Page 1 IN THE MATTER OF THE HEARING CALLED 3 BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING: 4 CASE NO. 15056 5 APPLICATION OF NADEL AND GUSSMAN HEYCO, LLC FOR APPROVAL OF A 6 NONSTANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY ORIGINAL 7 POOLING, EDDY COUNTY, NEW MEXICO. 8 9 REPORTER'S TRANSCRIPT OF PROCEEDINGS 10 EXAMINER HEARING November 14, 2013 11 12 Santa Fe, New Mexico 13 14 BEFORE: DAVID K. BROOKS, CHIEF EXAMINER 15 16 17 $c \supset$ This matter came on for hearing before the 18 New Mexico Oil Conservation Division, David K. Brooks Chief Examiner, on Thursday, November 14, 2013, at the 19 New Mexico Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Porter Hall, 20 Room 102, Santa Fe, New Mexico. 21 22 REPORTED BY: Mary C. Hankins, CCR, RPR New Mexico CCR #20 23 Paul Baca Professional Court Reporters 500 4th Street, Northwest, Suite 105 24 Albuquerque, New Mexico 87102 (505) 843-9241 25

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Page 2 1 APPEARANCES 2 FOR APPLICANT NADEL AND GUSSMAN HEYCO, LLC: 3 JAMES G. BRUCE, ESQ. Post Office Box 1056 4 Santa Fe, New Mexico 87504 (505) 982-2043 5 jamesbruc@aol.com 6 7 INDEX PAGE 8 Case Number 15056 Called 3 9 Nadel and Gussman Heyco, LLC's Case-in-Chief: 10 Witnesses: 11 Colby Booth: Direct Examination by Mr. Bruce 12 3 Cross-Examination by Examiner Brooks 10 13 Gordon Yahney: 14 Direct Examination by Mr. Bruce 11 15 Proceedings Conclude 16 16 17 Certificate of Court Reporter 17 18 19 20 EXHIBITS OFFERED AND ADMITTED 21 Nadel and Gussman Heyco, LLC Exhibit Numbers 1 through 7 9 2.2 Nadel and Gussman Heyco, LLC Exhibit 23 Numbers 8 through 13 15 24 25

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Page 3 (8:24 a.m.) 1 EXAMINER BROOKS: Then we should call Case 2 15056, application of Nadel and Gussman Heyco, LLC for 3 approval of a nonstandard oil spacing and proration unit 4 and compulsory pooling, Eddy County, New Mexico. 5 Call for appearances. 6 MR. BRUCE: Mr. Examiner, Jim Bruce of 7 Santa Fe representing the Applicant. I have two 8 witnesses. 9 10 EXAMINER BROOKS: Very good. Would the witnesses please identify themselves? 11 12 MR. YAHNEY: Gordon Yahney. MR. BOOTH: Colby Booth. 13 (Mr. Yahney and Mr. Booth sworn.) 14 15 EXAMINER BROOKS: You may proceed, 16 Mr. Bruce. COLBY BOOTH, 17 after having been first duly sworn under oath, was 18 guestioned and testified as follows: 19 20 DIRECT EXAMINATION BY MR. BRUCE: 21 Mr. Booth, where do you reside? 22 Ο. Roswell, New Mexico. 23 Α. Who do you work for and in what capacity? 24 Ο. I am a landman for Nadel and Gussman Heyco, 25 Α.

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Page 4 LLC. 1 2 Have you previously testified before the ο. 3 Division? Α. Yes, I have. 4 5 Ο. And were your credentials as an expert landman accepted as a matter of record? 6 7 Α. Yes, they were. And are you familiar with the land matters in 8 ο. this case? 9 Yes, I am. 10 Α. MR. BRUCE: Mr. Examiner, I'd tender 11 Mr. Booth as an expert petroleum landman. 12 13 EXAMINER BROOKS: So qualified. 14 Ο. (BY MR. BRUCE) Mr. Booth, could you identify Exhibit 1 and describe what Nadel and Gussman Heyco 15 16 seeks in this case? Exhibit 1 is a Midland Map Company plat, which 17 Α. was part of Township 18 [sic] South, Range 26 East, 18 dealing with the north half-north half of Section 9. 19 We also seek to pool the north half-north half as to the 20 Glorieta-Yeso Formation. 21 And what is the name of the proposed well, and 22 Ο. what are the footages for the well? 23 The proposed well is the Iron Duke #2H. 24 Α. It is located in the northwest-northwest of Section 9. 25 Our

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Page 5 surface location is 990 from the north and 200 from the 1 2 west, with a bottom-hole location of 990 from the north 3 and 330 from the east. Q. Will the entire producing interval of the 4 wellbore be orthodox? 5 Α. Yes. 6 7 MR. BRUCE: Mr. Examiner, the API number for the well is 3001540044. 8 9 EXAMINER BROOKS: 40044? MR. BRUCE: Yes. 10 (BY MR. BRUCE) What does the working interest 11 Q. ownership in the well refer you to? 12 13 Α. It lists the working interest owners in the well unit, together with the percentage of the mineral 14 15 interests. And is this all fee lands? 16 Ο. Yes, that is correct. 17 Α. And who on this list do you seek to force pool? 18 0. At this time, we seek to force pool everybody 19 Α. excluding Nadel and Gussman Heyco and Yates Petroleum. 20 Yates Petroleum has signed our AFE. And is currently 21 negotiating a deal with us right now. 22 Are all of these other interest owners unleased 23 Ο. mineral interest owners? 24 That is correct. 25 Α.

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Page 6 Could you identify Exhibit 3 and just briefly Q. 1 discuss your contacts with the Examiner? 2 3 Α. Exhibit 3 is our proposal letter to each of 4 the -- either the participants in the well or the 5 unleased mineral owners. If we were unable to get them on the first try, we turned around and tried many 6 different addresses, as well as looking at the online 7 directories and whatnot to try to find these owners. 8 9 And page 3, are those your notes regarding the Ο. addresses and your attempts to discern the correct 10 addresses for all of the parties? 11 12 Α. That is correct. Those are our notes. 13 Ο. Are there any unlocatable owners? 14 Α. Eddy County Board of Education acquired an interest in 1918, which the Eddy County Board of 15 16 Education no longer exists. We have contacted Eddy County, as well as New Mexico Public Education 17 18 Department as to who could be the possible successors. However, they do not claim the interest. 19 20 We have recently learned that the Artesia 21 Public School District claims or may claim this 22 interest, and we have been in contact with them. If Artesia Public Schools doesn't own it, then title cure 23 will have to be done to, of course, take care of the 24 situation. But we have been in contact with Artesia 25

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Page 7 Public Schools and those other two entities as well. 1 2 Q. And you did have a title opinion prepared on 3 this, correct? Α. Yes. 4 And did the title attorney spend extensive time 5 0. trying to identify the successor to Eddy County Board of 6 Education? 7 That is correct. 8 Α. MR. BRUCE: Mr. Examiner, at the end of the 9 10 hearing, I'd like this matter to be continued to the next Division hearing, because at this point, we have 11 been in touch with Artesia Public Schools, but we did 12 13 not yet notify them of the history. We were trying to 14 work out a deal with them. (BY MR. BRUCE) In your opinion, has Nadel and 15 Q. Gussman Heyco made a good-faith effort to obtain the 16 17 voluntary joinder of the interest in the well? Yes, we have. 18 Α. Could you identify Exhibit 4 for the Examiner 19 Q. and discuss the cost of the well? 20 Exhibit 4 is our AFE for the Iron Duke 4H. 21 Α. We 22 have an estimated dry-hole cost of \$2,360,840, with a 23 total well cost completed at \$3,824,080. 24 Ο. And is each cost in line with the cost of other 25 wells drilled to this depth in this area of Eddy County?

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Page 8 Yes, they are. 1 Α. And is your request that Nadel and Gussman 2 Q. Heyco be appointed operator of the well? 3 4 Α. Yes, I do. And what overhead are you asking? 5 ο. We're requesting 6,000 a month be allowed for 6 Α. monthly drilling and 600 a month for a producing well. 7 And are these the rates which will be in your 8 Ο. JOA with Yates Petroleum? 9 Yes, they are. 10 Α. And are these equivalent to those normally 11 Ο. 12 charged by Nadel and Gussman Heyco wells drilled to this depth in this area? 13 That is correct, yes. 14 Α. 15 And do you request that the rates be adjusted Q. 16 periodically as provided by the COPAS accounting procedure? 17 18 Α. Yes. And does Nadel and Gussman Heyco request the 19 Ο. maximum cost plus 200-percent risk charge for an 20 interest owner that goes nonconsent in the wall? 21 22 Α. That is correct, yes. And were the locatable parties notified of this 23 Q. hearing? 24 And that is shown on our Exhibit 5. 25 Α. Yes.

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Page 9 What is Exhibit 6? 1 Ο. Exhibit 6 lists all the offset operators to the 2 Α. 3 nonstandard unit of the well. And were they notified of this hearing? Q. 4 Yes. 5 Α. And is that reflected in Exhibit 7? 6 Ο. Exhibit 7. 7 Α. Were Exhibits 1 through 7 prepared by you or 8 Ο. under your supervision or compiled from company business 9 records? 10 Α. Yes, they were. 11 And in your opinion, is the granting of this 12 Q. application in the interest of conservation and the 13 prevention of waste? 14 Yes, it is. 15 Α. MR. BRUCE: Mr. Examiner, I'd tender the 16 admission of Exhibits 1 through 7. 17 EXAMINER BROOKS: Very good. 1 through 7 18 are admitted. 19 (Nadel and Gussman Heyco, LLC Exhibit 20 Numbers 1 through 7 were offered and 21 admitted into evidence.) 22 23 MR. BRUCE: And those are the only questions I have of this witness. 24 25

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Page 10 1 CROSS-EXAMINATION 2 BY EXAMINER BROOKS: 3 Q. Okay. Let's see. It's in the north half-north half of Section 9, 18 South, 26 East, correct? 4 Yes, sir, that is correct. 5 Α. And surface location is where? 6 Ο. 7 Α. Northwest-northwest. And do you have footages? 8 Ο. Yes. It is 990 from the north and 200 from the 9 Α. west for the surface hole. 10 990 from north, 200 from west. 11 Q. What's the bottom hole? 12 Bottom hole is 990 from the north and 330 from 13 Α. 14 the east. 15 Q. 990 north, 330 from the east. Now, will the completed interval be 16 orthodox? 17 18 Α. Yes, sir. Because it's going to be -- at the surface, 19 Ο. it's within -- it's outside the setback to the west? 20 Yes, that is correct. 21 Α. I think that's all I need to know, except I 22 Ο. continue to be curious as to who is the Iron Duke? 23 Τ ran [sic] into the Iron Duke a long time ago. Since 24 it's the 19th Century, I tend to think it's the Duke of 25

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Page 11 Wellington, but I've never been able to confirm that. 1 2 Thank you. GORDON YAHNEY, 3 after having been previously sworn under oath, was 4 questioned and testified as follows: 5 DIRECT EXAMINATION 6 BY MR. BRUCE: 7 Mr. Yahney, who do you work for and in what 8 Ο. 9 capacity? I work for Nadel and Gussman Heyco. 10 Α. I'm a 11 geologist. 12 Ο. Have you previously testified before the 13 Division as a petroleum geologist? Yes, I have. 14 Α. And were your credentials as an expert 15 Ο. geologist accepted as a matter of record? 16 17 Α. They were indeed. And does your area of responsibility at Nadel 18 Q. and Gussman Heyco include this portion of southeast 19 New Mexico? 20 21 Α. It does. And are you familiar with the geology involved 22 Q. 23 in this application? 24 A. Yes, I am. MR. BRUCE: Mr. Examiner, I'd tender 25

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Page 12 Mr. Yahney as an expert petroleum geologist. 1 EXAMINER BROOKS: So qualified. 2 (BY MR. BRUCE) Mr. Yahney, would you identify 3 ο. Exhibit 8 for the Examiner? 4 Exhibit 8 is a base map that I've prepared for 5 Α. this area, 18 South, 26 East. It's about six or seven 6 miles south of Artesia, New Mexico. The surface 7 location is marked there up in the upper, left-hand part 8 of the map, and the bottom-hole location, as well, is 9 present on the map there. It's kind of in the center of 10 the north part of the map. 11 I will be referring to a cross section 12 labeled on here, B prime, a little later. 13 And what is Exhibit 9? 14 Ο. Exhibit 9 is a cumulative map for the area, Α. 15 same base map area, showing the production from the 16 San Andres and the Yeso Formations, from the recent 17 horizontal wells that have been drilled in the area. 18 Are those San Andres wells primarily much older 19 Ο. wells? 20 Yes, they are much older wells. You have a Α. 21 unit there, the Atoka-San Andres unit, that's been 22 active for a number of decades. 23 What is Exhibit 10? 24 Ο. Exhibit 10 is a structure map drawn on the top 25 Α.

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Page 13 of the interval that we've been mapping, and it's our target interval that's identified on the cross section. We'll get to that in just a little bit. The dip is from the west to the east and southeast. You're along the shelf edge for the Upper Leonard-Yeso Formation, Paddock equivalent.

Q. What does Exhibit 11 reflect?

Exhibit 11 is an isopach -- porosity isopach 8 Α. taken from all the control wells in the mapped area. It 9 was based on a five-percent porosity cutoff, and totals 10 of footage exceeding that are marked on the map. The 11 north half of the north half of Section 9 there is 12 shown, again, with the cross section. We've got fairly 13 variable porosity development across the area. 14

15 Q. Would you anticipate each quarter-quarter 16 section being productive in this well?

17 A. Yes, I would.

7

18 Q. And please move on to your cross section.

A. The next exhibit is a cross section that folds
out a little bit showing the target interval that we're
placing our horizontal wellbores.

This particular proposal, the Iron Duke #4, is pretty much a direct duplicate of the Iron Duke #2H, which is a half mile to the south. That well has been on production for some time, and it's currently making

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Page 14 somewhere around 70 barrels of oil a day. 1 Now, you said that porosity development is 2 Ο. 3 somewhat variable, but the cross section shows that the target zone is productive across this area? 4 5 Α. Yes, it does. And would you anticipate, based on your 6 ο. exhibits, that each quarter-quarter section would 7 contribute more or less equally to production? 8 The Upper Yeso is kind of a I would. 9 Α. mid-ramp -- Leonard-ramp-facing [sic] that is a 10 It seems to have a pretty good -- once you 11 Greenstone. stimulate it, it seems to have a pretty good vertical 12 drainage for the wellbore. 13 Finally, what is Exhibit 18? 14 ο. Exhibit 18 is the Well Planning Report for the 15 Α. wellbore path and design for the well. This well will 16 17 be drilled west to east. It has -- at about 2,450, on 18 page 3 of that planning report, we will be crossing that hard line and be into a normal orthodox situation 19 location. And at about 2,800 feet, well within the 20 boundaries of the proration unit, we will be setting 21 casing -- a seven-inch casing string. 22 After that, we'll drill out and drill our 23 horizontal, which will be -- we'll run a four-and-a-half 24 inch liner in it and have an open-hole section that we 25

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Page 15 will stimulate with hydraulic packers and hydraulic 1 ports. 2 Approximately how many completion stages has 3 Ο. Nadel and Gussman Heyco put in this? 4 This well will have a 20-stage completion. 5 Α. In your opinion, is the granting of this 6 ο. application in the interest of conservation and the 7 8 prevention of waste? 9 Α. Yes. And were Exhibits 8 through 13 prepared by you 10 Q. or compiled from company business records? 11 They were indeed. 12 Α. MR. BRUCE: Mr. Examiner, I'd move the 13 admission of Exhibit 8 through 13. 14 EXAMINER BROOKS: 8 through 13 are 15 admitted. 16 17 (Nadel and Gussman Heyco, LLC Exhibit Numbers 8 through 13 were offered and 18 admitted into evidence.) 19 MR. BRUCE: Pass the witness. 20 21 EXAMINER BROOKS: I have no questions. You said to continue it to the next docket, 22 which would be two weeks, December 5th. Of course, if 23 you need to give notice --24 25 MR. BRUCE: Mr. Examiner, it's three weeks.

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Page 16 EXAMINER BROOKS: That's right, three 1 weeks, because we don't have a docket on Thanksgiving. 2 3 MR. BRUCE: Yeah, thankfully. EXAMINER BROOKS: None of us would want to 4 be here. 5 Okay. Three weeks would not be enough time 6 7 to give notice, unless you -- well, for publication, you only have to publish ten days ahead. 8 MR. BRUCE: Correct. And that notice has 9 already been sent. This takes care of the rest. 10 EXAMINER BROOKS: Very good. Case Number 11 15056 will be continued until December the 5th. 12 13 (Case Number 15056 concludes, 8:41 a.m.) 14 15 16 17 , do hereby certify that like is regoing to 18 in a record of the proceedings in 6 60 10.0 19 20 Examiner 21 22 23 24 25

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1 STATE OF NEW MEXICO

2 COUNTY OF BERNALILLO

3 4 CERTIFICATE OF COURT REPORTER I, MARY C. HANKINS, New Mexico Certified 5 Court Reporter No. 20, and Registered Professional 6 7 Reporter, do hereby certify that I reported the 8 foregoing proceedings in stenographic shorthand and that 9 the foregoing pages are a true and correct transcript of 10 those proceedings that were reduced to printed form by 11 me to the best of my ability. 12 I FURTHER CERTIFY that the Reporter's Record of the proceedings truly and accurately reflects 13 the exhibits, if any, offered by the respective parties. 14 15 I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or 16 attorneys in this case and that I have no interest in 17 the final disposition of this case. 18 ankins 19 20 MARY C. HANKINS, CCR, RPR 21 Paul Baca Court Reporters, Inc. New Mexico CCR No. 20 22 Date of CCR Expiration: 12/31/2013 23 24 25

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