

**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. 13003
ORDER NO. R-11961**

**APPLICATION OF EOG RESOURCES, INC. FOR 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 February 20, 2003, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 13th day of May, 2003, 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, EOG Resources, Inc. ("EOG"), seeks an exception to Division Rule No. 104.C.(2)(b) to permit the simultaneous dedication of the following wells to an existing 292.32-acre non-standard gas proration unit in the Morrow formation, South Empire-Morrow Gas Pool, comprised of the N/2 of Irregular Section 7, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico:

Well Name

Well Location

Warp Speed A "7" Federal
Com Well No. 1
(API No. 30-015-31476)

2280' FNL & 1930' FWL (Unit F)

Warp Speed "7" Federal
Com Well No. 2
(API No. 30-015-25628)

1985' FNL & 526' FWL (Unit E)
(Surface Location)
1980' FNL & 660' FWL (Unit E)
(Bottomhole Location)

(3) Although they did not protest the application, Murchison Oil & Gas, Inc. ("Murchison"), Devon Energy Production Company, L.P. ("Devon"), and Mewbourne Oil Company ("Mewbourne") all entered appearances and were represented by legal counsel at the hearing.

(4) Murchison is the affected offset operator to the west and northwest in Sections 1 and 12, Township 17 South, Range 28 East, NMPM, and currently operates the Yogi Bear State Com Well No. 1 (API No. 30-015-32216) located 1750 feet from the North line and 660 feet from the East line (Unit H) of Section 12, which currently produces from the South Empire-Morrow Gas Pool.

(5) Mewbourne is the affected offset operator to the south in Section 7 and currently operates the Empire "7" Federal Well No. 1 (API No. 30-015-31134) located 760 feet from the South line and 1750 feet from the West line (Unit N), and the Empire "7" Federal Well No. 2 (API No. 30-015-32561) located 760 feet from the South line and 660 feet from the East line (Unit P), which both currently produce from the South Empire-Morrow Gas Pool.

(6) Devon is the affected leasehold owner to the north in Section 6. There are currently no Morrow-producing wells on Devon's acreage.

(7) The South Empire-Morrow Gas Pool is currently governed by Division Rule 104.C.(2), which requires standard 320-acre gas spacing and proration units with wells to be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(8) Additionally, Rule 104.C.(2)(b) provides that:

"only one infill well on a 320-acre unit shall be allowed provided that the well is located in the quarter section of the 320-acre unit not containing the initial well and is located no closer than 660 feet to the outer boundary of the quarter section and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary."

(9) The Warp Speed A "7" Federal Com Well No. 1 is located at an unorthodox gas well location that was previously approved by Division Order No. R-11433-A dated December 14, 2000. Additionally, the subject 292.32-acre non-standard gas proration unit was approved by Division Order No. R-11433 dated August 3, 2000.

(10) The proposed exception to Rule No. 104.C.(2)(b) is necessary because both the Warp Speed A "7" Federal Com Well No. 1 and the Warp Speed "7" Federal Com Well No. 2 are located within the NW/4 of Section 7.

(11) Testimony presented by EOG and data obtained from Division records demonstrate that:

- (a) EOG drilled the Warp Speed A "7" Federal Com Well No. 1 in May-June, 2001. The well was drilled to a total depth of 10,885 feet and was completed in the "Warp" and "Green" sand intervals within the Lower Morrow formation from a depth of 10,532'-10,550'. From these intervals, the well tested at a rate of 766 MCF gas per day. In September, 2001, additional perforations were added in the Middle Morrow interval from 10,426'-10,472';
- (b) in May-June 2002, Murchison drilled the Yogi Bear State Com Well No. 1. The well was drilled to a total depth of 10,620 feet and was completed in the "Yogi" sand interval within the Lower Morrow formation. From this interval, the well tested at a rate of 2.8 MMCF of gas per day. The well subsequently produced at a rate of approximately 7.0 MMCF of gas per day;
- (c) at the time it was drilled, the Yogi Bear State Com Well No. 1 encountered virgin reservoir pressure in the Yogi sand interval;
- (d) the Yogi sand interval is not present within the Warp Speed A "7" Federal Well No. 1;
- (e) in order to protect its acreage from drainage from the offset Yogi Bear State Com Well No. 1, EOG re-entered and directionally drilled the plugged and abandoned Warp Speed "7" Federal Com Well No. 2 to a standard bottomhole location within Unit E of Section 7;

- (f) the Yogi sand was encountered in the Warp Speed "7" Federal Com Well No. 2 and the well was perforated in this interval from approximately 10,515'-10,532'. The well initially produced at a rate of approximately 1.0 MMCF of gas per day, but has since declined to a rate of approximately 600 MCF gas per day; and
 - (g) the Warp Speed A "7" Federal Com Well No. 1 is currently shut-in pending the outcome of this application.
- (12) EOG presented geologic evidence that demonstrates that:
- (a) within the N/2 of Section 7, the Warp, Green and Yogi sand intervals within the Lower Morrow formation generally trend in a northwest to southeast direction. All three of these producing sand intervals are present predominantly within the NW/4 of this N/2 spacing unit;
 - (b) these Lower Morrow sands are generally lenticular and discontinuous;
 - (c) there is very little potential for encountering the Warp, Green and Yogi sand intervals within the NE/4 of Section 7, consequently, it appears that no additional wells will be drilled within this N/2 spacing unit;
 - (d) the only sands present and productive within the Warp Speed A "7" Federal Com Well No. 1 are the Warp and Green sand intervals and the Middle Morrow interval;
 - (e) the Middle Morrow interval appears to be "tight" within the Warp Speed A "7" Federal Com Well No. 1 and capable of marginal production only; and
 - (f) the only sand present and productive within the Warp Speed "7" Federal Com Well No. 2 in the

Lower Morrow formation is the Yogi sand interval. Although the Middle Morrow interval has not been perforated or tested, this interval is also potentially productive in this well.

(13) EOG presented engineering evidence that demonstrates that:

- (a) at the time the Yogi Bear State Com Well No. 1 was drilled, it encountered virgin reservoir pressure of approximately 4,900 psi within the Yogi sand interval. This pressure data demonstrates that the Yogi and Warp/Green sand intervals are separate and distinct gas reservoirs;
- (b) the Warp Speed A "7" Federal Com Well No. 1 should ultimately recover 0.8 BCF of gas from the Warp/Green sand interval, and 0.3 BCF of gas from the Middle Morrow interval. Additionally, the area drained by this well in the Middle Morrow interval is calculated to be approximately 8 acres;
- (c) the Warp Speed "7" Federal Com Well No. 2 should ultimately recover 0.3 BCF of gas from the Yogi sand interval; and
- (d) the Yogi Bear State Com Well No. 1 should ultimately recover 2.5 BCF of gas from the Yogi sand interval.

(14) The evidence presented in this case demonstrates that the Warp/Green and Yogi sand intervals of the Lower Morrow formation are separate and distinct gas reservoirs.

(15) The evidence further demonstrates that in order to protect its correlative rights and develop the gas reserves underlying the N/2 of Section 7, it is necessary for EOG to simultaneously produce the Warp Speed A "7" Federal Com Well No. 1 and the Warp Speed "7" Federal Com Well No. 2.

(16) EOG testified that the Middle Morrow interval, which is being produced in the Warp Speed A "7" Federal Com Well No. 1, will not be completed and produced in the Warp Speed "7" Federal Com Well No. 2 until such time as the majority of gas

reserves in the Yogi sand interval have been recovered in this well. EOG estimates that it will take approximately one to two years to accomplish this recovery.

(17) EOG's evidence demonstrates that ultimately producing the Middle Morrow interval in the Warp Speed "7" Federal Com Well No. 2 will help to recover additional gas reserves from the NW/4 of Section 7, and will not violate correlative rights.

(18) No offset operator or interest owner appeared at the hearing in opposition to the application.

(19) The application should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, EOG Resources, Inc., is hereby authorized to simultaneously dedicate the following wells to an existing 292.32-acre non-standard gas proration unit in the Morrow formation, South Empire-Morrow Gas Pool, comprised of the N/2 of Irregular Section 7, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico:

<u>Well Name</u>	<u>Well Location</u>
Warp Speed A "7" Federal Com Well No. 1 (API No. 30-015-31476)	2280' FNL & 1930' FWL (Unit F)
Warp Speed "7" Federal Com Well No. 2 (API No. 30-015-25628)	1985' FNL & 526' FWL (Unit E) (Surface Location) 1980' FNL & 660' FWL (Unit E) (Bottomhole Location)

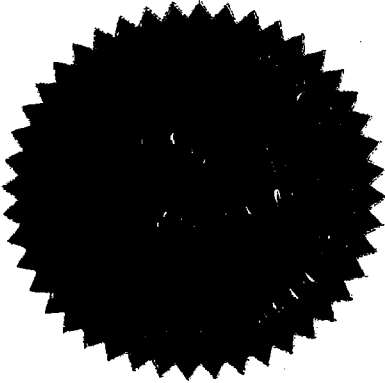
(2) The applicant is further authorized to produce the Warp and Green sand intervals (Lower Morrow) and the Middle Morrow interval in the Warp Speed A "7" Federal Com Well No. 1, and the Yogi sand interval (Lower Morrow) and Middle Morrow interval in the Warp Speed "7" Federal Com Well No. 2; provided however that at the time the Middle Morrow interval is completed in the Warp Speed "7" Federal Com Well No. 2, the applicant shall provide notice of such completion to all offset operators and to the Santa Fe office of the Division.

(3) Unless and until such time as the Warp Speed A "7" Federal Com Well No. 1 or the Warp Speed "7" Federal Com Well No. 2 is no longer producing from the

Morrow formation, no additional Morrow wells shall be drilled within the subject non-standard gas proration unit unless authorized by the Division after notice and hearing.

(4) Jurisdiction is hereby 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.



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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY
Director