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:

NOMENCLATURE CASE NO. 10444 ORDER NO. R-9696

APPLICATION OF AMERADA HESS CORPORATION FOR POOL CREATION, SPECIAL POOL RULES AND THE CONTRACTION OF THE VERTICAL LIMITS OF THE HOBBS-BLINEBRY POOL, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 20, 1992, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>17th</u> day of July, 1992 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-3530, dated October 22, 1968 and made effective November 1, 1968, the Division created and defined the Hobbs-Blinebry Pool for the production of oil from the Blinebry formation. The horizontal limits for said pool, as currently defined, include the following described lands in Lea County, New Mexico:

Township 18 South, Range 38 East, NMPM

Section 19: S/2

Section 28: SW/4

Section 29: W/2 and SE/4

Section 30: E/2

Section 31: NE/4

Section 32: All

Section 33: N/2 and SW/4

Section 34: W/2

Township 19 South, Range 38 East, NMPM

Section 3: NW/4

- (3) The Hobbs-Blinebry Pool is currently governed by the General Statewide Rules and Regulations with development on 40-acre spacing units each having a top unit depth bracket allowable of 107 barrels of oil per day and a limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil which results in a casinghead gas allowable of 214 MCF per day.
- (4) The applicant in this matter, Amerada Hess Corporation ("Amerada"), is an interest owner in the Hobbs-Blinebry Pool and operates one well therein; the State "A" Well No. 5 located in Unit A of Section 32, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico.
- (5) At this time, Amerada seeks the contraction of the vertical limits of said Hobbs-Blinebry Pool in conjunction with the concomitant creation of a new pool for the production of oil from the Lower Blinebry formation within the existing horizontal limits of the Hobbs-Blinebry Pool, as described above. The applicant further seeks the promulgation of special rules for the proposed "Lower Blinebry" pool including provisions for 80-acre oil spacing and proration units, designated well location requirements and for a special gas/oil ratio limitation of 10,000 cubic feet of gas per barrel of oil.
- (6) Although said State "A" Well No. 5 is located within the Hobbs-Blinebry Pool, the geological evidence presented at the hearing demonstrates that said well, which is currently completed and producing from the Blinebry formation through the perforated intervals at 6204 feet to 6210 feet, 6212 feet to 6214 feet and 6269 feet to 6274 feet, has tapped into a previously unproduced common source of supply within the Blinebry formation which exhibits reservoir characteristics that differ somewhat from the upper producing interval of the Blinebry formation found in the other wells completed throughout the pool.
- (7) Three other wells within the Hobbs-Blinebry Pool have tested this lower interval of the Blinebry formation whereby it can be established that the reservoir characteristics between the lower and upper Blinebry zones are not the same over the entire pool.

- (8) A new oil pool should therefore be created with the vertical limits to include the lower Blinebry formation from a gamma ray marker consisting of a shale bed found at a depth of 6203 feet on the Gamma Ray-Neutron Log dated May 28, 1969 for the State "A" Well No. 5, as described above, to the base of the Blinebry formation. Further, the vertical limits of the Hobbs-Blinebry Pool should be concomitantly contracted to include the top of the Blinebry formation to the above-described "shale marker." The horizontal limits of both zones should comprise the area described in Finding Paragraph No. (2) of this order.
- (9) The new "Lower Blinebry" Pool should be designated the Hobbs-Lower Blinebry Pool and the Hobbs-Blinebry Pool should be redesignated the Hobbs-Upper Blinebry Pool.
- (10) There is ample evidence in the record of this case to justify the establishment of 80-acre spacing and proration units for the proposed Lower-Blinebry Pool on a temporary basis of twenty-four months. Said temporary rules should provide for well locations to be within 150 feet of the center of a governmental quarter-quarter section, so as to promote orderly development of said new pool.
- (11) Subpart A of Section 70-2-3 NMSA 1978 of the "Oil and Gas Act", defines waste as including: "the inefficient, excessive, or improper, use or dissipation of the reservoir energy, including gas energy and water drive, of any pool."
- (12) Section 70-2-12.B. (4) and (9), respectively, gives the New Mexico Oil Conservation Division authority to make and enforce rules and regulations:
 - "(4) To prevent the drowning by water of any stratum or part thereof capable of producing oil or gas, or both oil and gas, in paying quantities, and to prevent the premature and irregular encroachment of water, or any other kind of water encroachment, which reduces or tends to reduce the total ultimate recovery of crude petroleum oil or gas or both such oil and gas, from any pool."
 - "(9) To require the operation of wells with efficient gas-oil ratios and to fix such ratios."
- (13) The immediate two statutory paragraphs above dictate the Division's obligations in the prevention of waste with respect to the production and/or handling of oil and natural gas including the conservation of energy within the reservoir.

- (14) Therefore, upon the discovery of a reservoir, the manner in which it will ultimately perform will depend upon the operating principles which are applied and the operating practices imposed. Essentially, the technology applying to petroleum reservoirs is a recognition of the fact that operating practices must be such as to utilize efficiently the energy of production, whatever the type be, in order that the greatest and most economic recovery of petroleum be had. This constitutes the fundamental bases for conservation measures designed to prevent waste.
- (15) The New Mexico Oil Conservancy first addressed the assignments of gas/oil ratios to certain pools in Lea County in Case No. 19 which resulted in the issuance of the following four orders:

Order No. 236, dated January 13, 1940; Order No. 237, dated January 13, 1940; Order No. 238, dated January 13, 1940; and Order No. 250, dated March 27, 1940.

- (16) In July, 1943, by Order No. 545 issued in Case No. 42, the Oil Conservancy established a limiting gas/oil ratio factor of 2,000 cubic feet of gas per barrel of oil for all new and undesignated pools. This limiting factor has remained in effect since that time and is currently administered under the provisions of Division General Rule 506.
- (17) The Division has granted numerous exceptions over the years to the basic 2,000 to 1 gas/oil ratio (of the seventeen Blinebry pools, nine have a 2,000 to 1 ratio, two have 4,000 to 1, two have 6,000 to 1, two have 7,000 to 1, and two are unrestricted due to low production rates and low gas/oil ratio); however, adequate information concerning the particular reservoir and its characteristics were presented, in detail, before such exception was granted.
- (18) The applicant in this instance presented insufficient evidence concerning the reservoir characteristics and essential production data to support the establishment of the requested 10,000 to 1 limiting gas/oil ratio factor for the new pool. Therefore, the portion of this application requesting a special gas/oil ratio should not be approved at this time. However, Amerada Hess is encouraged to present any available data to support its request should it still desire a special gas/oil ratio for the newly formed Hobbs-Lower Blinebry Pool.
- (19) During the twenty-four month period in which this order is in effect, the applicant, along with the operators in both the upper and lower pools should gather all available information relating to drainage and recoverable reserves in the subject pools.

(20) This case should be reopened at an examiner hearing in June 1994, at which time the operators in the lower pool should appear and show cause why the Hobbs-Lower Blinebry Pool should not be developed on 40-acre spacing and proration units and why both upper and lower pools formed by this order should not be rejoined and redesignated the Hobbs-Blinebry Pool.

IT IS THEREFORE ORDERED THAT:

(1) At the request of the applicant, Amerada Hess Corporation, a new pool for lower Blinebry oil production is hereby created and designated the Hobbs-Lower Blinebry Pool with upper and lower limits defined as the top of the shale bed marker found at a depth of 6203 feet on the Gamma Ray-Neutron Log run May 29, 1969 from a kelly bushing elevation of 3661 feet in the State "A" Well No. 5 located in Unit A of Section 32, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico to the base of the Blinebry formation and comprising the following described acreage in Lea County, New Mexico:

Township 18 South, Range 38 East, NMPM

Section 19: S/2

Section 28: SW/4

Section 29: W/2 and SE/4

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Section 31: NE/4

Section 32: All

Section 33: N/2 and SW/4

Section 34: W/2

Township 19 South, Range 38 East, NMPM

Section 3: NW/4

- (2) The vertical limits of the Hobbs-Blinebry Pool is hereby contracted by the deletion of the lower portion of the Blinebry formation which will consist of the newly formed Hobbs-Lower Blinebry Pool as described above. Further, the Hobbs-Blinebry Pool is hereby designated the Hobbs-Upper Blinebry Pool.
- (3) The redesignation and vertical contraction of the Hobbs-Blinebry Pool and the concomitant creation of the Hobbs-Lower Blinebry Pool shall become effective June 1, 1992.
- (4) Temporary special rules and regulations for the newly formed Hobbs-Lower Blinebry Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE HOBBS-LOWER BLINEBRY POOL

- **RULE 1:** Each well completed or recompleted in the Hobbs-Lower Blinebry Pool or within one mile thereof, and not nearer to or within the limits of another Blinebry oil pool, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- **RULE 2:** Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2 or W/2 of a governmental quarter section; provided however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in that unit.
- RULE 3: The Director of the Oil Conservation Division, hereinafter referred to as the "Division", may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a single governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within thirty days after the Director has received an application.
- **RULE 4:** Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.
- RULE 5: The Division Director may grant an exception to the requirements of Rule 4 without hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within twenty days after the Director has received the application.

RULE 6: The allowable for a standard proration unit (79 through 81 acres) shall be subject to an 80-acre depth-bracket allowable of 222 barrels of oil per day and a limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil which results in a casinghead gas allowable of 444 MCF per day. In the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED THAT:

- (5) The applicant's request for a special gas/oil ratio limitation factor of 10,000 cubic feet of gas per barrel of oil for the newly formed Hobbs-Lower Blinebry Pool is hereby denied.
- (6) The locations of any other wells presently drilling to or completed in the Hobbs-Lower Blinebry Pool or in the Blinebry formation within one mile thereof, and not nearer to or within the limits of another designated Blinebry pool are hereby approved; the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well on or before August 1, 1992.
- (7) Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), contained in Chapter 271, Laws of 1969, existing wells in the newly formed Hobbs-Lower Blinebry Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within sixty days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said sixty-day limitation, each well presently drilling to or completed in the Hobbs-Lower Blinebry Pool or in its corresponding vertical limits as described in Decretory Paragraph No. (1), above, or within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(8) This case shall be reopened at an examiner hearing in June, 1994, at which time the operators in the subject pool should be prepared to appear and show cause why the temporary special pool rules for the Hobbs-Lower Blinebry Pool should not be

rescinded and said pool not be developed on 40-acre spacing units and why both the upper and lower Blinebry pools formed by this order should not be rejoined and redesignated the Hobbs-Blinebry Pool.

(9) 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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