20711 conclude, 3:12 p.m.)
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

Page 14 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. 20 DATED THIS 19th day of August 2019. 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