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. 13471 ORDER NO. R-12341

APPLICATION OF RB OPERATING COMPANY FOR DIRECTIONAL DRILLING, AN UNORTHODOX SURFACE AND SUBSURFACE WELL LOCATION, AND SIMULTANEOUS DEDICATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION;

This case came on for hearing at 8:15 a.m. on April 21, 2005 at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 29th day of April, 2005, 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) Division Cases No. 13471 and 13472 were consolidated at the hearing for the purpose of testimony.
- (3) The applicant, RB Operating Company ("RB Operating" or "applicant"), seeks authorization to drill its Carrasco "14" Well No. 6 from an unorthodox surface location 1400 feet from the North line and 800 feet from the East line (Unit H) of Section 14, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, to an unorthodox bottomhole location 1400 feet from the North line and 1250 feet from the East line (Unit H) of Section 14. The applicant further seeks authority to simultaneously dedicate the SE/4 NE/4 of Section 14 in the East Loving-Brushy Canyon Pool to the proposed Carrasco "14" Well No. 6 and to the existing RB Operating Carrasco "14" Well No. 3 (API No. 30-015-26350) located 1980 feet from the North line and 560 feet from the East line (Unit H) of Section 14.

- (4) Both the proposed Carrasco "14" Well No. 6 and the existing Carrasco "14" Well No. 3 are located within the East Loving-Brushy Canyon Pool. This pool is currently governed by 19.15.3.104.(B) NMAC, which requires standard 40 acre spacing and proration units with wells to be located no closer than 330 feet to the outer boundary of the spacing unit. The pool allowable is currently set at 142 barrels of oil per day, and the limiting gas-oil ratio is currently set at 8,000 cubic feet of gas per barrel of oil (established by Division Order No. R-9501-B dated July 9, 1993.)
- (5) RB Operating testified that the proposed directional drilling is necessitated by the presence of the Pecos River.
- (6) The **bottomhole** location of the Carrasco "14" Well No. 6 is proposed to be in the approximate center of four existing 40-acre spacing units in the East Loving-Brushy Canyon Pool. Within this 160-acre area, the NE/4 NE/4 is currently dedicated to the RB Operating South Culebra Bluff'14" Well No. 1 (API No. 30-015-26347), the NW/4 NE/4 is currently dedicated to the RB Operating South Culebra Bluff Unit Well No. 7 (API No. 30-015-23811), the SE/4 NE/4 is currently dedicated to the RB Operating Carrasco "14" Well No. 3 (API No. 30-015-26350), and the SW/4 NE/4 is currently dedicated to the RB Operating Carrasco "14" Well No. 2 (API No. 30-015-26293).
- (7) RB Operating testified that the NE/4 of Section 14 is comprised of Federal and fee leases described as follows:
 - (a) the N/2 NE/4 is a commonly-owned single Federal lease (Federal Lease No. NM-0542015);
 - (b) the S/2 NE/4 is a commonly-owned single fee lease. Within this lease, there are approximately 25-35 different royalty interest owners; and
 - (c) the working interest ownership within the NE/4 of Section 14 is owned 50% by RB Operating and 50% by Chesapeake Permian, L.P.
- (8) RB Operating intends to drill the Carrasco "14" Well No. 6 at the proposed location in order to recover additional reserves from the East Loving-Brushy Canyon Pool that may otherwise not be recovered by the existing wells within the NE/4 of Section 14. In support of its request, RB Operating presented engineering evidence that demonstrates that:

- (a) the four existing wells within the NE/4 of Section 14, the South Culebra Bluff "14" Well No. 1, the South Culebra Bluff Unit Well No. 7, the Carrasco "14" Well No. 2 and the Carrasco "14" Well No. 3 will cumulatively recover approximately 824,000 barrels of oil from this 160-acre area;
- (b) based upon decline curve analysis, the combined drainage area of these four existing wells will be approximately 105 acres;
- (c) a well drilled at the proposed unorthodox location should recover an additional 70,000 barrels of oil from the NE/4 of Section 14 that will otherwise not be recovered by the four existing wells, thereby preventing waste; and
- (d) the Carrasco "14" Well No. 6 will drain portions of the NE/4 NE/4, NW/4 NE/4, SE/4 NE/4 and the SW/4 NE/4 of Section 14.
- (9) RB Operating also presented geologic evidence that demonstrates that:
 - (a) the East Loving-Brushy Canyon Pool is comprised of at least seven (7) separate producing sand intervals:
 - (b) structure is not a big factor affecting production; and
 - (c) the reservoir quality in each of these producing sands is highly variable and may account for the limited drainage area of some wells.

- (10) In order to protect the correlative rights of all interest owners within the NE/4 of Section 14, RB Operating has formed a voluntary "drilling unit" for the Carrasco "14" Well No. 6 that contains 40 acres and comprises the SW/4 NE/4 NE/4, SE/4 NW/4 NE/4, NE/4 SW/4 NE/4 and the NW/4 SE/4 NE/4 of Section 14. The voluntary "drilling unit" agreement stipulates that the production from the Carrasco "14" Well No. 6 will be shared by all interest owners within the NE/4 of Section 14, and that each quarter-quarter section within the NE/4 of Section 14 will be credited with one-fourth (1/4) of the total production from the well.
- (11) With the exception of the Bureau of Land Management (BLM), all interest owners within the NE/4 of Section 14 have voluntarily executed the "drilling unit" agreement.
- (12) By letter dated March 31, 2005, RB Operating advised the BLM of its plans with regards to the Carrasco "14" Well No. 6. BLM has yet to respond to RB Operating.
- (13) Notice of this application was provided to all interest owners within the NE/4 of Section 14. No interest owner appeared at the hearing.
- (14) In accordance with Division rules, the Carrasco "14" Well No. 6 will share a unit allowable with the existing Carrasco "14" Well No. 3. Currently, the Carrasco "14" Well No. 3 produces at a rate of 25 barrels of oil and 42 MCF of gas per day. The combined production from these two wells should not exceed the top unit allowable for the SE/4 NE/4 of Section 14.
- (15) Due to the diverse ownership situation, RB Operating testified that the oil and gas production from the Carrasco "14" Well No. 6 will be separately metered and stored.
- (16) The evidence presented in this case demonstrates that the drilling of the Carrasco "14" Well No. 6 at the proposed unorthodox oil well location will result in the recovery of additional oil and gas from the NE/4 of Section 14 that may otherwise not be recovered, thereby preventing waste, and that the formation of the voluntary "drilling unit" for the well will ensure that the correlative rights of all interest owners in the NE/4 of Section 14 are adequately protected.
 - (16) The application of RB Operating should be approved.

IT IS THEREFORE ORDERED THAT:

- (1) The application of RB Operating Company for approval to directionally drill its proposed Carrasco "14" Well No. 6 at an unorthodox surface location 1400 feet from the North line and 800 feet from the East line (Unit H) of Section 14, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, to an unorthodox bottomhole location 1400 feet from the North line and 1250 feet from the East line (Unit H) of Section 14 to test the Brushy Canyon member of the Delaware formation is hereby approved. The applicant is further authorized to simultaneously dedicate the SE/4 NE/4 of Section 14 in the East Loving-Brushy Canyon Pool to the proposed Carrasco "14" Well No. 6 and to the existing RB Operating Company Carrasco "14" Well No. 3 (API No. 30-015-26350) located 1980 feet from the North line and 560 feet from the East line (Unit H) of Section 14.
- (2) RB Operating Company shall comply with all directional drilling requirements contained within 19.15.3.111 NMAC.
- (3) In accordance with Division rules, the Carrasco "14" Well No. 6 shall share a unit allowable with the existing Carrasco "14" Well No. 3. The unit allowable may be produced from either well in any proportion.
- (4) Production from the Carrasco "14" Well No. 6 shall be allocated to each of the quarter-quarter sections within the NE/4 of Section 14, and to each interest owner within these areas in accordance with the provisions of the "drilling unit" agreement presented by the applicant and identified as applicant's Exhibit No. (2) in this case.
- (5) In accordance with 19.15.5.303 NMAC, RB Operating Company shall maintain separate measurement equipment and storage facilities for the Carrasco "14" Well No. 6.
- (6) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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

SEAL

STATE **OF** NEW MEXICO OIL CONSERVATION DIVISION

MARK E. **FESMIRE**, P.E.,

Director