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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 HILCORP ENERGY CASE NOs. 20426, COMPANY FOR AN EXCEPTION TO THE 20427, 20428, WELL DENSITY REQUIREMENTS OF THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL, SAN JUAN COUNTY, NEW MEXICO.

20429, 20430, 20431, 20432, 20433, 20434, 20435, 20436, 20437, 20438, 20439, 20440

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

May 2, 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, May 2, 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 4 110 North Guadalupe, Suite 1 Santa Fe, New Mexico 87501 5 (505) 988-4421 agrankin@hollandhart.com б 7 8 INDEX 9 PAGE Case Numbers 20426 through 20440 Called 3 10 11 Case Presented by Affidavit 3 Proceedings Conclude 15 12 13 Certificate of Court Reporter 16 14 15 EXHIBITS OFFERED AND ADMITTED 16 Hilcorp Energy Company Exhibits A, B and C with all attachments for each case 15 17 18 19 20 21 22 23 24 25

Page 3 (4:49 p.m.) 1 2 EXAMINER DAWSON: The next cases to be heard are Hilcorp Energy Cases 20426 through 20440, so 3 that'll be 15 cases, and it's for simultaneous 4 5 dedication, Mesaverde, San Juan County. Call for appearances, please. 6 7 Mr. Examiner, Adam Rankin, MR. RANKIN: 8 with the Santa Fe office of Holland & Hart, on behalf of 9 the Applicant, Hilcorp Energy Company, in these cases. I have no witnesses, but we'll be presenting these cases 10 by affidavit. I ask they be consolidated for 11 12 presentation purposes. 13 EXAMINER DAWSON: Okay. Are there any other appearances in this 14 case -- in any of these cases? 15 16 Seeing none, when you're ready, Mr. Rankin. 17 With your permission, I'd like MR. RANKIN: 18 to present and walk through with you the first case and 19 explain the organization of the exhibit notebook before 20 you and then reference and incorporate the testimony of the -- of all the subsequent cases because they come to 21 22 the same conclusion and are based on the same analysis 23 involving the same procedures for notice, so that way I 24 wouldn't have to walk through all 15 cases. And that's 25 the way we've done it in the past. I'd appreciate the

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2 EXAMINER DAWSON: That would be okay,3 Mr. Rankin.

MR. RANKIN: Mr. Examiner, in front of you 4 is an exhibit notebook, three-ring binder. 5 That contains all 15 cases, beginning with the first case in 6 7 the series, 20426. Each case is identified by a tab by 8 case number. They are in sequence -- numerical 9 sequence, the first case to the last case by highest 10 case number.

11 Within each exhibit packet for each case, there are three affidavits. The first affidavit is an 12 affidavit from the landman from Hilcorp. The second 13 affidavit is a notice affidavit prepared by me 14 reflecting the notice that was provided, and the third 15 16 affidavit, Exhibit C, is an affidavit prepared by one of Hilcorp's engineers testifying as to their analysis on 17 the inadequacy of the existing well density under the 18 19 special pool rules for the Blanco-Mesaverde Pool. 20 EXAMINER DAWSON: Okav. If you look at the first 21 MR. RANKIN: 22 exhibit in the first case, Exhibit A, which is the affidavit of Rob Carlson -- let me just step back real 23 24 quick. 25 There are three -- Hilcorp operates in the

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Page 5 San Juan Basin and has divided its area into three 1 So in these cases, there are affidavits from 2 parts. three different landmen and three different engineers 3 representing the three different areas of the 4 5 development that Hilcorp is pursuing. б EXAMINER DAWSON: Okay. 7 This first affidavit that I'm MR. RANKIN: 8 referencing here in Case 20426 is from Mr. Rob Carlson. He's a landman who has previously testified at the 9 Division and has had his expert credentials recognized 10 11 and acknowledged by the Division as an expert petroleum land matters. His affidavit reviews the process by 12 which Hilcorp has identified the affected parties and 13 provided notice, and he identifies Exhibits 1 and 2, 14 which are attached to his affidavit. And I'll just 15 16 review for you those and what his affidavits testify to. 17 EXAMINER DAWSON: Okay. 18 MR. RANKIN: Exhibit A1 is an overview map 19 of the San Juan Basin reflecting the various units in the northwest of the San Juan Basin, and the federal 20 units are shaded with the red hatch mark and are 21 22 operated by Hilcorp. Other units are shaded with 23 different colors, meaning they're not operated -- not by 24 Hilcorp. And the specific spacing units that are the 25 subject of these 15 cases are highlighted in green. And

you'll see that some of them are located within federal 1 units and some of them are outside federal units. 2 In the cases where I'll -- and I'll explain this in more 3 detail on the next page. But in the cases where the 4 5 spacing units -- the subject spacing units are within a б federal unit, the interest owners are all identical in 7 the participating area. Therefore, Hilcorp has simply 8 just noticed all the working interest owners within the 9 participating area in that unit. If the spacing unit falls on a boundary of a federal unit, as some of them 10 11 do in this case, they have identified the working interest owners within the participating areas in that 12 adjoining federal unit. 13

14 In two cases, the spacing units are adjacent to the Rincon Unit, which is operated by 15 16 Enduring. In that case notice was simply provided to the operator of that unit, Enduring, where it was --17 where the offsetting spacing units were within the 18 19 Rincon Unit. Otherwise, as to those cases, the notice 20 parties would simply be the working interest owners within the existing PA within the unit that Hilcorp is 21 22 operating.

In the cases where Hilcorp spacing units are outside of any federal units, Hilcorp just identified the offsetting spacing units and the operator

Page 7 in those spacing units. If Hilcorp was the operator 1 itself, then it gave notice to all the working interest 2 owners in those offsetting spacing units. Otherwise, if 3 it was a nonoperating spacing unit, then it just gave 4 5 notice to the operator of that spacing unit. Hopefully б that's clear as mud. 7 EXAMINER DAWSON: Okay. 8 MR. RANKIN: The next page, Mr. Examiner, is a close-up. Each of the exhibits has that overview 9 It's an identical exhibit for each of the cases. 10 map. 11 The next page of Exhibit A1 is specific to 12 each case, and it is a close-up of the spacing unit at 13 issue with the well that is being proposed for recompletion from the Dakota into the Mesaverde. 14 This exhibit reflects the existing wells within the 15 16 Blanco-Mesaverde Pool, which are reflected by the 17 circle. A notation identifies the well, the well name 18 and API number. The exhibit reflects the proposed 19 recompletion well. In this case it's the Clayton 1. Ιt 20 identifies it by name with the API, and the triangle is the symbol indicating that this is a Dakota completion 21 22 and the one they're proposing to recomplete up into the Blanco-Mesaverde Pool. 23 24 This exhibit also shows the offsetting 25 spacing units -- 320-acreage spacing units, which

Hilcorp has identified as the areas requiring notice 1 In this case these are 2 under the special pool rules. all Hilcorp except for the one spacing unit with the 3 diagonal hatch mark. These are all Hilcorp-operated 4 5 spacing units. The other is operated by Enduring. The next exhibit, A2 -- it's the same 6 7 pattern for each of these cases -- is a list of all the 8 parties that fell -- fall within that -- the spacing 9 units offsetting the subject spacing unit in each case. So for each exhibit, A2 is a list of the parties that 10 11 Hilcorp has identified as requiring notice under the Blanco-Mesaverde Pool rules. And in some cases, Hilcorp 12 was the only 100 percent working interest owner or 13 offsets, and so those were identified. You'll see as 14 you go through that in some cases, Hilcorp is the only 15 16 noticed party, and they didn't obviously give themselves 17 notice. 18 So with respect to each of the cases, the 19 land affidavit reviews the process for giving notice, 20 the offsetting parties and the -- essentially, what the application is seeking. It identifies the wells that 21

Page 8

21 application is seeking. It identifies the wells that 22 are existing in place and the well that is requested to 23 be recompleted within that particular spacing unit. 24 Exhibit C -- sorry -- B is a copy of the 25 affidavit prepared by me and my law firm reflecting that we have given notice to each of the parties that was
provided to us by Hilcorp and identified as an affected
party in those offsetting spacing units.

Exhibit B1 is the letter that was sent to 4 5 each of those parties, and behind that letter is a list б of those notice parties that were identified to us by 7 Hilcorp. And the last page of that exhibit is a list --8 report reflecting the status of the certified mails --9 mailings to each of those parties as of yesterday. So in some cases, you'll see that the United States Postal 10 11 Service is reflecting that some of those packages are 12 still in transit, so for whatever reason, the United States Postal Service has not updated their delivery 13 status. And just as a consequence of that and to 14 confirm that we have identified all parties, we have 15 16 given constructive notice as well by publishing a Notice of Publication in the newspaper within the county where 17 the well is located. 18

19 So Exhibit B2 is a copy of that Affidavit 20 of Publication reflecting that we've identified each of 21 those parties by name, including, in some cases, the 22 heirs and devisees.

Exhibit C is a copy of the engineer's affidavit. In this case it is Mr. Alex Liang, who has previously testified before the Division and had his

credentials as a reservoir engineer accepted as a matter
of record.

3 As with the prior cases that we have presented before the Division, Hilcorp has undertaken a 4 5 study, a volumetric analysis, comparing calculated original gas in place against what has been produced 6 7 from the Blanco-Mesaverde Pool and identified areas 8 where there is remaining gas in place. And Mr. Liang 9 reviews that process by volumetric analysis, as well as the calculations that have been conducted in 10 11 coordination with their geologist to identify 12 prospective recompletes. 13 Exhibits 1 through 6 -- C1 through 6 review his analysis and identification of each of the wells in 14 the spacing unit. 15 16 And then the volumetric analysis is 17 depicted in Exhibits 2, 3 and 4 graphically. 18 Exhibit 5 is the calculated analysis 19 reflecting Hilcorp's calculations for remaining -- what 20 they have calculated as the recovery factors for gas at different levels of -- at section -- section level --21 quarter-section level, section level and nine-section 22 23 level as sort of a cross comparison, as Mr. Liang 24 testifies, to confirm that indeed there is remaining gas 25 in place that has not been and otherwise would not be

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Page 11 recovered based on the existing well density. 1 2 Mr. Liang testifies that, in general, 3 Hilcorp expects gas recovery factors in a reservoir of this type to be on the order of 70 to 80 percent. In 4 5 this case, as you can see, depending on the scale, the recoveries are much lower. 6 7 I will point out that in some cases, 8 depending on the scale you're looking at, the 9 calculations vary. And you may see in some instances, 10 the quarter-section calculation may be higher. Hilcorp -- that's why they do the double-check with the 11 12 different scales. So you'll see that while in some cases the calculated recovery factors may be higher, 13 closer to that 70 to 80 percent, they nonetheless are 14 below what is expected on a broader scale. So they 15 believe that it's economic to go ahead and make that 16 17 recompletion. The last exhibit in Exhibit C -- the last 18 19 attachment to Exhibit C is a wellbore diagram that 20 reflects Hilcorp's current knowledge and understanding 21 of the existing condition of the well that they're 22 proposing for recompletion. Recently, the Division has requested that we provide with our exhibits wellbore 23 diagrams reflecting the current condition status of the 24

25 well. Hilcorp -- so based on this, this reflects the

Page 12 current knowledge on the existing cement, the location 1 of cement, top of cement, as Hilcorp understands it. 2 But the practice has been, at the time they are seeking 3 to recomplete, to work with the district office, to file 4 5 a sundry, at which time they confirm the location and the top of cement, if they have good data that they can 6 7 rely on; if not, if the Division requires them to do a 8 cement bond log to confirm the location. 9 So based on the Division's request, we have provided this additional exhibit reflecting the current 10 11 status of the well and the cement, with the 12 understanding that as and when Hilcorp is prepared to actually do the recompletion, that they work with the 13 Division district office to confirm the location of the 14 cement and the condition of the well. 15 16 EXAMINER DAWSON: Okay. 17 MR. RANKIN: So as -- that completes the 18 exhibit packet for that one case. Each of the cases has 19 a -- has a corresponding exhibit reflecting the same 20 analysis. The landman has prepared the same study of the lands and identified through the same process the 21 22 affected parties and all offsetting spacing units. The reservoir engineer has conducted the same volumetric 23 24 analysis and has identified in each case if there are

remaining reserves in place that would otherwise not be

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recovered without increasing the well density as they
have requested in these cases.

3 And just as a summary, kind of a reminder, the Blanco-Mesaverde Pool rule limits well density in 4 5 each of the 320-acre spacing units to four wells, two in 6 each half section. And so in each case, Hilcorp is 7 seeking to exceed that well density either because it 8 has proposing three wells in a quarter section or, in 9 some cases, they are proposing two wells in a 10 quarter-quarter section, which also requires an 11 exception to the well density rule. In every case where 12 there is an exception required, we have to come to hearing. So we're here for those exceptions in all 15 13 of these cases. 14

With that, Mr. Examiner, I ask that the 15 16 affidavits for all 15 of these cases be entered into the record with their attachments and that each of these 17 18 cases be taken under advisement. Unless there are any 19 other questions -- and if the Division identifies any 20 questions or concerns, I'll be happy to supplement as 21 needed. EXAMINER DAWSON: 22 Okay. I have one 23 question. I see they provided current schematics on all 24 of the wells in this package.

MR. RANKIN: Uh-huh.

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Page 14 EXAMINER DAWSON: Did they talk about their 1 2 plans for the wells on the perforations? Did they ask for like a recompletion schematic from Hilcorp? 3 They have not yet gotten to 4 MR. RANKIN: 5 that point, stage of planning those cases. However, if you look at Exhibit C1 in the first case, for example, 6 7 which is sort of an overview exhibit that reflects sort 8 of the location of the well within the section, the 9 existing Dakota wells are circled in blue. And on the right-hand side of that are some indications of what 10 11 Hilcorp's plans are and the current status of that well. 12 This would be the third Mesa- -- for example, it would be the third Mesaverde completion in the quarter 13 section, and they've identified the distance from the 14 nearest Mesaverde producer. And they anticipate that 15 16 this well completed in the Mesaverde will help drain the area to the south, as you can see in the map of that 17 18 area. Based on this cartoon, t is not fully -- not 19 fully developed. 20 EXAMINER DAWSON: Okav. 21 MR. RANKIN: And then in the last bullet, 22 they indicate what they recompleted -- within the Blanco-Mesaverde. So exactly where, I think, they're 23 24 going to recomplete, they would identify that through 25 their sundry notice with the Division, is my

Page 15 understanding. 1 2 EXAMINER DAWSON: With the district office? 3 MR. RANKIN: Yeah. 4 EXAMINER DAWSON: Okay. Great. Thank you. 5 Do you have any questions? 6 EXAMINER BROOKS: None. 7 EXAMINER DAWSON: Okay. With that, then 8 we'll take Cases 20426 through 20440 -- we'll take them 9 under advisement. That's 15 cases. 10 And that concludes our hearings for today. 11 MR. RANKIN: Mr. Examiner, I would ask at 12 this time that Exhibits A, B and C and their attachments in each of these cases, starting with 20426 sequentially 13 through 20440, be accepted and made a matter of record. 14 Okay. At this moment 15 EXAMINER DAWSON: 16 Exhibits A through C for all cases, 20426 through 20440 and all attached exhibits, will be admitted to the 17 18 record. 19 (Hilcorp Energy Company Exhibits A, B and C 20 and all attachments for each case are offered and admitted into evidence.) 21 22 (Case Numbers 20426 through 20440 conclude, 23 5:08 p.m.) 24 25

Page 16 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 21st day of May 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