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:

CASE NO. 15465 ORDER NO. R-14153

APPLICATION OF ENDURANCE RESOURCES, LLC FOR A SPECIAL DEPTH BRACKET ALLOWABLE FOR OIL WELLS WITHIN THE WC-025 G-05 S253523H; DELAWARE POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 14, 2016, at Santa Fe, New Mexico before Examiner William V. Jones.

NOW, on this 19th day of April, 2016, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.
- (2) The Applicant, Endurance Resources, LLC ("Endurance"), seeks to establish special pool rules for oil production from the Delaware formation within a Wildcat Delaware Oil Pool which is currently designated as the WC-025 G-05 S253523H; Delaware Pool (Pool Code No. 97779). Endurance seeks to increase the depth bracket allowable for oil production within this pool from 230 barrels of oil per day to 350 barrels of oil per day per each standard 40-acre oil spacing and proration unit.
- (3) The WC-025 G-05 S253523H; Delaware Pool was discovered in 2009 by Chesapeake Operating, Inc.'s Dinwiddie 23 Federal Well No. 1 (API No. 30-025-38242) located in the SE/4 NE/4 (Unit H) of Section 23, Township 25 South, Range 35 East, NMPM, Lea County, New Mexico. The top perforation in that completion was at 8443 feet. This pool is governed by Division Rule 19.15.20.12 NMAC, which provides a top unit allowable of 230 barrels of oil per day per standard 40-acre oil spacing and proration unit. This pool is

also governed by Division Rule 19.15.20.13 NMAC, which provides for a limiting gas-oil ratio of 2000 cubic feet of gas per barrel of oil.

(4) The Division's district office in Hobbs has determined that the horizontal limits for this pool currently comprise the following lands in Lea County, New Mexico:

Township 25 South, Range 35 East, NMPM

Section 15: S/2

Section 16: W/2 and SE/4

Section 22: NE/4 Section 23: N/2

- (5) All working interest owners and all operators of wells producing from the Delaware formation within the WC-025 G-05 S253523H; Delaware Pool and all operators and working interest owners within one mile of the pool boundaries were notified of this application. No objections were received and no other party entered an appearance in this case.
 - (6) Endurance presented exhibits and testimony showing the following.
 - (a) Endurance spud the Yates 16 State Well No. 1H (API No. 30-025-42757) on October 21, 2015 in Unit D of Section 16, Township 25 South, Range 35 East, NMPM, Lea County, New Mexico and drilled the well as a one-mile horizontal well from north to south in a productive marine sand within the Basal Brushy Canyon member of the Delaware Mountain Group at a maximum, true vertical depth of 9024 feet. The completed interval is at a standard location.
 - (b) The well was tested on January 11th of 2016 at a daily rate of 2195 barrels of oil, 2024 Mcf gas, and 3191 barrels of water. The well first produced in January of 2016 under a discovery allowable at a rate exceeding the pool limit of 230 barrels of oil per day. The well name was changed effective February 1, 2016, to the White Falcon 16 State Well No. 1.
 - (c) The completion formation, the Basal Brushy Canyon sand, is continuous across the pool although it is thicker in some areas than in others. The sand has greater than eight (8) percent porosity.
 - (d) The production plot presented by Endurance indicates that the Gas-Oil Ratio has not significantly varied as the production rate from the well was changed. The reservoir drive mechanism is solution gas drive. The oil cut has remained above 50 percent. Damage to this well or to this reservoir will not occur if the well is produced at a rate above the current depth bracket allowable. There is no need to

- increase the limiting Gas-Oil Ratio from the currently allowed 2000 to 1.
- (e) The well was curtailed after the discovery allowable period expired and remains curtailed pending the outcome of this hearing.

The Division concludes that:

- (7) Endurance has shown that an increase in the depth bracket allowable from 230 to 350 barrels of oil per day per standard 40-acre spacing and proration unit is necessary to protect correlative rights and will not cause waste.
- (8) This application should be approved, granting the requested increase in the depth bracket allowable. The Special Rule should not be made temporary or require subsequent appearance and justification before the Division.
- (9) This is a Wildcat Delaware Oil Pool and has not been created through a nomenclature hearing before the Division. The boundaries of this pool have been tentatively drawn by the district geologist in Hobbs beginning at the location of the discovery well and extending in a northwest direction to the project area of the latest well drilled by Endurance; which is currently the only well producing from the Delaware formation within this acreage. The pool is contiguous but has not been rigorously delineated by well completions.
- (10) This application requesting to increase the depth bracket allowable in the Delaware formation over this defined area was noticed to all working interest owners and no protests were received. However, the pool area should be presented by Endurance at a nomenclature hearing to officially establish this pool.
- (11) Endurance or another working interest owner within the pool should reopen this case within 60 days after the date of this order and request Pool Creation of a defined Delaware Oil Pool and request that any Special Pool Rule enacted herein to be applied to the new pool.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Endurance Resources, LLC ("Endurance") to increase the depth bracket allowable for the WC-025 G-05 S253523H; Delaware Oil Pool (Pool Code 97779) to 350 barrels of oil per day per standard 40-acre spacing and proration unit is hereby granted.
- (2) Special Pool Rules for the WC-025 G-05 S253523H; Delaware Oil Pool are hereby established as follows:

Special Rules for the WC-025 G-05 S253523H; Delaware Oil Pool

Rule 1: Each well completed or recompleted in the WC-025 G-05 S253523H; Delaware Oil Pool (Pool Code 97779) or within 1 mile thereof and not nearer to or within the limits of another Delaware formation oil pool, shall be produced in accordance with the Special Rules hereinafter set forth.

- **Rule 2:** Effective April 1, 2016, the allowable for a standard 40-acre oil spacing and proration unit shall be 350 barrels of oil per day.
 - Rule 3: All other rules shall conform to the Division's statewide rules.
- (3) Applicant shall apply to re-open this case within 60 days from the date of this order, requesting Pool Creation of a defined Delaware Oil Pool and requesting that the Special Pool Rules enacted herein be applied to the new pool. If this Delaware Oil Pool is not created through Division hearing prior to January 1, 2017, the Special Pool Rules adopted herein shall then expire.
- (4) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

S.F.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

and K. Lake

DAVID R. CATANACH

Director