

**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
ORDERS NO. R-6483-B
R-8575-B**

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

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 19 and June 28, 2001 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 27th day of July, 2001, 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) At the hearing Division Cases No. 12623, 12624, and 12625 were consolidated for the purpose of testimony.

(3) The applicant, Raptor Resources, Inc. ("Raptor"), seeks an exception to the well location and well density provisions currently governing the Jalmat (Tansill-Yates-Seven Rivers) Gas Pool for its proposed: (i) State "A" A/C-2 Well No. 79 to be located at an unorthodox infill gas well location 660 feet from the North and West lines (Unit D) of Section 11, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico; and (ii) State "A" A/C-2 Well No. 80 (**API No. 30-025-35567**) to be located at a standard infill gas well location 1980 feet from the North and West lines (Unit F) of Section 11.

(4) By Order No. R-6483, issued in Case No. 7022 and dated October 20, 1980, the Division, authorized the simultaneous dedication of the following four wells to a standard 640-acre gas spacing and proration unit ("GPU") for the Jalmat Gas Pool comprising all of Section

11:

- (i) State "A" A/C-2 Well No. 14 (**API No. 30-025-08873**), located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 11;
 - (ii) State "A" A/C-2 Well No. 36 (**API No. 30-025-08878**), located 660 feet from the South and West lines (Unit M) of Section 11;
 - (iii) State "A" A/C-2 Well No. 42 (**API No. 30-025-08879**), located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 11; and
 - (iv) 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.
- (5) Subsequent to the issuance of Order No. R-6483 the Division authorized development within this 640-acre GPU in the following manner:
- (i) by Division Order No. R-8575, issued in Case No. 9275 and dated January 4, 1988, authorization was given to include the 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 in the GPU;
 - (ii) by Division Administrative Order NSL-3089, dated January 17, 1992, another well for this GPU, the 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, was also approved; and finally
 - (iii) by Division Administrative Order NSL-3089-A (SD), dated September 16, 1999, the 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, was also approved.

(6) On December 14, 1989 the Division issued a combined order in Case No. 9774 (Orders No. R-6483-A/R-8575-A) that affected the metering and testing of gas production from this 640-acre unit.

(7) The rules and procedures currently governing the Jalmat Gas Pool include but are not necessarily limited to:

(i) the "*Special Rules and Regulations for the Jalmat Gas Pool*," as promulgated by Division Order No. R-8170, as amended;

(ii) Division Rule 605.B;

(iii) Division Rule 104.F, revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999;

(iv) Rule 1207.A (2); and

(v) the amended Stipulated Declaratory Judgement of the First Judicial District Court in Santa Fe County, New Mexico issued on July 11, 2001 in Hartman vs. Oil Conservation Division, Cause No. D-0101-CV-9902927 ("Stipulated Declaratory Judgement").

(8) In its application Raptor indicated that its plugged and abandoned State "A" A/C-2 Well No. 18 located at a standard gas well location 1650 feet from the North and East lines (Unit G) of Section 11 is currently dedicated to this 640-acre GPU. Records indicate that this well was originally drilled in 1939 by Texas Pacific Coal and Oil Company ("TP"), was completed as an oil well in the Arrowhead-Grayburg Pool, produced a total of 143,705 barrels of oil, and was plugged and abandoned in 1953 by TP; therefore, the State "A" A/C-2 Well No. 18 should be omitted from this GPU.

(9) Raptor acquired interests in the Jalmat Gas Pool within Townships 22 and 23 South, Range 36 East, NMPM, Lea County, New Mexico 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 the existence of substantial recoverable reserves in the Jalmat Gas Pool that cannot be recovered by the existing wells in this pool.

(10) The amended Stipulated Declaratory Judgment provides in part that:

(i) the approval of drilling an additional well or wells on a spacing unit ("infill drilling") in the Eumont and 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; and

(ii) 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 1207.A (2) and opportunity for hearing for affected persons. Once notice is provided, the Division may process the application in a manner consistent with [this judgement], and otherwise consistent with the Division's practice, its Rules and Regulations and the Oil and Gas Act.

(11) Raptor presented evidence showing that it notified all affected persons of this application in accordance with Division Rules 104 and 1207.A (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.

(12) It appears that Raptor has provided notice of the application in this case in accordance with the provisions of the amended Stipulated Declaratory Judgment and Division Rules 104 and 1207.A (2).

(13) No affected party or offsetting operator and/or interest owner appeared at the hearing in opposition to this application.

(14) Raptor presented geological evidence that shows:

(i) there is substantial geologic discontinuity in the Jalmat Gas Pool underlying Section 11 on which these proposed infill wells (State "A" A/C-2 Wells No. 79 and 80) are to be drilled;

(ii) development of the Jalmat Gas Pool within this standard 640-acre GPU with only one well per 160-acre tract

(NE/4, NW/4, SW/4, and SE/4 of Section 11), would miss sands containing producible reserves and leave reserves in the ground, thereby causing waste; and

(iii) development of the Jalmat Gas Pool with more than one well per 160-acre tract is needed to assure that as many producible sands as reasonably possible are intersected by a wellbore.

(15) The engineering evidence presented by Raptor showed that substantial reserves have not been recovered by existing wells within its property 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 throughout the pool, being by-passed and not produced.

(16) Without this 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.

(17) Raptor's engineering evidence also included information on the wells located on all 40-acre tracts offsetting the State "A" A/C-2 Wells No. 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. 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 are 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.

(18) The drilling of the Raptor Resources, Inc. State "A" A/C-2 Wells No. 79 and 80 will enable applicant to recover reserves that otherwise will not be recovered.

(19) Raptor also testified that due to the heterogeneous nature of the Yates and Seven Rivers formations and the limited offsetting production, the proposed State "A" A/C-2 Wells No. 79 and 80 are needed to efficiently drain remaining reserves from this proration unit.

(20) The proposed State "A" A/C-2 Wells No. 79 and 80 are necessary to efficiently drain remaining recoverable reserves from this proration unit.

(21) Raptor presented economic information on its overall Jalmat gas redevelopment program, which shows that it will obtain an acceptable economic return from new infill Jalmat wells it drills within its property holdings.

(22) The proposed State "A" A/C-2 Wells No. 79 and 80 will economically drain recoverable reserves from this 640-acre GPU.

(23) Raptor has met the conditions of the amended Stipulated Declaratory Judgment for this application, which will result in effective spacing of less than 160 acres per well.

(24) Raptor presented evidence that to be able to selectively perforate individual zones within the Jalmat Gas Pool that have not previously been produced to depletion, it needs to drill new wells instead of attempting recompletions of old existing wellbores.

(25) 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 990 feet to the outer boundary of the spacing unit (*Special Rule 2 (b) 1, Order No. R-8170*). Accordingly, the proposed location of the State "A" A/C-2 Well No. 79 is closer to the outer boundary of the acreage dedicated thereto than permitted by the Jalmat special pool rules.

(26) Raptor presented evidence 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.

(27) 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.

(28) The proposed unorthodox gas well location for the State "A" A/C-2 Well No. 79 will serve to protect correlative rights and prevent waste and should therefore be approved.

(29) To efficiently produce the remaining recoverable reserves from the Jalmat Gas Pool under this standard 640-acre gas spacing and proration unit, all Jalmat gas production from the State "A" A/C-2 Wells No. 14, 15, 36, 42, 62, 73, 75, 79, and 80 should be simultaneously dedicated to this GPU.

(30) That portion of this application for the simultaneous dedication of the State "A" A/C-2 Wells No. 14, 15, 36, 42, 62, 73, 75, 79, and 80 (less the State "A" A/C-2 Well No. 18) to the subject 640-acre standard gas spacing and proration unit should therefore be approved.

(31) Approval of this application and the drilling of the Raptor Resources, Inc. State "A" A/C-2 Wells No. 79 and 80 will result in the recovery of hydrocarbons that will otherwise not be recovered thereby preventing waste and will otherwise be in the best interest of conservation and protection of correlative rights.

(32) The drilling of Raptor's State "A" A/C-2 Well No. 79 at the proposed unorthodox infill gas well location in Section 11, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico and State "A" A/C-2 Well No. 80 at a standard infill gas well location in Section 11 is necessary to efficiently and economically drain the existing 640-acre GPU comprised of Section 11 and should therefore 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 (Unit D) of Section 11, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico, within an existing standard 640-acre gas spacing and proration unit in the Jalmat Gas Pool ("GPU") comprising all of Section 11, is hereby granted.

IT IS FURTHER ORDERED THAT:

(2) Applicant, pursuant to the rules governing the Jalmat Gas Pool and the amended Stipulated Declaratory Judgment, is further authorized to simultaneously dedicate this standard 640-acre unit in the Jalmat Gas Pool to its proposed State "A" A/C-2 Well No. 80 (**API No. 30-025-35567**), to be located at a standard infill gas well location 1980 feet from the North and West lines (Unit F) of Section 11, the above described State "A" A/C-2 Well No. 79, and the following described wells:

- (i) State "A" A/C-2 Well No. 14 (**API No. 30-025-08873**), located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 11, which was the subject of Division Order No. R-6483, issued in Case No. 7022 and dated

October 20, 1980;

(ii) State "A" A/C-2 Well No. 15 (**API No. 30-025-08874**), located at an unorthodox gas well location (approved by Division Administrative Order NSL-3089, dated January 17, 1992) 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 11;

(iii) State "A" A/C-2 Well No. 36 (**API No. 30-025-08878**), located 660 feet from the South and West lines (Unit M) of Section 11, which was also the subject of Division Order No. R-6483;

(iv) State "A" A/C-2 Well No. 42 (**API No. 30-025-08879**), located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 11, which was also the subject of Division Order No. R-6483;

(v) 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, which was also the subject of Division Order No. R-6483;

(vi) State "A" A/C-2 Well No. 73 (**API No. 30-025-30035**), located at an unorthodox gas well location (approved by Division Order No. R-8575, issued in Case No. 9275 and dated January 4, 1988) 990 feet from the South line and 660 feet from the East line (Unit P) of Section 11; and

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

(3) Raptor is hereby permitted to produce the allowable assigned the subject 640-acre GPU from all nine of these wells in any proportion.

(4) All provisions applicable to the subject 640-acre GPU in Division Orders No. R-6483, R-6483-A, R-8575, and R-8575-A and Division Administrative Orders NSL-3089 and NSL-3089-A, not in conflict with this order, shall remain in full force and effect until

further notice.


(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.



S E A L

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY
Director