

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. 10099  
Order No. R-9334

APPLICATION OF SAMUEL GARY JR. AND  
ASSOCIATES, INC. FOR A HORIZONTAL  
DIRECTIONAL DRILLING PILOT PROJECT  
AND SPECIAL OPERATING RULES THEREFOR,  
SANDOVAL COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 19 and October 3 and 17, 1990, at Santa Fe, New Mexico, before Examiners David R. Catanach, Jim Morrow and Michael E. Stogner, respectively.

NOW, on this 8th day of November, 1990, 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, Samuel Gary Jr. & Associates, Inc., seeks authority to institute a horizontal directional drilling pilot project in the W/2 of Section 11, Township 20 North, Range 3 West, NMPM, Sandoval County, New Mexico, forming a standard 320-acre oil spacing and proration unit in the Rio Puerco-Mancos Oil Pool. The applicant proposes to drill its San Isidro "11" Well No. 14 from a surface location 450 feet from the South line and 1975 feet from the West line (Unit N) of said Section 11 in the following unconventional manner:

Drill vertically to a depth of approximately 3500 feet, kick off from vertical and commence a medium radius curve in a northwesterly direction building angle to approximately 80 degrees, commence drilling horizontally at a depth of approximately 3979 feet a distance of approximately 2000 feet and bottoming said wellbore at a location approximately 1742 feet from the North line and 703 feet from the West line (Unit E) of said Section 11.

(3) At the hearing on September 19, the applicant requested that the surface location for the subject well be amended to 450 feet from the South line and 1975 feet from the West line of said Section 11 from the initially proposed location of 934 feet from the South line and 1975 feet from the West line (Unit N) of said Section 11 in order to provide additional flexibility should the applicant drill the lateral portion of the wellbore beyond the proposed 2000 feet.

(4) The subject case was readvertised for the October 17 hearing in order to correctly identify the new surface well location; however, prior to the October 17 hearing, the applicant notified the Division that due to time constraints and drilling deadlines, the subject well would be drilled at the initially proposed surface location of 934 feet from the South line and 1975 feet from the West line (Unit N) of said Section 11.

(5) No offset operator and/or interest owner appeared and objected to either surface location.

(6) The applicant further requests that special operating provisions be established for the project area including the designation of a prescribed area limiting the horizontal extent of the wellbore such that it can be no closer than 660 feet from the outer boundary of the proration unit or project area, a provision allowing the applicant to expand the proration unit for the subject well to encompass two 320-acre units, and a provision authorizing an unrestricted oil allowable while drilling and completing the subject well.

(7) The proposed well and project area are located within the boundaries of the Rio Puerco-Mancos Oil Pool, and as such, are subject to the Special Rules and Regulations for said pool as promulgated by Division Order No. R-7471, as amended, which require 320-acre spacing and proration units with well to be located no closer than 660 feet to the outer boundary of the proration unit nor closer than 330 feet to any governmental quarter-quarter section line nor closer than 1800 feet to any well completed in or drilling to the Mancos formation, and which further prohibit the drilling of more than one well on a standard proration unit, and which further establish an oil allowable of 320 barrels of oil per day per standard proration unit and a limiting gas-oil ratio of 500 cubic feet of gas per barrel of oil.

(8) The proposed well is located within the applicant's San Isidro (Shallow) Unit, which encompasses some 18,897.16 acres, and which was formed for the purpose of conducting a horizontal directional drilling program.

(9) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore, which is experimental in nature, should encounter a substantially greater number of natural fractures within the Mancos formation than would a conventional wellbore, which may ultimately result in the recovery of a greater amount of oil from the proposed project area, thereby preventing waste.

(10) No offset operator and/or interest owner appeared in opposition to the proposed horizontal directional drilling project.

(11) The project area should be initially limited to the W/2 of said Section 11.

(12) No part of the horizontal wellbore should be located closer than 660 feet from the outer boundary of the project area.

(13) By Order No. R-9330, dated October 24, 1990 and issued in Case No. 10100, the Division, upon application of Samuel Gary Jr. & Associates, Inc., promulgated Special Rules and Regulations for horizontal/high angle wellbores within the San Isidro (Shallow) Unit Area, including provisions for surface and bottomhole well locations, dedication of acreage, oil allowable

during drilling or completion operations, conductance of directional surveys on the vertical and lateral portions of the wellbore, and a procedure whereby such horizontal wellbores may be administratively approved.

(14) Special provisions and/or operating procedures for the subject well including expansion of the project area, oil allowable during drilling or completion operations, and conductance of directional surveys on the vertical and lateral portions of the wellbore should be in accordance with the Special Rules and Regulations for the San Isidro (Shallow) Unit as described above.

(15) The Division Director should have the authority to authorize amendments to this order provided that the applicant applies for such amendments pursuant to the administrative procedures set forth in Division Order No. R-9330.

(16) Approval of the proposed pilot project should result in the recovery of an additional amount of oil from the project area which may not otherwise be recovered, thereby preventing waste, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Samuel Gary Jr. & Associates, Inc., for a horizontal directional drilling pilot project in the W/2 of Section 11, Township 20 North, Range 3 West, NMPM, Rio Puerco-Mancos Oil Pool, Sandoval County, New Mexico, is hereby approved.

(2) The applicant is further authorized to drill its San Isidro "11" Well No. 14 from a surface location 934 feet from the South line and 1975 feet from the West line (Unit N) of said Section 11 in the following unconventional manner:

CASE NO. 10099  
Order No. R-9334  
Page -5-

Drill vertically to a depth of approximately 3500 feet, kick off from vertical and commence a medium radius curve in a northwesterly direction building angle to approximately 80 degrees, commence drilling horizontally at a depth of approximately 3979 feet a distance of approximately 2000 feet and bottoming said wellbore at a location approximately 1742 feet from the North line and 703 feet from the West line (Unit E) of said Section 11.

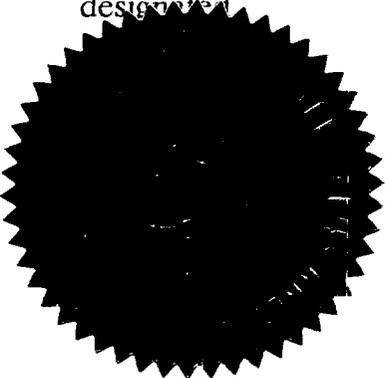
PROVIDED HOWEVER THAT, the horizontal portion of the subject well shall be located no closer than 660 feet from the outer boundary of the project area.

(3) Expansion of the project area, oil allowable during drilling and completion operations, and conductance of directional surveys on the vertical and lateral portions of the wellbore shall be in accordance with the Special Rules and Regulations for the San Isidro (Shallow) Unit as promulgated by Division Order No. R-9330.

(4) The Division Director shall have the authority to authorize administrative amendments to this order provided that the applicant applies for such amendments pursuant to the administrative procedures set forth in Division Order No. R-9330.

(5) 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