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. 14538

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. 14497

APPLICATION OF DAVID H. ARRINGTON OIL & GAS, INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

ORDER NO. R-13372

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on September 2, 2010, at Santa Fe, New Mexico, before Examiner Terry Warnell.

NOW, on this 16th day of March, 2011, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

I. Preliminary Matters

- A. Due notice has been given, and the Division has jurisdiction of the parties to these cases and of the subject matter.
- B. By its application in Case No. 14538, Marshall & Winston, Inc. (Marshall & Winston) seeks an order canceling the authority of David H. Arrington Oil & Gas, Inc., to operate the Green Eyed Squealy Worm Well No. 1, located 1974 feet from the South line and 1129 feet from the East line in the NE/4 SE/4 of Section 26, Township 15 South, Range 34 East, NMPM, in Lea County, New Mexico. Marshall & Winston seeks to re-

enter the Well to test an oil zone on 40-acre spacing uphole in the Cisco Canyon formation. They further request that they be approved as operator of the well.

- C. By its application 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 in the S/2 of Section 26, Township 15 South, Range 34 East, NMPM, in Lea County, New Mexico to form a 320-acre gas unit for all formations and pools 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 gas unit comprising the SE/4 for all formations and or pools developed on 160-acre spacing within this vertical extent. These units are to be dedicated to the Green Eyed Squealy Worm Well No. 1 (API No. 30-025-36013). The exact permitted location of the Well was 1974 feet from the South line and 1129 feet from the East line (Unit I) of Section 26. Arrington further requests that it be approved as operator of the Well.
- D. Due to the factual relationship between these cases, they were combined for purposes of hearing. A joint order should be entered as to both cases.
- E. All parties appeared at the hearing and presented testimony. Arrington presented evidence in support of its application in Case No. 14497 and in opposition to Marshall & Winston's application in Case No. 14538. Marshall & Winston presented evidence in support of its application in Case No. 14538 and in opposition to Arrington's application in Case No. 14497.

II. Undisputed Evidence.

The following facts appear to be undisputed:

- A. Within the S/2 of Section 26 Arrington owns 75 percent of the working interest and Marshall & Winston owns 25 percent.
- B. The oil and gas leases that were in effect when the Well was drilled have all expired by their own terms, as has the joint operating agreement covering the S/2 of Section 26 pursuant to which the Well was drilled.
- C. Arrington has obtained a new lease covering the S/2 of Section 26 with the exception of the N/2 SE/4.
- D. Marshall & Winston owns 100% of the working interest in the N/2 SE/4 of Section 26, Township 15 South, Range 34 East, NMPM. However, Arrington holds an easement from the surface owner allowing it access to the Well.
 - E. OCD records show Arrington as the operator of the Well.
 - F. There is still gas in the upper Morrow and it might produce.



III. The Evidence

- A. In support of its application in Case No. 14497, and in opposition of the application of Marshall & Winston in Case No. 14538, Arrington presented testimony from Monty W. Kastner, Brian C. Ball, and Arturo C. Carrasco:
 - 1. Monty W. Kastner is Vice President of Land and Legal employed by Arrington Oil & Gas. In addition to matters recited above as undisputed facts, Mr. Kastner testified as follows:
 - (a) The Well was drilled by Arrington in 2004; Marshall & Winston participated in the drilling of the well.
 - (b) The Well was completed March 15, 2004; production started May 10, 2004, and the Well produced up until March of 2007.
 - (c) In July 2007 Arrington tried an unsuccessful workover in the Morrow Formation and the Well produced intermittently until October of 2007.
 - (d) The original oil and gas leases and the Joint Operating Agreement pursuant to which the Well was drilled have all expired.
 - (e) In March of 2010 Arrington proposed a workover in the Cisco Canyon formation. Marshall & Winston responded verbally that they had no interest in participating in the proposed workover.
 - (f) After further evaluation Arrington proposed a reentry and second workover in the Morrow formation but received no reply from Marshall & Winston.
 - (g) Arrington obtained an exclusive easement for the access to the Well across the S/2 of Section 26 from the surface owner.
 - 2. Brian Ball, Arrington's exploration manager, testified that the Well's original initial production was 1.347 million cubic feet of gas, 36 barrels of oil and 58 barrels of water. Cumulative production is over 397 million cubic feet of gas, 11,000 barrels of oil and 17,000 barrels of water. He went on to testify the reason the Morrow had been abandoned was it started producing quite a bit of water, and it was not economic at that time.
 - 3. Arturo C. Carrasco, Arrington's engineering operation manager, testified that the 2007 workover found the Well made some gas and oil but would not flow on its own. They ran a buildup and found the bottomhole pressure to be 4,650 pounds, indicating the Well still has some production potential with the aid of artificial lift. He also testified they would exercise care not to do anything that

would jeopardize the later use of this wellbore for shallower horizons and that a Morrow workover could be done in 90 days.

- B. In support of its application in Case No. 14538 and in opposition to Arrington's application in Case No. 14497, Marshall & Winston presented the testimony of Kevin Hammit and John D. Savage:
 - 1. Kevin Hammit is Vice President of Land employed by Marshall & Winston. In addition to matters recited above as undisputed facts, Mr. Hammit testified as follows:
 - (a) Marshall & Winston participated as working interest owners in the Green Eyed Squealy Worm Well No. 1 when it was originally drilled.
 - (b) The Well was a successful gas well initially but by 2006 production started going down.
 - (c) In July 2007 Arrington tried an unsuccessful workover in the Morrow Formation which Marshall & Winston participated in.
 - (d) After Arrington determined the recompletion attempt was not successful, they submitted a Cisco Canyon formation completion AFE to Marshall & Winston in a letter dated July 23, 2007.
 - (e) Marshall & Winston agreed to participate in the Cisco Canyon formation completion, but it was never done.
 - (f) The original oil and gas leases and the Joint Operating Agreement pursuant to which the Well was drilled have all expired.
 - (g) In March 2010 Marshall & Winston received from Arrington an informal proposal for a Cisco Canyon formation completion and they declined to participate.
 - (h) On May 20, 2010 Marshall & Winston received a proposal from Arrington to recomplete in the Morrow formation.
 - (i) Marshall & Winston's working interest in a Cisco Canyon formation completion is now 100%.
 - (j) Marshall & Winston obtained a release of the oil and gas lease, and a release of the Joint Operating Agreement after it filed a complaint in the Lea County District Court.

- 2. John D. Savage, a registered professional engineer, testified that he was hired to look at the remaining reserves in the Morrow zone and conduct an economic study regarding a completion. He stated that, in his opinion, the proposed Morrow recompletion would be marginal or uneconomic. He also testified the remaining Morrow gas reserves would be drained by other wells in the vicinity.
- 3. Mr. Savage also testified that when the Well was on production it was the "dominant" well in the pool and probably drained reserves from adjoining tracts.

IV. Conclusions Regarding Legal Issues

- A. The original oil and gas leases have all expired by their own terms, as has the Joint Operating Agreement covering the South half of Section 26.
- B. It is undisputed that Marshall & Winston owns or controls 100% of the working interest in the N/2 SE/4 of Section 26 (the tract the well is on).
- C. The Cisco Canyon formation spacing is 40-acre oil and the Morrow formation spacing is 320-acre gas.
- D. Marshall & Winston requested that Arrington's old lease be released and that Arrington recognize that the Joint Operating Agreement be terminated. They were not provided the releases and pursued an action to the state courts of New Mexico; such actions did not constitute violations of the Oil and Gas Act or Division rules, and accordingly should not influence the Division's decision in these cases.
- E. Section 70-2-17.C NMSA 1978, as amended, provides that the Division shall issue compulsory pooling orders "to avoid the drilling of unnecessary wells or to protect correlative rights, or to prevent waste." Thus David H. Arrington Oil & Gas, Inc., as applicant for compulsory pooling, bears the burden of proving, by appropriate geological and engineering evidence, that pooling should be granted for one or more of those reasons. See Sims v. Mechem, 72 N.M. 186, 382 P.2d 183 (N.M. Sup. 1962). Surprisingly they had not calculated the expected economics and reserves of the recompletion procedure.

V. Conclusions Regarding Technical Issues

A. David H. Arrington Oil & Gas Geologist testified the open hole logs from 2004 suggested all of the Morrow should contribute hydrocarbons, but offered no current logs or information. The evidence (old logs) is clearly not sufficient for the Division to practicably determine the total gas reserves in this reservoir, or the gas reserves underlying any specific quarter section.

- B. The Well originally drilled and operated by Arrington produced through perforations in the bottom two Morrow zones (13,055-13,059 and 13084-13,100). It was uneconomical and they plugged off the two zones with a cast iron bridge plug and went in the Well with TCP guns and perforated 12,993 feet to 13,004 feet.
- C. Unfortunately the TCP guns were shot off the end of the tubing and landed on top of the CIBP at approximately 13,006 feet. Subsequently Arrington did a high pressure acid job on the top perfs (12,993-13,004) and they assumed the cast iron bridge plug released and the fish went to the bottom. No verification of this assumption was presented.
- D. There was a recompletion attempt by Arrington to reestablish production from the Morrow formation in March 2007. Marshall & Winston paid their share and in July 2007 received a memo from Arrington saying the attempt was not successful and Arrington would like to test the Cisco Canyon formation.
- E. A packet and letter were received by Marshall & Winston on July 23, 2007. There was an AFE for a completion attempt in the Cisco Canyon formation and Marshall & Winston agreed to participate. However, Arrington never did the work.
- F. In May 2010 Arrington proposed a second reentry attempt on the Morrow formation and Marshall & Winston was not interested and went to District Court to secure a formal release of underlying leases in the expired Joint Operating Agreement.
- G. According to OCD records the last reported Morrow gas production was January 2006 (5 years ago).
- H. Arrington's compulsory pooling application should be denied and Marshall & Winston should be designated operator of the subject well.

IT IS THEREFORE ORDERED THAT:

- (1) The application of David H. Arrington Oil & Gas Inc in Case No. 14497 for approval of compulsory pooling in Lea County, New Mexico is <u>denied</u>.
- (2) Pursuant to the application of Marshall & Winston, Inc. in Case No. 14538, for cancellation of the authority for David H. Arrington Oil & Gas, Inc. to operate the Green Eyed Squealy Worm Well No. 1(API No. 30-025-36013), located 1974 feet from the South line and 1129 feet from the East line of Section 26, Township 15 South, Range 34 East, NMPM, in Lea County, New Mexico is hereby approved.
- (3) Marshall & Winston (OGRID 14187) is hereby designated the operator of the Green Eyed Squealy Worm Well No. 1 (API No. 30-025-36013) ("the Well"), at a surface location 1974 feet from the South line and 1129 feet from the East line (Unit I) of Section 26. Further, Marshall & Winston is also authorized to re-enter the Well to test the oil zone on a 40-acre spacing and proration Unit in the Cisco Canyon formation.



(4) Jurisdiction of this case 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

DANIEL SANCHEZ
Acting Director