# 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. 13472 ORDER NO. R-12342

APPLICATION OF RB OPERATING COMPANY FOR AN UNORTHODOX OIL 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 29<sup>th</sup> 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 South Culebra Bluff "23" Well No. 17 at an unorthodox oil well location 2440 feet from the South line and 1500 feet from the West line (Unit K) of Section 23, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, to test the Brushy Canyon member of the Delaware formation, East Loving-Brushy Canyon Pool. The applicant further seeks authority to simultaneously dedicate the NE/4 SW/4 of Section 23 in the East Loving-Brushy Canyon Pool to the proposed South Culebra Bluff "23" Well No. 17 and to the existing South Culebra Bluff "23" Well No. 1 (API No. 30-015-25841) located 1830 feet from the South line and 1980 feet from the West line (Unit K) of Section 23.

- (4) Both the proposed South Culebra Bluff "23" Well No. 17 and the existing South Culebra Bluff "23" Well No. 1 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) The South Culebra Bluff "23" Well No. 17 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 SE/4 NW/4 is currently dedicated to the RB Operating South Culebra Bluff Well No. 13 (API No. 30-015-30164) and to the RB Operating Donaldson Com "A" Well No. 1 (API No. 30-015-22404), the SW/4 NW/4 is currently dedicated to the RB Operating South Culebra Bluff Well No. 4 (API No. 30-015-26285), the NW/4 SW/4 is currently dedicated to the RB Operating South Culebra Bluff Well No. 2 (API No. 30-015-26213), and the NE/4 SW/4 is currently dedicated to the RB Operating South Culebra Bluff "23" Well No. 1 (API No. 30-015-25841).
- (6) RB Operating testified that the S/2 NW/4 and N/2 SW/4 of Section 23 are two separate fee leases described as follows:
  - (a) the S/2 NW/4 is a commonly-owned single fee lease that has multiple royalty and overriding royalty interest owners;
  - (b) the N/2 SW/4 is a commonly-owned single fee lease that has multiple royalty and overriding royalty interest owners; and
  - (c) the working interest ownership within the S/2 NW/4 and the N/2 SW/4 of Section 23 is owned 50% by RB Operating and 50% by Chesapeake Permian, L.P..
- (7) RB Operating intends to drill the South Culebra Bluff "23" Well No. 17 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 S/2 NW/4 and the N/2 SW/4 of Section 23. In support of its request, RB Operating presented engineering evidence that demonstrates that:

- (a) the five existing wells within the S/2 NW/4 and N/2 SW/4 of Section 23, the South Culebra Bluff Well No. 4, the South Culebra Bluff Well No. 13, the Donaldson Com "A" Well No. 1, the South Culebra Bluff "23" Well No. 1 and the South Culebra Bluff Well No. 2 will cumulatively recover approximately 608,000 barrels of oil from this 160-acre area;
- (b) based upon decline curve analysis, the combined drainage area of these five existing wells will be approximately 140 acres;
- (c) a well drilled at the proposed unorthodox location should recover an additional 50,000 barrels of oil from the S/2 NW/4 and the N/2 SW/4 of Section 23 that will otherwise not be recovered by the five existing wells, thereby preventing waste; and
- (d) the South Culebra Bluff "23" Well No. 17 will drain portions of the SE/4 NW/4, SW/4 NW/4, NW/4 SW/4 and the NE/4 SW/4 of Section 23.
- (8) 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.

- (9) In order to protect the correlative rights of all interest owners within the S/2 NW/4 and the N/2 SW/4 of Section 23, RB Operating has formed a voluntary "drilling unit" for the South Culebra Bluff "23" Well No. 17 that contains 40 acres and comprises the SW/4 SE/4 NW/4, SE/4 SW/4 NW/4, NE/4 NW/4 SW/4 and the NW/4 NE/4 SW/4 of Section 23. The voluntary "drilling unit" agreement stipulates that the production from the South Culebra Bluff "23" Well No. 17 will be shared by all interest owners within the S/2 NW/4 and N/2 SW/4 of Section 23, and that each quarter-quarter section within this area will be credited with one-fourth (1/4) of the total production from the well.
- (10) All of interest owners within the S/2 NW/4 and the N/2 SW/4 of Section 23 have voluntarily executed the "drilling unit" agreement.
- (11) Notice of this application was provided to all interest owners within the S/2 NW/4 and N/2 SW/4 of Section 23. No interest owner appeared at the hearing.
- (12) In accordance with Division rules, the South Culebra Bluff "23" Well No. 17 will share a unit allowable with the existing South Culebra Bluff "23" Well No. 1. Currently, the South Culebra Bluff "23" Well No. 1 produces at a rate of 28 barrels of oil and 145 MCF of gas per day. The combined production from these two wells should not exceed the top unit allowable for the NE/4 SW/4 of Section 23.
- (13) Due to the diverse ownership situation, RB Operating testified that the oil and gas production from the South Culebra Bluff "23" Well No. 17 will be separately metered and stored.
- (14) The evidence presented in this case demonstrates that the drilling of the South Culebra Bluff "23" Well No. 17 at the proposed unorthodox oil well location will result in the recovery of additional oil and gas from the S/2 NW/4 and the N/2 SW/4 of Section 23 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 S/2 NW/4 and the N/2 SW/4 of Section 23 are adequately protected.
  - (15) The application of RB Operating should be approved.

## IT IS THEREFORE ORDERED THAT:

- (1) The application of RB Operating Company for approval to drill its South Culebra Bluff "23" Well No. 17 at an unorthodox oil well location 2440 feet from the South line and 1500 feet from the West line (Unit K) of Section 23, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, to test the Brushy Canyon member of the Delaware formation, East Loving-Brushy Canyon Pool, is hereby approved. The applicant is further authorized to simultaneously dedicate the NE/4 SW/4 of Section 23 in the East Loving-Brushy Canyon Pool to the proposed South Culebra Bluff "23" Well No. 17 and to the existing RB Operating Company South Culebra Bluff "23" Well No. 1 (API No. 30-015-25841) located 1830 feet from the South line and 1980 feet from the West line (Unit K) of Section 23.
- (2) In accordance with Division rules, the South Culebra Bluff "23" Well No. 17 shall share a unit allowable with the existing South Culebra Bluff "23" Well No. 1. The allowable may be produced from either well in any proportion.
- (3) Production from the South Culebra Bluff "23" Well No. 17 shall be allocated to each of the quarter-quarter sections within the S/2 NW/4 and the N/2 SW/4 of Section 23, and to each interest owner within this area 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.
- (4) In accordance with 19.15.5.303 NMAC, RB Operating Company shall maintain separate measurement equipment and storage facilities for the South Culebra Bluff "23" Well No. 17.
- (5) 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.



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.,

Director