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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. 10332
ORDER NO. R-9561

APPLICATION OF VETERAN EXPLORATION, INC.
FOR A NON-STANDARD OIL PRORATION UNIT, A
HIGH ANGLE/HORIZONTAL WELLBORE THAT EXCEEDS
THE SET-BACK REQUIREMENTS FOR THE SAN ISIDRO
(SHALLOW) UNIT AREA, AND SIMULTANEOUS DEDICATION,
SANDOVAL COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 13, 1991, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this _____ day of August, 1991, 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) By Division Order No. R-9330, dated October 26, 1990, special operating provisions for the drilling of horizontal/high angle directional wellbores in the Rio Puerco-Mancos Oil Pool within the San Isidro (Shallow) Unit, Sandoval County, New Mexico, were promulgated including the establishment of non-standard 640-acre oil spacing and proration units as long as said unit was confined within a single governmental section (Rule 5(b)) and provided set back requirements for the wellbores such that the producing interval be no closer than 660 feet to the outer boundary of its assigned proration unit (Rule 8(A)(2)).

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(3) The applicant in this matter, Veteran Exploration, Inc., successor to Samuel Gary, Jr. and Associates, Inc. as unit operator, seeks an exception to Rule 7 of said Special Rules authorizing the formation of a 617.79-acre non-standard oil spacing and proration unit comprising Lots 3 and 4, S/2 NW/4, and SW/4 (W/2 equivalent) of Section 6 and the W/2 of Section 7, both in Township 20 North, Range 2 West, NMPM, Rio Puerco-Mancos Oil Pool, San Isidro (Shallow) Unit, Sandoval County, New Mexico, said unit to be simultaneously dedicated to a high angle/horizontal well to be drilled from a standard surface location 660 feet from the North line and 1452 feet from the West line (Unit C) of said Section 7 and to its existing Johnson "7" Well No. 11 located at a standard oil well location 2074 feet from the South line and 1650 feet from the West line (Unit K) of said Section 7.

(4) The applicant presented geological evidence showing the existence of a basement fault traversing the unit from the west-southwest to the northeast. A "line of maximum flexure" in the Mancos formation approximates the path of this basement fault.

(5) Past experience has shown that successful conventional wells within the unit are located on or near the line of maximum flexure in the Mancos formation. Further, the San Isidro 12 Well No. 10 located in the E/2 of adjoining Section 12 to the west of the proposed project area, a horizontal well, crosses this line of maximum flexure in the Mancos formation and has been deemed as a commercial well.

(6) It is therefore necessary for a well to cross the line of maximum flexure in the Mancos formation to ensure a reasonable chance of drilling a commercial well.

(7) In order to cross said flexure line, it is necessary for the applicant to combine the two stand-up 320-acre units. Also, by doing so, it will serve to help keep an orderly and consistent pattern for future horizontal wells in the unit.

(8) The applicant proposes to drill its Johnson "7" Well No. 3 vertically to a depth of approximately 3874 feet, kick-off and commence a medium radius curve in a northern direction building angle to approximately 85 degrees, and from a true vertical depth of approximately 4280 feet, commence drilling horizontally a distance of approximately 3600 feet.

(9) The applicant further requests an exception to Special Rule 8(A)(2) allowing for a larger "drilling window" for said horizontal wellbore such that the producing interval can be no closer than 528 feet to the outer boundary of said 617.79-acre oil proration unit.

(10) The aforementioned prescribed area limiting the horizontal displacement of the wellbore would allow for flexibility, serve to minimize risk and maximize the success of such a completion.

(11) Since the proposed project area consists of essentially two 320-acre proration units, an oil allowable should be assigned said 617.79-acre proration unit in a manner consistent with Rule 5(b) of said Special Rules.

(12) Both the existing Johnson "7" Well No. 11 and the proposed Johnson "7" Well No. 3 should be simultaneously dedicated to said proration unit; further, the operator should be permitted to produce the allowable assigned the subject proration unit from both wells in any proportion.

(13) There was no objection to the subject application by any interested party.

(14) In the interest of conservation, the prevention of waste, and the protection of correlative rights, the application of Veteran Exploration, Inc. for this horizontal drainhole project should be approved.

(15) The non-standard proration unit, as described above, should not become effective until such time as the horizontal wellbore is completed and placed on production and will cease at such time as the horizontal wellbore is properly plugged and abandoned.

(16) The applicant should be required to determine the actual location of the kick-off point prior to directional drilling operations. Also, the applicant should notify the supervisor of the Aztec District Office of the Division of the proposed direction of the deviated hole and of the date and time of the commencement of directional drilling in order that the same may be witnessed.

(17) The applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of the drilling operations on the well and submit a copy of said survey to both the Santa Fe and Aztec Offices of the Division.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Veteran Exploration, Inc. for a horizontal/high angle directional drilling project comprising Lots 3 and 4, S/2 NW/4 and SW/4 (W/2 equivalent) of Section 6 and the W/2 of Section 7, both in Township 20 North, Range 2 West, NMPM, Rio Puerco-Mancos Oil Pool, San Isidro (Shallow) Unit, Sandoval County, New Mexico, forming a non-standard 617.79-acre oil spacing and proration unit, is hereby approved.
- (2) The applicant is further authorized to drill its Johnson "7" Well No. 3 at a standard surface oil well location 660 feet from the North line and 1452 feet from the West line (Unit C) of said Section 7 in the unconventional manner as described in Finding Paragraph No. (6) of this order.
- (3) The lateral extent of the horizontal wellbore shall be such that its producing interval be limited to an area that extends no closer than 528 feet to the outer boundary of said non-standard proration unit.
- (4) Said proration unit shall be assigned an appropriate acreage factor reflecting the 617.79 acres comprising the unit to be assessed toward the depth bracket allowable for said Unit Area and pool.
- (5) Both the existing Johnson "7" Well No. 11 and the proposed Johnson "7" Well No. 3 shall be simultaneously dedicated to said proration unit; further, the operator shall be permitted to produce the allowable assigned the subject proration unit from both wells in any proportion.
- (6) This non-standard proration unit shall not become effective until such time as the horizontal wellbore is completed and placed on production and shall cease at such time as the horizontal well is properly plugged and abandoned. At that time the W/2 of Johnson "7" Well No. 11 shall be dedicated to its current proration unit comprising the W/2 of said Section 7.
- (7) The geographic location of the kick-off point for the proposed horizontal well shall be determined prior to directional drilling. Also, the operator shall notify the supervisor of the Aztec District Office of the Division of the proposed direction of the deviated hole and of the date and time of the directional drilling in order that the same may be witnessed.
- (8) The applicant shall conduct a directional drilling survey on the well during or after completion of horizontal drilling operations.

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(9) Upon completion of the horizontal drilling operations on the well, the applicant shall file a copy of said directional drilling survey along with a final report specifying the depth and location of the terminus of said horizontal wellbore to both the Santa Fe and Aztec Offices of the Division.

(10) Jurisdiction of this cause 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

WILLIAM J. LEMAY
Director

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