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STATE OF NEW MEXICO

ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 16338 16339

Application of Oxy, USA for a non-standard oil. spacing and proration unit, and compulsory pooling, Eddy County, New Mexico.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

THURSDAY, JULY 26, 2018

SANTA FE, NEW MEXICO

This matter came on for hearing before the New Mexico Oil Conservation Division, William B. Jones Examiner, and David Brooks, Legal Examiner, on Thursday, July 26, 2018, 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 Therese Macfarlane New Mexico CCR 122 PAUL BACA COURT REPORTERS 500 Fourth Street NW, Suite 105 Albuquerque, New Mexico 87102

Page 2 1 APPEARANCES. 2 For the Applicant: Jordan Kessler, Esq. Holland & Hart, LLP 3 P.O. Box 2208 Santa Fe, NM 87504-2208 4 5 INDEX CASES NOS. 16338, 16339 CALLED 6 PAGE 7 APPLICANT'S WITNESSES: 8 INDIA ISBELL DIRECT EXAMINATION BY MS. KESSLER: 3 9 CROSS EXAMINATION BY MR. JONES: 9 12 CROSS EXAMINATION BY MR. BROOKS: 10 TYLER EVANS DIRECT EXAMINATION BY MS. KESSLER: 11 13 CROSS EXAMINATION BY MR. JONES: 17 12 EXHIBIT INDEX 13 14 EXHIBIT PAGE APPLICANT OXY USA EXHIBIT 1 9 15 16 APPLICANT OXY USA EXHIBIT 2 9 APPLICANT OXY USA EXHIBIT 3 9 17 18 APPLICANT OXY USA EXHIBIT 4 9 19 APPLICANT OXY USA EXHIBIT 5 9 20 APPLICANT OXY USA EXHIBIT 6 9 APPLICANT OXY USA EXHIBIT 7 9 21 17 22 APPLICANT OXY USA EXHIBIT 8 23 APPLICANT OXY USA EXHIBIT 9 17 24 25

Page 3 (Time noted: 1:35 p.m.) 1 2 MR. JONES: Let's go on the record this afternoon and call -- I assume they are going to be 3 4 combined, so call Cases 16338 and 16339. Both cases are applications by Oxy USA, Incorporated, for a non-standard 5 spacing and proration unit and compulsory pooling in Eddy 6 7 County, New Mexico. 8 Call for appearances. 9 MS. KESSLER: Mr. Examiner, Jordan Kessler from 10 the Santa Fe office of Holland & Hart appearing for the Applicant. 11 12 MR. JONES: Any other appearances? 13 (Note: No response.) 14 MS. KESSLER: Two witnessess today Mr. Examiner 15 MR. JONES: Will the witnesses please stand and 16 be sworn by the court reporter: (Whereupon the designated witnesses were duly sworn.) 17 18 MS. KESSLER: Mr. Examiner, as with other cases today we will be dismssing the request for non-standard 19 20 spacing unit. This case was filed on June 26th. 21 MR. JONES: Okay. 22 INDIA ISBELL, 23 having been duly sworn, testifed as follows: 24 DIRECT EXAMINATION 25 BY MS. KESSLER:

Page 4 1 Would you please state your name for the record. Q. India Isbell. 2 Α. 3 By whom are you employed? 0. 4 Α. Oxy, USA, Inc. 5 And in what capacity? 0. 6 Α. I'm a land negotiator. 7 Have you previously testified before the Q. 8 Division? 9 Α. I have. 10 Q. Were your credentials as an expert in petroleum land matters accepted and made a matter of record? 11 12 Α. They were 13 Are you familiar with the applications filed in Q. 14 these consolidated cases? 15 Α. Yes. And are you familiar with the status of the 16 0. 17 lands that are the subject of these applications? 18 Α. Yes. MS. KESSLER: Mr. Examiners, I would tender Ms. 19 Isbell as an expert in petroleum land matters. 20 MR. JONES: How do you spell Isbell? 21 THE WITNESS: I-s-b-e-l-l. 22 23 MR. JONES: Isbell. Okay. 24 MR. BROOKS: That's your last name? 25 MR. JONES: She is so qualified.

Page 5 1 Ms. Isbell, let's look at Exhibit 1. Q. 2 Can you please identify Exhibit 1 and explain what Oxy seeks under these consolidated cases. 3 4 Α. Yes. Exhibit 1 is a C-102 form. We are seeking 5 to pool uncommitted interest owners for the 4H. It would be a 320-, roughly 320-acre spacing unit comprised of the 6 7 west half of the east half of Section 34, 23 South, 31 East; and Section 3, 24 South, 31 East. 8 9 That would be dedicated to the 4H well; is that Q. 10 correct? 11 Α. Correct. 12 Okay. Q. 13 Α. Then for the 5H it's a non-standard location but 14 within the east half of the east half, also in Section 34, 15 23 South, 31 East, and in Section 3, 24 South, 31 East. 16 So you're asking for two standard 320-acre 0. spacing units; is that correct? 17 18 Α. Correct. 19 0. And you're asking to compulsory pool uncommitted interest owners in the Bone Spring, correct? 20 21 Α. Yes. 22 What pool is involved in these applications? 0. This will be the Engle (phonetic) wells, Bone 23 Α. 24 Spring Pool. 25 Is that pool the 33740? 0.

Page 6 1 Α. Yes. 2 Is that pool governed by the Division's Q. 3 statewide rules? 4 Α. Yes. 5 What is the nature of this acreage? 0. It's all federal. 6 Α. 7 Will the completed intervals for the 4H, 5H and Q. 8 6H wells comply with the setback requirements? 9 Yes, except for the 5H which is a non-standard Α. 10 location that NSL has been approved. 11 Adminstratively approved? 0. 12 Α. Correct. 13 MR. JONES: Do you know the number? 14 MS. KESSLER: I can provide that. 15 MR. JONES: All Right. 16 Let's turn to Exhibit 2. Q. 17 Is this an ownership plat showing the 18 leases and identifying the Working Interest Owners of each 19 of the spacing units? 20 Yes, it is. Α. 21 Q. Is ownership identical between the 4H, the 5H 22 and the 6H wells? Yes, it is. 23 Α. 24 If you look on the first page of Exhibit 2, this Q. 25 shows each of the leases, correct?

Page 7 1 Α. That's correct. 2 Does the -- on the second page does this list Q. 3 the interest owners that you're seeking to pool? 4 Α. Yes. 5 This would be for the 4H well? 0. That is correct. 6 Α. 7 Then if I turn to Exhibit 3, on the second page Q. 8 you have highlighted the owners that you seek to pool for 9 the 5H and the 6H wells? 10 Α. Correct. 11 0. What Working Interest Owners -- these are all 12 Working Interest Owners, correct? 13 Α. Yes. 14 Are there any Overriding Royalty Interest 0. 15 Owners? 16 Α. There are overriding owners, but we have the 17 ability to pool their interest. 18 So you are not requesting compulsory pooling? Q. 19 Α. Correct. Is Exhibit 4 a sample of the Well Proposal 20 Q. letter for each of the proposed wells? 21 22 Yes, it is. Α. 23 Q. And attached to this letter are AFEs for the 4H, 24 5H and 6H wells, correct? 25 A. Correct.

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Page 8 Are those costs consistent with what Oxy has 1 ο. 2 encountered in drilling similar wells? 3 Α. Yes. 4 ο. What efforts have you undetaken to reach 5 agreements with the interest owners they seek to pool? Α. 6 In addition to sending the proposal letter we've 7 also offered to trade the parties out of their acreage or 8 acquire term assignments. 9 Q. And you have had contact with each of the 10 Working Interest Owners, correct? 11 Α. Yes. 12 Have you estimated overhead and administrative Q. 13 costs? 14 Α. Yes. For drilling \$7500, and for producing 15 \$750. Are those rates consistent with what Oxy and 16 0. 17 other operators in the area are charging for similar Bone 18 Spring wells? 19 Α. Yes. Does Exhibit 5 contain an affidavit with letters 20 Q. 21 prepared by my office providing notice to the parties that 22 you seek to pool? 23 Α. Yes. 24 And out of an abundance of caution, Holland & Q. 25 Hart published Notice directed to the parties that you're

Page 9 1 seeking to pool, correct? 2 Α. Yes. 3 Q. Those affidavits are included as Exhibits 6 and 4 7? 5 Yes. Α. 6 You stated that all of the parties that you're Q. 7 seeking to pool were locatable? 8 Α. Correct. 9 Were Exhibits 1 through 4 prepared by you or Q. 10 compiled under your direction? 11 Α. Yes. MS. KESSLER: Mr. Examiner, I would move 12 Exhibits 1 through 7 into evidence. 13 14 MR. JONES: Exhibits 1 through 7 are admitted. CROSS-EXAMINATION 15 16 BY MR. JONES: 17 Q. So this is a potash-restricted area or real 18 close to it? 19 It is. Α. 20 So one of the wells -- Well No. 4H seems to be Q. 21 more affected by that, is that correct, or is it just 22 surface and vertical hole restrictions mainly through the 23 potash? 24 Α. Yes. The casing is a little -- the casing 25 design is a little different in the potash, from what I

Page 10 understand. 1 2 I do not believe we are on a drill island for this one but I'm not sure. I have handled most of the 3 4 subsurface rather than surface. 5 Okay. So they have a different person for 0. surface land issues? 6 7 That's correct. Α. 8 0. And permitting issues. 9 Okay. So 5H has got an NSL because why? 10 Why was it it needing one? It is less than 330 from the west half --11 Α. 12 Okay. Q. 13 Α. -- line. 14 So you're encroaching on the other --0. 15 Α. The 4H spacing unit, yes. 16 The proposed 4H spacing. Q. MR. BROOKS: It needs an NSL number under the 17 old rules. 18 MR. JONES: The new rule would allow you to 19 combine this whole thing if you wanted a 640, I guess, and 20 have the 5H as your first well -- or it -- well, it 21 22 defines the spacing unit. I guess they call it that. 23 You can't call it the defining well because 24 it's not defined. 25 MR. BROOKS; The defining well is not defined.

Page 11 MR. JONES: The defining well is not defined but 1 2 we can say it is the well that would define the spacing 3 unit. 4 MS. KESSLER: I don't think it works. 5 MR. JONES: Yeah. Unless someone re-opens those 6 rules and changes that. 7 So everybody -- It's basically EOG; is that Q. 8 right? 9 Correct. Α. 10 What's their hesitation? Q. 11 I honestly am not sure. They've been Α. nonresponsive. 12 13 Q. Chuck Moran? 14 Α. I was actually working with Clay Haggett 15 (phonetic) on this one. 16 Oh, okay. Do you also do Bravo Dome? Q. 17 Α. No. 18 I was told yestereday that they're going to Q. 19 propose a bunch of wells next year, but it just depends on management where they want to spend their money. 20 21 And these are -- the tracts are identified as separately owned. There's two tracts, right --22 23 Α. Correct. 24 -- in each well, each of these spacing units? Q. 25 Α. Two separate leases.

Page 12 1 Q. Federal leases? 2 Α. Uh-huh. 3 Is there restrictions on when you can get out 0. 4 here and drill? Are there any prairie chicken or lizard? 5 Α. I do not believe these are in a prairie chicken 6 area, no. 7 Would you drill all these wells and then Q. 8 complete them at the same time? 9 Essentially. They will be drilled back to back Α. 10 and completed as soon as reasonably possible thereafter. Okay. I didn't know if you were requesting any 11 0. 12 kind of extended... Not in this case, no. 13 Α. 14 MR. JONES: Okay. Mr. Brooks? 15 CROSS-EXAMINATION 16 BY MR. BROOKS: 17 Sometimes I wonder if EOG isn't kind of like 0. 18 Union Pacific when they merged with Southern Pacific. For 19 the first few months they were stopping trains and lining them up on the track in Houston, for several miles outside 20 21 of Houston, because they couldn't figure out what trains 22 were what and where they were going. 23 But don't take that remark seriously. 24 So EOG and their entities are the only 25 parties to be pooled?

Page 13 1 Α. Correct. 2 Q. Are there any overrides? 3 Α. There are. 4 Q. There are? 5 Not to be pooled. There are overrides in these Α. 6 tracts. 7 But are those overrides committed to the unit by Q. 8 virtue of existing agreements? 9 Α. Yes. 10 MR. BROOKS: Okay. That's all I have. MS. KESSLER: I'll call my next witness. 11 12 TYLER EVANS, 13 having been previously sworn, testified as follows: 14 DIRECT EXAMINATION BY MS. KESSLER: 15 16 Please state your name for the record. Q. 17 My name is Tyler Evans. Α. 18 By whom are you employed? Q. I work for Oxy, USA. 19 Α. And in what capacity? 20 Q. Staff geologist in New Mexico. 21 Α. 22 Have you previously testified before the Q. 23 Division? 24 Α. No. 25 Can you please outline your educational 0.

Page 14 1 background. 2 Α. Sure. I have a Bachelor in Science in environmental science from the University of North 3 Carolina from 2011, and a PhD in goeology from the 4 University of South Caroline in 2016. 5 6 Q. What has been your work history? 7 Worked at Oxy since January of 2017 in New Α. 8 Mexico. 9 And during this time your experience has Q. 10 included the Permian Basin, correct? 11 Α. Yes. 12 Are you a member of any professional ο. associations? 13 14 Α. Yes. The APG Houston Geological Society and 15 West Texas Geological Society. 16 Are you familiar with the applications filed in 0. 17 these consolidated cases? 18 Α. Yes. 19 0. Have you conducted a geologic study of the lands 20 that are the subject of these applications? 21 Α. Yes. MS. KESSLER: I would tender Mr. Evans as an 22 23 expert in petroleum geology. 24 MR. JONES: Okay. Why would you go -- what did 25 you do your Ph- -- did you have a thesis or something?

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Page 15 Yeah, I wrote a dissertation on mostly ground 1 Α. water flow on the Continental Shelf Scale for the Atlantic 2 barges in the Southeast. Simulate variable density fluid 3 4 flow on the Continental Shelf. 5 MR. JONES: Oh, okay. So the Mars water 6 discovery is interesting you, probably. 7 Yeah. So it's sort of the -- there's potential Α. 8 for future oil and gas exploration out there, so there's a 9 lot of legacy data from the '60s sort of delineating 10 aquifers. Q. 11 Okay. 12 Α. You know, reservoirs, maybe. 13 MR. JONES: Well, thank you. He's qualified as 14 an expert in petroleum geology. 15 MS. KESSLER: Thank you. 16 Mr. Evans, let's turn to Exhibit 8. Can you Q. 17 please identify this exhibit 18 Sure. Exhibit 8 is a structure map at the top Α. of the Second Bone Spring Sand, which is the target of the 19 Platinum 4, 5, 6H wells. As you can see, those three 20 wells are highlighted with the white stars and also 21 labeled. 22 23 In general, the geology is pretty calm 24 here; it's gently dipping to the east. We are going to be 25 drilling approximately a long strike from north to south.

Page 16 There's a black line labeled A to A prime that describes 1 the cross section which is the next exhibit, and in 2 general the structure map shows that there are no faults 3 4 or unusual structures in the area. 5 Thank you. Is Exhibit 9 a cross section showing 0. 6 the Bone Spring? 7 Q. Yes. 8 Please walk us through this exhibit. 0. 9 This cross section, as labeled on the map Α. Sure. 10 preceeding, goes from A to A prime. The first well is Sterling Silver 33.2. The first track is the depth, the 11 12 second track is gamma ray and the third track is deep 13 resistivity. The red line indicates the top of the Second 14 Bone Spring Sand, the blue line represents the top of the 15 Third Bone Spring limestone. 16 We're drilling these wells, like I said, from north to south at approximately 9,980 feet TVD from 17 the first well, the Sterling Silver 33.2. This is a 18 continuous sand load right above a middle carbonate layer 19 that we routinely drill these wells in. As you can see, 20 the thickness of the Second Bone Spring Sand is uniform in 21 this area both north/south and east/west. 22 23 ο. No major thickening or thinning for the target 24 formation --25 Α. No.

Page 17 1 -- acros the proposed unit? Q. 2 Α. No. 3 Q. Based on your geologic study of this area, have 4 you identified any hazards to drilling horizontal wells? 5 Α. No. 6 In your opinion can the area be efficiently and Q. 7 economically developed by horizontal wells? 8 Α. Yes. And in your opinion will the acreage comprising 9 0. the proposed unit contribute more or less equally to 10 11 production? 12 Α. Yes. 13 In your opinion will granting Oxy's application 0. 14 be in the best interests of conservation, the prevention 15 of waste, and the protection of correlative rights? 16 Α. Yes. 17 Q. And finally, were Exhibits 8 and 9 prepared by 18 you or under your direction and supervision? 19 Α. Yes. 20 MS. KESSLER: Mr. Examiner, I move admission of Exhibits 8 and 9. 21 22 MR. JONES: Exhibits 8 and 9 are admitted. 23 CROSS-EXAMINATION 24 BY MR. JONES: 25 Second Bone Spring --Q.

Page 18 Yes, sir. 1 Α. 2 Q. -- sand? And you're about to drill north/south wells here for some reason. 3 4 Α. There's a strong -- we have a lot of data that 5 suggests there is a strong SH maximum, about 70 degrees, so north/south ultimizes that fracture growth. 6 7 So you would agree that 100 feet heel and toe is Q. 8 a safe distance to not affect your neighbors. 9 Yes. Α. 10 MR. BROOKS: No questions. 11 MR. JONES: Thanks for coming all the way from North Carolina. South Carolina? 12 13 I guess you're in Houston now. 14 THE WITNESS: Houston now, yeah. 15 MR. BROOKS: Your dissertation is a subject that sounds like very little relationship to New Mexico. 16 THE WITNESS: That's true. 17 18 MR. BROOKS: That's true of most people's dissertations, though. 19 20 MR. JONES: We're all here because something 21 happened. MR. BROOKS: That's definitely true of me. 22 23 MS. KESSLER: I would ask these cases be taken 24 under advisement. 25 MR. JONES: Cases 16338 and 16339 are taken

			Page 19
1	under advisement.		
2	MS. KESSLER:	Thank you.	
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5	REPORTER'S CERTIFICATE		
6	I, MARY THERESE MACFARLANE, New Mexico Reporter		
7	CCR No. 122, DO HEREBY CERTIFY that on Thursday, July 26,		
8	2018, the proceedings in the above-captioned matter were		
9	taken before me; that I did report in stenographic		
10	shorthand the proceedings set forth herein, and the		
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