# 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. 11367 Order No. R-10455

# APPLICATION OF CHEVRON USA INC. FOR DIRECTIONAL DRILLING, AN UNORTHODOX BOTTOMHOLE OIL WELL LOCATION, AND A NON-STANDARD OIL PRORATION UNIT, LEA COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

### **BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on August 24, 1995, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 1st day of September, 1995, 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, Chevron USA Inc., seeks authority to re-enter its currently shut-in Lea "YL" State Well No. 2 located at a previously approved unorthodox surface location (approved by Division Order No. R-9325) 2230 feet from the South line and 2310 feet from the East line (Unit J) of Section 2, Township 17 South, Range 37 East, NMPM, Lea County, New Mexico, kick off from the vertical and directionally drill said well in a northeast direction in a manner so as to bottom the wellbore in the Strawn formation at an unorthodox bottomhole location within 50 feet of a point 2600 feet from the North line and 1700 feet from the East line (Unit G) of Section 2.

(3) The applicant further seeks to establish an 80-acre non-standard oil proration unit in the Strawn formation comprising the SW/4 NE/4 and the NW/4 SE/4 of Section 2.

(4) The Lea "YL" State Well No. 2 is located within the Shipp-Strawn Pool which is currently governed by Special Rules and Regulations as promulgated by Division Order No. R-8062, as amended, which require standard 80-acre oil spacing and proration units with wells to be located within 150 feet of the center of either quarter-quarter section or lot.

(5) Division records indicate that the Lea "YL" State Well No. 2 was drilled in October, 1990, by Chevron USA Inc. to test the Shipp-Strawn Pool. The well IP'd in the Strawn formation at a rate of 105 barrels of oil and 150 MCF gas per day. The well was shut-in in October, 1993 after cumulatively producing approximately 4,910 barrels of oil from the Shipp-Strawn Pool.

(6) According to applicant's geologic evidence and testimony, the Lea "YL" State Well No. 2 originally penetrated the Strawn formation at the edge of an "algal mound" in an area of limited porosity and permeability.

(7) By utilizing 3-D seismic data, the applicant has been able to more accurately map the extent and location of the thickest portion of this structure.

(8) The applicant's geologic evidence indicates that a well directionally drilled to the proposed unorthodox bottomhole location should penetrate the Strawn structure in an area of maximum thickness and consequently greater porosity and permeability development than a well drilled at a standard oil well location thereon, thereby increasing the likelihood of obtaining commercial oil production.

(9) This Strawn structure, according to applicant's evidence, is more or less centered around the applicant's proposed non-standard proration unit.

(10) The Lea "YL" State Well No. 2, drilled to the proposed unorthodox bottomhole location, should efficiently and effectively drain and develop applicant's proposed non-standard proration unit.

(11) The applicant presented waivers of objection to the proposed unorthodox bottomhole location from the only two affected offset operators, Bechtel Energy Resources Corp. (Bechtel) and Conoco Inc.

(12) Neither Bechtel or Conoco Inc. appeared at the hearing in opposition to the proposed non-standard oil proration unit.

(13) No other offset operator and/or interest owner appeared at the hearing in opposition to the application.

(14) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the oil in the Strawn formation, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.

(15) The applicant should be required to conduct a directional survey on the well prior to initiating directional drilling operations and subsequent to the completion of such operations in order that the bottomhole location of the well may be verified to be in compliance with the terms of this order.

(16) The applicant should notify the supervisor of the Division's Hobbs district office of the date and time of the conductance of any directional survey on the subject well in order that the same may be witnessed. In addition, subsequent to the conductance of such directional surveys, copies of these surveys should be furnished to the Santa Fe and Hobbs offices of the Division.

## **IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Chevron USA Inc., is hereby authorized to re-enter its currently shut-in Lea "YL" State Well No. 2 located at a previously approved unorthodox surface location 2230 feet from the South line and 2310 feet from the East line (Unit J) of Section 2, Township 17 South, Range 37 East, NMPM, Lea County, New Mexico, kick off from the vertical and directionally drill said well in a northeast direction in a manner so as to bottom the wellbore in the Strawn formation at an unorthodox bottomhole location within 50 feet of a point 2600 feet from the North line and 1700 feet from the East line (Unit G) of Section 2.

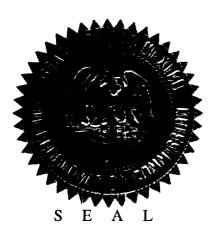
(2) The SW/4 NE/4 and the NW/4 SE/4 of Section 2, forming an 80-acre nonstandard oil proration unit in the Shipp-Strawn Pool, also hereby approved, shall be dedicated to the Lea "YL" State Well No. 2.

(3) The applicant shall conduct a directional survey on the well prior to initiating directional drilling operations and subsequent to completion of such operations in order that the bottomhole location of the well may be verified to be in compliance with the terms of this order.

(4) The applicant shall notify the supervisor of the Division's Hobbs district office of the date and time of the conductance of any directional survey on the subject well in order that the same may be witnessed. In addition, subsequent to the conductance of such directional surveys, copies of these surveys shall be furnished to the Santa Fe and Hobbs offices of the Division. CASE NO. 11367 ORDER NO. R-10455 PAGE -4-

(5) 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

WILLIAM J. LEMAY Director