

**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. 12625  
ORDER NO. R-\_\_\_\_\_**

**APPLICATION OF RAPTOR RESOURCES, INC. FOR AN UNORTHODOX  
INFILL GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA  
COUNTY, NEW MEXICO.**

**RAPTOR RESOURCES, INC.'S  
PROPOSED ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a. m. on April 19, 2001, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this \_\_\_\_ day of April, 2001, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS THAT:**

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Raptor Resources, Inc. ("Raptor") seeks an exception to the well location requirements of the Special Pool Rules and Regulations for the Jalmat Gas Pool, as promulgated by Division Order No. R-8170, as amended, for an unorthodox Jalmat infill gas well location for its State "A" A/C-2 Well No. 79 to be drilled at an unorthodox location 660 feet from the North and East lines of Section 11, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico, within a standard 640-acre spacing and proration unit in the Jalmat Gas Pool comprised of said Section 11.

Applicant also seeks to drill its proposed State "A" A/C-2 Well No. 80 at a standard location 1980 feet from the North and West lines of said Section 11 and, pursuant to the

rules governing the Jalmat Gas Pool and the Stipulated Declaratory Judgment entered by the First Judicial District Court in Santa Fe County, New Mexico, on December 15, 2000, in Hartman v. Oil Conservation Division, Cause No. D-0101-CV-9902927 ("the Stipulated Declaratory Judgment"), also seeks to simultaneously dedicate Jalmat production to this 640-acre standard unit from all Jalmat gas wells located thereon.

(3) The following gas wells have been dedicated to the standard 640-acre Jalmat gas spacing unit comprised of Section 11, Township 22 South, Range 36 East, NMPM:

- A. State "A" A/C-2 Well No. 14 (**API No. 30-025-08873**), located at an unorthodox location 660 feet from the North and 1980 feet from the East line (Unit B) of Section 11 (*Order No. R-6483, dated October 20, 1980*);
- B. State "A" A/C-2 Well No. 15 (**API No. 30-025-08874**), located at an unorthodox gas well location 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 11 (*NSL-3089, dated January 17, 1992*);
- C. State "A" A/C-2 Well No. 18, located at a standard location 1650 feet from the North and East lines (Unit G) of Section 11 (*plugged and abandoned*);
- D. State "A" A/C-2 Well No. 36 (**API No. 30-025-08878**), located at an unorthodox location 660 feet from the South and West lines (Unit M) of Section 11 (*Order No. R-6483, dated October 20, 1980*);
- E. State "A" A/C-2 Well No. 42 (**API No. 30-025-08879**), located at an unorthodox location 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 11 (*Order No. R-6483, dated October 20, 1980*);
- F. State "A" A/C-2 Well No. 62 (**API No. 30-025-25542**), located at a standard gas well location 1980 feet from the South line and 2310 feet from the West line (Unit K) of Section 11 (*Order No. R-6483, dated October 20, 1980*);
- G. State "A" A/C-2 Well No. 73 (**API No. 30-025-30035**), located at an unorthodox gas well location 990 feet from the South line and 660 feet from the East line (Unit P) of Section 11 (*Order No. R-8575, dated January 4, 1988*); and

- H. State "A" A/C-2 Well No. 75 (**API No. 30-025-34791**), located at an unorthodox gas well location 2040 feet from the South line and 660 feet from the West line (Unit L) of Section 11 (*NSL-3089-A(SD)*), dated *September 16, 1999*).

(4) Raptor acquired interests in the Jalmat Gas Pool in 1998 and embarked on a redevelopment program which included the drilling of 14 wells during calendar years 1999 and 2000. The results of this program demonstrate that there are substantial recoverable reserves in the Jalmat Gas Pool which cannot be recovered by the existing wells in this pool. (*Raptor Exhibit Nos. 2, 4, 5 and 6; Testimony of Lawrence*).

**NOTICE**

- (5) The Stipulated Declaratory Judgment provides that:

- A. "The approval of drilling an additional well or wells on a spacing unit ("infill drilling") in the Eumont or Jalmat Gas Pools shall be administered in a manner that affords due process to affected parties, including notice, an opportunity to object and in the case of objection a right to public hearing in accordance with Division Rule 104.
- B. In accordance with those principles, it is provided that in the event an operator files an application with the Division for approval of an additional well or wells in the Eumont Gas Pool or the Jalmat Gas Pool, which if allowed would result in spacing of less than 160 acres per well on a proration unit, the infill well or wells may be permitted only after notice pursuant to Division Rule 1207A(2) and opportunity for hearing for affected persons."

(6) Raptor presented evidence that showed that it notified all affected persons of this application in accordance with Division Rules 104 and 1207A(2) by providing a copy of this application by certified mail to all offsetting Division designated operators and working interest owners in adjoining spacing units. (*Raptor Exhibit 17; Testimony of Keithly*).

**FINDING:** Raptor provided notice of this application in accordance with the provisions of the Stipulated Declaratory Judgment and Division Rules 104 and 1207A(2).

(7) No interest owner objected to this application or appeared at the hearing on this application.

**NEED FOR ADDITIONAL JALMAT GAS WELLS**

(8) The Stipulated Declaratory Judgment also provides that an application for approval of an additional well or wells in the Jalmat Gas Pool, which if allowed would result in spacing of less than 160 acres per well on a proration unit "...must be supported by evidence that the additional well or wells are necessary to efficiently and economically drain the proration unit, will prevent waste and protect correlative rights" (emphasis added).

(9) Raptor presented geological evidence which shows:

- A. there is substantial geologic discontinuity in the Jalmat Gas Pool under Section 11 on which these proposed infill wells are to be drilled;
- B. with only one well drilled on each 160-acre spacing unit, sands containing producible reserves can be missed and the reserves left in the ground; and
- C. development of the Jalmat Gas Pool on less than 160-acre spacing is needed to assure that as many producible sands as possible are intersected by a wellbore. (*Raptor Exhibits 24 through 27; Testimony of Percy*).

(10) The engineering evidence presented by Raptor showed that substantial reserves have not been recovered by existing wells due to inadequate completion practices in older wells including inadequate treatment of perforated intervals and incomplete perforating of productive intervals which has resulted in many of the productive intervals in the Yates and Seven Rivers formations, as well as other productive zones through the pool, have been by passed and not produced. (*See, Raptor Exhibits 28 through 32; Testimony of Lawrence*).

(11) Without redevelopment, the properties in the Raptor 1999 and 2000 program would have produced approximately 3.1 million cubic feet of gas per day. However, as a result of the Raptor redevelopment program, these properties now produce at more than twice that rate. (*Testimony of Lawrence*).

(12) Raptor's engineering evidence also included information on the wells located on all 40-acre tracts offsetting the State "A" A/C-2 Well Nos. 79 and 80.

Although four wells produce from the 40-acre tracts in the Jalmat Gas Pool and the Eumont Gas Pool offsetting the State "A" A/C-2 Well No. 79, these wells produce at only marginal rates and cannot drain the NW/4 of Section 11. (*Raptor Exhibit 31, Testimony of Lawrence*). Although wells produce from the Jalmat Gas Pool on the 40-acre tracts offsetting the proposed State "A" A/C-2 Well No. 80, the geologic evidence on the area shows that the Yates and Seven Rivers formations is very heterogeneous in this area and a well in the SE/4 NW/4 of Section 11 is needed to produce the remaining recoverable reserves under this acreage. (*Raptor Exhibit 32; Testimony of Lawrence*).

(13) The drilling of the Raptor Resources, Inc. State "A" A/C-2 Well Nos. 79 and 80 will enable applicant to recover reserves which otherwise will not be recovered.

(14) Raptor also testified that due to the heterogeneous nature of the Yates and Seven Rivers formations and the limited offsetting production, both the State "A" A/C-2 Well Nos. 79 and 80 are needed to efficiently drain remaining reserves from this proration unit. (*Testimony of Percy and Lawrence*).

**FINDING: The State "A" A/C-2 Well Nos. 79 and 80 are necessary to efficiently drain remaining recoverable reserves from this proration unit.**

(15) Raptor presented economic information on its redevelopment program which showed that it will obtain an acceptable economic return from the new infill Jalmat wells it drills in Jalmat Gas Pool. (*Raptor Exhibit No. 7, Testimony of Lawrence*).

**FINDING: The State "A" A/C-2 Well Nos. 79 and 80 will economically drain recoverable reserves from this proration unit.**

**FINDING: Raptor has met the conditions of the Stipulated Declaratory Judgment for applications for approval of additional wells in the Jalmat Gas Pool which if allowed would result in spacing of less than 160 acres per well on a proration unit.**

(16) Raptor testified that to be able to selectively perforate individual zones within the Jalmat Gas Pool which have not previously been produced to depletion that new wells need to be drilled instead of attempting recompletions old existing wellbores. (*See, Log of Raptor State "A" A/C-1 Well No. 127 on Raptor Exhibit No. 19, Testimony of Percy and Lawrence*).

### **UNORTHODOX WELL LOCATIONS**

(17) The Special Pool Rules and Regulations for the Jalmat Gas Pool provide for wells on 640-acre spacing and proration units to be located no closer than 1650 feet from the outer boundary of the spacing unit (*Rule 2(b)1, Order No. R-8170*). Accordingly, the State "A" A/C-2 Well No 79 is too close to the outer boundary of the acreage dedicated thereto than permitted by the Special Pool Rules and Regulations for the Jalmat Gas Pool.

(18) Raptor testified that to intersect portions of the reservoir not previously drained, well locations must be determined based upon the geologic and reservoir characteristics at the proposed location and an engineering evaluation of the prior completions and past and current production from offset wells. (*Testimony of Lawrence*).

(19) The geological and engineering data presented in support of the well location for the State "A" A/C-2 Well No. 79 demonstrate that the proposed unorthodox well location is necessary to enable the applicant to recover remaining reserves under this spacing and proration unit thereby preventing waste.

**FINDING: The proposed unorthodox gas well location for the State "A" A/C-2 Well No. 79 will protect correlative rights and prevent waste and should be approved.**

### **SIMULTANEOUS DEDICATION**

(21) All wells capable of producing Jalmat reserves from the subject spacing and proration unit are necessary to recover the remaining reserves under this unit.

(22) To efficiently produce the remaining recoverable reserves from the Jalmat Gas Pool under this 640-acre standard spacing and proration unit, all Jalmat Gas Pool production from the State "A" A/C-2 Well Nos. 14, 15, 36, 42, 62, 73, 75, 79, and 80 should be simultaneously dedicated to this spacing and proration unit.

**FINDING: The application for the simultaneous dedication of the State "A" A/C-2 Well Nos. 14, 15, 36, 42, 62, 73, 75, 79 and 80 to the subject 640-acre non-standard gas spacing and proration unit should be approved.**

(23) Approval of this application and the drilling of the Raptor Resources, Inc. State "A" A/C-2 Well Nos. 79 and 80 will result in the recovery of hydrocarbons which will otherwise not be recovered thereby preventing waste and will be in the best interest of conservation and protection of correlative rights.

**FINDING:** The drilling of the Raptor Resources, Inc. State "A" A/C-2 Well No. 79 at an unorthodox infill location 660 feet from the North and West lines of Section 11 and the Raptor Resources, Inc. State "A" A/C-2 Well No. 80 at a standard infill location 1980 feet from the North and West lines of Section 11 are necessary to efficiently and economically drain the standard 640-acre spacing and proration unit comprised of Section 11, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico and should be approved.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Raptor Resources, Inc. ("Raptor") for an exception to the well location requirements of the Special Pool Rules and Regulations for the Jalmat Gas Pool, as promulgated by Division Order No. R-8170, as amended, for the Raptor State "A" A/C-2 Well No. 79 to be drilled at an unorthodox infill gas location 660 feet from the North and West lines of Section 11, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico is hereby granted.

(2) Applicant, pursuant to the rules governing the Jalmat Gas Pool and the Stipulated Declaratory Judgment, is authorized to simultaneously dedicate Jalmat Gas Pool production to the 640-acre standard unit from the above described State "A" A/C-2 Well Nos. 14, 15, 36, 42, 62, 73, 75, 79, and the State "A" A/C-2 Well No. 80 to be drilled at a standard gas well location 1980 feet from the North and West lines of said Section 11.

(3) 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.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

LORI WROTENBERY  
Director

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