

**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. 11773
ORDER NO. R-10854***

**APPLICATION OF CONOCO, INC. FOR
PROMULGATION OF 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 May 1, 1997 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 4th day of August, 1997 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 in this matter, Conoco, Inc., is the owner and operator of the Elvis Well No. 1 (**API No. 30-025-33584**), located at a standard oil well location 1780 feet from the North line and 1980 feet from the West line (Unit F) of Section 20, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico, which was drilled to a total depth of 13,900 feet and subsequently completed on December 19, 1996 as a Devonian producing oil well through perforations from 13,771.5 feet to 13,773.5 feet.

(3) By Division Order No. R-10795, issued in Case 11765, dated April 28, 1997 and made effective May 1, 1997, the Division created and defined the West Maljamar-Devonian Pool for the production of oil from the Devonian formation, with its horizontal limits comprising the NW/4 of Section 20, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico. The poolwide depth bracket allowable was therefore established pursuant to General Rule 505.A as 455 barrels of oil per day. Said Order No. R-10795 further provided, pursuant to Division General Rule 509, for a bonus discovery allowable in the amount of 68,725 barrels of oil to be assigned over a two-year period and made retroactive to March 1, 1997 to the aforementioned Elvis Well No. 1.

(4) By letter of application dated March 26, 1997, Conoco, Inc. requested the Division, after notice and hearing, issue an order providing for the promulgation of special poolwide rules and regulations for the West Maljamar-Devonian Pool including provisions:

- (a) for 160-acre oil spacing and proration units;
- (b) for designated well location requirements whereby wells would be permitted to be located no closer than 330 feet to any quarter-quarter section line with no more than one producing well for each 160-acre unit;
- (c) for a special limiting gas/oil ("GOR") ratio of 2,000 cubic feet of gas per barrel of oil;
- (d) for a special depth bracket oil allowable of 900 barrels of oil per day per standard 160-acre unit; and,
- (e) that each well completed or recompleted in this pool or in the Devonian formation within one mile thereof, shall be spaced, drilled, operated, and produced in accordance with these proposed special rules and regulations.

(5) Since two of the above-described requests [Finding Paragraph Nos. (4)(c) and (4)(e)] by Conoco in this matter are somewhat redundant with respect to established Division rules, procedures, and policies, as well as standard industry practices, it will be necessary to revise the application in order to address those issues that require a formal Division directive issued subsequent to a hearing.

(6) Division General Rule 506.A provides that all pools be limited to a GOR of 2,000 cubic feet of gas per barrel of oil unless otherwise provided for by special pool rules; therefore, Conoco's request for a special 2,000 to one ("**GOR**") limitation is currently in effect and can therefore be dismissed.

(7) Division General Rule 104.A defines a development well in southeast New Mexico as a well within one mile of a pool and subject to said rules governing that pool; therefore, this rule satisfies the applicant's request that all wells within one mile of a particular pool be spaced, drilled, operated, and produced in accordance with any special pool rules herein adopted.

(8) Conoco presented geological and engineering evidence and testimony to demonstrate that:

(a) based upon 3-D seismic data and conventional geological data, the West Maljamar-Devonian Pool is a localized structural feature consisting of a fractured vuggy karstic dolomite;

(b) based upon a *Circumferential Borehole Imaging Log* ("CBIL"), the subject reservoir contains multiple distinct compartmentalized intervals of fractured vuggy dolomite which are both horizontally and vertically porous and permeable through the entire system;

(c) that wells located on not less than 160 acres per well should be sufficient to encounter all of the various compartmentalized intervals of the pool while wells located on 320 acres would be inadequate for efficient drainage of the reservoir;

(d) based upon PVT ("pressure/volume/temperature") data, crude oil produced from this reservoir is an under-saturated, volatile oil;

(e) based upon a pressure buildup test, the radius of investigation established that the drainage area for the 3 feet of perforations in the discovery well extended at least 2,000 feet which calculates to a drainage area of approximately 189 acres; and,

(f) based upon a deliverability test, the discovery well has the capacity to produce the requested 900 barrels of oil per day allowable while not increasing the percentage of water produced.

(9) In order to: (i) assure orderly development of the proposed pool, (ii) prevent the economic loss caused by the drilling of unnecessary wells, (iii) avoid the augmentation of risk arising from the drilling of an excessive number of wells, (iv) prevent reduced recovery which might result from the drilling of too few wells, and (v) to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 160-acre spacing units along with the proposed well location restrictions should be promulgated for the proposed pool.

(10) The proposed 330-foot set back requirement would serve to provide the operators in the subject pool with the maximum appropriate flexibility in locating wells at more favorable positions on the structural feature of this pool. Furthermore, as to assure the orderly development of the pool and to deter the drilling of multiple wells in a spacing unit which would be unnecessary, the proposed limitation of one well per spacing unit should be granted.

(11) Division General Rule 505.A provides a depth bracket oil allowable of 695 barrels of oil per day for 160-acre spacing units for a pool at the depth of 13,771.5 feet to 13,773.5 feet. The requested special oil allowable of 900 barrels of oil a day is appropriate because said allowable will not cause waste or damage to the reservoir.

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

(13) Approval of Conoco's request is in the best interest of conservation, will allow the interest owners the opportunity to economically recover their share of the oil and gas in the subject pool, will not reduce ultimate recovery from the subject pool, and will not violate correlative rights.

(14) The proposed pool rules should be established for a period of two years in order to allow the operator(s) in the subject pool to gather sufficient reservoir information to determine that the pool can be sufficiently and economically drained and developed by one well per 160 acres.

IT IS THEREFORE ORDERED THAT:

(1) The Temporary Special Rules and Regulations for the West Maljamar-Devonian Pool, currently comprising the NW/4 of Section 20, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico, are hereby promulgated as follows:

**TEMPORARY SPECIAL RULES AND REGULATIONS
FOR THE
WEST MALJAMAR-DEVONIAN POOL**

RULE 1: Each well completed or recompleted in the West Maljamar-Devonian Pool or in the Devonian formation within one mile thereof, and not nearer to or within the limits of another Devonian 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 160 acres, more or less, substantially in the form of a square, which is a governmental quarter section, being a legal subdivision of the Public Lands Survey.

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 duly filed under the provisions of **Rule 104.d(2)** of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11351 on January 18, 1996.

RULE 4: Only one well per 160-acre unit shall be permitted and the location of such well shall be located no closer than 330 feet to any quarter-quarter section line.

RULE 5: The Division Director may grant an exception to the requirements of Rule 4 without hearing when an application has been duly filed under the provisions of **Rule 104.F** of said General Rules and Regulations of the Division.

RULE 6: A standard 160-acre spacing and proration unit (158 through 162 acres) in the West Maljamar-Devonian Pool shall be assigned a special depth bracket allowable of 900 barrels. 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 160 acres.

(2) The locations of all wells presently drilling to or completed in the West Maljamar-Devonian Pool or in the Devonian formation within one mile thereof 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 within thirty days from the date of this order.

(3) Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), contained in Chapter 271, Laws of 1969, existing wells in the West Maljamar-Devonian 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 West Maljamar-Devonian Pool or in the Devonian formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(4) Unless called earlier upon the motion of the Division, this case shall be reopened at an examiner hearing in August, 1999, 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 West Maljamar-Devonian Pool should not be rescinded and said pool not be developed on statewide 40-acre oil spacing.

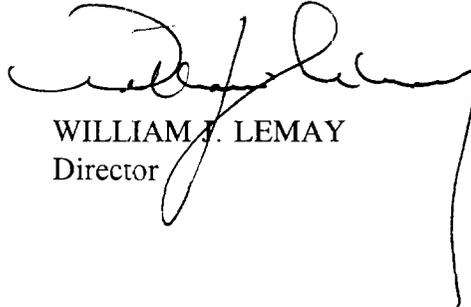
IT IS FURTHER ORDERED THAT:

(5) The portion of the application of Conoco, Inc. for the promulgation of special poolwide rules and regulations therefor including provisions: (i) for a special limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil; and, (ii) that each well completed or recompleted in this pool or in the Devonian formation within one mile thereof, shall be spaced, drilled, operated, and produced in accordance with these proposed special rules and regulations: is hereby dismissed.

(6) 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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