

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION**

**IN THE MATTER OF THE HEARINGS CALLED
BY THE OIL CONSERVATION COMMISSION FOR
THE PURPOSE OF CONSIDERING:**

**APPLICATION OF MARSHALL & WINSTON, INC.
TO CANCEL AN OPERATOR'S AUTHORITY AND
TERMINATE A SPACING UNIT, AND APPROVE A
CHANGE OF OPERATOR, LEA COUNTY, NEW MEXICO. Case No. 14538**

**APPLICATION OF DAVID H. ARRINGTON OIL &
GAS INC. FOR COMPULSORY POOLING, LEA
COUNTY, NEW MEXICO. Case No. 14497
Order No. R-13372-D**

ORDER OF THE COMMISSION

These cases came before the Oil Conservation Commission (Commission) for consideration on December 8, 2011, and the Commission having considered the evidence in support and opposition to these applications, on this 23rd day of January, 2012,

FINDS THAT:

1. Due notice of the hearing on these applications has been given, and the Commission has jurisdiction of the parties to these cases and the subject matter thereof.

2. In Case No. 14497, David H. Arrington Oil & Gas Inc. (Arrington) seeks an order pooling all mineral interests from the surface to the base of the Upper Morrow formation underlying the S/2 of Section 26, Township 15 South, Range 34 East, NMPM, to form a standard 320-acre gas spacing unit for all pools or formations developed on 320-acre spacing within this vertical extent, including the North Eidson-Morrow Gas Pool (76360), the Undesignated North Hume-Morrow Gas Pool (78850), and a 160-acre spacing and proration unit comprising the SE/4 of Section 26 to form a standard 160-acre gas spacing unit for all pools or formations developed on 160-acre spacing. Arrington proposed to dedicate these spacing and proration units to the Green Eyed Squealy Worm Well No. 1 (API No. 30-025-36013) (the Well), located 1974 feet from the South line and 1129 feet from the East Line in the NE/4 SE/4 of Section 26. Arrington requests that it be designated operator of the Well.

3. In Case No. 14538, Marshall & Winston, Inc. (M&W) seeks an order canceling the authority of Arrington to operate the Well, and terminating the S/2 of

Section 26 spacing unit dedicated to the Well. M&W further requested that it be approved as operator of the Well. M&W proposed to reenter the well to test an oil zone on 40-acre spacing in the Cisco Canyon formation.

4. These applications raise related issues and have been consolidated for the purposes of hearing.

5. In March 2011 the Division entered Order No. R-13372, denying Arrington's application and granting M&W's application. Arrington filed an application for hearing *de novo*.

6. Arrington, as operator and largest interest owner, drilled the well in 2004. The Well was completed in the Morrow formation as a producer in 2004. M&W participated in the Well. The S/2 of Section 26 was dedicated to the Well, and the working interest owners executed a Joint Operating Agreement (JOA) covering the S/2 of Section 26 as to all depths. *See* Testimony of Kastner at p. 14; Testimony of Hammit at p.61.

7. The Well produced from the Morrow gas formation until 2007 when it was shut in. *See* Arrington Exhibit 2; Testimony of Kastner at Transcript p. 14. Arrington, M&W, and others paid their respective shares of the Well costs. *See* Testimony of Kastner at Transcript p.14; Testimony of Hammit at Transcript p.61.

8. Thereafter, Arrington proposed to M&W a re-entry attempt under the JOA covering this acreage in the Cisco formation, which M&W declined. *See* Testimony of Kastner at Transcript p. 14; Testimony of Hammit at Transcript p. 65.

9. Arrington's lease in the S/2 of Section 26 expired due to lack of production and the JOA covering this acreage expired of its own terms. Thereafter, Arrington acquired a new oil and gas lease covering this acreage and an easement from the surface owner to assure access to the Well. *See* Arrington Exhibits No. 2 and 3; Testimony of Kastner at Transcript pp. 15-16; Testimony of Hammit at Transcript p. 66. M&W also have entered a surface use agreement with the surface owner. *See* Testimony of Hammit at Transcript p. 73.

10. Arrington owns 75% of the working interest in the S/2 of Section 26 and M&W owns 25% of the working interest in the S/2 of Section 26. M&W owns 100% of the working interest in the NE/4 SE/4 of Section 26, which it proposed to dedicate to the Well if it successfully completes the Well in the Cisco formation. *See* Testimony of Kastner at Transcript p. 17; Testimony of Hammit at Transcript p. 68.

11. With the assistance of new engineering employees who have experience in re-entering Morrow wells and re-establishing commercial production in the Morrow formation, Arrington re-evaluated the Morrow and determined that it was a good candidate for a re-entry attempt. *See* Testimony of Bucy at Transcript pp. 50-51.

12. In March 2010, Arrington sent a workover proposal to M&W for a joint development effort in the Morrow formation, but they did not reach an agreement. *See* Testimony of Kastner at Transcript p. 15; Testimony of Hammit at Transcript pp. 67.

13. The parties have not reached an agreement for the development of the S/2 of Section 26 with a re-entry attempt in the Morrow formation of this acreage and, following Arrington's notice that it would seek a pooling order, each filed their respective applications in these consolidated cases. *See* Testimony of Hammit at Transcript pp. 70-71.

14. In support of its application in Case No. 14497, and in opposition to the M&W's application in Case No. 14538, Arrington presented the following testimony:

a. Prior to being shut-in, the Well produced more than 397 million cubic feet of natural gas, more than 11,000 barrels of oil, and 17,000 barrels of water. *See* Testimony of Ball at Transcript p.26.

b. The Morrow zones in which Arrington proposes to attempt a re-entry are good quality sections of this formation and geologically correlate with other wells that have produced from offsetting Morrow wells. *See* Testimony of Ball at Transcript pp. 26 and 28.

c. In 2007, the Well was not producing and it looked like a good candidate to attempt to clean up the well and bring it back onto production; however, Arrington could not get the swab down the well due to an obstruction in the tubing. After fracture stimulating the Well, it still made too much water to produce on its own. *See* Testimony of Carrasco at Transcript p. 33.

d. When it was apparent that no agreement could be reached on completing the Well in the Cisco formation, Arrington decided to take one more look at returning the Well to production in the Morrow formation before abandoning the zone. *See* Testimony of Carrasco at Transcript p. 34.

e. Arrington's production engineer analyzed the well in April 2010 and based on Arrington's experience in its Bills Hopper Well and the recent results obtained by another operator of deep gas wells, he concluded that Arrington should add artificial lift to this Well to lift the water off the Morrow formation, thereby permitting the Well to produce. *See* Testimony of Carrasco at Transcript pp. 35-38, 41; Testimony of Bucy at Transcript pp. 50-52.

f. If this re-entry in the Morrow is not attempted before using the Well to try to complete in the Cisco formation, it will be extremely difficult or impossible to later test the Morrow in this Well and recover the remaining Morrow reserves under this acreage. *See* Testimony of Carrasco at Transcript p. 38.

g. Arrington presented an economic projection for the Well using a commercial program called PHD Win that showed the Well would be very economical with a return possible of as much as 1,000 percent and evidence that showed production from the Well to be in excess of a BCF of gas and 48,000 bbls. of oil. *See* Arrington Exhibit Nos. 8 and 9; Testimony of Bucy at Transcript p. 53.

h. Arrington believes that the re-entry attempt can be completed within 90 days depending on the current condition of the wellbore. *See* Testimony of Carrasco at Transcript p. 39.

i. M&W recently conducted some work on this wellbore, and Arrington is therefore unaware of its current condition. If the condition of the Well is such that it requires more than 90 days to complete this re-entry, Arrington may need additional time to complete the re-entry attempt. *See* Testimony of Carrasco at Transcript p. 39.

15. In support of its application in Case No. 14538 and in opposition to Arrington's application in Case No. 14497, M&W presented the following testimony:

a. M&W presented reserve and economic estimates showing Arrington's proposed re-entry to be a marginal prospect. *See* Testimony of Savage at Transcript pp. 81-84.

b. The Maxwell 26 Well No. 1 (the Maxwell well) is located in the northwest quarter of Section 26 and dedicated to acreage in which neither Arrington or M&W owns an interest. It is the only well that produces from the Morrow reservoir in Section 26. *See* Testimony of Savage at Transcript p. 105.

c. The Maxwell well has produced for more than 10 years, and continues to produce from this Morrow reservoir. *See* Testimony of Savage at Transcript pp. 86 and 105.

d. M&W estimates there remain approximately 1.8 BCF to be recovered out of this Morrow reservoir. *See* Testimony of Savage at Transcript pp. 86-89.

e. The Morrow sand that is the subject of Arrington's application extends across all of Section 26. *See* Testimony of Savage at Transcript p. 87.

f. Although some Morrow wells in Lea County, New Mexico that have been shut in and then returned to production come back on at their original producing rates (Savage at Transcript p. 100), their average producing rates after being shut in is 53 percent of their original producing rates. *See* Testimony of Savage at Transcript p. 93.

g. M&W has commenced re-completion operations on the Well and Arrington will have to squeeze the new perforation before it can attempt its re-entry. *See* Testimony of Savage at Transcript pp. 94-96. Arrington has also dropped a fish in the Well that can result in problems when an operator attempts to re-enter a well. *See* Testimony of Savage at Transcript p. 96.

16. The Commission has a statutory duty to prevent waste and protect correlative rights. NMSA 1978, Section 70-2-11(A) and *Continental Oil Co. v. OCC*, 70 N.M. at 323, 373 P.2d at 817 (Sup.Ct. 1962).

17. The legislature has prohibited the waste of crude petroleum oil or natural gas of any type or in any form. NMSA 1978, Section 70-2-2.

18. M&W testified that Morrow reserves are present throughout Section 26 (Savage at Transcript p. 105) and under the S/2 of Section 26 there are 1.8 BCF of Morrow gas reserves to be recovered. *See* Testimony of Savage at Transcript p. 89.

19. Unless another well is completed in the S/2 of Section 26, there will be no opportunity for the owners of the Morrow reserves to produce their share of these reserves. *See* Testimony of Savage at Transcript p. 106.

20. The Well is connected to the common Morrow reservoir under Section 26 and, if capable, could produce the reserves under the S/2 of Section 26. *See* Testimony of Savage at Transcript p. 108.

21. To determine if the Well is capable of producing these Morrow reserves under the S/2 of Section 26, the owners of these reserves must test the formation. *See* Testimony of Savage at Transcript p. 111.

22. If this re-entry is not approved, the only way to test and produce Morrow reserves under the S/2 of Section 26 is to drill another well, which, if unsuccessful, would have to be plugged and abandoned.

23. The drilling of an additional well to test the Morrow formation under the S/2 of Section 26 would be an unnecessary well.

24. Approval of Arrington's application will avoid the drilling of an unnecessary well.

25. For an operator to obtain its just and reasonable share of the reserves under a tract, a well is required. *See* Testimony of Savage at Transcript p. 106.

26. Arrington seeks an opportunity to produce its just and equitable share of the remaining Morrow reserves under the S/2 of Section 26 and to do so desires to use the Well.

27. M&W testified that, while every situation is different (Savage at Transcript p. 124), you do not know what you can produce from the Morrow until you drill a well. *See* Testimony of Savage at Transcript p. 103.

28. M&W acknowledged that it would not have to participate in the Arrington re-entry attempt (Savage at Transcript p. 109) and that, if Arrington's re-entry was successful, all owners in the S/2 of Section 26 would share in the production from the Well. *See* Testimony of Savage at Transcript pp. 110-111.

29. To deny Arrington the opportunity to attempt to return the Well to production in the Morrow formation would impair Arrington's correlative rights.

30. Arrington's geological evidence shows there is a potentially productive zone in the Morrow formation under the S/2 of Section 26. *See* Testimony of Ball at Transcript p. 26.

31. Arrington presented engineering testimony that showed, based on its experience with another Morrow well and on the experience of other Morrow operators, that by pumping water off the Morrow formation, the Well could be returned to production and the total recovery of crude oil or natural gas can be increased from the Well. *See* Arrington Exhibit No. 9; Testimony of Carrasco at Transcript pp. 36-38; Testimony of Bucy at Transcript pp. 50-53.

32. M&W admitted that if the owners of the reserves under the S/2 of Section 26 could not test the Morrow formation and attempt to re-establish production from this formation, reserves could be left in the ground. *See* Testimony of Savage at Transcript p. 111.

33. The denial of Arrington's application could tend to reduce the total quantity of crude petroleum oil or natural gas recovered from this pool.

34. Arrington presented engineering calculations that showed that a successful re-entry of the Well could result in the recovery of an additional 1 BCF of natural gas and 48,000 barrels of oil (Arrington Exhibit No. 9; Testimony of Bucy at Transcript p. 53) and at an estimated value of \$2.37 million. *See* Arrington Exhibit No. 8; Testimony of Bucy at Transcript pp. 52-53.

35. Arrington should be designated as operator of the Well and of the units.

36. Pursuant to Division Rule 19.15.13.8 NMAC, any pooled working interest owner who does not pay its share of estimated well costs should have withheld from production its share of reasonable well costs plus an additional 200 percent thereof as a reasonable charge for the risk involved in the re-entry of the Well.

37. Reasonable charges for supervision (combined fixed rates) should be fixed at \$6,000 per month while drilling and \$600 per month while producing, provided that

these rates should be adjusted annually pursuant to Section III.1.A.3 of the COPAS form titled "*Accounting Procedure-Joint Operations*". Arrington should be authorized to withhold from production the proportionate share of both the supervision charges and the actual expenditures required for operating the Well, not in excess of what are reasonable, attributable to each pooled working interest.

38. To avoid the drilling of unnecessary wells, to protect correlative rights, prevent waste and afford to the owner of each interest in the units the opportunity to recover or receive without unnecessary expense its just and fair share of hydrocarbons, Arrington's application should be granted by pooling all uncommitted interests, whatever they may be, in the oil and gas within the units.

IT IS THEREFORE ORDERED THAT:

1. The application of M&W in Case No. 14538 for an order canceling Arrington's authority to operate the Well is hereby denied.

2. The application of Arrington in Case No. 14497 is hereby granted and all uncommitted interests whatever they may be from the surface to the base of the Morrow formation underlying the S/2 of Section 26, Township 15 South, Range 34 East, NMPM, Lea County, New Mexico, are hereby pooled in the following manner:

the S/2 to form a standard 320-acre spacing and proration unit for any formations or pools spaced on 320 acres within this vertical extent which presently include but are not necessarily limited to the North Eidson-Morrow Gas Pool (76360) and the Undesignated North Hume-Morrow Gas Pool (78850); and

the SE/4 to form a standard 160-acre spacing and proration unit for all formations and pools developed on 160-acre spacing.

3. These units shall be dedicated to the Well.

4. Arrington is hereby designated the operator of the Well and these units.

5. Arrington shall re-enter and re-complete the well within 90 days of the entry of this order, and thereafter shall continue to re-establish production from the Morrow formation with due diligence.

6. In the event Arrington does not conclude re-completion within 90 days after the entry of this order, Ordering Paragraph 1 shall be of no effect, unless Arrington obtains a time extension from the Division Director for good cause.

7. Should Arrington not complete the proposed re-completion of the Well within 90 days after the order, Arrington shall appear before the Division Director and show why Ordering Paragraph No. 2 should not be rescinded.

8. Upon final plugging and abandonment of the Morrow gas zone, the pooled unit created by this order shall terminate, unless this order has been amended to authorize further operation.

9. After pooling, uncommitted working interest owners are referred to as "pooled working interest owners". ("Pooled working interest owners" are owners of working interests in the units, including unleased mineral interest, who are not parties to an operating agreement governing the units.) After the effective date of this order, Arrington shall furnish the Division and each known pooled working interest owner in the units an itemized schedule of estimated well costs of drilling, completing, and equipping the proposed well ("well costs").

10. Within 30 days from the date the schedule of estimated costs is furnished, any pooled working interest owner shall have the right to pay its share of estimated well costs to the operator in lieu of paying its share of reasonable well costs out of production as hereinafter provided, and any such owner who pays its share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges. Pooled working interest owners who elect not to pay their share of estimated well costs as provided in this paragraph shall thereafter be referred to as "non-consenting working interest owners".

11. Arrington shall furnish the Division and each known pooled working interest owner (including each non-consenting working interest owner) an itemized schedule of actual well costs within 90 days following completion of the proposed well. If no objection to the actual well costs is received by the Division, and the Division has not objected within 45 days following receipt of the schedule, the actual well costs shall be deemed to be the reasonable well costs. If there is an objection to actual well costs within the 45-day period, the Division will determine reasonable well costs after public notice and hearing.

12. Within 60 days following determination of reasonable well costs, any pooled working interest owner who has paid its share of estimated well costs in advance as provided above shall pay to Arrington its share of the amount that reasonable well costs exceed estimated well costs and shall receive from Arrington the amount, if any, that estimated well costs that it has paid exceeds its share of the reasonable well costs.

13. Arrington is hereby authorized to withhold the following costs and charges from production:

- a. The proportionate share of reasonable well costs attributable to each non-consenting working interest owner; and
- b. As a charge for the risk involved in drilling the well, 200 percent of the above costs.

14. Arrington shall distribute the costs and charges withheld from production to the parties who advanced the well costs.

15. Reasonable charges for supervision (combined with fixed rates) are hereby fixed at \$6,000 per month while drilling and \$600 per month while producing, provided that this rate shall be adjusted annually pursuant to Section III.A.3 of COPAS form titled "*Accounting Procedure-Joint Operations*". Arrington is hereby authorized to withhold from production the proportionate share of both the supervision charges and the actual expenditures required for operating the Well, not in excess of what are reasonable, attributable to each pooled working interest owner.

16. Except as provided in Ordering Paragraphs 13 and 15 above, all proceeds from production from the well that are not disbursed for any reason shall be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership. Arrington shall notify the Division of the name and address of the escrow agent within 30 days from the date of first deposit with the escrow agent.

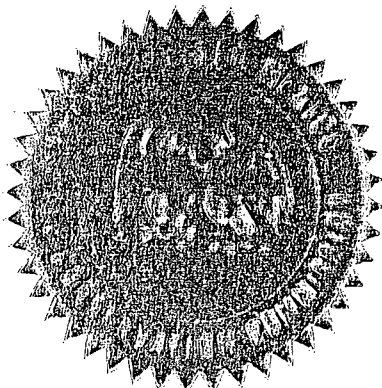
17. Any unleased mineral interest shall be considered a seven-eighths working interest and a one-eighth royalty interest for the purpose of allocating costs and charges under this order. Any well costs or charges that are to be paid out of production shall be withheld only from the working interests' share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

18. Should all parties to this compulsory pooling order reach voluntary agreement subsequent to entry of this order, that portion of this order authorizing compulsory pooling shall thereafter be of no further effect.

19. Arrington shall notify the Division in writing of the subsequent voluntary agreement of all parties subject to the compulsory pooling provisions of this order.

20. The Commission retains jurisdiction over this case for the entry of such further orders as the Commission deems necessary.

DONE at Santa Fe, New Mexico on the 23rd of January 2012.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


SCOTT DAWSON, Member


ROBERT BALCH, Member


JAMI BAILEY, Chair