BEFORE THE OIL CONSERVATION DIVISION EXAMINER HEARING DECEMBER 12, 2019

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case No. 20962

Danger Noodle 29-20 Fed Com 1H Well Danger Noodle 29-20 Fed Com 2H Well Danger Noodle 29-20 Fed Com 3H Well

Case No. 20963

Danger Noodle 29-20 Fed Com 4H Well Danger Noodle 29-20 Fed Com 5H Well Danger Noodle 29-20 Fed Com 6H Well Danger Noodle 29-20 Fed Com 7H Well

Devon Energy Production Company, L.P.

HEARING EXHIBITS

Case No. 20962

Reference: Application – Case No. 20962

Exhibit 1: Affidavit of Andy D. Bennett, Landman, and Supporting Documents

Exhibit 2: Affidavit of John Green, Geologist, and Supporting Documents

Exhibit 3: Notice Affidavit

Case No. 20963

Reference: Application – Case No. 20963

Exhibit 4: Affidavit of Andy D. Bennett, Landman, and Supporting Documents

Exhibit 5: Affidavit of Thomas Peryam, Geologist, and Supporting Documents

Exhibit 6: Notice Affidavit

STATE OF NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES OIL CONSERVATION DIVISION

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY LP FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case No. 20962

AFFIDAVIT OF JOHN GREEN

STATE OF OKLAHOMA)
) ss.
COUNTY OF OKLAHOMA)

- I, being duly sworn on oath, state the following:
- 1. I am over the age of 18, and I have personal knowledge of the matters stated herein.
- 2. I am employed as a petroleum geologist for Devon Energy Production Company, L.P. ("Devon"), and I am familiar with the subject application and the geology involved.
- 3. This affidavit is submitted in connection with the filing by Devon of the above-referenced compulsory pooling application pursuant to 19.15.4.12.A(1), (6) NMAC.
- 4. I have testified previously by affidavit before the Oil Conservation Division ("Division") as an expert petroleum geologist; my credentials have been made a matter of record, and I have been qualified as an expert by the Division.
 - a. I hold a Bachelor's degree in Geology obtained from Oklahoma State
 University, and a Master's degree in Geology from Oklahoma State
 University. I completed my education in 2011.
 - b. I have been employed as a petroleum geologist with Devon since April, 2011.
- 5. Exhibit A is a Bone Spring structure map. The unit being pooled is outlined by red rectangle. Strata dip approximately 100' eastward across sections 20-29. The apparent





structural dip along the proposed Danger Noodle wellbores is around 0.50°. No major structural hazards exist at this location.

- 6. **Exhibit A** identifies wells in the vicinity of the proposed well, with a cross-section line running from A to A'.
 - 7. **Exhibit A** shows that the structure dips down to the east.
- 8. **Exhibit B** is a Bone Spring stratigraphic cross-section hung on the First Bone Spring Limestone. The cross-section shows consistent target thickness in wells near the Danger Noodle sections. The well logs on the cross-section give a representative sample of the Bone Spring formation in the area and demonstrate reasonable well control. The target zone for the 1H, 2H, and 3H wells is the Leonard Formation, as indicated by the blue lines in **Exhibit B**. The target zones are continuous across the well unit.
- 9. **Exhibit** C is a gross isochore of the Leonard target formation. The map shows thickness for the 1H-3H wellbores indicated in **Exhibit B**. The Leonard target interval is uniform across the proposed well unit.
 - 10. I conclude from the attached exhibits that:
 - a. The horizontal spacing and proration unit is justified from a geologic standpoint.
 - b. There are no structural impediments or faulting that will interfere with horizontal development.
 - c. Each quarter-quarter section in the unit will contribute more or less equally to production.
- 11. The preferred well orientation in this area is south-north. This is because the inferred orientation of the maximum horizontal stress is roughly E-W.

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- 12. The Exhibits to this Affidavit were prepared by me, or compiled from Devon's company business records under my direct supervision.
- 13. The granting of this Application is in the interests of conservation, the prevention of waste, and the protection of correlative rights.
 - 14. The foregoing is correct and complete to the best of my knowledge and belief.

[Signature page follows]

FURTHER AFFIANT SAYETH NAUGHT

John Green

Subscribed to and sworn before me this day of December, 2019.

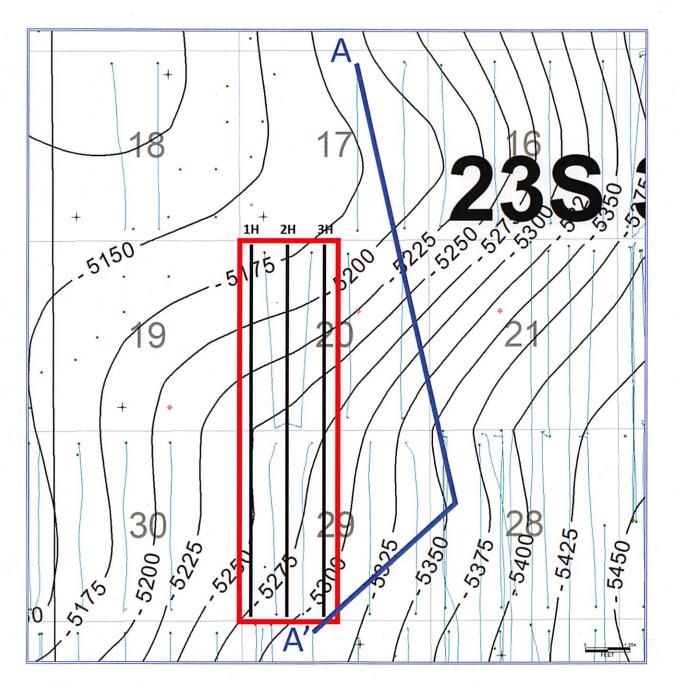


Exhibit A: Bone Spring structure map. Contour interval = 25'. Cross-section indicated by blue line labeled A to A'. The red rectangle indicates the unit being pooled.

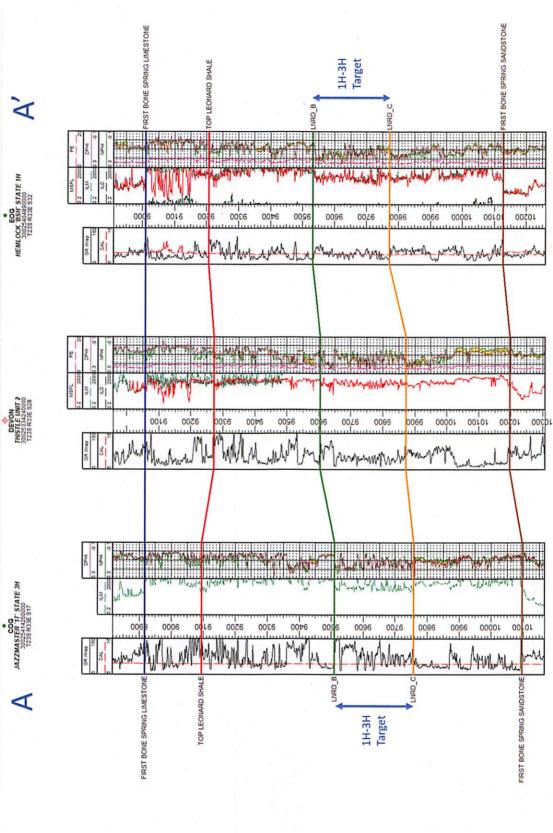


Exhibit B: Cross-section A to A'. Stratigraphic cross-section hung on First Bone Spring Limestone top. Target intervals indicated by blue arrows.

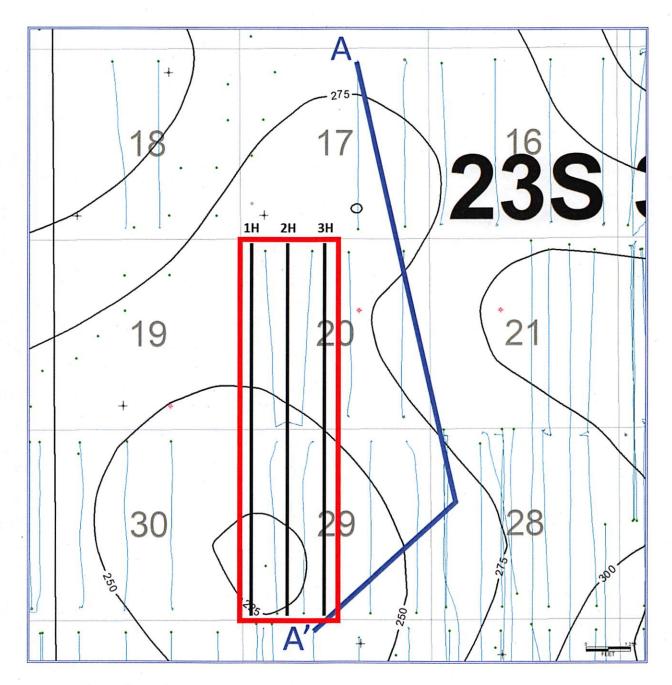


Exhibit C: Isochore thickness of target interval indicated on cross-section (Exhibit B). Cross-section indicated by blue line labeled A to A'. The red rectangle indicates the unit being pooled.