

**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. 12808  
ORDER NO. R-11757**

**APPLICATION OF DAVID H. ARRINGTON OIL AND GAS, INC. FOR AN  
UNORTHODOX OIL WELL LOCATION AND 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 February 7, 2002, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 12th day of April, 2002, 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 approval to recomplete its existing Mayfly "14" State Well No. 7 (**API No.** 30-025-35078) located at an unorthodox location 330 feet from the North and East lines (Unit A) of Section 14, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, for production from the Strawn formation, North Shoe Bar-Strawn Pool, and for the simultaneous dedication of this well to an existing standard 160-acre oil spacing and proration unit comprising the NE/4 of Section 14.

(3) The Mayfly "14" State No. 7 is located within the North Shoe Bar-Strawn Pool, which is currently governed by the "*Special Rules and Regulations for the North Shoe Bar-Strawn Pool*, " as established by Division Order No. R-4658 dated November 16, 1973. These pool rules require standard 160-acre spacing and proration units and designated well location requirements such that wells shall be located within 150 feet of the center of a governmental quarter-quarter section or lot. The pool rules further provide that:

"Rule 6: A standard proration unit (158 through 162 acres) shall be assigned a depth bracket allowable of 605 barrels, subject to the market demand percentage factor, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion."

(4) The applicant's evidence demonstrates that:

- (a) the Mayfly "14" State No. 7 was originally permitted by Arrington as a Pennsylvanian/Mississippian formation test;
- (b) by Order No. R-1 1403 entered in Case No. 12381 on June 20, 2000, the Division approved the unorthodox gas well location for this well for all formations spaced on 320 acres within the vertical interval from the top of the Cisco formation to the base of the Mississippian formation;
- (c) based on an agreement with Yates Petroleum Corporation ("Yates"), an objection to the application by Permian Resources, Inc. ("Permian"), and the evidence presented in Case No. 12381, the Mayfly "14" State No. 7 was assessed a 75% production penalty in the "Austin" sand member of the Morrow formation, and a 50% production penalty for any other completion in the Pennsylvanian or Mississippian formation spaced on 320 acres; and
- (d) the well was drilled by Arrington in July, 2000 to a total depth of approximately 12,578 feet. The well was subsequently tested in the Mississippian formation and the Cisco interval of the Pennsylvanian formation. The well was non-commercial in these zones.

(5) The NE/4 of Section 14 is currently dedicated in the North Shoe Bar-Strawn Pool to the Arrington Mayfly "14" State Com Well No. 2 (**API No. 30-025-34630**) located at a surface location 660 feet from the North line and 2060 feet from the East line (Unit B), and at a bottomhole location 715 feet from the North line and 788 feet

from the East line (Unit A). This well was horizontally drilled within the Strawn formation a distance of approximately 1,300 feet.

(6) During 2001, the Mayfly "14" State Com No. 2 produced at an average rate of 393 barrels of oil per day and 926 MCF of gas per day.

(7) The affected offset operators to the proposed unorthodox location are described as follows:

- (a) the SE/4 of Section 11 is currently operated by Yates. Within this quarter section, Yates operates the Runnels "ASP" Well No. 2 (**API** No. 30-025-34443) located 1650 feet from the South line and 2270 feet from the East line (Unit J). This well is currently completed in and producing from the North Shoe Bar-Strawn Pool;
- (b) the SW/4 of Section 12 is currently operated by Chesapeake Operating, Inc. ("Chesapeake"). There is currently no well within this quarter section producing from the North Shoe Bar-Strawn Pool; and
- (c) the NW/4 of Section 13 is currently operated by Permian. Within this quarter section, Permian currently operates the Hilburn Well No. 1 (**API** No. 30-025-24473) located at a standard location 1980 feet from the North line and 660 feet from the West line (Unit E). This well is currently completed as a downhole commingled well in the North Shoe Bar-Strawn and North Shoe Bar-Wolfcamp Pools.

(8) Arrington originally filed this application in April, 2001. The application was assigned Case No. 12663, and was heard by the Division on June 14, 2001.

(9) By Order No. R-1 1646 entered in Case No. 12663 on September 11, 2001, the Division denied the application of Arrington for the following reasons:

- (a) Permian, being the affected offset operator to the east in Section 13 objected to the application on the basis that approval of the application would violate its correlative rights. In support of this position,

Permian presented geologic evidence that demonstrated: (i) the Strawn structure being targeted by the Mayfly "14" State No. 7 extended onto its acreage in the NW/4 of Section 13; (ii) its Hilburn Well No. 1, located in the NW/4 of Section 13, was producing from a separate Strawn structure; (iii) Permian had no well in the NW/4 of Section 13 to protect its acreage from offset drainage by the Mayfly "14" State No. 7; and (iv) Permian was in the process of obtaining the necessary permits to drill an additional well within the NW/4 of Section 13;

- (b) Arrington's Mayfly "14" State Com No. 2 was capable of draining the entire NW/4 of Section 14 in this Strawn reservoir;
- (c) approval of the application would likely only serve to accelerate the recovery of hydrocarbons from this Strawn reservoir; and
- (d) approval of the application would not prevent waste and would likely violate the correlative rights of Permian.

(10) Arrington presented evidence that demonstrates:

- (a) subsequent to the hearing in Case No. 12663, Permian drilled its Hilburn Well No. 3 (**API No. 30-025-35596**) from a surface location 510 feet from the North line and 250 feet from the West line (Unit D), to two separate bottomhole locations within the NW/4 of Section 13 to test the Strawn formation;
- (b) the Hilburn No. 3 encountered a non-productive Strawn structure separate and distinct from the Strawn structure being produced by the Mayfly "14" State Com No. 2; and
- (c) consequently, Permian did not appear at the hearing in opposition to the application.

(11) The geologic evidence currently available demonstrates that the NW/4 of Section 13 will not be adversely affected by approval of Arrington's application.

(12) Arrington presented engineering evidence that further demonstrates that the Mayfly "14" State No. 7 will recover incremental reserves from the Strawn reservoir underlying the NE/4 of Section 14 that cannot be recovered by the existing Mayfly "14" State Com No. 2, thereby preventing waste.

(13) Approval of the application will afford Arrington the opportunity to recover additional hydrocarbons from the Strawn reservoir underlying the NE/4 of Section 14 that would otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(14) Arrington testified that the production penalty agreement entered into with Yates is still in effect for the Mayfly "14" State No. 7 and should be applied to this well in the North Shoe Bar-Strawn Pool.

(15) In order to protect correlative rights, a production penalty of 50% should be assessed against the Mayfly "14" State No. 7 in the North Shoe Bar-Strawn Pool. This 50% production penalty should be applied against the well's ability to produce as determined from semi-annual production tests.

(16) Arrington should advise the Division of the date and time production tests are conducted on the Mayfly "14" State No. 7 in order that these operations may be witnessed. Arrington should submit the results of the tests to the Hobbs District Office of the Division no later than 15 days from the date the test was conducted.

(17) Any deviation from the testing and reporting requirements described above should subject the Mayfly "14" State No. 7 to immediate shut-in by the Division.

**IT IS THEREFORE ORDERED THAT :**

(1) David H. Arrington Oil and Gas, Inc. is hereby authorized to recomplete its existing Mayfly "14" State No. 7 (**API** No. 30-025-35078) located at an unorthodox location 330 feet from the North and East lines (Unit A) of Section 14, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, for production from the Strawn formation, North Shoe Bar-Strawn Pool.

(2) The NE/4 of Section 14 shall be simultaneously dedicated to the Mayfly "14" State No. 7 and to the existing Mayfly "14" State Com No. 2 (**API** No. 30-025-

**34630**) located at a surface location 660 feet from the North line and 2060 feet from the East line (Unit B), and at a bottomhole location 715 feet from the North line and 788 feet from the East line (Unit A).

(3) Pursuant to the “*Special Rules and Regulations for the North Shoe Bar-Strawn Pool*,” the allowable assigned to this 160-acre standard proration unit may be produced from either well on this unit in any proportion.

(4) A production penalty of 50% is hereby assessed against the Mayfly "14" State No. 7 in the North Shoe Bar-Strawn Pool. This 50% production penalty shall be applied against the well's ability to produce as determined from semi-annual production tests.

(5) The operator shall advise the Division of the date and time production tests are conducted on the Mayfly "14" State No. 7 in order that these operations may be witnessed. The operator shall submit the results of the tests to the Hobbs District Office of the Division no later than 15 days from the date the test was conducted.

(6) Any deviation from the testing and reporting requirements described above shall subject the Mayfly “14” State No. 7 to immediate shut-in by the Division.

(7) 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

LORI WROTENBERY  
Director

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