

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

**APPLICATIONS OF CIMAREX ENERGY CO.
FOR A HORIZONTAL SPACING UNIT
AND COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO**

CASE NOS. 23448-23455

**APPLICATIONS OF CIMAREX ENERGY CO.
FOR COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO**

CASE NOS. 23594-23601

**APPLICATIONS OF READ & STEVENS, INC.
FOR COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO.**

CASE NOS. 23508-23523

READ & STEVENS, INC.'S CLOSING ARGUMENT

Read & Stevens, Inc. ("Read & Stevens") and Permian Resources Operating, LLC ("Permian Resources") (collectively "Permian Resources"), through undersigned counsel, submit this closing argument for the Division's consideration with its separately filed Proposed Findings and Conclusions. For the reasons stated here and in the Proposed Findings and Conclusions, the applications under Case Nos. 23508-23523 should be approved, Permian Resources should be designated operator of the proposed spacing units and initial wells, as modified, and Cimarex's competing applications under Case Nos. 23508-23534 and 23594-23601 should be denied.

INTRODUCTION

Permian Resources' plan to simultaneously co-develop the Bone Spring and Wolfcamp formations in these competing pooling cases is the only proposal before the Division that will protect the correlative rights of all owners and prevent waste. Contrary to Cimarex's assertions, the Upper Wolfcamp in this area is a "sweet spot" that is a viable and valid independent target

for development. Because no frac baffles or barriers exist between the Upper Wolfcamp and basal Third Bone Spring, the zones must be developed together to maximize recovery and avoid potential parent-child depletion effects. Targeting only the Bone Spring, as Cimarex intends, will not effectively or efficiently drain the available reserves. And returning to drill the Upper Wolfcamp later, as Cimarex might do, will be substantially less effective due to documented parent-child depletion effects within the Wolfcamp. Both outcomes under Cimarex's plans will strand reserves and cause waste.

In contrast, Permian Resources' proposal to co-develop both zones is supported by early-time offsetting production, demonstrating substantial improved production compared to developing the Bone Spring interval alone. In addition, co-development is the only way to afford owners in both pools an opportunity to access their just and equitable share of production in each pool.

Finally, neither of Cimarex's alternative options under its proposed plan are workable under the statutes or regulations. Option 1 violates correlative rights and Cimarex provided no evidence explaining or supporting the basis for its proposed buffer zone. Similarly, Option 2 violates the New Mexico Oil and Gas Act and administrative rules. And Cimarex also provided no basis for allocating production between the two pools that would be necessary under this alternative.

ARGUMENT

I. Relevant Factors Considered in Deciding Competing Compulsory Pooling Cases Favor Permian Resources.

The Division is authorized to issue compulsory pooling orders that "protect correlative rights" and "prevent waste." NMSA 1978, § 70-2-17(C); *Marbob Energy Corp. v. N.M. Oil Conservation Comm'n*, 2009-NMSC-013, ¶ 2, 206 P.3d 135 (the Division has "two primary

duties regarding the conservation of oil and gas: prevention of waste and protection of correlative rights”). When evaluating competing compulsory pooling applications, the Division and New Mexico Oil Conservation Commission (“Commission”) consider several factors in furtherance of these duties. *See* Order No. R-21420-A, ¶ 9. “[T]he most important consideration in awarding operations to competing interest owners is geologic evidence as it relates to well location and recovery of oil and gas and associated risk.” *Id.*; *see also* Order No. R-10731-B, ¶ 23(f). Factors the Division may consider include: (a) **comparison of geologic evidence** well locations, and efficient recovery of reserves; (b) comparison of risk; (c) review of the “good faith” negotiations; (d) the ability of each party to prudently operate and prevent waste; (e) **differences in well cost estimates (AFE)s** and other operational costs for each party’s respective proposals; (f) **the mineral interest ownership control**; and (g) the “surface factor.” Order R-21420-A, ¶ 9. Also to be considered is which plan **best protects correlative rights and prevents waste**. *See, e.g.*, Order No. R-21198, COL ¶ 15; *Marbob Energy Corp*, 2009-NMSC-013, ¶ 2.

The most relevant factors at issue in these cases are underlined above in bold and involve comparison of (1) the target geology, well locations, and efficient recovery of reserves; (2) differences in well and operating costs; (3) mineral interest ownership control; (4) which plan best avoids waste by not stranding reserves; and (5) which plan best protects correlative rights. Consideration of these dispositive factors strongly favors Permian Resources.

A. Permian Resources’ Plan to Co-Develop the Third Bone Spring with the Upper Wolfcamp is Necessary to Protect Correlative Rights, Efficiently Recover Reserves, and Prevent Waste.

Approving Permian Resources’ proposal to simultaneously co-develop the Bone Spring and Wolfcamp pools is the only way for the Division to fulfill its dual obligations to prevent waste and protect correlative rights given the ownership differences between the two pools in these cases. It is undisputed that mineral ownership between the Bone Spring and Wolfcamp

pools is not uniform. Cimarex also acknowledges at least two owners own an interest only in the Wolfcamp. Simultaneously co-developing the Bone Spring and Wolfcamp will protect all interests involved by affording owners in both pools the opportunity to produce their just and equitable share of production attributable to each pool. It is also necessary to prevent permanently stranding reserves in the Upper Wolfcamp due to parent-child effects and inefficient well sequencing that will occur under Cimarex's plan.

1. Simultaneous Co-Development is Necessary to Protect the Correlative Rights of All Owners.

Permian Resources targets two hydrocarbon-rich geologic intervals in the lower basal Third Bone Spring and Upper Wolfcamp XY interval that are found on either side of an ownership depth severance between the Bone Spring and Wolfcamp pools. While the geologic targets are thick enough to require a vertically staggered and stacked "wine-rack" pattern to effectively and efficiently drain them, separately targeting these benches is also necessary to protect the correlative rights of mineral owners on both sides of the depth severance. Cimarex targets only the Bone Spring and contends that co-development will be "financially wasteful." Permian Resources provided extensive legal justification in advance of the hearing demonstrating that co-development is necessary. *See* Resp. to Cimarex's Legal Memorandum. After the hearing, there is also overwhelming factual support.

Cimarex confirmed in its testimony that it believes its proposed Bone Spring wells will drain and produce "the primary concentrations of hydrocarbons in the Wolfcamp, those being in the Upper Wolfcamp." *See* Permian FOF 33. Owners with a greater share of interest in the Bone Spring, including Cimarex, favor Cimarex's development plan targeting production from both pools through wells in Bone Spring spacing units that will allocate production based on Bone

Spring ownership¹ but will produce from the Wolfcamp without paying Wolfcamp owners on their larger Wolfcamp ownership basis.² For the reasons outlined in Section II, below, Cimarex's proposed plan under either of its alternative options will irreparably impair the correlative rights of Wolfcamp owners. *See, infra*, Sec. II.A and II.B.

The impairments are not minor. Approximately half the working interest owners subject to force pooling in these cases will have their correlative rights negatively impacted under Cimarex's plan. *See, e.g.*, FOF 11, 12, 33, 35, 44, 69. Not surprisingly, most of the owners with substantial interests in the Wolfcamp pool either support Permian Resources or have vocally withdrawn support for Cimarex's plan over concerns about not separately targeting the Wolfcamp and impairment to Wolfcamp interests. FOF 10-17. In contrast, Permian Resources' plan protects the correlative rights of all owners by producing both pools and allocating owners their equitable share of production from both pools based on their respective ownership interests.

Partly in response to concerns over correlative rights, Cimarex suggested it may consider targeting the Upper Wolfcamp later by drilling this "lower tier" target substantially below the base of the Bone Spring. However, no frac baffles exist between the Upper Wolfcamp and the base of the Bone Spring. Subsequent wells targeting the Upper Wolfcamp are, therefore, likely to suffer from substantial parent-child depletion effects documented in the HFTS-2 Study that Cimarex relies on. That is exactly the problem that occurred in Apache's Black and Tan wells that Cimarex cites to in support of their contention that Permian Resources' Wolfcamp wells will underperform. Following a poor sequencing approach here, as Cimarex proposes, will result in a significantly smaller stimulated rock volume in later-drilled Upper Wolfcamp wells—similar to

¹ FOF 9, 13.

² FOF 9, 13.

results in the Black and Tan wells and documented in the HFTS-2 Study. That will strand reserves, cause waste, and further impair Wolfcamp owners.

2. Simultaneous Co-Development will prevent permanently stranding reserves in the Upper Wolfcamp and avoid waste.

Contrary to Cimarex's arguments, and belied by Cimarex's own testimony, the Upper Wolfcamp in this acreage is a valid and viable standalone geologic target. Cimarex contends it can capture most of the Upper Wolfcamp's reserves through its Bone Spring wells because no frac baffles block drainage. As demonstrated, however, drilling only Bone Spring wells will severely and irreparably harm Wolfcamp owners' correlative rights. And, as alluded to above, it will also result in substantial waste by permanently stranding reserves in the Wolfcamp because there are no frac baffles between the pools to prevent parent-child depletion effects in later-drilled Wolfcamp wells.

Cimarex contends that $\text{Phi} \times \text{H}$ (porosity $\times$ height) is a direct proxy for recoverable reserves. Cimarex also asserts that a 40% increase in reserves is necessary to justify drilling the Wolfcamp XY target under Cimarex's economics. At the same time, Cimarex does not dispute that the $\text{Phi} \times \text{H}$ for the Wolfcamp in the subject acreage is 43% larger than in offsetting acreage targeted by the Apache Black and Tan wells, indicating that by its own standards the Wolfcamp XY is a viable independent target for development. Cimarex confirmed this by agreeing it would drill its successful offsetting Wolfcamp Perry wells again and will likely target the Upper Wolfcamp in this acreage later. The problem is that by doing so, Cimarex will strand reserves in the Upper Wolfcamp that cannot be drained by its Bone Spring wells alone and will not be accessed by later-drilled Wolfcamp wells due to reduced stimulated rock volumes caused by parent-child depletion.

Reduced stimulated rock volumes caused by poor well sequencing is not a speculative or theoretical concern. It is a well-documented occurrence within the Wolfcamp through the HFTS-2 Study relied on by Cimarex. While the HFTS-2 Study is not perfectly analogous to the subject lands, it does demonstrate that poorly sequenced wells in the Wolfcamp drilled after depleting pressures will result in less stimulated rock volume and reduced ultimate recovery of Wolfcamp reserves. This assessment is strongly supported by Permian Resources' early-time results in its immediately offsetting Batman development, where co-development of the Bone Spring and Wolfcamp pools demonstrates substantially improved production when the zones are co-developed compared to developing the Bone Spring alone.

B. Differences in Well Cost Estimates Are Not a Significant Factor and Do Not Vary Substantially Between the Parties on a Per-Well Basis.

Permian Resources' estimated well costs range between \$10.7 million for its shallowest proposed Bone Spring wells and \$11.9 million for its Upper Wolfcamp target. In contrast, Cimarex's updated well costs range from \$9.7 to \$10.6 million. That is a difference in estimated costs of between about 9.3% and 11% per well. These "differences in AFE's (well cost estimates) and other operational criteria are not significant factors in awarding operations and have only minor significance in evaluating an operator's ability to prudently operate the property." Order No. R-10731-B, ¶ 23(j).

Because the differences in AFE costs between the two competing development plans are not significant and not considered a significant factor in determining operatorship, this factor does not favor either party in these cases and should be considered neutral.

1. Only One Initial Well Must be Drilled and Completed within the Deadlines to Perfect Compulsory Pooling Orders.

Permian Resources initially included all the wells it might drill as initial wells in its applications for maximum flexibility to develop its spacing units most effectively and efficiently

due to the constraints under the Division's horizontal Infill Well Rule. *See* 19.15.13.9 NMAC (“ . . . [E]ither the operator or an owner of a pooled working interest may, at any time after completion of the initial well provided in the pooling order, propose drilling of an infill well.”). Under this rule, initial wells approved in pooling orders must be drilled and completed before infill wells can be proposed. If operators batch drill any initial wells, all potential batch-drilled initial wells must be included in the application so they can be drilled and completed together.

Approximately three years ago, the Division revised the form of its pooling orders. After discussions with Division counsel specifically over whether the proposed form of pooling order clearly addressed the need for operators to have flexibility to drill one or a select number of initial wells, the Division changed the proposed form of order to refer to “Well(s)” as opposed to “Wells” or “Well.” *See, e.g.*, Order No. R-22859, ¶¶ 2-3, 10, 16, 20. Based on these discussions, our understanding is that the intent of this change was to clarify that while the well or wells dedicated under the pooling order are initial wells, operators are required to drill only one initial well under the terms of the pooling order within its deadlines to perfect the order.

This understanding aligns with the language of the Infill Well Rule, which requires only one initial well to be drilled. *See* 19.15.13.9 NMAC (“the initial well”). Initial wells not drilled and completed within the order timeframes specified are no longer authorized and must be re-proposed as infill wells under the terms of the pooling order and the Infill Well Rule. Accordingly, paragraph 20 of the standard pooling order requires operators to commence drilling either a well or wells within one year of the order. See example pooling order, attached as **Exhibit A**. Paragraph 20 provides that “each well” drilled under the order must be completed within one year “after the commencement of drilling of the Well” is commenced to perfect the order. *Id.* It does not require that all wells or every well approved under the order be drilled and

completed. If one well (“the Well” under Paragraph 20) is drilled and completed within the timeframes in paragraph 20, the pooling order is perfected.

This interpretation also makes sense because pooling orders are intended to function as a substitute for voluntary joint operating agreements (“JOA”). JOAs also provide deadlines for proposed wells to be drilled, but if a proposed well is not drilled within the timeframe under the JOA, the JOA does not terminate; rather, the well simply must be re-proposed. The same is true for initial wells not drilled under pooling orders. Moreover, operators require flexibility under pooling orders if economic conditions change within the one-year timeframe or they decide not to batch drill wells. Finally, it is important to remember that pooling orders combine or pool mineral interests into spacing units, not individual wells, so drilling every approved well is not essential to perfect an order.

The thrust of pooling orders with respect to initial wells is to approve the proposed initial wells, their estimated costs and overhead rates, to designate an operator, and to set a deadline to perfect the spacing unit by drilling at least one of the approved initial wells. If one or more wells approved under the order are not drilled, the order remains in effect if at least one initial well is drilled and completed (i.e., “the Well”).

2. To Maintain an “Apples-to-Apples” Comparison, Permian Resources has Elected to Dismiss its Initial Proposed Bone Spring Wells Except for the Basal Third Bone Spring Wells it will Co-Develop with the Upper Wolfcamp.

Because it has no other viable basis to contest Permian Resources’ plan, Cimarex chose to focus on the aggregate costs under Permian Resources’ maximum proposed development plan (48 total wells) compared to the wells Cimarex initially planned to drill (10 initial wells).³ That

³ Permian Resources initially proposed five wells in each of its Bone Spring cases (Case Nos. 23508-23511 and 23516-23519) and a single well in each of its Wolfcamp cases (Case Nos. 23512-23515 and 23520-23523). In

is not an apples-to-apples comparison because, as explained at hearing, Permian Resources intends to initially develop only its proposed basal Third Bone Spring wells (8 wells total) and its Upper Wolfcamp wells (8 wells total). *See* Permian Resources Revised Exhibit B, filed on Aug. 24, 2023. That is a total of 16 wells or one well per case under Permian Resources' plan compared to 10 wells or one or two wells per case under Cimarex's plan.

In addition to making an apples-to-oranges comparison, Cimarex erroneously argues that working interest owners would be subject to the costs of all Permian Resources' initial proposed wells. This argument is misplaced for two reasons. First, in its well proposals, Permian Resources offered working interest owners the opportunity to reach voluntary agreement to pool their interests separately in each spacing unit and pay their share of well costs on a well-by-well basis. *See* Permian Resources Exhibit C-10 (well proposal includes a well-by-well election to participate). Permian Resources' proposal was never "all or nothing," as Cimarex contends. Second, Permian Resources proposes to modify the standard form of compulsory pooling order to also provide pooled working interest owners the opportunity to elect to participate on a well-by-well basis. *See* Permian Resources, Exhibit C, ¶ 25. Under this modification, Permian Resources would be required to provide estimated well costs and an opportunity for each pooled working interest owner to elect to participate only as to each well that Permian Resources plans to drill at least 60 days before drilling. *Id.*

However, to avoid confusion and to maintain an apples-to-apples comparison, Permian Resources submitted revised compulsory pooling checklists in Case Nos. 23508-23511 and 23516-23519 dismissing all its initial proposed Bone Spring wells except for the basal Third

contrast, Cimarex initially proposed two wells (Case Nos. 23448 and 23452) or one well (Case Nos. 23449-23451, 23453-23455, 23594-23601) in its Bone Spring cases and did not propose to drill any wells in the Wolfcamp.

Bone Spring wells that it intends to initially drill and co-develop with the initial proposed Wolfcamp wells in Case Nos. 23512-23515 and 23520-23523.

C. Mineral Ownership Control is Not a Significant Factor When Other Factors Control.

While Cimarex controls most of the working interest in the Bone Spring and Wolfcamp spacing units in these contested cases,⁴ working interest control is not a significant factor when other “compelling factors,” such as geologic and prospective differences and efficient recovery of reserves, control. Order No. R-10731-B, ¶ 24.

As outlined above, Cimarex’s plan would irreparably harm owners and would permanently strand reserves in the Upper Wolfcamp, resulting in waste. Given the importance of geologic targets, preventing waste, and protecting correlative rights in these competing compulsory pooling cases, differences in working interest control is not significant and does not control. In addition, working interest owners who had initially pledged support for Cimarex’s plan have withdrawn their support and either wish to remain neutral pending the Division’s decision or support exploring co-development of the two formations with consideration of the ownership differences between them. FOF 16. This significant fact mitigates against weighing this factor in Cimarex’s favor and should be considered as not favoring either party.

D. 19.15.12 NMAC is Not Applicable to Wells Drilled and Completed within Single Division-Designated Pools.

The Division Technical Examiner requested the parties to address whether 19.15.12.9.A NMAC is applicable to these cases where both parties acknowledge that there will be some mixing of Bone Spring and Wolfcamp production from wells separately completed within the Bone Spring and Wolfcamp pools, respectively. In

⁴ FOF 2-5.

short, this provision is not applicable in these cases where the wells at issue are to be completed and operated entirely within a single Division-designated pool or common source of supply and will have properly cased and cemented wellbores.

Under 19.15.12.9.A NMAC, the Division's rules require operators to "produce each pool as a single common source of supply and complete, case, maintain and operate wells in the pool so as to prevent communication within the well bore with other pools." The purpose is to segregate production from multiple pools unless an operator is authorized to commingle production on the surface (surface commingling) or by completing the wellbore within multiple zones (downhole commingling). For purposes of these cases, the only relevant provision is downhole commingling.

The pool segregation requirement is not at issue here because the proposed wells are to be drilled, completed, and operated within the three-dimensional space of a single Division-designated pool in a manner that will prevent communication with other pools in the wellbore. Authority for downhole commingling is required only when a wellbore perforates and is completed within multiple pools. *See, e.g.,* 19.15.12.11.A(3) (addressing wellbore perforations in multiple zones and with differing pressures); 19.15.12.11.A(4) (addressing concerns for cross flow between different formations within the well bore); *see also* OCD Form C-107-A (specifying location and depths of perforated or open-hole intervals within the well bore). Here, in each case, the wells proposed will be completed within a single Division-designated pool. They also will be cased and cemented in a manner to prevent communication with other pools within the wellbore. 19.15.12.9.A is simply not applicable in this circumstance.

II. Cimarex's Proposal Will Impair Correlative Rights, Permanently Strand Reserves in the Upper Wolfcamp, and Conflicts with Statutory and Regulatory Requirements.

The ownership difference between the Bone Spring and Wolfcamp pools means that Cimarex's proposal under either its Option 1 or Option 2 cannot be approved under the Division's statutory or regulatory framework because both alternatives impair Wolfcamp owners' correlative rights and contravene the Oil and Gas Act and the Division's regulations. Cimarex's plan will also permanently strand reserves, resulting in waste.

A. Cimarex's Option 1⁵ Impairs Correlative Rights and Strands Upper Wolfcamp Reserves.

Under Option 1, Cimarex's preferred plan, Cimarex's landman admits that Cimarex will "produce the primary concentrations of hydrocarbons in the Wolfcamp" but will allocate production only to Bone Spring mineral owners in proportion to their ownership interests in the Bone Spring on a surface acreage basis, as the compulsory pooling statute requires. Wolfcamp owners, including the two owners who own no interests in the Bone Spring, will receive no payment on production from the Wolfcamp in proportion to their Wolfcamp ownership. To the extent they own a greater share in the Wolfcamp, or own only in the Wolfcamp, their correlative rights will be irreparably impaired under this approach.

This impairment is unavoidable even assuming, for the sake of argument, that Cimarex's assumptions in its economic analysis are correct. As demonstrated at the hearing, however, Cimarex's assumptions are wrong and Permian Resources disputes them. But even if the assumptions were correct, Cimarex's approach will deprive Wolfcamp owners access to their proportionate share of production contributed from the Wolfcamp pool in accordance with their

⁵ Permian Resources incorporates and adopts its Response to Cimarex's Legal Memorandum, filed on August 3, 2023.

Wolfcamp ownership percentage (which may be larger than their Bone Spring share). For example, in Case No. 23519 (E/2 E/2 of Sections 5 & 8) First Century owns a 2.91% working interest in the Bone Spring, but in Case No. 23523 (E/2 E/2 of Sections 5 & 8) First Century owns 7.248% working interest in the Wolfcamp.⁶ Under Cimarex's plan, First Century would receive only a 2.91% share in production from Cimarex's proposed Bone Spring wells—not their 7.248% Wolfcamp share—even though the “primary concentrations” of Upper Wolfcamp reserves also will be produced. Cimarex attempts to overcome this impairment by asserting that Wolfcamp owners will be in a better economic position under Cimarex's plan than they would be under Permian Resources' plan. Setting aside Cimarex's erroneous economic and legal assumptions,⁷ First Century and other similarly situated Wolfcamp owners will be deprived of the right to access their proportionate share of their Upper Wolfcamp production. No economic gloss can rectify that harm. The Division also has no authority under the statute to modify the allocation of production under a compulsory pooling order. *See* § 70-2-17(C).

Moreover, Cimarex's Option 1 will prohibit Permian Resources and other Wolfcamp owners from drilling any wells in the “sweet spot”⁸ Permian Resources identified within the Wolfcamp XY interval by instituting a “buffer zone” where no production would be permitted.⁹ As previously explained,¹⁰ the two owners who do not own in the Bone Spring would be barred from accessing their Upper Wolfcamp reserves and would receive production under a Bone Spring compulsory pooling order even though the “primary concentrations” of their Upper

⁶ *See* Permian Resources Exhibit C-8. Numerous other working interest owners are in a similar situation as First Century where they own a greater proportionate interest in the Wolfcamp than in the Bone Spring.

⁷ Impairment of correlative rights is not measured by economics, but by whether an owner has a just and equitable opportunity to produce their share of the reserves in a pool. *See* Permian Resources' Response to Cimarex's Legal Memorandum at 4-5.

⁸ FOF 54.

⁹ It should be noted that Cimarex has not provided any testimony or evidence establishing the technical basis for the buffer it proposes. The Division has no basis, therefore, to institute Cimarex's proposed buffer under Option 1.

¹⁰ *See* Permian Resources' Response to Cimarex's Legal Memorandum at 5.

Wolfcamp reserves would be produced by Cimarex's Bone Spring wells. This effort to prevent mineral owners in the Wolfcamp from accessing their Wolfcamp oil and gas reserves is a textbook impairment of correlative rights.

Wolfcamp owners also will lose access to their Upper Wolfcamp reserves that will be stranded under Cimarex's plan. Cimarex contends its Bone Spring wells will produce at most 26% percent of the Upper Wolfcamp reserves. The remainder of the Upper Wolfcamp reserves not produced by Cimarex's Bone Spring wells will be stranded due to parent-child depletion effects that substantially contributed to the poor performance of Apache's Black and Tan wells if Cimarex or another operator attempts to target the Upper Wolfcamp later. The parent-child effect makes it unlikely Cimarex or any operator would revisit targeting the Upper Wolfcamp later. Even if the Upper Wolfcamp is later developed, the reduced stimulated rock volume means subsequent wells in the Upper Wolfcamp will be ineffective and inefficient, leaving reserves stranded and causing in waste.

B. Cimarex's Option 2¹¹ Contravenes Statute and Regulations.

Cimarex contends that by considering the additional statutory phrase "to a common source of supply," the requirement of Section 70-2-17(C) to drill a well "on said unit" does not mean "in said unit" or "into said unit." However, including the additional phrase in the analysis does nothing to alter the meaning or intent of the statute. Cimarex's effort to re-construe the statute would effectively eliminate the distinction for what it means to drill a well on a spacing unit, lead to absurd results, and is contrary to the Division's longstanding interpretation.

First, and most apparently, many horizontal wells are drilled with surface locations "off unit" due to topographic issues, surface obstructions, or to maximize the lateral length of a

¹¹ Permian Resources incorporates and adopts its Response to Cimarex's Legal Memorandum, filed on August 3, 2023.

horizontal wellbore's completed interval within the targeted spacing unit. Such wells are nevertheless clearly "on said unit" for purposes of the statute because the completed interval of the horizontal wellbore penetrates and is completed within the three-dimensional space of the designated spacing unit. Under Cimarex's strained construction, for a well to be designated to a spacing unit it must be physically located on the geographic surface of the unit to qualify as being "on said unit." See Cimarex Reply at 5. That has never been the Division's interpretation of what is required and is unworkable.¹² For example, under Cimarex's interpretation, every horizontal well that is "off-unit" would require approval of a non-standard location for it to be dedicated to the intended spacing unit even though the completed portion of the interval is within the three-dimensional space of the intended spacing unit and its authorized setbacks. What determines whether a horizontal well is "on said unit" therefore is not a well's surface location but whether the completed portion of the wellbore is within the spacing unit.

This same analytical error applies to Cimarex's interpretation of 19.15.16.15.B(1)(a) NMAC. By construing "contiguous tracts" to mean surface tracts that are "projected down onto the Wolfcamp formation," and interpreting the phrase "completed interval penetrates" to mean a wellbore penetrates the Wolfcamp formation—even though it physically does not—Cimarex completely dismantles every distinction that constrains and limits well dedications. Under Cimarex's approach, an operator could project onto any formation the surface tracts to assert a proposed completed horizontal well interval should be dedicated to multiple Division-designated pools not separated by frac baffles even if the completed interval of the well does not actually physically penetrate one of the pools. That has never been the Division's approach and Cimarex is unable to provide a single example where its interpretation has been adopted by the Division.

¹² Consider, for example, that Division's compulsory pooling checklist is focused on the location and footages of the completed intervals of each horizontal wellbore within the designated spacing unit. Not the surface locations.

Stated plainly: A spacing unit is a three-dimensional space and a horizontal well's lateral must be completed within it for that well to be dedicated to it.

Second, Cimarex erroneously contends that under Section 70-2-17(C) a "common source of supply" can be something different and larger than a Division-designated "pool." *See* Cimarex's Reply at 5, Ex. 1. The Division, however, defines a "common source of supply" and "pool" to be synonymous. *See* 19.15.2.7.P(5) NMAC.¹³ Here, the Division has determined in its expertise that the Bone Spring and Wolfcamp formations are each separate pools or common sources of supply and has assigned each of them separate pool designations. This is not disputed. Cimarex's geologist agrees the Bone Spring and Wolfcamp are separate formations¹⁴ and Cimarex has taken no steps to reclassify them into a single pool or common source of supply.¹⁵ By definition, the "common source of supply" for the Bone Spring Pool and Wolfcamp Pool are separate and limited to the Bone Spring or Wolfcamp formations, respectively. In addition, spacing units are dedicated to Division-designated pools.¹⁶ That means a separate well or wells must be dedicated to each pool or common source of supply to create a valid spacing unit under the statute and Division rules. Cimarex's construction conflicts with the Division's definition and interpretation of what a common source of supply is and does not work under the statute.

Section 70-2-17(C) provides that wells are to be drilled to a common source of supply. Under the Division's construction, that means a well must be drilled to and completed within a Division-designated pool. There is no basis to assert under the statute or rules that a well can be designated to multiple pools when it is not physically located within one of the targeted pools, as Cimarex urges. It is certainly possible for the Division to approve simultaneous dedications to

¹³ "Pool" is synonymous with "common source of supply" and with "common reservoir."

¹⁴ August 9, 2023, Tr. 154:18-19.

¹⁵ August 9, 2023, Tr. 205:2-5.

¹⁶ See Form C-102 instructions which plainly state that each well is to be dedicated a to a pool.

multiple pools. *See* 19.15.12.11 NMAC. Simultaneous dedications are frequently approved in the San Juan Basin, but in every instance the subject well is completed and perforated within each of the targeted pools to which the well is dedicated. That is what the rule governing simultaneous dedications expressly contemplates. *See* 19.15.12.11.A(3) NMAC. That is not the circumstance here.

Third, Cimarex attempts to construe 19.15.16.7.G NMAC as allowing a single horizontal well lateral to produce from more than one formation, justifying its interpretation of the statutes and rules. *See* Cimarex Reply at 7-8. Cimarex relies solely on a portion of the “horizontal well” definition applicable to horizontal wells with multiple laterals but ignores the specific rule that governs multiple-lateral horizontal wells under 19.15.16.15.B(7) NMAC. That rule specifically provides the circumstances in which wells with multiple laterals are to be dedicated to the same or separate spacing units. *See* 19.15.16.15.B.7 NMAC. It expressly states that each lateral is to be dedicated to its own spacing unit, unless a single exception applies. Under no circumstance, however, does 19.15.16.7.G or 19.15.16.15.B.7 NMAC support an interpretation that a spacing unit can be created without an actual horizontal lateral completed within it. But taking the horizontal well definition as it applies to wells with multiple laterals out of context, Cimarex erroneously concludes that “[a] well bore that produces two different formations ‘shall be considered one well’” means “one well is able to produce two formations if the hydrocarbons from the formation enter into the common well bore[.]” Cimarex Reply at 8. As expressly provided under 19.15.16.15.B.7 NMAC, the only time a single well bore can produce from multiple formations or pools is if that well bore has multiple laterals completed in different formations, each lateral being dedicated to a separate spacing unit in which it is completed. *See*,

e.g., 19.15.16.15.B.7(a)¹⁷ NMAC; *see also* 19.15.16.15.E(2) NMAC. Cimarex counsel appears to understand this fundamental requirement when he pointed out to the Division Technical Examiner during the hearing that when there is an ownership difference within the same pool, “under permit [sic] interpretations of the statute and regulations, you account for a severance by—you know, if you want to produce below the severance, you have to do a separate well bore as I am sure you know.” Aug. 9, 2023, Tr. 212:13-17 (emphasis added). This comment reflects that Cimarex counsel agrees that when there is a depth severance in a pool, separate spacing units are required above and below the depth severance and a separate completed well bore is required to be drilled within the spacing unit below the depth severance to produce it, *i.e.*, each spacing unit requires its own completed well bore to be dedicated to it.

Finally, Cimarex applies the same faulty interpretation to the definition of an “infill horizontal well.” Under Cimarex’s approach, an infill horizontal well does not need to be drilled and completed in the same spacing unit as the initial well. As demonstrated above and in Permian Resources’ Response to Cimarex’s Legal Memorandum, this is plainly incorrect. The initial well or wells under a compulsory pooling order must be dedicated to the same spacing unit in which the completed lateral for the initial well is physically located. That means infill wells must also be completed in the spacing unit that the initial well or wells are completed in.

CONCLUSION

Cimarex’s applications and its proposed alternatives would permanently impair correlative rights of Wolfcamp owners and conflict with longstanding interpretation and application of the Oil and Gas Act and its regulations. The only way for the Division to fulfill its

¹⁷ “Multiple laterals in the same pool or formation and oriented such that the completed interval of each lateral is located entirely within the boundaries of a horizontal spacing unit for the longest lateral may be dedicated to the same horizontal spacing unit.” (emphasis added). This provision makes clear that completed laterals must be located entirely within the three-dimensional space of the designated spacing unit.

dual obligations to prevent waste and protect correlative rights is to approve Permian Resources' proposed co-development of both Division-designated Bone Spring and the Wolfcamp pools. Besides complying with the statutory and regulatory framework, this approach is also the most practicable to prevent waste and protect the correlative rights of all owners.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on August 3, 2023, I served a copy of the foregoing document to the following counsel of record via Electronic Mail:

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Exhibit A

**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. 23650
ORDER NO. R-22859**

ORDER

The Director of the New Mexico Oil Conservation Division (“OCD”), having heard this matter through a Hearing Examiner on August 17, 2023, and after considering the testimony, evidence, and recommendation of the Hearing Examiner, issues the following Order.

FINDINGS OF FACT

1. COG Operating, LLC (“Operator”) submitted an application (“Application”) to compulsory pool the uncommitted oil and gas interests within the spacing unit (“Unit”) described in Exhibit A. Operator seeks to be designated the operator of the Unit.
2. Operator will dedicate the well(s) described in Exhibit A (“Well(s)”) to the Unit.
3. Operator proposes the supervision and risk charges for the Well(s) described in Exhibit A.
4. Operator identified the owners of uncommitted interests in oil and gas minerals in the Unit and provided evidence that notice was given.
5. The Application was heard by the Hearing Examiner on the date specified above, during which Operator presented evidence through affidavits in support of the Application. No other party presented evidence at the hearing.

CONCLUSIONS OF LAW

6. OCD has jurisdiction to issue this Order pursuant to NMSA 1978, Section 70-2-17.
7. Operator is the owner of an oil and gas working interest within the Unit.
8. Operator satisfied the notice requirements for the Application and the hearing as required by 19.15.4.12 NMAC.
9. OCD satisfied the notice requirements for the hearing as required by 19.15.4.9 NMAC.
10. Operator has the right to drill the Well(s) to a common source of supply at the depth(s) and location(s) in the Unit described in Exhibit A.

11. The Unit contains separately owned uncommitted interests in oil and gas minerals.
12. Some of the owners of the uncommitted interests have not agreed to commit their interests to the Unit.
13. The pooling of uncommitted interests in the Unit will prevent waste and protect correlative rights, including the drilling of unnecessary wells.
14. This Order affords to the owner of an uncommitted interest the opportunity to produce his just and equitable share of the oil or gas in the pool.

ORDER

15. The uncommitted interests in the Unit are pooled as set forth in Exhibit A.
16. The Unit shall be dedicated to the Well(s) set forth in Exhibit A.
17. Operator is designated as operator of the Unit and the Well(s).
18. If the location of a well will be unorthodox under the spacing rules in effect at the time of completion, Operator shall obtain the OCD's approval for a non-standard location in accordance with 19.15.16.15(C) NMAC.
19. If the Unit is a non-standard horizontal spacing unit which has not been approved under this Order, Operator shall obtain the OCD's approval for a non-standard horizontal spacing unit in accordance with 19.15.16.15(B)(5) NMAC.
20. The Operator shall commence drilling the Well(s) within one year after the date of this Order, and complete each Well no later than one (1) year after the commencement of drilling the Well.
21. This Order shall terminate automatically if Operator fails to comply with Paragraph 20 unless Operator obtains an extension by amending this Order for good cause shown.
22. The infill well requirements in 19.15.13.9 NMAC through 19.15.13.12 NMAC shall be applicable.
23. Operator shall submit each owner of an uncommitted working interest in the pool ("Pooled Working Interest") an itemized schedule of estimated costs to drill, complete, and equip the well ("Estimated Well Costs").
24. No later than thirty (30) days after Operator submits the Estimated Well Costs, the owner of a Pooled Working Interest shall elect whether to pay its share of the Estimated Well Costs or its share of the actual costs to drill, complete and equip the well ("Actual Well Costs") out of production from the well. An owner of a Pooled

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Working Interest who elects to pay its share of the Estimated Well Costs shall render payment to Operator no later than thirty (30) days after the expiration of the election period, and shall be liable for operating costs, but not risk charges, for the well. An owner of a Pooled Working Interest who fails to pay its share of the Estimated Well Costs or who elects to pay its share of the Actual Well Costs out of production from the well shall be considered to be a "Non-Consenting Pooled Working Interest."

25. No later than one hundred eighty (180) days after Operator submits a Form C-105 for a well, Operator shall submit to each owner of a Pooled Working Interest an itemized schedule of the Actual Well Costs. The Actual Well Costs shall be considered to be the Reasonable Well Costs unless an owner of a Pooled Working Interest files a written objection no later than forty-five (45) days after receipt of the schedule. If an owner of a Pooled Working Interest files a timely written objection, OCD shall determine the Reasonable Well Costs after public notice and hearing.
26. No later than sixty (60) days after the expiration of the period to file a written objection to the Actual Well Costs or OCD's order determining the Reasonable Well Costs, whichever is later, each owner of a Pooled Working Interest who paid its share of the Estimated Well Costs shall pay to Operator its share of the Reasonable Well Costs that exceed the Estimated Well Costs, or Operator shall pay to each owner of a Pooled Working Interest who paid its share of the Estimated Well Costs its share of the Estimated Well Costs that exceed the Reasonable Well Costs.
27. The reasonable charges for supervision to drill and produce a well ("Supervision Charges") shall not exceed the rates specified in Exhibit A, provided however that the rates shall be adjusted annually pursuant to the COPAS form entitled "Accounting Procedure-Joint Operations."
28. No later than within ninety (90) days after Operator submits a Form C-105 for a well, Operator shall submit to each owner of a Pooled Working Interest an itemized schedule of the reasonable charges for operating and maintaining the well ("Operating Charges"), provided however that Operating Charges shall not include the Reasonable Well Costs or Supervision Charges. The Operating Charges shall be considered final unless an owner of a Pooled Working Interest files a written objection no later than forty-five (45) days after receipt of the schedule. If an owner of a Pooled Working Interest files a timely written objection, OCD shall determine the Operating Charges after public notice and hearing.
29. Operator may withhold the following costs and charges from the share of production due to each owner of a Pooled Working Interest who paid its share of the Estimated Well Costs: (a) the proportionate share of the Supervision Charges; and (b) the proportionate share of the Operating Charges.

30. Operator may withhold the following costs and charges from the share of production due to each owner of a Non-Consenting Pooled Working Interest: (a) the proportionate share of the Reasonable Well Costs; (b) the proportionate share of the Supervision and Operating Charges; and (c) the percentage of the Reasonable Well Costs specified as the charge for risk described in Exhibit A.
31. Operator shall distribute a proportionate share of the costs and charges withheld pursuant to paragraph 29 to each Pooled Working Interest that paid its share of the Estimated Well Costs.
32. Each year on the anniversary of this Order, and no later than ninety (90) days after each payout, Operator shall provide to each owner of a Non-Consenting Pooled Working Interest a schedule of the revenue attributable to a well and the Supervision and Operating Costs charged against that revenue.
33. Any cost or charge that is paid out of production shall be withheld only from the share due to an owner of a Pooled Working Interest. No cost or charge shall be withheld from the share due to an owner of a royalty interests. For the purpose of this Order, an unleased mineral interest shall consist of a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest.
34. Except as provided above, Operator shall hold the revenue attributable to a well that is not disbursed for any reason for the account of the person(s) entitled to the revenue as provided in the Oil and Gas Proceeds Payment Act, NMSA 1978, Sections 70-10-1 *et seq.*, and relinquish such revenue as provided in the Uniform Unclaimed Property Act, NMSA 1978, Sections 7-8A-1 *et seq.*
35. The Unit shall terminate if (a) the owners of all Pooled Working Interests reach a voluntary agreement; or (b) the well(s) drilled on the Unit are plugged and abandoned in accordance with the applicable rules. Operator shall inform OCD no later than thirty (30) days after such occurrence.
36. OCD retains jurisdiction of this matter for the entry of such orders as may be deemed necessary.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**



DYLAN M FUGE
DIRECTOR
DMF/hat

Date: 9/10/2023

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Exhibit A

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COMPULSORY POOLING APPLICATION CHECKLIST	
ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS	
Case: 23650	APPLICANT'S RESPONSE
Hearing Date	August 3, 2023
Applicant	COG Operating LLC
Designated Operator & OGRID (affiliation if applicable)	COG Operating LLC (OGRID 229137)
Applicant's Counsel:	Holland & Hart LLP
Case Title:	APPLICATION OF COG OPERATING LLC FOR COMPULSORY POOLING AND APPROVAL OF AN OVERLAPPING SPACING UNIT, EDDY COUNTY, NEW MEXICO.
Entries of Appearance/Intervenors:	Mewbourne Oil Company
Well Family	TLC 30 Fed Com wells
Formation/Pool	
Formation Name(s) or Vertical Extent:	Wolfcamp formation
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	N/A
Pool Name and Pool Code:	Purple Sage Wolfcamp (Gas) (98220)
Well Location Setback Rules:	330 feet under Order R-14262 (Special Rules)
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	947 acres, more or less
Building Blocks:	Quarter sections
Orientation:	South-North
Description: TRS/County	S2 equivalent of irregular Section 30 and all of irregular Section 31, Township 23 South, Range 27 East, NMPM, Eddy County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested in this application?	Yes
Other Situations	
Depth Severance: Y/N. If yes, description	No
Proximity Tracts: If yes, description	SE4 of Section 30 and E2 of Section 31
Proximity Defining Well: if yes, description	TLC 30 Fed Com 702H
Applicant's Ownership in Each Tract	Exhibit A-2
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	
Well #1	TLC 30 Fed Com 701H (API Pending) SHL: 260' FSL, 1140' FEL (Unit P), Sec. 31, 23S, 27E BHL: 2360' FSL, 1105' FEL (Unit I) Sec. 30, 23S, 27E Wolfcamp formation South-North Completions are expected to be standard

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Well #2	TLC 30 Fed Com 801H (API Pending) SHL: 260' FSL, 1110' FEL (Unit P), Sec. 31, 23S, 27E BHL: 2360' FSL, 330' FEL (Unit I) Sec. 30, 23S, 27E Wolfcamp formation South-North Completions are expected to be standard
Well #3	TLC 30 Fed Com 802H (API Pending) SHL: 260' FSL, 1170' FEL (Unit P), Sec. 31, 23S, 27E BHL: 2360' FSL, 1880' FEL (Unit J) Sec. 30, 23S, 27E Wolfcamp formation South-North Completions are expected to be standard
Well #4	TLC 30 Fed Com 702H (API Pending) SHL: 240' FSL, 1535' FWL (Unit N), Sec. 31, 23S, 27E BHL: 2360' FSL, 2660' FWL (Unit K), Sec. 30, 23S, 27E Wolfcamp formation South-North Completions are expected to be standard
Well #5	TLC 30 Fed Com 803H (API Pending) SHL: 240' FSL, 1505' FWL (Unit N), Sec. 31, 23S, 27E BHL: 2360' FSL, 1880' FWL (Unit K), Sec. 30, 23S, 27E Wolfcamp formation South-North Completions are expected to be standard
Well #6	TLC 30 Fed Com 703H (API Pending) SHL: 240' FSL, 1475' FWL (Unit N), Sec. 31, 23S, 27E BHL: 2360' FSL, 1105' FWL (Lot 3), Sec. 30, 23S, 27E Wolfcamp formation South-North Completions are expected to be standard
Well #7	TLC 30 Fed Com 804H (API Pending) SHL: 240' FSL, 1445' FWL (Unit N), Sec. 31, 23S, 27E BHL: 2360' FSL, 330' FWL (Lot 3), Sec. 30, 23S, 27E Wolfcamp formation South-North Completions are expected to be standard
Horizontal Well First and Last Take Points	Exhibit A-1
Completion Target (Formation, TVD and MD)	Exhibit A-3
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8,000
Production Supervision/Month \$	\$800
Justification for Supervision Costs	Exhibit A
Requested Risk Charge	200%
Notice of Hearing	
Proposed Notice of Hearing	See filed Application
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit C
Proof of Published Notice of Hearing (10 days before hearing)	N/A
Ownership Determination	
Land Ownership Schematic of the Spacing Unit	Exhibit A-2

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Tract List (including lease numbers and owners)	Exhibit A-2
If approval of Non-Standard Spacing Unit is requested, Tract List (including lease numbers and owners) of Tracts subject to notice requirements.	N/A
Pooled Parties (including ownership type)	Exhibit A-2
Unlocatable Parties to be Pooled	N/A
Ownership Depth Severance (including percentage above & below)	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit A-3
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4
Overhead Rates In Proposal Letter	Exhibit A-3
Cost Estimate to Drill and Complete	Exhibit A-3
Cost Estimate to Equip Well	Exhibit A-3
Cost Estimate for Production Facilities	Exhibit A-3
Geology	
Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit B-1
Gunbarrel/Lateral Trajectory Schematic	Exhibit B-1
Well Orientation (with rationale)	Exhibit B
Target Formation	Exhibit B-4
HSU Cross Section	Exhibit B-4
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Exhibit A-1
Tracts	Exhibit A-2
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2
General Location Map (including basin)	Exhibit B-1
Well Bore Location Map	Exhibit B-1
Structure Contour Map - Subsea Depth	Exhibit B-2
Cross Section Location Map (including wells)	Exhibit B-3
Cross Section (including Landing Zone)	Exhibit B-4
Additional Information	
Special Provisions/Stipulations	N/A
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Michael H. Feldewet
Signed Name (Attorney or Party Representative):	
Date:	27-Jul-23

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