

**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. 10653
Order No. R-9842**

**APPLICATION OF ARMSTRONG ENERGY
CORPORATION FOR SPECIAL POOL
RULES, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 7, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 8th day of February, 1993, 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, Armstrong Energy Corporation, seeks an order promulgating special rules and regulations for the Northeast Lea-Delaware Pool, Lea County, New Mexico, including a provision for a special oil allowable of 300 barrels per day.

(3) The Northeast Lea-Delaware Pool, created and defined by Division Order No. R-8233 on May 29, 1986, currently comprises the SE/4 of Section 35, Township 19 South, Range 34 East, NMPM, and the E/2 of Section 2, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico.

(4) The discovery well for the Northeast Lea-Delaware Pool is the Spectrum 7 Exploration Company Mobil State Well No. 1 located in Unit J of said Section 2, which was completed in the Delaware formation through perforations from 5,626 feet to 5,695 feet.

(5) The Northeast Lea-Delaware Pool is currently governed by general statewide rules and regulations, including a daily oil allowable of 107 barrels and a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil.

(6) According to Division records, there are two wells currently producing from the subject pool, these being the aforesaid Mobil State Well No. 1, currently operated by Harken Exploration Company, and the Mescalero Ridge Unit Well No. 3 located in Unit P of Section 35 and operated by Pennzoil Exploration & Production Company. The Mobil State Well No. 1 and the Mescalero Ridge Unit Well No. 3 are currently producing approximately 16.0 and 5.5 barrels of oil per day, respectively.

(7) The applicant has recently drilled its Mobil Lea State Well No. 1 located in Unit K of Section 2, Township 20 South, Range 34 East, NMPM. The subject well has been completed in the Northeast Lea-Delaware Pool through perforations from 5,890 feet to 5,931 feet.

(8) According to applicant's evidence and testimony, the Mobil Lea State Well No. 1 is capable of oil production far in excess of 300 barrels per day.

(9) Geologic evidence and testimony presented by the applicant indicate that:

- a) the Delaware producing interval in this area consists of four distinct and separate zones each capable of oil production;
- b) the Mobil Lea State Well No. 1 is currently completed in the third sand member only. The Mobil State Well No. 1 and the Mescalero Ridge Unit Well No. 3 are currently completed in the first sand member and the carbonate interval stratigraphically equivalent to the second sand member, respectively;
- c) the geographic productive area of the third and fourth sand members is likely limited to Section 2 and the E/2 of Section 10; the geographic productive area of the first and second sand members comprises at least portions of Sections 2, 3 and 10;
- d) the four producing intervals appear to be continuous and correlatable to wells producing from the Quail Ridge-Delaware Pool.

(10) The Quail Ridge-Delaware Pool currently comprises the SW/4 of Section 3, the SE/4 of Section 4, the NE/4 of Section 9 and the W/2 of Section 10, all of Township 20 South, Range 34 East, NMPM. The allowable for the Quail Ridge-Delaware Pool is currently 107 barrels of oil per day.

(11) According to Division records, there are seven wells currently producing from the Quail Ridge-Delaware Pool operated by two different operators. Several of the wells in the Quail Ridge-Delaware Pool are currently capable or could be capable of production in excess of top allowable.

(12) The applicant submitted engineering evidence in the form of a 69-day production test run on the Mobil Lea State Well No. 1. During this production test, the subject well was produced at various rates ranging from 100 to 300 barrels per day. The results of the test indicate that the water cut and the gas-oil ratio remained fairly constant over various producing rates.

(13) The applicant seeks a higher oil allowable for the Northeast Lea-Delaware Pool for the following reasons:

- a) accelerated oil recovery will result in more favorable economics and reduced operating costs which in turn will result in quicker development of the pool;
- b) accelerated oil recovery will lessen the chance for reduced recovery due to mechanical failures which have occurred in certain wells in this area due to the corrosive nature of fluids in the Seven Rivers Reef zone;
- c) higher allowables will result in accelerated development of additional productive zones in the Delaware formation within the pool.

(14) There is no evidence to indicate that mechanical well failures in this area have caused premature abandonment of wellbores and resultant loss of oil and gas reserves.

(15) There is no currently available data which would conclusively demonstrate that oil production at the proposed rate of 300 barrels per day will not cause reduced ultimate oil recovery from the third sand member due to excessive expenditure of reservoir energy.

(16) The applicant presented no evidence as to the nature or characteristics of the remaining three producing intervals within the Northeast Lea-Delaware Pool.

(17) There is no currently available data which would demonstrate that oil production at the proposed rate of 300 barrels per day will not cause reduced ultimate oil recovery from the first, second and fourth sand members due to excessive expenditure of reservoir energy.

(18) There is ample evidence in the record of this case to suggest that the Northeast Lea-Delaware Pool and the Quail Ridge-Delaware Pool should be developed as a single common source of supply, and any proposed special rules applicable to only the Northeast Lea-Delaware Pool would result in the violation of correlative rights of those operators in the Quail Ridge-Delaware Pool without relief which may or may not be subsequently approved by the Division.

(19) The evidence presented in this case does not establish that a special oil allowable of 300 barrels per day will prevent waste and protect correlative rights.

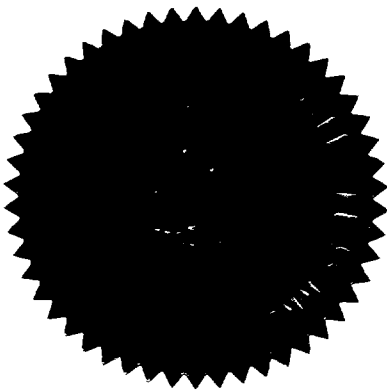
(20) The application of Armstrong Energy Corporation for special rules and regulations for the Northeast Lea-Delaware Pool should be denied.

IT IS THEREFORE ORDERED THAT:

(1) The application of Armstrong Energy Corporation for the establishment of special rules and regulations for the Northeast Lea-Delaware Pool, Lea County, New Mexico, including a provision for an oil allowable of 300 barrels per day is hereby denied.

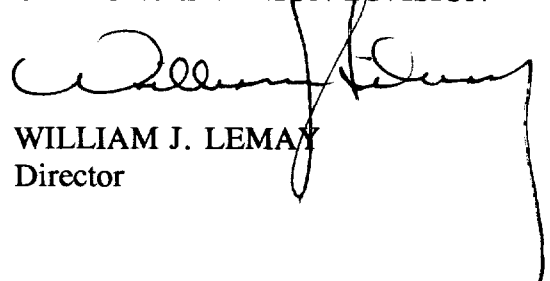
(2) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAN
Director