Page 1 1 STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 2 OIL CONSERVATION DIVISION IN THE MATTER OF THE HEARING CALLED 3 BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING: 4 CASE NO. 14690 5 APPLICATION OF MEWBOURNE OIL COMPANY FOR APPROVAL OF A NON-STANDARD OIL SPACING AND 6 PRORATION UNIT AND COMPULSORY POOLING, 7 LEA COUNTY, NEW MEXICO ORIGINAL 8 REPORTER'S TRANSCRIPT OF PROCEEDINGS 9 EXAMINER HEARING 10 11 12 BEFORE: TERRY G. WARNELL, Hearing Examiner 2011 NUG -5 A II: 02 13 14 July 21, 2011 15 Santa Fe, New Mexico 16 17 This matter came on for hearing before the 18 New Mexico Oil Conservation Division, TERRY G. WARNELL, Hearing Examiner on Thursday, July 21, 2011, at the 19 New Mexico Energy, Minerals and Natural Resources Department, 1220 South Street Francis Drive, Room 102, 20 Santa Fe, New Mexico. 21 22 Lisa Reinicke 23 REPORTED BY: PAUL BACA PROFESSIONAL COURT REPORTERS 24 500 Fourth Street, NW, Suite 105 Albuquerque, NM 87102 25

Page 2 APPEARANCES 1 2 For the Applicant: JAMES GARRETT BRUCE 3 ATTORNEY AT LAW 4 P.O. Box 1056 Santa Fe, New Mexico 87504-1056 5 (505) 982-2043 6 7 INDEX PAGE 8 DIRECT EXAMINATION OF COREY MITCHELL 9 4 DIRECT EXAMINATION OF NATHAN CLESS 10 12 11 CERTIFICATE OF COMPLETION OF DEPOSITION 21 EXHIBITS 12 MARKED/IDENTIFIED 13 1. Land Plat Map 11 14 2. Tract Ownership 11 15 3. Summary of Communications 11 4. Authorization for Expenditure 16 11 5. Affidavit of Notice 17 11 18 6. Offset Operators and Working Interest Owners 11 7. Affidavit of Notice 19 11 20 8. Structure Map 18 21 9. Map 18 22 10. Map 18 11. Production Data Table 23 18 24 12. DDC Well Planning Report 18 25

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Page 3 HEARING OFFICER WARNELL: Are we going to 1 hear each of these cases separately? 2 MR. BRUCE: Well, Mr. Examiner, the 3 4 Mewbourne case, the next one, that's just one. 5 HEARING OFFICER WARNELL: Yeah, okay. 6 MR. BRUCE: And then with the Cimarex cases 7 we're basically going to put on one case because 8 virtually all four are identical so it won't take very 9 long. 10 HEARING OFFICER WARNELL: And I apologize about that Mewbourne. I don't know, for some reason I 11 had written down -- I'll double check on that, but I'm 12 sure the error is mine. Unfortunately, I don't have the 13 folder for it. 14 15 MR. BRUCE: There's not much to it. 16 HEARING OFFICER WARNELL: Should I run upstairs and find the folder? 17 MR. BRUCE: I don't think you need it. 18 Ιf 19 there's anything you need I can give it to you. 20 HEARING OFFICER WARNELL: Okay. Very well. With that, then, we'll call Case 14690, application of 21 Mewbourne Oil Company for approval of a non-standard oil 22 spacing proration unit and compulsory pooling, Lea 23 County, New Mexico. 24 25 Call for appearances.

Page 4 1 MR. BRUCE: Mr. Examiner, Jim Bruce of 2 Santa Fe representing the applicant. I have two witnesses. 3 4 HEARING OFFICER WARNELL: Very well. Will 5 the witnesses please stand and state your name and be sworn. And if you could supply the court reporter with 6 7 a business card, that's always helpful. 8 MR. CLESS: Nathan Cless, Tyler, Texas. 9 MR. MITCHELL: Corey Mitchell, Midland, Texas. 10 11 [WHEREUPON the witnesses were duly sworn.] 12 HEARING OFFICER WARNELL: Call your first witness. 13 14 MR. BRUCE: I call Mr. Mitchell to the stand. 15 16 COREY MITCHELL 17 after having been first duly sworn under oath, 18 was questioned and testified as follows: 19 DIRECT EXAMINATION BY MR. BRUCE: 20 21 Ο. Would you please state your name and city of residence for the record? 22 Corey Mitchell, Midland, Texas. 23 Α. 24 Who do you work for and in what capacity? Ο. 25 Mewbourne Oil Company as a landman. Α.

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Page 5 Q. Have you previously testified before the 1 Division? 2 Α. Yes, sir. 3 Q. And were your credentials as an expert petroleum 4 landman accepted as a matter of record? 5 Yes, sir. Α. 6 And does your area of responsibility at Mewbourne 7 Ο. include this area of Southeast New Mexico? 8 A. Yes, sir. 9 Ο. And are you familiar with the land matters 10 11 involved in this case? 12 A. Yes, sir. 13 MR. BRUCE: Mr. Examiner, I tender Mr. Mitchell as an expert petroleum landman. 14 15 HEARING OFFICER WARNELL: So accepted. Ο. (By Mr. Bruce) Mr. Mitchell, could you identify 16 Exhibit 1 for the Examiner and describe what Mewbourne 17 seeks in this case? 18 Exhibit 1 is a Midland map company land plat, 19 Α. which shows township 19 south, range 33 east, of Lea 20 County, New Mexico. It also has our proposed well and 21 proration unit. We are seeking an order approving a 22 non-standard well unit comprised of the north half north 23 half of section 17 and pooling from the surface to the 24 base of the Bone Spring Formation. 25

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Page 6 In looking at the plat, Mr. Mitchell, the entire 1 Ο. 2 well unit is comprised of a single lease, is it not? 3 Α. Correct. Yes, sir. 4 Ο. So you would seek to force pool the 40 acres where the surface well location is as well as the 5 non-standard unit, correct? 6 7 Yes, sir. Α. 8 Ο. And what is the name of the proposed well? The proposed well is the Spyglass 17 Federal 9 Α. Number 2H well. It's a horizontal well at the surface 10 location 660 from the north, 330 from the west. 11 And a bottom hole location of 660 from the north, 330 from the 12 13 east. And what is the working interest in the well 14 Ο. And I refer you to Exhibit 2. unit? 15 Exhibit 2 is a tract ownership of all the working 16 Α. 17 interest owners in the well. I have noted the people we 18 are pooling today or seek to pool by an asterisk. It is 19 an Ard Oil, Limited and James H. Yates, Incorporated. Together they make up a little over 6.9 percent. 20 And what is Exhibit 3? Ο. 21 22 Α. Exhibit 3 is a summary of my communications and copies of my correspondence with Ard Oil and James H. 23 24 Yates, Incorporated. And they were sent well proposals with the AFEs, 25 Ο.

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Page 7 1 were they not? 2 Α. Yes, sir. 3 0. And this is a federal well, so these are working interests, not unleased mineral owners? 4 5 Α. Correct. Yes, sir. 6 Ο. Have you received any response from either of the 7 parties? Α. 8 I have not. And this is actually our second well 9 in this section, and we had to pool these two in the first well as well. 10 They just simply haven't responded? 11 Ο. Correct. Yes, sir. 12 Α. And in your opinion has Mewbourne made a good 13 Q. faith effort to obtain the voluntary joinder of these 14 interest owners in the wells? 15 Yes, sir. 16 Α. Would you identify Exhibit 4 and discuss the cost 17 Ο. 18 of your proposed well? Exhibit 4 is our AFE, which shows our estimated 19 Α. We have an estimated dry hole cost of well cost. 20 \$2,682,200 and an estimated completed well cost of 21 \$4,277,400. 22 And are these costs in line with the costs of 23 0. other horizontal wells drilled at this depth in this 24 area of New Mexico? 25

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Page 8 Α. Yes, sir. 1 Do you request that Mewbourne be appointed 2 Ο. 3 operator of the well? 4 Α. Yes, sir. 5 Do you have a recommendation as to the overhead 0. 6 rates? 7 Α. Yes, sir. We are recommending 7,000 a month for drilling and 700 a month for producing. 8 And are these amounts equivalent to those charged 9 Q. by Mewbourne and other operators for wells of this type 10 11 in this area of the state? 12 Α. Yes, sir. 13 Q. Do you request that the rates be adjusted periodically as provided by the COPAS accounting 14 procedure? 15 Α. Yes, sir. 16 And does Mewbourne request the maximum cost plus 17 Ο. 18 200 percent risk charge if an interest owner goes non-consent in the well? 19 20 Α. Yes, sir. 21 And were the parties being pooled notified of Q. 22 this application? Yes, sir. 23 Α. 24 0. Now, in looking at Exhibit 5, Mr. Mitchell, the 25 very last page of it shows that Ard Oil was sent

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Page 9 certified mail and they have not picked up the certified 1 mail. Do you know for a fact that this is the correct 2 3 address for Ard Oil, Limited? 4 Α. Yes, sir. 5 Q. Have you sent other letters to Ard Oil by certified mail? 6 7 Α. Yes, sir. Did they refuse to pick up the certified mail? 8 Q. 9 Α. Yes, sir. 10 Q. How are you contacting them now when you send 11 well proposals? 12 Α. We are sending it overnight mail. And those overnight mails are received by Ard 13 Q. Oil, Limited? 14 15 Α. Yes, sir. 16 Ο. And what is Exhibit 6? 17 Α. Exhibit 6 is a list of the offset operators and working interest owners. 18 MR. BRUCE: Mr. Examiner, on Exhibit 6 if 19 you go down to the middle where it says southwest 20 21 quarter, southwest quarter of section 7, that should be 22 section 9, not section 7, the tract operated by Nearburg. 23 24 Ο. (By Mr. Bruce) And were these parties given 25 notice of the application?

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Page 10 Yes, sir, they were. 1 Α. And they all received actual notice, did they 2 0. 3 not? Α. Yes, sir. 4 5 Ο. And were Exhibits 1 through 7 prepared by you or under your supervision or compiled from company business 6 7 records? 8 A. Yes, sir. 9 Ο. And in your opinion is the granting of this application in the interest of conservation and the 10 11 prevention of waste? 12 Α. Yes, sir. Mr. Examiner, there was an error 13 MR. BRUCE: in the advertisement of this case, and it has already 14 been readvertised for August 4th. So I'd ask that it be 15 continued to then. 16 17 Ο. (By Mr. Bruce) But, Mr. Mitchell, as soon as possible after that date, would you request the entry of 18 an order in this matter? 19 20 Α. Yes, sir. There is a drilling rig coming to this location, 21 Q. 22 correct? A. Yes, sir. 23 24 HEARING OFFICER WARNELL: When do you expect 25 your drilling rig?

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Page 11 1 MR. MITCHELL: We'll be drilling probably 2 around the 1st of August. We have an August 15th 3 obligation date. So definitely before then. 4 MR. BRUCE: And with that, Mr. Examiner, I 5 move the admission of Exhibits 1 through 7. 6 HEARING OFFICER WARNELL: Exhibits 1 through 7 7 are admitted. 8 [Exhibits 1 through 7 admitted.] 9 MR. BRUCE: I have nothing further. 10 HEARING OFFICER WARNELL: Okay. Thank you. Mr. Mitchell, did you say this was surface to the 11 base of the Bone Springs? 12 13 MR. MITCHELL: Yes, sir. HEARING OFFICER WARNELL: And on BLM land. 14 15 And you mentioned the overnight mail. They don't accept certified? 16 17 MR. MITCHELL: No, sir. They used to but 18 they no longer sign for them, so we send it FedEx 19 overnight. 20 HEARING OFFICER WARNELL: Oh, and so you've got the signature on FedEx? 21 22 MR. MITCHELL: Yes, sir. Yes, sir, we do 23 have verification that they did receive it and sign for it. 24 25 HEARING OFFICER WARNELL: Interesting. Now,

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Page 12 on this time constraint, so we'll continue to August 4th 1 and supplement the folder or the file. 2 MR. BRUCE: Yeah, just to reflect, all that 3 4 was run incorrect in the first advertisement was the well number. And so I did get that. And we discovered 5 6 that a couple weeks ago, so I e-mailed the Division 7 secretary and she reset it for August 4th. 8 HEARING OFFICER WARNELL: All right. And do we have an API number on this well? 9 MR. MITCHELL: I'm not sure if we do or not. 10 MR. BRUCE: I'll check that for you, 11 Mr. Examiner. I thought we had one. 12 HEARING OFFICER WARNELL: If you could send 13 me the application. You've got that digitally? 14 15 MR. BRUCE: Yes. HEARING OFFICER WARNELL: If you could do 16 that, that might help expedite. 17 I have no further questions. You can call your 18 19 next witness, if you'd like. NATHAN CLESS 20 after having been first duly sworn under oath, 21 22 was questioned and testified as follows: 23 DIRECT EXAMINATION BY MR. BRUCE: 24 25 And would state your name and city of residence? 0.

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Page 13 Nathan Cless of Tyler, Texas. 1 Α. Who do you work for and in what capacity? 2 Ο. 3 Α. Mewbourne Oil Company as a geologist. 4 Ο. Have you previously testified before the Division? 5 Yes, sir. 6 Α. 7 Ο. And were your credentials as an expert geologist 8 accepted as matter of record? 9 Α. Yes, sir. Does your area of responsibility at Mewbourne 10 Ο. include this area of southeast New Mexico? 11 Yes, sir. Α. 12 And are you familiar with geology involved in 13 Q. this application? 14 A. Yes, sir. 15 MR. BRUCE: Mr. Examiner, I tender Mr. Cless 16 as an expert petroleum geologist. 17 18 HEARING OFFICER WARNELL: Mr. Cless is so 19 recognized. (By Mr. Bruce) Mr. Cless, could you identify 20 Ο. Exhibit 8 for the Examiner? 21 22 Yes, Mr. Examiner, Exhibit 8 is a structure map Α. of the area. I made this structure map based on what I 23 call the third Bone Spring carbonate marker. 24 And in Exhibit 11 I'll show you that marker that I've made the 25

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structure map on. But basically it shows that in this area there is a southeasterly dip. I don't believe that anything too abnormally is going on in the structure. Also, on this map you can see all the wells that are highlighted in yellow, wells that produce from the Bone Spring interval.

Now, the Bone Spring interval is comprised -- is
a couple thousand feet thick, so it comprises the Avalon
Shale, the first Bone Spring sand, the second Bone
Spring sand, and the third Bone Spring sand along with
the first Bone Spring, second Bone Spring, and third
Bone Spring carbonates.

As you can see in section 17, section 19, and 13 section 20, all those wells that are highlighted by 14 yellow produce out of the second Bone Spring sand. And 15 our proposed well, the Spyglass 17, Federal Number 2H, 16 will be structurally up dip from those producers. 17 So we believe it will be productive. That north half, north 18 19 half of section 17 will be productive.

20 Q. And what is Exhibit 9?

A. Exhibit 9 is an isopach map on the second Bone Spring C sand. And I'm going to go ahead and jump to Exhibit 10 just so I can show you what the sea sand is and what I'm calling the sea sand. Exhibit 10 is a cross section of two wells going from the well in 17G to

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Page 15 the well in 9M. On the top of this you can see what I'm 1 2 calling the top of the second Bone Spring sands. The 3 second Bone Spring sand consists of multiple sand intervals. And down about two-thirds of the way you can 4 5 see the lines in green are what I'm calling the second Bone Spring C interval. That's going to be our 6 7 horizontal target. And that sand interval is fairly 8 consistent throughout this whole area. And that sea 9 sand is what I've made this isopach map on.

10 So going back to Exhibit Number 9, this also shows the wells that produce out of the Bone Spring. 11 But also, to the bottom left of every well bore there's 12 13 a number, and that number corresponds to the thickness of the sea sand in that well bore. So you can see, 14 15 going from section 18 to section 17 and then up to section 9, you go from 63 feet to 56 feet back up to 64 16 feet. So really there's a pretty similar thickness all 17 along that northern part of section 17, the north half, 18 north half of section 17. 19

Q. And based on that would you expect that each
quarter, quarter section would contribute to production?
A. Yes, sir.

Q. And would they contribute more or less equally to production?

25 A. Yes, sir.

Q. What is Exhibit 11?

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2 Α. Exhibit 11 is a production table of all the wells 3 that produce out of the Bone Spring in this area. It lists the well name, the operator, the API number, the 4 5 location of the well, whether the well is a vertical well or a horizontal well, the date that it was 6 7 completed in the Bone Spring interval, what Bone Spring interval it went into. 8

9 As you can see, the first three wells, which are located in section 7, section 8, and section 9 produce 10 out of the first Bone Spring sand and then the third 11 Bone Spring carbonate. And then all the other wells 12 produce out of the second Bone Spring sand. Then I also 13 list the cum oil, the cum gas, and the cum water of 14 15 these wells. And I will point out that there have currently been three horizontal wells that have been 16 drilled in the second Bone Spring sand. Those wells 17 have all been drilled recently so there has been no 18 19 production released publicly yet.

Q. And looking at this, except for the final well,
the North Maduro Federal Unit Number 2, the production,
vertical production has been marginal, has it not?
A. Yes, sir. Yeah, that's why we believe that going
back with the horizontal well will certainly make this
an economic well.

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Page 17 And, finally, could you identify Exhibit 12 and 1 Q. discuss how Mewbourne drills and completes its 2 3 horizontal Bone Spring wells? 4 Yeah. Exhibit 12 is a preliminary horizontal Α. 5 survey that we got from a company called Directional 6 Drilling Company. They're the directional drillers that 7 we'll use while we're drilling this well. And basically 8 it's just a preliminary survey of where the horizontal well path will go. 9 We are not going to be drilling a pilot hole for 10 We have enough control in this area, and we 11 this well. drilled the well in the south half of north half of 12 section 17 without a pilot hole. So we believe we'll be 13 able to land this well in the correct interval as we're 14 drilling it. 15 If you'll turn to the very last page of 16 Exhibit 12, that last box that's labeled Plan 17 Annotations. It lists our kick off point, our landing 18 19 point, and our bottom hole location. You'll see it also 20 lists the measured depth and the vertical section. The 21 kick off point will be at 9307 measured depth and 9307 vertical depth. Our landing point will be at 10,196 22 23 feet measured depth and a vertical depth of 9880. And then our bottom hole we estimate that we're going to 24 25 have a total measure depth of 14,258 feet and our

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Page 18 vertical depth will be at 9,960 feet. 1 How many completion stages does Mewbourne have in 2 Ο. 3 its wells? 4 Α. We run a packers and ports completion system. And we'll usually run either 17 or 20 ports. And we'll 5 6 frac each of those ports individually. 7 In your opinion, will the granting of this Q. 8 application be in the interest of conservation and the prevention of waste? 9 Α. Yes, sir. 10 And were Exhibits 8 through 12 either prepared by 11 Ο. you or compiled from business records? 12 Yes, sir. 13 Α. MR. BRUCE: Mr. Examiner, I'd move the 14 admission of Exhibits 8 through 12. 15 16 HEARING OFFICER WARNELL: Exhibits 8 through 17 12 are admitted. 18 [Exhibits 8 through 12 admitted.] 19 HEARING OFFICER WARNELL: Mr. Cless, you mentioned a well in section 17 in the south, south half, 20 one that you did recently. 21 MR. CLESS: The south half of the north 22 half. 23 24 HEARING OFFICER WARNELL: The south half of the north half. And what's that well number? 25

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Page 19 1 MR. CLESS: It's the Spyglass 17 Federal 1H. 2 HEARING OFFICER WARNELL: 17 to 24 3 completion stages? 4 MR. CLESS: 17 to 20. 5 HEARING OFFICER WARNELL: How long does that take? 6 7 MR. CLESS: With the packers and port system it just takes a day because they basically -- they'll 8 9 open up the farther stage and they'll frac that. And then they drop a ball down and that seeds and opens up 10 11 the next one. So we're able to frac them fairly 12 quickly. So we're usually at just one day. 13 HEARING OFFICER WARNELL: So once you start 14 you run 24 hours? 15 MR. CLESS: Yeah, pretty much until the job is done. 16 HEARING OFFICER WARNELL: And this is going 17 to be the second well in that section? 18 19 MR. CLESS: Yes, sir. 20 HEARING OFFICER WARNELL: I don't have any 21 further questions. 22 MR. BRUCE: I have nothing further on this 23 matter, Mr. Examiner. So, again, I'd ask that it be continued for two weeks. 24 25 HEARING OFFICER WARNELL: All right. Thank

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1	REPORTER'S CERTIFICATE
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3	I, Lisa Reinicke, New Mexico Provisional
4	Reporter, License #P-405, working under the direction
5	and direct supervision of Paul Baca, New Mexico CCR
6	License #112, Official Court Reporter for the US
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12	I FURTHER CERTIFY that I am neither employed by
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15	disposition of this case in any court.
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