## 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:

AMENDED APPLICATION OF NOVO OIL & GAS CASE NOS. 16282, NORTHERN DELAWARE, LLC FOR A NONSTANDARD 16283, SPACING AND PRORATION UNIT AND COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

February 21, 2019

Santa Fe, New Mexico

BEFORE: MICHAEL McMILLAN, CHIEF EXAMINER
TERRY WARNELL, TECHNICAL EXAMINER
DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Michael McMillan, Chief Examiner, Terry Warnell, Technical Examiner, and David K. Brooks, Legal Examiner, on Thursday, February 21, 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 NOVO OIL & GAS NORTHERN DELAWARE, LLC:
3	CANDACE H. CALLAHAN, ESQ.
4	BEATTY & WOZNIAK, P.C. 500 Don Gaspar Avenue
5	Santa Fe, New Mexico 87505 (505) 983-8764
6	ccallahan@bwenergylaw.com
7	FOR INTERESTED PARTY TDY INDUSTRIES, LLC:
8	JAMES G. BRUCE, ESQ. Post Office Box 1056
9	Santa Fe, New Mexico 87504 (505) 982-2043
10	jamesbruc@aol.com
11	
12	INDEX
13	PAGE
14	Case Numbers 16282 and 16283 Called 3
15	Cases Presented by Affidavit 3
16	Proceedings Conclude 17
17	Certificate of Court Reporter 18
18	
19	
20	EXHIBITS OFFERED AND ADMITTED
21	Novo Oil & Gas Northern Delaware, LLC Exhibit Numbers 20 through 32 For Each Case 12, 17
22	Numbers 20 chrough 32 for Each Case 12, 17
23	
24	
25	

- 1 (2:18 p.m.)
- 2 EXAMINER McMILLAN: Let's go to the front
- 3 of the docket, Case Number 16283.
- 4 MS. CALLAHAN: 282 and 284.
- 5 EXAMINER McMILLAN: Will these be combined
- 6 with the other cases?
- 7 MS. CALLAHAN: Well, the first two are
- 8 going to be combined. The 84 I'd like to have right
- 9 afterwards because, as you'll see, it somewhat relates.
- 10 EXAMINER McMILLAN: Okay. At this time I'd
- 11 like to call Case Number 16283, amended application of
- 12 Novo Oil & Gas Northern Delaware, LLC for a nonstandard
- 13 spacing and proration unit and compulsory pooling, Eddy
- 14 County, New Mexico. This shall be combined with Case
- 15 Number 16282, amended application of Novo Oil & Gas
- 16 Northern Delaware, LLC for a nonstandard spacing and
- 17 proration unit and compulsory pooling, Eddy County, New
- 18 Mexico.
- 19 Call for appearances.
- 20 MS. CALLAHAN: Candace Callahan appearing
- 21 for Novo Oil & Gas Northern Delaware, LLC.
- 22 EXAMINER McMILLAN: Any other appearances?
- MR. BRUCE: Mr. Examiner, Jim Bruce
- 24 representing TDY Industries, LLC. I have no witnesses.
- 25 EXAMINER McMILLAN: Both cases?

- 1 MR. BRUCE: Both cases.
- 2 EXAMINER McMILLAN: Please proceed.
- 3 MS. CALLAHAN: Thank you.
- If it's all right with you, Mr. Examiner,
- 5 I'd like to start with 16282, and I just want to give
- 6 you some general opening remarks for context.
- 7 Cases 16282 and 16283 were initially heard
- 8 July 12th, 2018 just after the new horizontal rules went
- 9 into effect. The record was supplemented in both cases
- 10 at hearing on August 9th. The lands in these cases are
- 11 all within the potash area with limited surface access.
- 12 We're here today to address the depth severance in both
- 13 cases and the amended applications.
- 14 EXAMINER BROOKS: Okay. There was a prior
- 15 hearing?
- 16 MS. CALLAHAN: There were two, on July
- 17 12th, right after the horizontal rules went into effect,
- 18 and then again on August 9th.
- 19 EXAMINER BROOKS: Okay. I picked up on
- 20 August, but I missed out on July, and I was going to say
- 21 there were a lot of hearings closer to the date than
- 22 that. But I'm glad you explained. Go ahead.
- 23 MS. CALLAHAN: All right. Thank you.
- Both of these applications were amended and
- 25 renoticed to limit the requested spacing unit to the

- 1 depths within the Bone Spring below 8,773 feet
- 2 subsurface in accord with the conveyances that created
- 3 the depth severance. The depth severance in both 16282
- 4 and 16283 applies only to a 40-acre tract within each of
- 5 the 320-acre spacing units, and the only working
- 6 interest owner in the depths excluded from the Bone
- 7 Spring was COG Operating, LLC. And in the underlying
- 8 hearings, it was made clear that COG had no opposition.
- 9 We're presenting Cases 16282 and 16283 by
- 10 affidavit, since there's been no opposition, and we're
- 11 asking they be consolidated for hearing purposes.
- So I'd like to first look at the packet you
- 13 have for 16282. You'll see there are three affidavits
- 14 for this case. They're denoted "Land," "Geology" and
- 15 "Engineering."
- 16 And the affidavit of the land expert is
- 17 given by Brandon Patrick who has previously testified
- 18 before the Division, and his credentials were accepted
- 19 as an expert in petroleum land matters.
- 20 The affidavit of Michael Hale reflects
- 21 credentials set forth in that. He has not been before
- 22 the Division before.
- 23 And the affidavit of Kurt Shipley also
- 24 contains his credentials, and he's offered as an expert
- 25 petroleum engineer.

1 And Mr. Hale is offered as an expert in

- 2 geology.
- In Mr. Patrick's affidavit, he testifies
- 4 that Case 16282 as amended seeks an order creating a
- 5 320-acre nonstandard spacing unit in the Culebra Bluff;
- 6 Bone Spring, South Pool, pool code 15011, limited to all
- 7 depths below 8,773 feet to the base of the Bone Spring
- 8 Formation. And the proposed spacing unit is comprised
- 9 of the south half-south half of Section 4 and the south
- 10 half-south half of Section 5, Township 23 South, Range
- 11 29 East in Eddy County. The well proposed for this unit
- is the Rana Salada Fed Com 0504 134H well. The C-102
- 13 for this well was submitted at the August 9th hearing.
- 14 And Novo is seeking to pool all uncommitted mineral
- interests underlying this proposed spacing unit.
- 16 If we look at Mr. Patrick's Exhibit Number
- 17 20, we'll see a plat and an updated mineral ownership
- 18 schedule reflecting additional interests which Novo has
- 19 acquired since the initial filing of the case.
- 20 Page 2 provides the mineral interests in
- 21 the south half-south half of Sections 4 and 5 for all
- 22 benches in the Bone Spring and below the Bone Spring.
- 23 Exhibit Number 21 lists all the parties
- 24 that Novo seeks to be pooled. The only working interest
- owner to be pooled is Marathon Oil Permian. The

1 remainder of the owners listed are all overriding

- 2 royalty interest owners with the exception of two
- 3 companies, TDY and BTA Oil Producers, who are identified
- 4 as royalty interest owners. They currently are
- 5 litigating competing interests in district court. They
- 6 have competing claims to the minerals in the fee acreage
- 7 within the spacing unit.
- 8 At the August 9th hearing, Mr. Patrick
- 9 testified to his good-faith efforts to obtain the
- joinder of Marathon, and the subsequent conveyance by
- 11 Marathon -- of its interests to Novo, I think, reflects
- 12 those efforts.
- Exhibit 22 includes a copy of the two
- 14 transfers of operating rights into Novo which are
- 15 defining the depth severance that we're using in this
- 16 hearing.
- 17 And Exhibit 23 is a description of the
- depths for the proposed spacing unit for the Rana Salada
- 19 Fed Com 0504 134H well.
- 20 Exhibit 24 is my Affidavit of Notice of the
- 21 amended application.
- 22 And 24B reflects the status of the
- 23 return-receipt cards. All of the return-receipt cards
- 24 were received in this case except the notice sent to one
- 25 of the overriding royalty interest owners, and that was

- 1 Destiny Management, Inc.
- 2 So as a result of that, we have published
- 3 notice, and that Affidavit of Publication is Exhibit 25.
- 4 All of the mineral owners within the Bone
- 5 Spring -- within all intervals of the Bone Spring were
- 6 sent notices of this amended application.
- 7 EXAMINER BROOKS: Including COG?
- 8 MS. CALLAHAN: Including COG, yes.
- 9 If we turn now to the affidavit of Michael
- 10 Hale, the geologist for Novo, he's submitted five
- 11 exhibits. The first, which is denoted Exhibit 26, is a
- 12 picture of the -- it's a plat of the Bone Spring
- 13 execution plan for the 3rd Bone Spring proposed location
- 14 for the well in this case. I think it will in part
- 15 explain why all these cases are being asked to be
- 16 considered together.
- 17 Let's see. Exhibit 27 is a subsea
- 18 structure map on the top of the 3rd Bone Spring.
- 19 EXAMINER McMILLAN: Jim, do you have any
- 20 problems with the geologist being an expert witness?
- MR. BRUCE: No.
- 22 EXAMINER McMILLAN: Okay. Continue.
- MS. CALLAHAN: Thank you.
- 24 Should I have submitted him as an expert?
- 25 EXAMINER McMILLAN: Yes.

1 MS. CALLAHAN: Okay. I am asking to do so.

- 2 Thank you.
- 3 Let's see. Exhibit 27 is a subsea
- 4 structure map on the top of the 3rd Bone Spring.
- 5 Exhibit 28 is the gross isopach map for the
- 6 3rd Bone Spring.
- 7 And Exhibit 29 is a stratigraphic cross
- 8 section of the 3rd Bone Spring illustrating three type
- 9 wells in and offsetting Novo's Rana Salada development
- 10 block. You'll see that the cross section identifies the
- 11 depth severance of 8,773 feet, the target zone and the
- 12 target depth of the landing point. The API numbers for
- 13 all three of these wells are given at the top of each of
- 14 the logs.
- 15 Exhibit 30 is a Rana Salada development
- 16 block type log with frac barriers and target interval.
- 17 The Carthel Federal 2 has been used to illustrate the
- 18 low porosity limestone barriers between the 2nd and 3rd
- 19 Bone Spring intervals. The depth severance, the target
- 20 zone and the target depth are also identified.
- 21 In his affidavit, Mr. Hale concludes from
- 22 his study of the Bone Spring that the 3rd Bone Spring
- 23 Lime barrier will effectively prevent communication
- 24 between the 2nd and 3rd Bone Spring intervals. The
- 25 fracs from the proposed well will not extend into the

1 2nd Bone Spring interval. The Bone Spring Formation

- 2 underlying the proposed unit is suitable for horizontal
- 3 development. Each quarter-quarter section will
- 4 contribute more or less equally to the production from
- 5 the proposed well, and the granting of Novo's
- 6 application will be in the best interest of conservation
- 7 and the prevention of waste.
- 8 I'd like to move now to the affidavit of
- 9 Novo's engineer, Mr. Kurt Shipley. Mr. Shipley
- 10 reiterates that the 130H well is targeting the 3rd Bone
- 11 Spring Sand interval. He states the stimulation design
- 12 for the 134H well is a slick water and sand fracture
- 13 stimulation, and the design is intended to control
- 14 height and maximize fracture half-length.
- 15 Attached to Mr. Shipley's affidavit are two
- 16 exhibits. Exhibit 31 is a type log for the Carthel
- 17 Federal 2. And you'll see that the target depth and the
- 18 distances are denoted on this exhibit.
- 19 And Exhibit 32 is a map and diagram used
- 20 for comparison of the vertical separation of the 2nd and
- 21 3rd Bone Spring Formations -- or benches.
- With reference to these exhibits,
- 23 Mr. Shipley states the gross height between the depth
- 24 severance of 8,773 feet subsurface and the producing 3rd
- 25 Bone Spring Sand interval is approximately 788 feet, and

- 1 the conductive frac height is not expected to exceed
- 2 approximately 100 feet. The stimulation model suggests
- 3 the limestone barrier which exists between 8,773 feet
- 4 subsurface and the producing 3rd Bone Spring Sand
- 5 interval will act as a barrier and isolate these
- 6 intervals.
- 7 He goes on to state that Novo is not aware
- 8 of any lasting communication effects between these zones
- 9 in the immediate area, and there is 788 feet of vertical
- 10 separation between the depth severance of 8,773 feet and
- 11 the top of the 3rd Bone Spring Sand at 9,561 feet.
- 12 There is 849 feet between the base of the 2nd Bone
- 13 Spring at 8,712 feet and the top of the 3rd Bone Spring
- 14 at 9,561 feet. The planned landing point for the
- 15 proposed well is at 9,750 feet. There are 336 feet of
- 16 frac barriers in the Upper 3rd Bone Spring Lime and
- 17 multiple frac barriers in the Lower 3rd Bone Spring.
- 18 Mr. Shipley concludes that the Bone Spring
- 19 Formation above the depth severance of 8,773 feet
- 20 subsurface and the producing 3rd Bone Spring interval
- 21 will be isolated from each other and not within
- 22 hydraulic fracture communication. The granting -- and
- 23 he also states the granting of the application is in the
- 24 best interest of conservation and the prevention of
- 25 waste.

1 And I guess at this point, I'd like to move

- 2 for the admission of the affidavits and the related
- 3 exhibits of Brandon Patrick, Michael Hale and Kurt
- 4 Shipley, together with my affidavits and the Affidavit
- 5 of Publication.
- 6 EXAMINER McMILLAN: So Exhibits 20 through
- 7 31?
- 8 MS. CALLAHAN: 32.
- 9 EXAMINER McMILLAN: Oh, 32.
- 10 Any objections?
- MR. BRUCE: No.
- 12 EXAMINER McMILLAN: Exhibits 20 through 32
- 13 for Cases 16282 and 16283 may now be accepted as part of
- 14 the record.
- 15 (Novo Oil & Gas Northern Delaware, LLC
- 16 Exhibit Numbers 20 through 32 are offered
- and admitted into evidence.)
- MS. CALLAHAN: Okay. I have a little bit
- 19 of information I'd like to give for Case 16283 just to
- 20 point out the differences between the two. They're
- 21 virtually identical, but, you know, there is a different
- 22 spacing unit, and I just wanted to point those things
- 23 out.
- 24 EXAMINER BROOKS: Okay. Before you go into
- 25 the next case, that is another case. You said you were

- 1 going to do that separate, right?
- 2 MS. CALLAHAN: Yes.
- This is it for 16282.
- 4 EXAMINER BROOKS: I just want to make a
- 5 brief remark on depth severances. The depth severance
- 6 information we've got here is sufficient, I think, but
- 7 it's only sufficient because we have the consent of the
- 8 party that owns the counterinterest. But if it were not
- 9 on a consent basis, I think we would need to have the
- 10 geology witness testify based -- well, ideally what we
- 11 would have is a copy of the title instrument attached to
- 12 the landman's affidavit, which includes the depth
- 13 severance -- the actual definition of the depth
- 14 severance in the title.
- 15 MS. CALLAHAN: That is included in here.
- 16 Yes.
- 17 EXAMINER BROOKS: Yeah.
- Well, then the second thing is if it's only
- 19 X number of feet, which is what you're saying here, then
- 20 we need to get it clarified whether it's X number of
- 21 feet in a straight line or whether it's 8,773 -- or the
- 22 stratigraphic equivalent of 8,773 feet as to some
- 23 marker, and that marker would have to be identified by a
- 24 particular well at which the marker appears at that
- 25 level.

```
1 EXAMINER McMILLAN: It is tied to one.
```

- 2 EXAMINER BROOKS: Okay. Good. Then I made
- 3 the speech --
- 4 EXAMINER McMILLAN: It's the Carthel
- 5 Federal 2.
- 6 MS. CALLAHAN: The conveyance is not tied
- 7 to that, but the geologist and the engineer used that as
- 8 a basis for --
- 9 EXAMINER BROOKS: Okay. That's good,
- 10 except it does need to be -- if you don't have the
- 11 consent involved, then you need to have that depth
- 12 severance either -- the marker either specified in the
- 13 title instrument or have your experts testify that that
- 14 is a recognized marker, and it can be identified in a
- 15 particular other well -- in a particular well. I mean,
- 16 since you're drilling a new well, it couldn't be that
- 17 well, so, of course, it would be another well. But in
- 18 another type of case, it might be that well. But we
- 19 need -- if it's in the title instrument, the title
- 20 instrument governs, of course. If it's not in the title
- 21 instrument, then we have to have some interpretation of
- 22 the title instrument, and that can only come from a
- 23 geologist. So I just wanted to give you my take on how
- 24 these depth severances --
- 25 MS. CALLAHAN: Thank you. In our case it's

1 clearly set forth in the conveyance instrument, and, in

- 2 fact, COG is responsible for creating the depth
- 3 severance. So they had an opportunity to tie it to a
- 4 well, but they did not.
- 5 EXAMINER BROOKS: Well, there's a rumor
- 6 going around that I'm an expert on depth severances.
- 7 I'm not. Michael over here is the expert on depth
- 8 severances, but I have to add my own little twist to it.
- 9 EXAMINER McMILLAN: Sitting through a ton
- 10 of these cases, you learn real quickly what's needed.
- 11 EXAMINER BROOKS: Well, it's unfortunate
- 12 that I drafted conversance of instruments a long time
- 13 before -- as did many other lawyers.
- MS. CALLAHAN: So as I said, Case 16283 is
- 15 virtually identical, and there are just a few
- 16 exceptions. A spacing unit is proposed. It's a
- 17 320-acre spacing unit, but it's to be comprised of the
- 18 north half-south half of Sections 4 and 5, so in the
- 19 same sections as 16282. And the initial well proposed
- is the Rana Salada Fed Com 0504 133H well.
- 21 And then if we look at the exhibit packet
- 22 for 16283 and look at Exhibit 20, you'll see that the
- 23 mineral ownership is different in this case.
- 24 The parties we request to be pooled are set
- 25 forth in Exhibit 21, and the working interest owners to

- 1 be pooled are OXY Y-1 Company and XTO, who are the
- 2 successors in interest to THRU Line Oil & Gas NM, LLC.
- 3 The remainder of all these people are all overriding
- 4 royalty interest owners. And miraculously enough we
- 5 received return-receipt cards for all but two of the
- 6 overriding royalty interest owners, and we did publish
- 7 as to those owners. And then those are really the
- 8 differences.
- 9 The affidavits of Mr. Patrick, Mr. Hale and
- 10 Mr. Shipley are all comparable to what we submitted for
- 11 Case 16282 and contain virtually the same information.
- So with that, I'd move for the admission of
- 13 the affidavits of Mr. Patrick, Mr. Hale and Mr. Shipley
- 14 together with their respective exhibits, 20 through 32,
- 15 which include my Affidavit of Notice and the Affidavit
- 16 of Publication.
- 17 EXAMINER McMILLAN: Exhibits 20 through 32
- 18 for --
- 19 Any objections?
- MR. BRUCE: No.
- 21 EXAMINER WARNELL: Wait a minute. Wait a
- 22 minute. Do I have the geologist? Oh, yeah, I do.
- 23 Never mind.
- 24 EXAMINER McMILLAN: 20 through 32 in Case
- 25 16283 may now be accepted as part of the record.

Page 17 (Novo Oil & Gas Northern Delaware, LLC 1 Exhibit Numbers 20 through 32 are offered 2 3 and admitted into evidence.) MS. CALLAHAN: That's all I have for those 5 two cases. EXAMINER McMILLAN: Do you want them taken 6 7 under advisement? 8 MS. CALLAHAN: Oh, yes, please. Would you 9 please take those two cases under advisement? 10 EXAMINER McMILLAN: Jim? 11 MR. BRUCE: No objection. 12 EXAMINER McMILLAN: 16282 and 16283 may now be taken under advisement. 13 14 Thank you. Thank you. 15 MS. CALLAHAN: 16 (Case Numbers 16282 and 16283 conclude, 17 2:43 p.m.) 18 19 20 21 22 23 24 25

- 1 STATE OF NEW MEXICO
- 2 COUNTY OF BERNALILLO

3

- 4 CERTIFICATE OF COURT REPORTER
- 5 I, MARY C. HANKINS, Certified Court
- 6 Reporter, New Mexico Certified Court Reporter No. 20,
- 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
- 10 a true and correct transcript of those proceedings that
- 11 were reduced to printed form by me to the best of my
- 12 ability.
- I FURTHER CERTIFY that the Reporter's
- 14 Record of the proceedings truly and accurately reflects
- 15 the exhibits, if any, offered by the respective parties.
- 16 I FURTHER CERTIFY that I am neither
- 17 employed by nor related to any of the parties or
- 18 attorneys in this case and that I have no interest in
- 19 the final disposition of this case.
- 20 DATED THIS 27th day of March 2019.

21

22

MARY C. HANKINS, CCR, RPR
Certified Court Reporter
New Mexico CCR No. 20

Date of CCR Expiration: 12/31/2019
Paul Baca Professional Court Reporters

25