# 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. 10983 Order No. R-10127

APPLICATION OF COLLINS & WARE INC. FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT, SPECIAL OPERATING RULES THEREFOR, A NON-STANDARD OIL PRORATION UNIT AND A SPECIAL PROJECT OIL ALLOWABLE, EDDY COUNTY, NEW MEXICO.

## ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 26, 1994, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 3rd day of June, 1994, 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, Collins & Ware, Inc., seeks authority to initiate a high angle/horizontal directional drilling pilot project in the Undesignated East Herradura Bend-Delaware Pool underlying the SW/4 NW/4 and NW/4 SW/4 of Section 31, Township 22 South, Range 29 East, NMPM, Eddy County, New Mexico, thereby creating a non-standard 80-acre oil spacing and proration unit for said pool.
- (3) The applicant further seeks authority to horizontally drill its existing Quahada Ridge Federal "31" Well No. 1, located at a standard surface location 2310 feet from the South line and 330 feet from the West line (Unit L) of Section 31, in the following unconventional manner:

Squeeze perforations from 6,104 feet to 6,310 feet, mill casing from approximately 6,050 feet to 6,100 feet, set cement plug and kick off from the vertical at a depth of approximately 6,065 feet and drill in a northerly direction building angle to approximately 90 degrees so as to penetrate the top of the "Collins" sand interval at a true vertical depth of approximately 6,078 feet. Continue drilling horizontally a distance of approximately 1,000 feet so as to bottom said wellbore at an approximate bottomhole location 1970 feet from the North line and 330 feet from the West line (Unit E).

- (4) The applicant further seeks the adoption of special operating provisions and rules within the pilot project area including the designation of a prescribed area limiting the horizontal or producing portion of the wellbore such that it can be no closer than 330 feet from the outer boundary of the project area.
  - (5) The applicant further seeks:
    - a) authority to establish an 80-acre non-standard oil spacing and proration unit comprising the SW/4 NW/4 and NW/4 SW/4 of Section 31, and;
    - b) the assignment of a special oil allowable for the subject well equal to two times the normal allowable for a standard 40-acre proration unit.
- (6) The proposed well is located within one mile of the East Herradura Bend-Delaware Pool which is currently governed by Statewide Rules and Regulations which require standard 40-acre spacing and proration units with wells to be located no closer than 330 feet from the outer boundary of the spacing unit, a standard oil allowable of 142 barrels of oil per day, and a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.
- (7) The evidence, testimony and Division records indicate that the Quahada Ridge "31" Federal Well No. I was drilled by the applicant during September, 1993, and was completed in the Brushy Canyon member of the Delaware formation through the perforated interval from 6,104 feet to 6,310 feet.
- (8) The subject well is currently producing approximately 25 barrels of oil per day.

- (9) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore should penetrate and traverse the "Collins" sand in an area of greater sand thickness which should substantially increase the productivity of the subject well and which should ultimately result in the recovery of a greater amount of oil and gas from the proposed project area, thereby preventing waste.
- (10) The proposed horizontal wellbore, which will traverse both 40-acre tracts within the project area, should be capable of draining and developing both tracts within the project area.
- (11) The proposed horizontal wellbore, if drilled as proposed, will not encroach on any offset acreage.
  - (12) All interests within the proposed project area are common.
- (13) No offset operator and/or interest owner appeared at the hearing in opposition to the application.
- (14) In the interest of conservation and prevention of waste, the application of Collins & Ware Inc. for a high angle/horizontal directional drilling project should be approved.
- (15) The applicant should be required to determine the actual location of the kick-off point prior to commencing directional drilling operations. Also, the applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.
- (16) The applicant should notify the supervisor of the Artesia district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.
- (17) The applicant should be required to submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Artesia offices of the Division.
- (18) The allowable assigned to the project area in the Undesignated East Herradura Bend-Delaware Pool should be equal to 284 barrels of oil per day provided that the horizontal or producing portion of the wellbore traverses both 40-acre units within the project area as determined by directional surveys.

### IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Collins & Ware, Inc., is hereby authorized to initiate a high angle/horizontal directional drilling pilot project in the Undesignated East Herradura Bend-Delaware Pool underlying the SW/4 NW/4 and NW/4 SW/4 of Section 31, Township 22 South, Range 29 East, NMPM, Eddy County, New Mexico, thereby forming a non-standard 80-acre oil spacing and proration unit for said pool, also hereby approved.
- (2) The applicant is further authorized to horizontally drill its existing Quahada Ridge Federal "31" Well No. 1, located at a standard surface location 2310 feet from the South line and 330 feet from the West line (Unit L) of Section 31, in the following unconventional manner:

Squeeze perforations from 6,104 feet to 6,310 feet, mill casing from approximately 6,050 feet to 6,100 feet, set cement plug and kick off from the vertical at a depth of approximately 6,065 feet and drill in a northerly direction building angle to approximately 90 degrees so as to penetrate the top of the "Collins" sand interval at a true vertical depth of approximately 6,078 feet. Continue drilling horizontally a distance of approximately 1,000 feet so as to bottom said wellbore at an approximate bottomhole location 1970 feet from the North line and 330 feet from the West line (Unit E).

- (3) The horizonal or producing portion of the wellbore shall be located no closer than 330 feet from the outer boundary of the project area.
- (4) The applicant shall determine the actual location of the kick-off point prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.
- (5) The applicant shall notify the supervisor of the Artesia district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.
- (6) The applicant shall submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Artesia offices of the Division.

- (7) The allowable assigned to the project area in the Undesignated East Herradura Bend-Delaware Pool should be equal to 284 barrels of oil per day provided that the horizontal or producing portion of the wellbore traverses both 40-acre units within the project area as determined from directional surveys.
- (8) Jurisdiction of this cause 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

WILLIAM J. LEMAY Director