

**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. 12181  
Order No. R-11242***

**APPLICATION OF DAVID H. ARRINGTON OIL AND GAS, INC. FOR AN  
UNORTHODOX LOCATION AND FOR AN EXCEPTION TO DIVISION  
RULE 104.D(3) FOR SIMULTANEOUS DEDICATION, LEA COUNTY, NEW  
MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on August 5, 1999, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 8<sup>th</sup> day of September, 1999, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

**FINDS THAT:**

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, David H. Arrington Oil and Gas Inc. (Arrington), seeks an exception to all applicable well location setback requirements governing any and all formations and/or pools from the surface to the base of the Mississippian formation for its proposed Mayfly "14" State Com Well No. 1 to be drilled 330 feet from the North and West lines (Unit D) of Section 14, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico. This well is to be dedicated to the following described spacing and proration units: (i) the W/2 of Section 14 forming a standard 320-acre spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing, which presently include the Undesignated North Shoe Bar-Atoka Gas Pool, Undesignated Shoe Bar-Atoka Gas Pool, Townsend-Morrow Gas Pool and Undesignated North Townsend-Mississippian Gas Pool; and (ii) the NW/4 forming a standard 160-acre spacing and proration unit for any and all formations and/or pools developed on 160-acre spacing, which presently include the Undesignated North Shoe Bar-Wolfcamp Pool and the Undesignated North Shoe Bar-Strawn Pool.

(3) The applicant further seeks an exception to Division Rule No. 104.D(3) to continuously and concurrently produce gas from the Townsend-Morrow Gas Pool from the Mayfly "14" State Com Well No. 1 and from the existing Monsanto State Com Well No. 1 (API No. 30-025-24895) currently operated by Mark L. Shidler, Inc. and located at a standard gas well location 1980 feet from the South and West lines (Unit K) of Section 14, and for the simultaneous dedication of both wells to the existing 320-acre gas spacing and proration unit comprising the W/2 of Section 14.

(4) Yates Petroleum Corporation, an affected offset operator, appeared at the hearing through legal counsel.

(5) Division Rule 104.C(2), as it read at the time of the hearing, was applicable to the North Shoe Bar-Atoka, Shoe Bar-Atoka, Townsend-Morrow and North Townsend-Mississippian Gas Pools. Division Rule 104.C(2) required standard 320-acre gas spacing and proration units with wells to be located no closer than 1650 feet to the nearest end boundary nor closer than 660 feet to the nearest side boundary of the proration unit nor closer than 330 feet to any quarter-quarter section line or subdivision inner boundary.

(6) The North Shoe Bar-Wolfcamp Pool is currently governed by special rules set forth in Division Order No. R-4657 dated November 16, 1973, which require standard 160-acre oil spacing and proration units with wells to be located within 150 feet of the center of a governmental quarter-quarter section or lot.

(7) The North Shoe Bar-Strawn Pool is currently governed by special rules set forth in Division Order No. R-4658 dated November 16, 1973, which require standard 160-acre oil spacing and proration units with wells to be located within 150 feet of the center of a governmental quarter-quarter section or lot.

(8) The proposed Mayfly "14" State Com Well No. 1 is located within one mile of the outer boundary of both the North Shoe Bar-Strawn Pool and the Northwest Shoe Bar-Strawn Pool. At the time of the hearing, the Northwest Shoe Bar-Strawn Pool was subject to Division Rule 104.C(1), which required standard 40-acre oil spacing and proration units with wells to be located no closer than 330 feet to any boundary of the spacing unit.

(9) On August 31, 1999, certain amendments to Division Rule 104 became effective. The amendments applicable in this case are as follows:

- (a) the Northwest Shoe Bar-Strawn Pool is now governed by Division Rule 104.B(1), which requires standard 40-acre spacing and proration units with wells to be located no closer than 330 feet to any outer boundary of the spacing unit;
- (b) the North Shoe Bar-Atoka, Shoe Bar-Atoka, Townsend-Morrow and North Townsend-Mississippian Gas Pools are now governed by Division Rule 104.C(2), which requires standard 320-acre spacing with wells to be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; and
- (c) Division Rule 104.C now authorizes the drilling of an infill well within deep gas pools in Southeast New Mexico that are spaced on 320 acres.

(10) Pursuant to the current provisions of Division Rule 104, the applicant's requests for an exception to Division Rule 104.D(3) and for simultaneous dedication are unnecessary, and should therefore be dismissed.

(11) According to the applicant's evidence and testimony, the primary target within the Mayfly "14" State Com Well No. 1 is the Strawn formation. Secondary targets include the Morrow and Atoka formations.

(12) The proposed well location for the Mayfly "14" State Com Well No. 1 is standard with respect to the Northwest Shoe Bar-Strawn Pool; however, pursuant to the Special Rules for the North Shoe Bar-Strawn Pool set forth in Division Order No. R-4658 and Division Rule 104.C(2) effective August 31, 1999, the well location is unorthodox with respect to the North Shoe Bar-Strawn Oil Pool and the North Shoe Bar-Atoka, Shoe Bar-Atoka, Townsend-Morrow and North Townsend-Mississippian Gas Pools.

(13) Division records and the evidence presented indicate that the Mayfly "14" State Com Well No. 1 is located 330 feet from the outer boundary of the Northwest Shoe Bar-Strawn Pool, and 4,950 feet from the outer boundary of the North Shoe Bar-Strawn Pool. Current Division nomenclature policies and procedures generally dictate that the Mayfly "14" State Com Well No. 1 will be subject to the rules for the Northwest Shoe Bar-Strawn Pool.

(14) The applicant presented geologic evidence and testimony indicating that:

- (a) the primary target within the Mayfly "14" State Com Well No. 1 is a small Strawn algal mound, the center of which is located within the NW/4 NW/4 of Section 14;
- (b) it is necessary to locate the Mayfly "14" State Com Well No. 1 at its present location in order to penetrate the Strawn algal mound in an area of maximum porosity and permeability development;
- (c) a well drilled at a standard location for both the Strawn and Pennsylvanian gas horizons will not penetrate the targeted algal mound;
- (d) the Monsanto State Com Well No. 1 is currently completed in the Atoka "Brunson" Sand and is classified as being within the Townsend-Morrow Gas Pool;
- (e) the Atoka "Brunson" and Morrow "Carlisle" sands are potentially present and productive at the Mayfly "14" State Com Well No. 1 location; and
- (f) the Monsanto State Com Well No. 1 appears to be fault separated in the Atoka and Morrow formations from the Mayfly "14" State Com Well No. 1. As a result of this fault separation, the Monsanto State Com Well No. 1 may not be efficiently and effectively draining the W/2 of Section 14.

(15) Yates Petroleum Corporation is the affected offset operator in Sections 10 and 11, Township 16 South, Range 35 East, NMPM. Ocean Energy, Inc. is also an interest owner in the affected offset acreage in Section 10.

(16) The applicant presented as evidence an executed agreement between Yates Petroleum Corporation, Ocean Energy, Inc. and David H. Arrington Oil and Gas, Inc., whereby the Mayfly "14" State Com Well No. 1, if completed in any "deep

gas formations subject to 320-acre gas spacing," will be subject to a 50 percent production penalty to be assessed against the well's ability to produce into a pipeline as determined from semi-annual deliverability testing.

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

(18) The applicant testified that prior to producing the Mayfly "14" State Com Well No. 1 in the Townsend-Morrow Gas Pool, it will designate a single operator for both the Mayfly "14" State Com Well No. 1 and the Monsanto State Com Well No. 1.

(19) Approval of the proposed unorthodox gas well location, subject to the production penalty described in Finding (16), will allow the applicant the opportunity to produce its equitable share of the gas in the affected pools and will not violate correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, David H. Arrington Oil & Gas Inc. is hereby granted, to the extent necessary, an exception to well location setback requirements governing any and all formations and/or pools from the surface to the base of the Mississippian formation for its proposed Mayfly "14" State Com Well No. 1 to be drilled 330 feet from the North and West lines (Unit D) of Section 14, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico. This well is to be dedicated to the following described spacing and proration units: (i) the W/2 of Section 14 forming a standard 320-acre spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing, which presently include the Undesignated North Shoe Bar-Atoka Gas Pool, Undesignated Shoe Bar-Atoka Gas Pool, Townsend-Morrow Gas Pool and Undesignated North Townsend-Mississippian Gas Pool; and (ii) the NW/4 forming a standard 160-acre spacing and proration unit for any and all formations and/or pools developed on 160-acre spacing, which presently include the Undesignated North Shoe Bar-Wolfcamp Pool and the Undesignated North Shoe Bar-Strawn Pool.

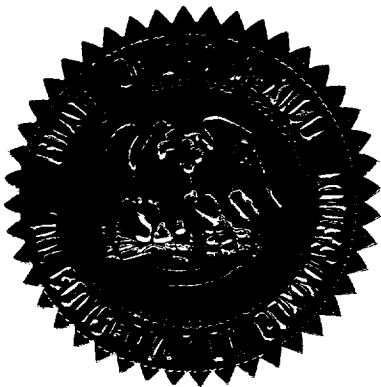
(2) That portion of the application seeking an exception to Division Rule 104.D(3) to continuously and concurrently produce gas from the Townsend-Morrow Gas Pool from the Mayfly "14" State Com Well No. 1 and from the existing Monsanto State Com Well No. 1 (API No. 30-025-24895) currently operated by Mark L. Shidler, Inc. and located at a standard gas well location 1980 feet from the South and West lines (Unit K) of Section 14, and for the simultaneous dedication of the W/2 of Section 14 to the above-described wells in the Townsend-Morrow Gas Pool is hereby dismissed.

(3) Gas production from any "deep gas formations subject to 320-acre gas spacing" within the Mayfly "14" State Com Well No. 1 shall be subject to a 50 percent production penalty. This penalty shall be assessed against the well's ability to produce as determined from a deliverability test to be conducted on the well on a semi-annual basis. The applicant shall be required to notify Yates Petroleum Corporation, Ocean Energy, Inc. and the Division's Artesia District Office of the date and time the semi-annual deliverability test is to be conducted in order that the test may be witnessed.

(4) Prior to producing the Mayfly "14" State Com Well No. 1 in the Townsend-Morrow Gas Pool, the applicant shall designate to the Division a single operator for both the Mayfly "14" State Com Well No. 1 and the Monsanto State Com Well No. 1.

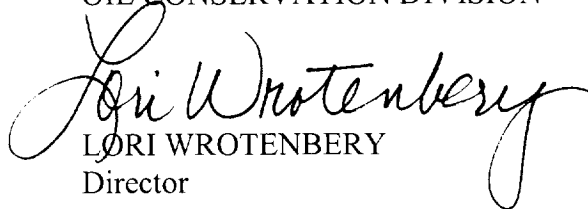
(5) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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



S E A L

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
LORI WROTENBERY  
Director