

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

**IN THE MATTER OF APPLICATION FOR
COMPULSORY POOLING SUBMITTED BY
COG OPERATING, LLC**

**CASE NO. 21219-21220
ORDER NO. R-21198**

ORDER

The Director of the New Mexico Oil Conservation Division (“OCD” or “Division”), having heard these consolidated cases through a Hearing Examiner on June 26, 2020, and having considered the evidentiary record, including testimony, exhibits, post-hearing submittals and the recommendation of the Hearing Examiner, denies COG’s applications seeking compulsory pooling based on the following findings and conclusions:

FINDINGS OF FACT

1. Applicant COG Operating, LLC (COG) seeks an order from the Division pooling all uncommitted interests in the Wolfcamp formation, Purple Sage-Wolfcamp Gas Pool (Pool code 98220), underlying a standard 960.48-acre, more or less, horizontal spacing unit comprised of all of Sections 6, 7, and 18, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico, approximately 5.4 miles southwest of Malaga, New Mexico.
2. Mewbourne Oil Company (Mewbourne) opposes the applications based on its own working interests in Section 6, which would allow it to drill and produce its own acreage independently without compulsory pooling, and because it is concerned about the drilling of unproven 3-mile laterals.
3. In Case 21219 COG seeks an order pooling all mineral interests in the Wolfcamp formation underlying the east halves of Sections 6, 7, and 18. This horizontal spacing unit would be dedicated to proposed wells Scout State Com 601H, 602H, and 603H.
4. In Case 21220 COG seeks an order pooling all mineral interests in the Wolfcamp formation underlying the west halves of Sections 6, 7, and 18. This horizontal spacing unit would be dedicated to proposed wells Scout State Com 604H, 605H, and 606H.
5. COG seeks an order from the Division pooling the following uncommitted working interest owners in the Wolfcamp formation underlying COG’s proposed horizontal spacing unit: Occidental Permian LP, Oxy Y-1 Company, Devon Energy Production Company LP (Devon), and Mewbourne.
6. COG seeks an order from the Division pooling Devon as an overriding royalty interest owner in the Wolfcamp formation underlying COG’s proposed horizontal spacing unit.
7. Mewbourne has permitted wells in the Wolfcamp formation in the S/2 of Section 6, in which Mewbourne owns 100% of the working interest.
8. In the N/2 of Section 6, 100% of the working interest is subject to a Joint Operating Agreement dated February 15, 2005 (the JOA).

9. Pursuant to the JOA, Mewbourne has proposed Wolfcamp wells in the N/2 of Section 6.
10. COG owns or has an interest in 40.90% of the W/2 of Sections 6, 7, and 18.
11. Mewbourne owns or has an interest in 23.41% of the W/2 of Sections 6, 7, and 18.
12. COG owns or has an interest in 54.87% of the E/2 of Sections 6, 7, and 18.
13. Mewbourne owns or has an interest in 23.34% of the E/2 of Sections 6, 7, and 18.
14. Mewbourne owns 100% of the working interest in the S/2 of Section 6 and an undivided 40% working interest in the N/2 of Section 6.
15. A chronology of events follows:
 - a. Between July 1 and July 17, 2019, Mewbourne and Devon completed a trade in which Mewbourne acquired Devon's interest in all of Section 6.
 - b. Between August 1 and August 5, 2019, COG and Mewbourne completed a trade in which COG acquired all of Mewbourne's interest in the N/2 of Section 6 and the W/2 of Section 7.
 - c. The effective date for the COG-Mewbourne trade is June 1, 2019 and the Mewbourne-Devon trade is effective June 1, 2019 as to the S/2 of Section 6 and July 1, 2019 for the N/2 of Section 6.
 - d. On January 23, 2020, COG sent well proposals and AFEs to working interest owners, including Mewbourne, for its Scout wells in Sections 6, 7, and 18.
 - e. COG then filed for compulsory pooling applications on the subject wells March 3, 2020.
 - f. On January 28, 2020, Mewbourne filed permits for its Pothole wells in the Wolfcamp Formation in the S/2 of Section 6.
 - g. On June 17, 2020, Mewbourne sent well proposals and AFEs to working interest owners, including COG, for its Devon Fee wells in the N/2 of Section 6 under the existing Joint Operating Agreement.
16. Numerous negotiations have been proposed by COG and Mewbourne; however, the Parties have been unable to reach an agreement concerning the subject acreage.
17. COG's applications were heard on June 26, 2020; the hearing was conducted on a virtual platform in accordance with Section 19.15.4 NMAC, the Division's Adjudication procedures. Besides Mewbourne, no other party entered an appearance.
18. The central issue in the hearing was which party's development plan is better suited to protect correlative rights, prevent waste, and is in the best interest of conservation.
19. COG presented five witnesses in support of its applications:
 - a. Travis Macha, a landman, described the proposed units COG seeks to pool, the wells for the proposed units, the parties sought to be pooled, COG's efforts to obtain voluntary joinder, estimated costs, and the required notice.
 - b. Dean Snidow, a petroleum geologist, described the proposed path of the wells, a structure map of the formation, and the proposed target intervals. He stated that stand-up orientation is preferred in this area to efficiently and economically develop acreage. COG proposes stand-up wells, while Mewbourne proposes lay-down wells.
 - c. David Hurd, a reservoir engineer, discussed his economic evaluation of the proposed wells, and the comparative analysis he did of the alternative plans. It is his opinion that 1-mile wells are not economic at current commodity

- pricing, that COG's development plan will cost \$22 million less than Mewbourne's, that COG's plan will allow for more efficient recovery of the area, and that COG's plan will reduce surface and facility usage.
- d. Parker Simmons, a drilling engineer, described the process COG would use to drill the proposed wells. He also discussed the modeling he had performed, examining a range of friction factors and the actual well path.
 - e. Craig Rohwer, a completions engineer, stated that in 2019 and 2020, COG drilled and completed six 3-mile wells in the Midland Basin in Texas, five of them in the Wolfcamp and one in the Spraberry, using a method known as a plug and perf. The depth, length, frack gradient, and casing size proposed for the Scout wells are similar. He summarized the challenges and mitigation strategies for 3-mile completions.
20. Mewbourne presented three witnesses in support of its own plan for Section 6:
 - a. Mitch Robb, a landman, described Mewbourne's permitted wells and approved APDs in the S/2 of Section 6, and the JOA and AFEs for four proposed Wolfcamp wells in the N/2 of Section 6. He set out a chronology of contacts between Mewbourne and COG since August 2019.
 - b. Nathan Cless, a geologist, presented geological plats showing regional horizontal Wolfcamp activity, a structure map on top of the Wolfcamp formation, a cross-section of the formation, and a production data table detailing Upper Wolfcamp horizontal producers within a 5-mile radius.
 - c. Travis Cude, a petroleum engineer, presented plats showing a lateral orientation comparison of production from Upper Wolfcamp.
 21. All witnesses were accepted as qualified to present expert opinion testimony; all witnesses were sworn in, and all were subject to cross-examination by the other party and by the examiners.
 22. Following receipt of the transcript, the parties submitted written closing statements on July 24; COG filed a motion to strike or supplement the record on July 29, and Mewbourne filed a response to the motion on August 12, 2020.
 23. Based on Mr. Robb's testimony, if Mewbourne develops its acreage with a 1-mile well in Section 6 and COG develops Sections 7 and 18 with a 2-mile well, there will be no stranded acreage, and COG would not be hindered by any surface use restrictions if it drills on the north edge of Section 7 through Section 18.
 24. Based on Mr. Cless' testimony, the formation in Sections 6, 7, and 18 are continuous and uniform in thickness, and each quarter section will contribute more or less equally to production.
 25. There are both standup and laydown wells in the area without significant difference in production quality.
 26. Operators continue to drill economic 1-mile wells nearby.
 27. Mewbourne already has surface facilities in the N/2 N/2 of Section 6, and salt water disposal infrastructure to treat produced water in that section, which would greatly reduce the cost of completion and lower operating costs.
 28. Based on Mr. Cude's testimony, there is negligible difference between North/South laterals and East/West laterals in the surrounding area.

29. A development spacing comparison shows that Mewbourne has the better plan with 660' spacing targeting two landing points compared to COG's with 880' spacing targeting a single landing point.
30. Mewbourne is a proven, low-cost operator of 1-mile laterals, while COG has never drilled a 3-mile well in New Mexico or the Delaware Basin.
31. Less than 0.1% of horizontal wells in New Mexico's Delaware Basin in the last 5 years have lateral lengths greater than 14,000 feet. The additional lateral length of a 3-mile well can lead to potential drilling and production problems as well as unanticipated increased drilling costs.
32. Mewbourne's plan has 2 more wells than COG's plan for Section 6, which target Wolfcamp Shale, so Mewbourne's recovery would be 25% greater in that section compared to COG's plan, which targets only Wolfcamp sand.

CONCLUSIONS OF LAW

1. The Division has jurisdiction over the parties and the subject matter in this case.
2. Proper public notice was given of the Applications and the hearing in his case.
3. The Oil and Gas Act, NMSA 1978 Sections 70-2-1 *et seq.* (Act), prohibits the waste of oil and gas and delegates to the Division the authority to prevent waste and protect correlative rights.
4. Section 70-2-17.C of the Act provides that when the owners of the interests in a spacing unit "have not agreed to pool their interests, and where one such separate owner, or owners, who has the right to drill has drilled or proposes to drill a well on said unit to a common source of supply, the division, to avoid the drilling of unnecessary wells or to protect correlative rights, or to prevent waste, shall pool all or any part of such lands or interests or both in the spacing or proration unit as a unit."
5. Pursuant to rulings by the Oil Conservation Commission in cases where an operator does not require a compulsory pooling application to develop its own land, what would be an evaluation of competing pooling applications is rather an evaluation of competing plans using the same factors. See Orders No. R-20223, R-21420-A, and R-21416-A.
6. The Division may consider:
 - a. A comparison of geologic evidence presented by each party as it relates to the proposed well location and the potential of each proposed prospect to efficiently recover the oil and gas reserves underlying the property.
 - b. A comparison of the risk associated with the parties' respective proposal for the exploration and development of the property.
 - c. A review of the negotiations between the competing parties prior to the applications to force pool to determine if there was a "good faith" effort.
 - d. A comparison of the ability of each party to prudently operate the property and, thereby, prevent waste.
 - e. A comparison of the differences in well cost estimates (AFEs) and other operational costs presented by each party for their respective proposals.
 - f. An evaluation of the mineral interest ownership held by each party at the time the application was heard.

- g. A comparison of the ability of the applicants to timely locate well sites and to operate on the surface (the "surface factor").
7. As Applicant, COG bears the burden of proof in evaluating each factor.
8. COG failed to establish that its applications, if granted, would more efficiently recover the oil and gas reserves underlying Section 6.
9. COG's plan is riskier than Mewbourne's plan, considering the challenges and costs associated with the longer lateral lengths.
10. A review of the negotiations between the parties, including the documents submitted following the hearing, does not weigh in favor of either party.
11. A comparison of the ability of each party to prudently operate the property does not weigh in favor of either party.
12. A comparison of the differences in well cost estimates (AFE's) and other operational costs does not weigh in favor of COG, insofar as Mewbourne's AFE's were more current, and Mewbourne has existing salt water disposal infrastructure running to Section 6, which will substantially reduce operational costs.
13. An evaluation of the mineral interest ownership held by each party at the time the application was heard supports independent development by Mewbourne of Section 6, and by COG of Sections 7 and 18.
14. A comparison of the ability of the applicants to timely locate well sites and to operate on the surface weighs toward Mewbourne's plan for Section 6 insofar as they have existing surface facilities.
15. COG failed to establish that its applications, if granted, would prevent waste or protect correlative rights.
16. Section 19.15.16.15.A .1 NMAC, HORIZONTAL WELLS, provides that "An operator shall not file an application for permit to drill nor commence the drilling of a horizontal oil or gas well until the operator has either:
 - (a) received the consent of at least one working interest owner or unleased mineral interest owner of each tract (in the target pool or formation) in which any part of the horizontal oil or gas well's completed interval will be located; or
 - (b) obtained a compulsory pooling order from the division for an appropriate horizontal spacing unit.
17. At the time COG applied for APDs covering the S/2 of Section 6, owned 100% by Mewbourne, COG had neither the owner's consent nor a compulsory pooling order.

ORDER

1. COG's Motion to Supplement the Record is granted; the additional evidence of subsequent settlement discussions submitted by COG on July 29 and by Mewbourne on August 12 is admitted into the record.
2. COG's applications are denied.
3. So much of the APDS for the Scout State well bore(s) that would cross through Section 6 are rescinded. The APDs remain valid as to those lands controlled by COG.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



ADRIENNE SANDOVAL, DIRECTOR

11/23/2020

DATE