

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

**APPLICATION OF CIMAREX ENERGY CO. FOR THE CREATION  
OF A SPECIAL POOL, A WOLFBONE POOL, PURSUANT TO  
ORDER NO. R-23089 AND TO REOPEN CASE NOS. 23448 – 23455,  
23594 – 23601, AND 23508 – 23523, LEA COUNTY, NEW MEXICO**

Case No. \_\_\_\_\_

**APPLICATION FOR A SPECIAL POOL**

Cimarex Energy Co. (“Cimarex”), OGRID No. 215099, through its undersigned attorneys, hereby files this Application with the Oil Conservation Division (“Division” or “OCD”) pursuant to the guidance of Order No. R-23089, NMSA 1978 § 70-2-17 (regarding the pooling applications referenced herein), and 19.15.4.8 NMAC seeking an order for the creation of a special Wolfbone Pool, an oil pool, to be designated as the “Quail Ridge; Wolfbone Pool.” Upon creation of the Wolfbone Pool, the proposed wells, units, and pooled minerals interests would be developed within the Wolfbone Pool whose vertical extent encompasses both the Third Bone Spring and Upper Wolfcamp formations as referenced in Cimarex’s Pooling Applications. The purpose of this Application is to reopen the above-referenced cases (“Subject Cases”) as provided for by OCD Order No. R-23089. Cimarex requests that the Division designate Cimarex as the operator of the wells and units described in the Pooling Applications it filed in Case Nos. 23448-23455 and 23594-23601.

In support of its Application for a Wolfbone Pool, Cimarex states the following:

1. The proposed Wolfbone Pool would comprise approximately 2,562.40 federal acres, more or less, in Lea County New Mexico, under lease with the Bureau of Land Management

pursuant to leases NMLC 0064194, NMNM 101115, and NMLC 0065607. The acreage covers lands (“Subject Lands”) as follows:

Township 20 South, Range 34 East, N.M.P.M.

Section 4: All  
 Section 5: All  
 Section 8: All  
 Section 9: All

2. Cimarex is both a working interest owner and controls working interest in the Subject Lands encompassing the proposed Wolfbone Pool. Under the Oil and Gas Act (“Act”), a pool is defined as “an underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure, which zone is completely separate from any other zone in the structure, is covered by the word “pool” as used in the Oil and Gas Act. “Pool” is synonymous with “common source of supply” and with “common reservoir.” NMSA 1978 § 70-2-33B.

3. On or about March 7, 2023, Cimarex filed applications in Cases Nos. 23448-23455 to develop the Bone Spring formation in the Subject Lands. Based on its specialized knowledge acquired through fourteen years of development in the general vicinity of the Subject Lands and its expertise as reflected in the fact that it is ranked as one of the top two operators in this area of Lea County,<sup>1</sup> Cimarex correctly identified the predominate target zone for optimal production as being the Third Bone Spring. *See* Exhibit B, ¶¶ 29-30, Cimarex’s Hearing Packet I. Submission of its pooling applications for the Bone Spring formation was consistent with the history and practice of development in this particular area of Lea County. *See* Exhibit D-3, Cimarex’s Hearing Packet I (showing the overwhelming predominance of Third Bone Spring development in the area). Thus,

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<sup>1</sup> *See* Self-affirmed Statement of Staci Mueller, Exhibit B at ¶ 5, p. 2, Cimarex’s Hearing Packet I; *see also* Cimarex’s Closing Statement with Findings of Fact and Conclusions of Law (“Closing Statement”) at ¶¶ 6-8, pp. 3-4; Exhibits D-1 & D-2, Cimarex’s Hearing Packet I.

when Cimarex requested from the Division the pool name and code, it accepted the Division's name and code for the Bone Spring, which Cimarex viewed as being consistent with the pattern of Third Bone development in this area.

4. Because Cimarex determined that the reservoir was located predominately in the Third Bone Spring, *see* Exhibit B, ¶¶ 29-30, Cimarex's Hearing Packet I, its Bone Springs applications proposed drilling four wells (the Mighty Pheasant wells) into the Third Bone Spring formation of Sections 5 and 8 and drilling four wells (the Loosey Goosey wells) into the Third Bone Spring formation of Sections 4 and 9.

5. On or about April 13, 2023, after Cimarex filed its Pooling Applications for the Bone Spring, Read & Stevens, Inc., in conjunction with its operator, Permian Resources Operating, LLC (collectively "Read & Stevens"), submitted competing pooling applications for the Subject Lands in Case Nos. 23508-23523 that proposed to locate wellbores (the Bane and Joker wells) in both the Third Bone Spring and the Upper Wolfcamp XY, which lies just below the base of the Third Bone Spring. *See e.g.*, Exhibits B, pp. 9-11, ¶¶ 24-29 and Exhibit B-23, Cimarex's Hearing Packet I. Drilling both the Third Bone Spring Sands and the Upper Wolfcamp is historically a rare and, in Cimarex's view, impractical approach to developing units in this area of Lea County. *See, e.g.*, Exhibit D-3, Cimarex's Hearing Packet I.

6. Contrary to Read & Stevens' proposed development, almost all operators with experience in this general area develop the Bone Spring because the most productive reservoir for this area is located predominately in the Third Bone Spring, which is consistent with the OCD's findings for the Subject Lands. *Id.*; *see also* Order No. R-23089, ¶ 6, a copy of which is attached hereto as Exhibit 1 (OCD's finding that the Subject Lands lack natural barriers that would prevent communication between the Third Bone Spring Sand and Upper Wolfcamp, thereby creating "a

single reservoir or common source of supply *located predominantly in the Third Bone Spring Sand*") (emphasis added).

7. Read & Stevens' plan is predicated on there being two distinct reservoirs – one located in the Third Bone Spring and one located in the Wolfcamp XY. As a result of this erroneous premise, Read & Stevens plans to drill an additional 8 wells in the Upper Wolfcamp. *See* Read & Stevens' Closing Argument at p. 3. (And for some reason, Read & Stevens also plans to drill 16 wells in the Third Bone Spring, twice as many as proposed by Cimarex.) As established by the Division's findings in Order No. R-23089, there is only one reservoir and it is located predominately in the Third Bone Spring. Thus, Read & Stevens imprudently drilling eight additional Upper Wolfcamp wells, along with its additional eight Bone Spring wells, to produce from the same single reservoir forms the centerpiece of its plan that as a whole results in a staggering and entirely unnecessary additional cost of approximately a quarter of a Billion Dollars compared to Cimarex's plan. *See* Cimarex's Closing Statement at pp. 19 and 33-35.

8. Because in its pooling applications, Read & Stevens proposed to drill a set of additional wells into the Wolfcamp XY, Cimarex, having already filed applications to pool the Third Bone Spring, submitted additional pooling applications to account for the pooling of, and any production from the Upper Wolfcamp. Those additional applications were informed by Cimarex's determination that the Third Bone Spring and Upper Wolfcamp formations constituted a single reservoir predominately located in the Third Bone Spring. Cimarex concluded that this single reservoir would be properly and efficiently developed with its set of eight Third Bone Spring wells and that drilling additional wells into the Upper Wolfcamp was both unnecessary and wasteful. Therefore, to prevent waste and the drilling of unnecessary wells in the Upper Wolfcamp, Cimarex pursued the novel approach in its Option II, wherein it dedicated its Third Bone Spring

wells to both the Bone Spring pool and the Wolfcamp pool, the two pools that had been assigned to the reservoir at the time of the original hearings. *See* Pooling Applications in Case Nos. 23594-23601, Cimarex's Hearing Packet IV Option II.

9. Understanding that its approach was novel but nonetheless necessary both due to the relatively unique geology and in order to avoid the Act's prohibition against waste and the drilling unnecessary wells (*see, e.g.* NMSA 1978 §§ 70-2-6, -11, and 70-2-17), Cimarex requested the Division to schedule a pre-hearing conference to address questions regarding the nature of the reservoir. Read & Stevens opposed having a pre-hearing conference to discuss the implications of the unique geology, and the Division denied the request. *See* Cimarex's Motion to Continue Hearing, ¶¶ 5-6, filed July 18, 2023 (Cimarex requesting a Pre-hearing Conference pursuant to 19.15.4.16B NMAC in order to address a number of unresolved questions regarding lack of baffles and open communication between the Third Bone Spring and Upper Wolfcamp to determine whether the designation of two pools needed to be reconsidered); *see also* Read & Stevens' Response in Opposition to Motion to Continue, at pp. 1, 5 (Read & Stevens vigorously opposing a continuance for a pre-hearing conference arguing there is no novel issue in the cases because the geology and engineering in this acreage are neither complex nor unique); Cimarex's Closing Statement, p. 42 (in addition to providing the Division its Options I and II for navigating the unique geological anomaly it identified in the Subject Lands, Cimarex also offered that the Division could "combine the Third Bone Spring formation with the Upper Wolfcamp formation to create a single pool that covers and accounts for the single common source of and implement Cimarex's development plan pursuant to such adjustment," which is the proposal currently under consideration).

10. Pursuant to the Division's findings in Order No. 23089, this Application for a Wolfbone Pool is submitted to create the special Wolfbone Pool that will allow for the proper development of the Third Bone Spring formation, pursuant Cimarex's Pooling Applications in Case Nos. 23448-23455, and for the proper development of the Upper Wolfcamp formation, pursuant to Cimarex's Pooling Applications in Case Nos. 23594-23601, as revised and reformed by the creation of a new Wolfbone Pool. Because the Wolfbone Pool, once created, will encompass the single reservoir located predominately in the Third Bone Spring but extending a certain limited degree into the Upper Wolfcamp, thereby accounting for both formations, the Division should be able to proceed with its review of Cimarex's Pooling Applications in a manner that will lead to a decision for operatorship of the proposed wells and units in the Subject Lands. Notice requirements completed for this Application for a Wolfbone Pool, pursuant to 19.15.4.9, in particular 19.15.4.9A(7), combined with the prior notice of the Pooling Applications provided to the public by the Division and to the interest owners by Cimarex should satisfy notice, allowing the Division to move forward with the proceedings and a final decision. This Application for a Wolfbone Pool competes with Read & Stevens Application in Case No. 24528.

11. Notice of this Application for a Wolfbone Pool will be provided to all owners of a working interest within the Subject Lands, and all operators, or working interest owners who own in tracts that do not have a designated operator, within one mile of the Subject Lands.

12. Cimarex proposes a vertical extent of the Quail Ridge; Wolfbone Pool that conforms with 19.15.12.9 NMAC, to insure pool segregation from adjacent pools, reservoirs, and common sources of supply. Thus, Cimarex proposes the upper limit of the Wolfbone Pool to be the stratigraphic equivalent of the top of the Third Bone Spring, located at approximately 10,620 feet measured depth, to the stratigraphic equivalent of the base of the Wolfcamp A shale, located

at approximately 11,225 feet measured depth, as found in triple combo well log of the Quail Ridge 32 State 2 well (API No. 30-025-37703). *See* Exhibit 5 attached hereto, outlining the vertical extend of the proposed Wolfbone Pool.

13. Cimarex requests that the Division accomplish the creation of the proposed Wolfbone Pool by including provisions in the Division's order for the vertical contraction of two pools, the Teas; Bone Spring, East Pool (Code 96637) and the Tonto; Wolfcamp Pool (Code 59500) in a manner that avoids overlap with the proposed Quail Ridge; Wolfbone Pool. The base of the Teas; Bone Spring, East Pool (Code 96637) is to be contracted to 10,620 feet, a depth equivalent to the top of the Third Bone Spring, and the top of the Tonto; Wolfcamp Pool (Code 59500) is to be contracted to 11,225 feet, the depth of the base of the Wolfcamp A Shale, as found in said triple combo well log of the Quail Ridge 32 State 2 well (API No. 30-025-37703). The creation of the Quail Ridge; Wolfbone Pool through the contraction of the Teas and Tonto pools is limited to the Subject has described, *supra*, in Paragraph 1. Cimarex requests that the Division's statewide rules apply to the Wolfbone Pool.

14. The name of the special pool, the Quail Ridge; Wolfbone Pool, is proposed pursuant to Division nomenclature and guidance from the Division officer charged with managing the classification and taxonomy of oil and gas pools, to ensure that the name accurately designates the geographical area. *See* Exhibit 2 attached hereto, reflecting email correspondence with Paul Kautz in OCD's Hobbs Field Office. Only official names sanctioned by the Division that account for the geographical location of the Subject Lands should be approved. Cimarex also submits that the name selection should be considered in coordination with nearby units under review for a special Wolfbone Pool. *See, e.g.*, Order No. R-23132, attached hereto as Exhibit 3 (Division order issued

in Case Nos. 23853 and 23295 to address the need for a Wolfbone Pool in Sections 12 and 13, Township 19 South, Range 34 East, just south of the Subject Lands).

15. The vertical extent of the proposed Wolfbone Pool does incorporate an ownership depth severance, that is located at the boundary line between the top of the Wolfcamp formation and the base of the Bone Spring formation, as acknowledged by both Cimarex and Read & Stevens. *See* Cimarex's Closing Statement, p. 26 (noting differences in ownership); Read & Stevens' Closing Arguments, p. 19 (noting the depth severance). More specifically, the depth severance is found at the division between the top of the Wolfcamp XY/base of the Third Bone Spring Sands, at a depth the stratigraphic equivalent of 10,875 feet TVD, as found in said triple combo well log of the Quail Ridge 32 State 2 well (API No. 30-025-37703). The severance results from a small number of minor differences in ownership between the Third Bone Spring and the Upper Wolfcamp among a limited number of owners. Only two owners, Warren and CLM, own a small interest in only one formation but not the other. Warren owns a small 1.6 net acres in the Wolfcamp with no ownership in the Bone Spring while CLM also owns a small 1.6 acres in the Wolfcamp with no ownership in the Bone Spring. All the other 29 owners own in both the Bone Spring and Wolfcamp, with only eight (Read & Stevens, MRC Permian, Northern Oil & Gas, First Century, CBR Oil, Marks Oil, Wilbanks, and HOG Partnership LP) of the of the 29 owners having differences in ownership between the Bone Spring and Wolfcamp.

16. Read & Stevens claims that Cimarex's plan threatens the correlative rights of these ten owners, especially Warren and CLM. *See, e.g.* Read & Stevens' Response in Opposition to Motion to Continue, p. 2. However, Correlative Rights are defined under the Act as "the opportunity afforded, so far as is practicable to do so, to the owner of each property in a pool to produce without waste the owner's just and equitable share of the oil or gas or both in the pool,



being an amount so far as can be practicably determined and so far as can be practicably obtained without waste, substantially in the proportion that the quantity of oil or gas or both under the property bears to the total recoverable oil or gas or both in the pool and, for such purpose, to use the owner's just and equitable share of the reservoir energy." NMSA 1978 § 70-2-33H. Thus, a correlative right is not an absolute right to produce a set amount of acreage but is a qualified right that guarantees only "*the opportunity*" to produce the owner's share, and this opportunity is further qualified by being an opportunity afforded only "*so far as practicable to do so*" and only if it is a "*just and equitable share of oil or gas*" and only to the extent the share can be "*practicably obtained without waste.*" (emphasis added).

17. Prior to the hearings, Cimarex afforded Warren and CLM an opportunity to produce without waste their just and equitable share of oil by offering a number of options, such as blending their Wolfcamp interest with the Bone Spring interest and even offering to give them net acres in the Bone Spring to match and compensate their small Wolfcamp interest, thus providing them ample "opportunity" to produce a just and equitable share. *See* Tr. (DD 8-9-2023) 38: 11-25. But these owners are currently allied with Read & Stevens and refused both options on the basis of Read & Stevens' position that they had an absolute right to have their small share produced regardless of any excessive costs, the drilling of unnecessary wells, and other impracticalities, presumably believing their stance might tip the scales in favor of Read & Stevens' plan. *See id.* As a result, Read & Stevens seeks to drill an additional eight unnecessary Upper Wolfcamp wells, that contribute no measurable significant amount to the EUR at substantial cost and burden to the other working interest owners.

18. Unsurprisingly, Read & Stevens claims that by not allowing Warren and CLM an absolute right to produce their small Wolfcamp interest, Cimarex is committing a textbook

violation of their correlative rights. *See* Read & Stevens' Closing Argument at p. 14. However, the leading commentators disagree with Read & Stevens' claim. According to Kramer and Martin, "The doctrine of correlative rights is not a rule that a court or party can express in a flat and unyielding statement. Rather, the concept of correlative rights is in the nature of a guide or precept that is to be applied to particular facts." *See* Bruce M. Kramer & Patrick H. Martin, *The Law of Pooling and Unitization*, § 5.01(4) at 24 (LexisNexis Matthew Bender 3d ed. 2022). "Some courts occasionally will state that protection of correlative rights is secondary to the prevention of waste, ... The more correct and certainly preferable view is that protection of correlative rights, properly understood, is equal in weight, dignity, and importance to the prevention of waste in agency regulation." Kramer & Martin, *supra* § 5.01(1) at 3, 4. Said another way, "Prevention of waste and protection of correlative rights are more properly understood as complementary, not competing, functions of the state conservation agency." *Id.* at 5. Under this textbook analysis, the exercise of any correlative right, especially for a very minor amount of acreage must be balanced against the massive cost of eight unnecessary Upper Wolfcamp wells, as proposed by Read & Stevens, burdening the working interest owners, and undermining their correlative right to produce their "just and equitable share of oil and gas" without "unnecessary expense." *See* § 70-2-33H; *see also* § 70-2-17C (all pooling orders shall be upon such terms and conditions as will afford the owners "the opportunity to recover or receive without unnecessary expense" their just and fair share of the oil or gas).

19. Although considerations of balance are necessary for the proper exercise and protection of correlative rights, the allocation formula proposed by Cimarex provides the owners a more accurate allocation of interest than Read & Stevens' method of over drilling the reservoir with its wells above and below the severance. Cimarex's formula for allocating ownership, based

on PhiH porosity, accurately accounts for the depth severance, providing all owners in the Wolfbone Pool with their just and equitable shares of oil, including Warren and CLM. *See* Cimarex's Closing Statement at p. 29. Cimarex's allocation formula provides the small number of working interest owners, who own different amounts in the Bone Spring and Wolfcamp or no interest in one or the other, their just and equitable share of production in a manner that satisfies the requirements of the pooling statute, which for "determining the portions of production owned by persons owning interest in the pooled oil and gas," requires that production "be allocated to the respective tracts within the unit in the proportion that the number of surface acres included within each tract bears to the number of surface acres included in the entire unit." § 70-2-17C, but which also requires that the rules and regulations of the Division "afford to the owner of each property in a pool the opportunity to produce his just and equitable share of the oil or gas, or both, in the pool, being an amount, so far as can be practically determined." § 70-2-17A.

20. Under its proposed allocation formula, Cimarex uses PhiH porosity to determine and allocate the percentages of production that would come from the Third Bone Spring formation in the Wolfbone Pool, determined to be 72.8%, and production from the Wolfcamp XY formation, determined to be 27.2% of production. *See* Exhibit B at p. 6, ¶ 15, Cimarex's Hearing Packet I; *see also* Exhibit B-10, Cimarex's Hearing Packet I. Read & Stevens itself stands by the accuracy of PhiH analysis for determining the percentage of contribution of each formation in the Wolfbone Pool to the overall production, having asked the Division to adopt as a finding that "[u]sing porosity height (Phi\*H) is a valid basis to predict reserves in production because it represents the total storage of pore space that can be accessed by a well." Read & Stevens' Proposed Findings and Conclusions at p. 8, ¶ 38.

21. Accordingly, Cimarex would apply its PhiH-based allocation formula to the ownership depth severance in the proposed Wolfbone Pool, a depth severance that separates the interval in the Wolfbone Pool containing the Bone Spring formation (“Bone Spring Interval”) from the interval in the Wolfbone containing the Upper Wolfcamp formation (“Wolfcamp Interval”). The ownership of the entire Bone Spring Interval is uniform, and the ownership of the Wolfcamp Interval is also uniform, because each owner in each Interval owns a uniform acre tract in that Interval so that production for the Interval can be allocated in the proportion that the surface acres of said tract bear to the surface acres of the entire unit, thus conforming to the pooling statute. *See* § 70-2-17C.

22. The following is an example of how the allocation formula will work. HOG Partnership owns a different number of net acres in the Bone Spring Interval (142.30 acres of the total 2562.40 acres of the Subject Lands) than in the Wolfcamp Interval (166.30 acres of the total 2562.40 acres), *see* Read & Stevens’ Exhibit I. Under Cimarex’s allocation formula, HOG Partnership would receive  $142.30/2562.40$  (or 5.55%) of production from the Bone Spring Interval and would be allocated  $166.30/2562.40$  (or 6.49%) of production from the Wolfcamp Interval. Since the Bone Spring Interval accounts for 72.8% of total production from the Wolfbone Pool, while the Wolfcamp Interval accounts 27.2% of total production, HOG’s just and equitable share of the oil produced from the Wolfbone Pool based on its Bone Spring working interest would be 5.55% of 72.8% of Wolfbone production, which equals 4.04%. HOG’s just and equitable share of oil produced from the Wolfbone Pool based on its Wolfcamp working interest would be 6.49% of 27.2% of the Wolfbone production, which equals 1.77%. Thus, HOG would receive a total of 5.80% of total production from the Wolfbone based on Cimarex’s allocation formula that conforms to the pooling statute. Thus, Warren and CLM, both of which own only in the Wolfcamp

formation, would receive their just and equitable share of production from the Wolfbone Pool pursuant to statutory requirements based on actual amounts produced from each formation “so far as can be practically determined.” § 70-2-17A.

23. In comparison, Read & Stevens attempts to account for the ownership depth severance by drilling 8 wells in the Third Bone Spring formation above the severance and drilling at tremendous cost and unnecessary expense 8 additional wells below the depth severance in the Wolfcamp XY formation. *See* Read & Stevens’ Closing Argument at p. 3. This is the plan Read & Stevens proposed in its pooling applications and at the hearings claiming the additional Upper Wolfcamp wells were needed to produce the two pools and to account for the depth severance, *see id.*, and this is the same plan Read & Stevens proposes in its Application for a special pool filed in Case No. 24528, a plan originally designed for two pools that Read & Stevens is now attempting to use for the development of a single pool, the Wolfbone, and its single reservoir.

24. Under its plan, as is the case for any plan designed for two pools, Read & Stevens would allocate all (100%) of the production captured and produced by its Third Bone Spring wells to the Bone Spring owners in an effort to maintain the uniformity of ownership in the Third Bone Spring Interval, and likewise, allocate all (100%) of the production captured and produced by its Upper Wolfcamp wells to the Wolfcamp owners, in an effort maintain the uniformity of Upper Wolfcamp ownership. However, after the Division confirmed, based on the evidence that Cimarex presented at the hearing, that the Third Bone Spring and Upper Wolfcamp together did in fact constitute a single reservoir located predominately in the Third Bone Spring, serious problems with Read & Stevens’ plan become readily apparent.

25. First, a single reservoir, such as the Wolfbone Pool, with open communication throughout its three-dimensional space does not need to be drilled with two sets of wells in order

to have it produced; the single reservoir should only be drilled and produced with one set of wells located in the sweet spot of the reservoir. Based on the Division's findings that the lack of natural barriers between the Third Bone Spring and Upper Wolfcamp creates "a single reservoir or common source of supply located predominately in the Third Bone Spring Sand," the sweet spot for producing the reservoir resides, by definition, in the Third Bone Spring, the exact location targeted by Cimarex's drilling plan from the beginning. *See* Order R-23089 at ¶ 6; *see also* Exhibit B, p. 11, ¶ 29-20, Cimarex's Hearing Packet I (geologist stating Cimarex's proposed Third Bone Spring Sand single landing is the optimal proposal based on the geology of the target area). In the face of the Division's finding that most of the hydrocarbons are located in the Third Bone Spring Interval, Read & Stevens' claims the sweet spot is in the Wolfcamp XY in its attempt to justify drilling an extremely costly set of additional Upper Wolfcamp wells. *See* Read & Stevens' Proposed Findings and Conclusions," pp. 10-11, at ¶¶ 49-54. The Division's findings directly refute this claim.

26. Second, the finding that the Third Bone Spring and Upper Wolfcamp constitute a single reservoir has other consequences for a plan that is designed for two distinct pools. Read & Stevens was aware that its wells would result in the intermixing of production from both formations, acknowledging that its Wolfcamp wells would produce from the Third Bone Spring and its Bone Spring wells would produce from the Upper Wolfcamp. *See* Order No. R-23089, ¶¶ 8-9. This situation raises questions, as the Division rightly pointed out, regarding the ability to conform to the requirements of 19.15.12.9A NMAC, which states that "an operator shall produce each pool as a single common source of supply...and operate wells in the pool so as to prevent communication within the wellbore with other pools," such that, "an operator shall at all times segregate oil or gas produced from each pool." *See id.* at ¶ 17.

27. In its Closing Argument, Read & Stevens argued it did not matter that its Bone Spring wells produced from the Wolfcamp, and vice versa, because each set of wells was drilled and completed in a separate “Division-designated pool,” and therefore, 19.15.12 NMAC did not apply. *See* Read & Stevens’ Closing Argument, p. 12. Such an argument implies additional language in the Rule that changes the plain meaning of 19.15.12.9A NMAC from “[a]n operator shall produce each pool as a single common source of supply” to “[a]n operator shall produce each pool as [if it were from] a single common source of supply [even though the well produces from more than one common source of supply].” In the end, the Division rejected this argument by concluding that the record evidence establishes that if there were two distinct pools then either Read & Stevens’ proposal would result in the illegal allocation or Cimarex’s proposal would lead to the impairment of correlative right because both requests extend outside of a standard compulsory pooling request *See* R-23089, ¶ 19. Thus, a wellbore must, at least to the extent practicable, produce a single common source of supply so as to prevent communication in the wellbore with other pools.

28. After the Wolfbone Pool is created, it will become the single common source of supply to be produced pursuant to 19.15.12.9A NMAC and wellbores drilled into the Wolfbone Pool will satisfy Rule 19.15.12.9A by virtue of it being a single pool. The only question remaining is how many wells are necessary to efficiently produce the Wolfbone Pool and how many wells would be considered unnecessary. Cimarex submits that only 8 wells drilled into the Third Bone Spring where the single reservoir is predominately located is the right number of wells to properly produce the Wolfbone pool, and that doubling that well count, as Read & Stevens does with its 8 additional wells in the Wolfcamp XY, results in the expenditure of significant extra costs to drill unnecessary wells that overly burden working interest owners. *See* § 70-2-17C (a pooling order

shall be on the terms and conditions that afford each owner the opportunity to receive *without unnecessary expense* its just and fair share of oil or gas) (emphasis added).

29. With the reclassification of the two prior pools, Third Bone Spring and Upper Wolfcamp, into a single pool, the Wolfbone, Cimarex's plan emerges as the best plan because it was originally designed and tailored to the actual geology to produce a single common source of supply which will be encompassed by the new Wolfbone Pool. On the other hand, Read & Stevens plan, designed to produce from two pools based on the wrongly assumed premise that the two pools represent two reservoirs, becomes obsolete under the reclassification. The only adjustment Cimarex needs to make is the withdrawal of its Motion for an Order to Prohibit the Drilling of Wells in the Upper Wolfcamp to Protect Correlative Rights and Optimize Production of the Subject Lands, filed July 13, 2023, pursuant to its Option I, which represented Cimarex's good faith effort to protect the single reservoir from over-drilling based on the misguided assumption that two pools are involved. Since the Division has found that a single special pool should be created for the single reservoir, Cimarex can safely withdrawal this Motion and respectfully requests the Division to accept its withdrawal.

30. The only remaining basis upon which Read & Stevens might attempt to justify its additional 8 Wolfcamp wells is to account for the ownership depth severance within the Wolfbone Pool. But in order to account for the differing ownership, Read & Stevens proposes to drill into the Third Bone Spring 8 wells located above the depth severance and drill into the Upper Wolfcamp an additional 8 wells located below the depth severance. *See* Read & Stevens' Closing Statement p. 3. Drilling above and below a depth severance in a pool is one approach the Division allows in order to address the challenges of accounting for non-uniform ownership. Under this method, the practice is to allocate all (100%) of the production from the Upper Wolfcamp wells to



the Wolfcamp owners and to allocate all (100%) of production from the Third Bone Spring wells to the Bone Spring Owners under the assumption that the Wolfcamp wells would predominately produce the reserves below the severance and the Bone Spring wells would predominately produce the reserves above the severance. This is not a precise method for allocating production, but it can be a “practicable” approach under certain circumstances as an effort to protect correlative rights. *See* 70-2-33 (stating correlative rights are to be exercised “to the extent practicable”). However, compared to Cimarex’s method based on PhiH, described *supra*, Read & Stevens’ drilling additional wells is crude and imprecise as it cannot accurately provide owners the actual amounts of production coming from the Third Bone Spring formation above the severance or from the Wolfcamp formation below the severance.

31. For example, Read & Stevens argues that Warren owns 1.60 net acres in the Wolfcamp formation and none in the Bone Spring, and therefore, Warren has an absolute right to receive this exact amount of production specifically from the Wolfcamp based on ownership of its net acreage in the Wolfcamp. Pursuant to this argument, Read & Stevens proposes to drill the additional eight Wolfcamp wells claiming that the wells are necessary to account for Warren only owning in the Wolfcamp. However, based on the actual geology of the Wolfbone, because there are no baffles between the Upper Wolfcamp and Third Bone Spring, Read & Stevens’ Wolfcamp wells will produce from both the Wolfcamp and Bone Spring formations, a fact that has been established. *See* Order No. 23089, ¶ 6. Furthermore, Read & Stevens has no means of measuring how much oil produced by its Wolfcamp wells would come from the Third Bone Spring, in which the reservoir is predominately located, and how much would come from the Upper Wolfcamp. As such, the evidence shows that the majority of the actual production Read & Stevens allocates to Warren, for example, would come from the Bone Spring, in which Warren owns no interest,

because this formation contains the larger reserves of the single reservoir. *See* Exhibit B at p. 11, ¶ 30, Cimarex's Hearing Packet I (stating "Read & Stevens' Wolfcamp XY Sands target will primarily produce from the 3<sup>rd</sup> Bone Spring Sand"). Thus, Warren, as well as the other owners in the Wolfcamp would be taking production, to the detriment of the Third Bone Spring owners, beyond an amount authorized by their correlative rights. Thus, although Read & Stevens' method of drilling wells above and below the depth severance is allowed by the Division to account for non-uniformity of ownership across the severance, this method is substantially inferior to Cimarex's proposed allocation formula that ensures with greater precision a fair and equitable distribution of production as mandated by the Act.

32. In contrast to Read & Stevens' plan, Cimarex drills a total of eight wells in the Wolfbone Pool. These wells are located in the Third Bone Spring above the depth severance in the heart of the single reservoir. *See id.* Based on the geology, Cimarex's Third Bone Spring wells will produce the entire Wolfbone Pool, such that a specified percentage, 72.8%, will be produced from the Third Bone Spring formation and a certain percentage, 27.2%, will be produced from the Upper Wolfcamp formation. Because PhiH porosity measurements are an accurate way to predict the reserves to be produced from each formation, Cimarex can determine the percentages of each interval of the Wolfbone Pool, the Third Bone Spring Interval above the depth severance and the Upper Wolfcamp Interval below. *See* Exhibit B at p. 6, ¶ 15, Cimarex's Hearing Packet I; *see also* Exhibit B-10, Cimarex's Hearing Packet I. Thus, Cimarex's plan and method, based on PhiH porosity, for segregating and allocating production owned by the working interest owners in the Third Bone Spring Interval above the depth severance and the production owned in the Upper Wolfcamp Interval below the depth severance is much more precise and accurate than the crude method proposed by Read & Stevens, which relies on drilling unnecessary wells at great costs.

33. There is clear and established precedent for the Division to provide a more precise allocation method based on percentages of ownership within individual intervals of a pool when circumstances require this approach in order to meet the Division's obligations of the Act and its rules. The Division has addressed non-uniform ownership within a pool pursuant to the pooling statutes while avoiding the drilling of unnecessary wells and protecting correlative rights in a precise manner in Case No. 13132. *See* Order No. R-12094 at p. 4, ¶ 7, issued in Case No. 13132, attached hereto as Exhibit 4 (stating that production from the subject well shall be allocated among three Morrow zones such that Zone A [11,366-11,761 feet] produces 76.4% of the pool, Zone B [11,761-11,766 feet] produces 0.967% of the pool, and Zone C [11,766-11,883 feet], produces 22.63% of the pool, and within each zone, costs and production shall be allocated based upon each owner's percentage interest ownership).

34. There is no approach for developing the Subject Lands that can perfectly account for the correlative rights of the owners in absolute terms. That is why correlative rights are not defined under the Act in absolute terms but are defined as only the "opportunity afforded" owners to produce their "just and equitable share of oil or gas" and only "so far as practicable to do so" without waste and unnecessary expense. *See* § 70-2-33H; *see also* § 70-2-17C. Cimarex's development plan protects correlative rights with as much precision as possible by using a scientific methodology for measuring reserves based on PhiH and thus avoiding the excessive costs of drilling unnecessary wells into the proposed Wolfbone Pool. Accordingly, Cimarex respectfully submits that its plan is the better of the two competing plans now before the Division.

WHEREFORE, Cimarex requests that this Application to Create a Special Pool, the Wolfbone Pool, be set for hearing on June 13, 2024, or scheduled for a later hearing date as necessary, before an Examiner of the Oil Conservation Division, and after notice and hearing as

required by law, pursuant to the reasons stated herein and in Cimarex's Closing Statement, and the Division's guidance under Order No. R-23089, the Division enter an order:

A. That creates, pursuant to this Application, a new special pool, the Quail Ridge; Wolfbone Pool, that includes the Subject Lands, as described above in Paragraph 1, and includes the vertical extent ranging from the top of the Third Bone Spring formation to the base of the Upper Wolfcamp formation, that being the base of the Wolfcamp A, as described above in Paragraph 12, in such manner that statewide rules apply to the special pool.

B. That re-opens the hearing record in the Subject Cases and allows for any adjustments or modifications that would facilitate a continuation of the proceedings, including but not limited to, any allowances or provisions for updating well proposals and notices necessary for incorporating into the proceedings the creation of the Wolfbone Pool.

C. That acknowledges and grants Cimarex's withdrawal of its Motion for an Order to Prohibit the Drilling of Wells in the Upper Wolfcamp to Protect Correlative Rights and Optimize Production of the Subject Lands, filed July 13, 2023, pursuant to its Option I, which is no longer needed as an effort to protect the common source of supply given that the proposed Wolfbone Pool will account for the full extent of the single reservoir;

D. That creates the Quail Ridge; Wolfbone Pool by contracting two pools, the Teas; Bone Spring, East Pool (Pool Code 96637) and the Tonto; Wolfcamp Pool (Pool Code 59500) in a manner that avoids overlap with the proposed Quail Ridge; Wolfbone Pool, as described in Paragraph 13.

E. That adopts and implements Cimarex's allocation formula based on PhiH porosity for the allocation of production to owners in the proposed Wolfbone Pool;

F. That approves Cimarex's Pooling Applications filed under Cas Nos. 23448-23455 and 23508-23523;

G. That denies Read & Stevens competing applications filed under Case Nos. 23508-23523 and denies its competing application for a special pool filed in Case No. 24528; and

H. That provides any such additional relief deemed necessary by the Division at its discretion.

Respectfully submitted,

ABADIE & SCHILL, PC

*/s/ Darin C. Savage*

---

Darin C. Savage

William E. Zimsky  
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**Attorneys for Cimarex Energy Co.**

***Application of Cimarex Energy Co. for the Creation of a Special Pool, a Wolfbone Pool, in Sections 4, 5, 8, and 9, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, Pursuant to Order No. R-23089 and to Re-open Case Nos. 23448 -23455, 23594 – 23601, and 23508-23523.*** Applicant in the above-styled cause seeks an order from the Division creating a special pool, the Quail Ridge; Wolfbone Pool, pursuant to Order No. R-23089, within Sections 4, 5, 8 and 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico (“Subject Lands”). Applicant proposes that Division’s statewide rules apply to spacing units and well locations within the Quail Ridge; Wolfbone Pool. The vertical extent of the proposed Quail Ridge; Wolfbone Pool will be the stratigraphic equivalent of the top of the Third Bone Spring, as the upper limit, located at approximately 10,620 measured depth, to the stratigraphic equivalent of the base of the Wolfcamp A shale, being the lower limit, located at approximately 11,225 feet measured depth, as found in the triple combo well log for the Quail Ridge 32 State 2 well (API No. 30-025-37703). Applicant will seek an order from the Division for the vertical extent by requesting the contraction of two pools, the Teas; Bone Spring, East Pool (Pool Code 96637) (“Teas Bone Spring”) and the Tonto; Wolfcamp Pool (Pool Code 59500) (“Tonto Wolfcamp”) in a manner that avoids overlap with the proposed Quail Ridge; Wolfbone Pool. The base of the Teas Bone Spring is to be contracted to 10,620 measured feet, equivalent to the top of the Third Bone Spring, and the top of the Tonto Wolfcamp is to be contracted to 11,225 measured feet, equivalent to the base of the Wolfcamp A Shale, as such depths are found in said triple combo well log of the Quail Ridge 32 State 2 well. To the extent necessary, Cimarex will request authorization for surface commingling. Also to be considered will be the re-opening of Case Nos. 23448-23455, 23594 -23601, and 23508-23523, for the purpose of continuing the Division’s review of pooling applications filed in said Cases in order to determine operatorship of units and wells proposed by the pooling applications. This application for a special pool competes with the application filed in Case No. 24528. The Subject Lands are located approximately 27 miles southwest of Hobbs, New Mexico.

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

**IN THE MATTER OF APPLICATION FOR  
COMPULSORY POOLING SUBMITTED BY  
CIMAREX ENERGY COMPANY**

**CASE NOS. 23448 - 23455**

**IN THE MATTER OF APPLICATION FOR  
COMPULSORY POOLING SUBMITTED BY  
CIMAREX ENERGY COMPANY**

**CASE NOS. 23594 - 23601**

**IN THE MATTER OF APPLICATION FOR  
COMPULSORY POOLING SUBMITTED BY  
READ & STEVENS, INC**

**CASE NOS. 23508 - 23523**

**ORDER NO. R-23089**

**ORDER**

The Director of the New Mexico Oil Conservation Division (“OCD”), having heard this matter through legal and technical Hearing Examiners on August 9, 2023, through August 11, 2023, and after considering the administrative record including the sworn testimony, evidence, and recommendations of the Hearing Examiners, issues the following Order.

**FINDINGS OF FACT**

1. Cimarex Energy Company (“Cimarex”) submitted a total of sixteen applications (“Cimarex Applications”) to compulsory pool the uncommitted oil and gas interests within the spacing unit as seen in Cimarex’ exhibits.
2. Read & Stevens, Inc. (“Read & Stevens”) submitted a total of sixteen applications (“Read & Stevens Applications”) to compulsory pool the uncommitted oil and gas interests within the spacing unit as seen in Read & Stevens’ exhibits.
3. Both parties are proposing to develop Sections 5 and 8, Township 20 South, Range 34 East. Cimarex’ plan for these lands is named “Mighty Pheasant” and Read & Stevens’ plan is named “Joker.” Both parties are also proposing to develop Sections 4 and 9, Township 20 South, Range 34 East. Cimarex’ plan for these lands is named “Loosey Goosey” and Read & Stevens’ plan is named “Bane.”.
4. Cimarex’ applications proposed drilling twelve wells per section with all twelve wells being distributed between the Bone Spring formation intervals.
5. Read & Stevens’ applications proposed drilling twenty-four wells per section with those twenty-four wells being distributed between the Bone Springs formation and the Wolfcamp formation intervals.

**EXHIBIT  
1**

6. The lands proposed for drilling by both parties lacks natural barriers that would prevent communication between the Third Bone Spring Sand and Upper Wolfcamp, thereby creating a single reservoir or common source of supply located predominantly in the Third Bone Spring Sand.

7. Cimarex' geologist Staci Mueller affidavit testimony paragraph twelve states:

*There are no indications of any major geomechanical changes/frac baffles in between Cimarex's 3rd Sand target and Permian Resources' Wolfcamp Sands target, indicating that these two intervals are most likely one shared reservoir tank.*

8. Read & Stevens' Reservoir Engineer John Fechtel testified that:

*The – both wells developed in the third bone sand and the wells developed in the XY will share – have some resources from either formation.”*

*(See Tr. (DD 8-10-23) 181: 2-4)*

9. Read & Stevens' Geologist Ira Bradford was questioned about the substantial communication issues and testified:

*Q: So, Mr. Bradford, you talked a little bit about that you do agree with Ms. Mueller that there is substantial communication between the third Bone Spring and the upper Wolfcamp; is that correct?*

*A: Yes.*

*(See Tr. (DD 8-10-23) 206: 11-1)*

10. Cimarex and Read & Stevens both acknowledged that wells completed in the Bone Spring and Wolfcamp formations will share production from both the Bone Spring and Wolfcamp formations.

11. Neither Cimarex nor Read & Stevens requested in their applications or at hearing the creation of a special pool to accommodate the communication of the Bone Springs and Wolfcamp formations such that there is a common supply.

12. Neither applicant requested a special pool order accounting for the common source of supply, or provided notice of a special pool request.

### **CONCLUSIONS OF LAW**

13. OCD has jurisdiction to issue this Order pursuant to NMSA 1978, Section 70-2-17.



14. A "Pool" is defined as "an underground reservoir containing a common accumulation of oil or gas. Each zone of a general structure, which zone is completely separated from other zones in the structure, is covered by the word pool as used in 19.15.2 NMAC through 19.15.39 NMAC. "Pool" is synonymous with "common source of supply" and with "common reservoir." 19.15.2.7.P(5) NMAC.
15. NMSA 1978, Section 70-2-12 B of the Oil and Gas Act requires OCD:
  - (2) to prevent crude petroleum oil, natural gas or water from escaping from strata in which it is found into other strata;
  - (7) to require wells to be drilled, operated and produced in such manner as to prevent injury to neighboring leases or properties;
  - (12) to determine the limits of any pool producing crude petroleum oil or natural gas or both and from time to time redetermine the limits;
16. 19.15.16.9 NMAC requires that during the drilling of an oil well, injection well or other service well, the operator shall seal and separate the oil, gas and water strata above the producing or injection horizon to prevent their contents from passing into other strata.
17. 19.15.12.9 NMAC requires that an operator shall 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. An operator shall at all times segregate oil or gas produced from each pool. The combination commingling of production, before marketing, with production from other pools without division approval is prohibited.
18. OCD has the authority to create special pool orders when required pursuant to 19.15.2.9 NMAC, when proper notice has been satisfied.
19. The evidence currently in the record before OCD indicates that Read & Stevens' and Cimarex' proposals would lead to either impairment of correlative rights or illegal allocation. Both parties testify that their production would extend outside of their respective pools and impact other pools, as such both requests extend outside of a standard compulsory pooling request.
20. Neither application can be approved while remaining in compliance with OCD rules and regulations that require pool segregation, prevent waste and protect correlative rights.

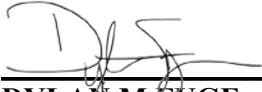
**ORDER**

21. OCD hereby denies both applications except insofar as either applicant or both applicants choose to propose a special pool, a Wolfbone pool, that would account for the lack of frac baffles between the Bone Spring and Wolfcamp formations in

this area. The record is left open for such a proposal and will prompt a reopening of the hearing record on both applications.

22. It is not necessary for the parties to repeat the testimony or resubmit the exhibits regarding their original proposed plans; they may refer to existing evidence to the extent needed to justify the special pool request.
23. 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 (Acting)**  
DMF/jag

**Date:** 4/8/24

**From:** Kautz, Paul, EMNRD <[paul.kautz@emnrd.nm.gov](mailto:paul.kautz@emnrd.nm.gov)> **Sent:** Wednesday, May 8, 2024 11:20 AM **To:** Bella Sikes <[Bella.Sikes@coterra.com](mailto:Bella.Sikes@coterra.com)>; Rikala, Ward, EMNRD <[Ward.Rikala@emnrd.nm.gov](mailto:Ward.Rikala@emnrd.nm.gov)> **Cc:** Dylan Park <[Dylan.Park@coterra.com](mailto:Dylan.Park@coterra.com)>; Scott Richter <[Scott.Richter@coterra.com](mailto:Scott.Richter@coterra.com)>; Juan Comella <[Juan.Comella@coterra.com](mailto:Juan.Comella@coterra.com)>; Staci Mueller <[Staci.Mueller@coterra.com](mailto:Staci.Mueller@coterra.com)> **Subject:** RE: [EXTERNAL] Wolfbone Pool Code T20S-R34E

You can use Teas;Wolfbone or Quail Ridge;Wolfbone

Paul Kautz  
Petroleum Specialist  
Hobbs Field Office Geologist  
Energy Minerals Natural Resources Dept.  
Oil Conservation Division  
1625 N. French Dr.  
Hobbs, NM 88240  
Cell # 575-602-4493

**From:** Bella Sikes <[Bella.Sikes@coterra.com](mailto:Bella.Sikes@coterra.com)> **Sent:** Wednesday, May 8, 2024 10:15 AM **To:** Kautz, Paul, EMNRD <[paul.kautz@emnrd.nm.gov](mailto:paul.kautz@emnrd.nm.gov)>; Rikala, Ward, EMNRD <[Ward.Rikala@emnrd.nm.gov](mailto:Ward.Rikala@emnrd.nm.gov)> **Cc:** Dylan Park <[Dylan.Park@coterra.com](mailto:Dylan.Park@coterra.com)>; Scott Richter <[Scott.Richter@coterra.com](mailto:Scott.Richter@coterra.com)>; Juan Comella <[Juan.Comella@coterra.com](mailto:Juan.Comella@coterra.com)>; Staci Mueller <[Staci.Mueller@coterra.com](mailto:Staci.Mueller@coterra.com)> **Subject:** RE: [EXTERNAL] Wolfbone Pool Code T20S-R34E

Paul,

Our Mighty Pheasant/Loosey Goosey development is in Sections 4, 5, 8, 9, Township 20 South, Range 34 East, Lea County, New Mexico.

Thank you,  
**Bella Sikes** | Landman – Permian Exploration  
T: 432.620.1639 | M: 806.543.4075

EXHIBIT  
2

**From:** Kautz, Paul, EMNRD <[paul.kautz@emnrd.nm.gov](mailto:paul.kautz@emnrd.nm.gov)> **Sent:** Wednesday, May 8, 2024 11:12 AM **To:** Bella Sikes <[Bella.Sikes@coterra.com](mailto:Bella.Sikes@coterra.com)>; Rikala, Ward, EMNRD <[Ward.Rikala@emnrd.nm.gov](mailto:Ward.Rikala@emnrd.nm.gov)> **Cc:** Dylan Park <[Dylan.Park@coterra.com](mailto:Dylan.Park@coterra.com)>; Scott Richter <[Scott.Richter@coterra.com](mailto:Scott.Richter@coterra.com)>; Juan Comella <[Juan.Comella@coterra.com](mailto:Juan.Comella@coterra.com)>; Staci Mueller <[Staci.Mueller@coterra.com](mailto:Staci.Mueller@coterra.com)> **Subject:** RE: [EXTERNAL] Wolfbone Pool Code T20S-R34E

Since I do not know what sections I cannot answer this question.

Paul Kautz  
Petroleum Specialist  
Hobbs Field Office Geologist  
Energy Minerals Natural Resources Dept.  
Oil Conservation Division  
1625 N. French Dr.  
Hobbs, NM 88240  
Cell # 575-602-4493

**From:** Bella Sikes <[Bella.Sikes@coterra.com](mailto:Bella.Sikes@coterra.com)> **Sent:** Wednesday, May 8, 2024 10:08 AM **To:** Kautz, Paul, EMNRD <[paul.kautz@emnrd.nm.gov](mailto:paul.kautz@emnrd.nm.gov)>; Rikala, Ward, EMNRD <[Ward.Rikala@emnrd.nm.gov](mailto:Ward.Rikala@emnrd.nm.gov)> **Cc:** Dylan Park <[Dylan.Park@coterra.com](mailto:Dylan.Park@coterra.com)>; Scott Richter <[Scott.Richter@coterra.com](mailto:Scott.Richter@coterra.com)>; Juan Comella <[Juan.Comella@coterra.com](mailto:Juan.Comella@coterra.com)>; Staci Mueller <[Staci.Mueller@coterra.com](mailto:Staci.Mueller@coterra.com)> **Subject:** RE: [EXTERNAL] Wolfbone Pool Code T20S-R34E

Hi Paul,

Thank you for answering my questions. So in this area, would the pool be: **Quail Ridge; Wolfbone** or, is there another geographic name the OCD would want us to use?

Thank you,  
**Bella Sikes** | Landman – Permian Exploration

T: 432.620.1639 | M: 806.543.4075

**From:** Kautz, Paul, EMNRD <[paul.kautz@emnrd.nm.gov](mailto:paul.kautz@emnrd.nm.gov)> **Sent:** Wednesday, May 8, 2024 11:01 AM **To:** Bella Sikes <[Bella.Sikes@coterra.com](mailto:Bella.Sikes@coterra.com)>; Rikala, Ward, EMNRD <[Ward.Rikala@emnrd.nm.gov](mailto:Ward.Rikala@emnrd.nm.gov)> **Cc:** Dylan Park <[Dylan.Park@coterra.com](mailto:Dylan.Park@coterra.com)>; Scott Richter <[Scott.Richter@coterra.com](mailto:Scott.Richter@coterra.com)>; Juan Comella <[Juan.Comella@coterra.com](mailto:Juan.Comella@coterra.com)>; Staci Mueller <[Staci.Mueller@coterra.com](mailto:Staci.Mueller@coterra.com)> **Subject:** RE: [EXTERNAL] Wolfbone Pool Code T20S-R34E

Hi Bella,

There are many problems with this.

1. Gotham is not a geographic name. Pool name consists of two parts a geographic name plus formation name.
2. T20S, R34E there are already existing Bone Spring and Wolfcamp pools any contraction of existing pools for the creation of a new pool will require it to go to hearing.

Paul Kautz  
Petroleum Specialist  
Hobbs Field Office Geologist  
Energy Minerals Natural Resources Dept.  
Oil Conservation Division  
1625 N. French Dr.  
Hobbs, NM 88240  
Cell # 575-602-4493

**From:** Bella Sikes <[Bella.Sikes@coterra.com](mailto:Bella.Sikes@coterra.com)> **Sent:** Wednesday, May 8, 2024 6:47 AM **To:** Kautz, Paul, EMNRD <[paul.kautz@emnrd.nm.gov](mailto:paul.kautz@emnrd.nm.gov)>; Rikala, Ward, EMNRD <[Ward.Rikala@emnrd.nm.gov](mailto:Ward.Rikala@emnrd.nm.gov)> **Cc:** Dylan Park <[Dylan.Park@coterra.com](mailto:Dylan.Park@coterra.com)>; Scott Richter <[Scott.Richter@coterra.com](mailto:Scott.Richter@coterra.com)>; Juan Comella <[Juan.Comella@coterra.com](mailto:Juan.Comella@coterra.com)>; Staci Mueller <[Staci.Mueller@coterra.com](mailto:Staci.Mueller@coterra.com)> **Subject:** RE: [EXTERNAL] Wolfbone Pool Code T20S-R34E

Hi Paul,

Wanted to follow up on my previous question. We presented our Mighty Pheasant 5-8/Loosey Goosey 4-9 development (in T-20-S, R-34-E) argument to the OCD from August 9 to August 11, 2023, and received an official order on April 8, 2024. Please see the official Order attached to this email.

The other applicant, Permian Resources, filed their Gotham Wolfbone pool proposal last Friday. Was their naming convention approved by the OCD or is it just a proposal? If it was approved by the OCD, would you mind sharing how that process works?

Thank you,

**Bella Sikes** | Landman – Permian Exploration  
T: 432.620.1639 | M: 806.543.4075

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

**IN THE MATTER OF APPLICATION FOR  
COMPULSORY POOLING SUBMITTED BY  
PRIDE ENERGY COMPANY**

**CASE NO. 22853**

**IN THE MATTER OF APPLICATION FOR  
COMPULSORY POOLING AND A  
HORIZONTAL SPACING UNITS SUBMITTED BY  
CIMAREX ENERGY COMPANY**

**CASE NO. 23295**

**ORDER NO. R-23132**

**ORDER**

The Director of the New Mexico Oil Conservation Division (“OCD”), having heard this matter through legal and technical Hearing Examiners on July 20, 2023, and after considering the testimony, evidence, and recommendation of the Hearing Examiners, issues the following Order.

**FINDINGS OF FACT**

1. Pride Energy Company (“Pride”) submitted an application (“Pride Application”) to compulsory pool the uncommitted oil and gas interests within the spacing unit as seen in Pride’s exhibits.
2. Cimarex Energy Company (“Cimarex”) submitted an application (“Cimarex Application”) to compulsory pool the uncommitted oil and gas interests within the spacing unit as seen in Cimarex’s exhibits.
3. Both parties are proposing to develop the W/2 W/2 of Sections 12 and 13, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico. Pride’s plan for these lands is named the “Go State”. Cimarex’s plan for these lands is named the “Showbiz”.
4. Pride’s application proposed drilling one well in the Wolfcamp formation.
5. Cimarex’s application proposed drilling three wells in the Bone Spring formation.
6. The lands proposed for drilling by both parties lacks natural barriers that would prevent communication between the Third Bone Spring Sand and Upper Wolfcamp, thereby creating a single reservoir or common source of supply.
7. Cimarex’s geologist Staci Mueller affidavit testimony stated that:

**EXHIBIT  
3**

Paragraph 9: ...*These help to show that the 3rd Sand & Wolfcamp XY behave as one geomechanical reservoir...*

Paragraph 10: ... *With a separation of 100 ft between Cimarex's proposed 3rd Sand landing and Pride's Upper Wolfcamp landing, and no indication of frac baffles in between, Pride's Wolfcamp well will produce mostly out of the 3rd Sand.*

Paragraph 12: ...*This is due to the lack of frac baffles between the 3rd Sand and Upper Wolfcamp...*

8. Pride's contract Geologist Harvin Broughton was questioned and answered as follows:

*Q: Okay. Did you analyze whether or not there's any baffling or natural barriers between the third Bone Spring and the upper Wolfcamp?*

*A: Yes. And I don't believe there are any -- any baffles. And when I think, more specifically, they're -- they're frack baffles, you know, or frack barriers... I -- I agree that there are no -- you know, and I looked at the Cimarex geology presentation also and I am in agreement with that.*

(See Tr. Pg 141: lines 13-19, 24-25 and Pg 142: line 1)

*Q: Would you say that without a baffle, you'd have communication between the formation and the reservoir?*

*A: I would say it's likely. But I -- to a degree, I couldn't -- couldn't say.*

(See Tr. Pg 142: lines 17-21)

9. Pride and Cimarex both acknowledged that wells completed in the Bone Spring and Wolfcamp formations will share production from both the Bone Spring and Wolfcamp formations.
10. Neither Pride nor Cimarex requested in their applications or at hearing the creation of a special pool to accommodate the communication of the Bone Springs and Wolfcamp formations such that there is a common supply.
11. Neither applicant requested a special pool order accounting for the common source of supply, or provided notice of a special pool request.

### CONCLUSIONS OF LAW

12. OCD has jurisdiction to issue this Order pursuant to NMSA 1978, Section 70-2-17.



13. A "Pool" is defined as "an underground reservoir containing a common accumulation of oil or gas. Each zone of a general structure, which zone is completely separated from other zones in the structure, is covered by the word pool as used in 19.15.2 NMAC through 19.15.39 NMAC. "Pool" is synonymous with "common source of supply" and with "common reservoir". 19.15.2.7.P(5) NMAC.
14. Chapter 70-2-12 B of the Oil and Gas Act requires OCD:
  - (2) to prevent crude petroleum oil, natural gas or water from escaping from strata in which it is found into other strata;
  - (7) to require wells to be drilled, operated and produced in such manner as to prevent injury to neighboring leases or properties;
  - (12) to determine the limits of any pool producing crude petroleum oil or natural gas or both and from time to time redetermine the limits;
15. 19.15.16.9 NMAC requires that during the drilling of an oil well, injection well or other service well, the operator shall seal and separate the oil, gas and water strata above the producing or injection horizon to prevent their contents from passing into other strata.
16. 19.15.12.9 NMAC requires that an operator shall 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. An operator shall at all times segregate oil or gas produced from each pool. The combination commingling of production, before marketing, with production from other pools without division approval is prohibited.
17. OCD has the authority to create special pool orders when required pursuant to 19.15.2.9 NMAC, when proper notice has been satisfied.
18. The evidence currently in the record before OCD indicates that Pride's and Cimarex' proposals would lead to either impairment of correlative rights or illegal allocation. Both parties testify that their production would extend outside of their respective pools and impact other pools, as such both requests extend outside of a standard compulsory pooling request.
19. Neither application can be approved while remaining in compliance with OCD rules and regulations that require pool segregation, prevent waste and protect correlative rights.

### **ORDER**

20. OCD hereby denies both applications except insofar as either applicant or both applicants choose to propose a special pool, a Wolfbone pool, that would account for the lack of frac baffles between the Bone Spring and Wolfcamp formations in

this area. The record is left open for such a proposal and will prompt a reopening of the hearing record on both applications.

21. It is not necessary for the parties to repeat the testimony or resubmit the exhibits regarding their original proposed plans; they may refer to existing evidence to the extent needed to justify the special pool request.
22. 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 (Acting)**  
DMF/jag

**Date:** 4/8/24

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. 13132  
ORDER NO. R-12094

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR  
COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on November 20, 2003 at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 4<sup>th</sup> day of February, 2004, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and of the subject matter.

(2) The applicant, Devon Energy Production Company, L.P. ("Applicant"), seeks an order pooling all uncommitted mineral interests in the Morrow formation underlying Lots 1 and 2, the S/2 NE/4 and the SE/4 (E/2 equivalent) of Section 6, Township 23 South, Range 27 East, NMPM, Eddy County, New Mexico, to form a standard 319.49-acre gas spacing and proration unit in the South Carlsbad-Morrow Gas Pool.

(3) The above-described unit ("the Unit") is to be dedicated to the proposed Joell Well No. 2 to be drilled at a standard gas well location 1330 feet from the North and East lines (Unit G) of Section 6.

(4) Two or more separately owned tracts are embraced within the Unit, and/or there are royalty interests and/or undivided interests in oil and gas minerals in one or more tracts included in the Unit that are separately owned.

EXHIBIT  
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**Order No. R-12094**  
**Page 2**

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(5) Applicant is an owner of an oil and gas working interest within the Unit. Applicant has the right to drill and proposes to drill the Joell Well No. 2 to a common source of supply in the Morrow formation at a standard gas well location within the SW/4 NE/4 of Section 6.

(6) There are interest owners in the proposed Unit that have not agreed to pool their interests.

(7) The applicant presented evidence that demonstrates that:

- (a) the Morrow formation underlying the Unit covers the subsurface interval from approximately 11,366 feet to 11,883 feet;
- (b) the Morrow formation within the E/2 of Section 6 is potentially productive from both the Middle-Morrow zone and the Lower-Morrow zone; and
- (c) the available geologic data suggests that a reasonable operator should test the entire Morrow interval in any well drilled within the E/2 of Section 6.

(8) The Morrow formation underlying the E/2 of Section 6 is divided into three zones, with different sets of ownership in each of these zones. These zones are described as follows:

- (a) 11,366-11,761 feet subsurface, which is 76.402321% of the Morrow interval. This portion of the Morrow formation is subject to an operating agreement entered into in 1970;
- (b) 11,761-11,766 feet subsurface, which is 0.967118% of the Morrow interval. This portion of the Morrow formation is also subject to the above-described operating agreement; and

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**Order No. R-12094**  
**Page 3**

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(c) 11,766-11,883 feet subsurface, which is 22.630561% of the Morrow interval. This portion of the Morrow formation is not subject to the above-described operating agreement.

(9) The operator under the operating agreement is Chaparral Energy, L.L.C. ("Chaparral"). Chaparral however, owns no working or other interest in the Morrow formation underlying the E/2 of Section 6.

(10) Applicant requests pooling of the lower portion of the Morrow formation that is not subject to the operating agreement. The applicant further requests that the Division approve a cost and production allocation between the three Morrow zones that is based upon the footage ratio described in Finding No. (8) above. The applicant further requests that it be named operator of the entire Morrow interval within the E/2 of Section 6.

(11) Chaparral was provided notice in this case, but did not appear at the hearing.

(12) The applicant testified that it is still negotiating with Chaparral the terms by which it will be allowed to drill and operate the proposed Joell Well No. 2. As of the hearing date, no agreement has been reached between these parties.

(13) A number of interest owners in the E/2 of Section 6 have entered into a voluntary agreement apportioning production based upon the percentages set forth in Finding No. (8) above.

(14) The working interest owners in the E/2 of Section 6 have received a demand from royalty owners to develop the acreage.

(15) The applicant's proposed cost and production allocation is fair and reasonable and should be approved.

(16) To avoid the drilling of unnecessary wells, protect correlative rights, prevent waste and afford to the owner of each interest in the Unit the opportunity to recover or receive without unnecessary expense its just and fair share of hydrocarbons, this application should be approved by pooling all uncommitted interests, whatever they may be, in the oil and gas within the Unit.

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(17) Applicant should be designated the operator of the subject well and of the Unit.

(18) 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% thereof as a reasonable charge for the risk involved in drilling the well.

(19) Reasonable charges for supervision (combined fixed rates) should be fixed at \$6,000.00 per month while drilling and \$600.00 per month while producing, provided that these rates should be adjusted annually pursuant to Section III.1.A.3. of the COP AS form titled "Accounting Procedure-Joint Operations."

**IT IS THEREFORE ORDERED THAT :**

(1) Pursuant to the application of Devon Energy Production Company, L.P., all uncommitted interests, whatever they may be, in the oil and gas in the Morrow formation underlying Lots 1 and 2, the S/2 NE/4 and the SE/4 (E/2 equivalent) of Section 6, Township 23 South, Range 27 East, NMPM, Eddy County, New Mexico, are hereby pooled to form a standard 319.49-acre gas spacing and proration unit in the South Carlsbad-Morrow Gas Pool. The above-described unit shall be dedicated to the proposed Joell Well No. 2 to be drilled at a standard gas well location 1330 feet from the North and East lines (Unit G) of Section 6.

(2) The operator of the Unit shall commence drilling the proposed well on or before May 1, 2004 and shall thereafter continue drilling the well with due diligence to test the Morrow formation.

(3) In the event the operator does not commence drilling the proposed well on or before May 1, 2004, Ordering Paragraph (1) shall be of no effect, unless the operator obtains a time extension from the Division Director for good cause.

(4) Should the subject well not be drilled and completed within 120 days after commencement thereof, Ordering Paragraph (1) shall be of no further effect, and the unit created by this Order shall terminate unless the operator appears before the Division Director and obtains an extension of time to complete the well for good cause demonstrated by satisfactory evidence.

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(5) Upon final plugging and abandonment of the subject well, the pooled unit created by this Order shall terminate, unless this order has been amended to authorize further operations.

(6) Applicant is hereby designated the operator of the subject well and of the Unit.

(7) Well costs and production from the subject well shall be allocated among the three Morrow zones in the following proportions. Within each zone, costs and production shall be allocated based upon each owner's percentage interest ownership.

- (a) Zone A (11,366-11,761 feet subsurface): 76.402321%
- (b) Zone B (11,761-11,766 feet subsurface): 0.967118%
- (c) Zone C (11,766-11,883 feet subsurface): 22.630561%

(8) 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 Unit, including **unleased** mineral interests, who are not parties to an operating agreement governing the Unit.) After the effective date of this order, the operator shall furnish the Division and each known pooled working interest owner in the Unit an itemized schedule of estimated costs of drilling, completing and equipping the subject well ("well costs").

(9) Within 30 days from the date the schedule of estimated well 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."

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(10) The operator shall furnish the Division and each known pooled working interest owner (including non-consenting working interest owners) 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.

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

(12) The operator 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% of the above costs.

(13) The operator shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs.

(14) Reasonable charges for supervision (combined fixed rates) are hereby fixed at \$6,000.00 per month while drilling and \$600.00 per month while producing, provided that these rates shall be adjusted annually pursuant to Section III.1.A.3. of the COPAS form titled "Accounting Procedure-Joint Operations." The operator is 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 pooled working interest owners.



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(15) Except as provided in Ordering Paragraphs (11) and (13) above, all proceeds from production from the well that are not disbursed for any reason shall be placed in escrow in Eddy County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership. The operator 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.

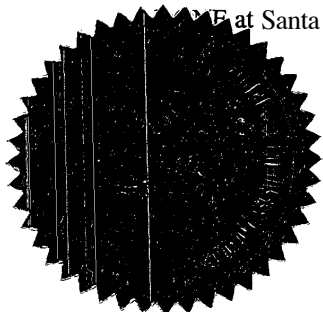
(16) Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under this order. Any well costs or charges that are to be paid out of production shall be withheld only from the working interests' share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(17) Should all the parties to this compulsory pooling order reach voluntary agreement subsequent to entry of this order, this order shall thereafter be of no further effect.

(18) The operator of the well and Unit shall notify the Division in writing of the subsequent voluntary agreement of all parties subject to the forced pooling provisions of this order.

(19) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

WITNESSED at Santa Fe, New Mexico, on the day and year hereinabove designated.



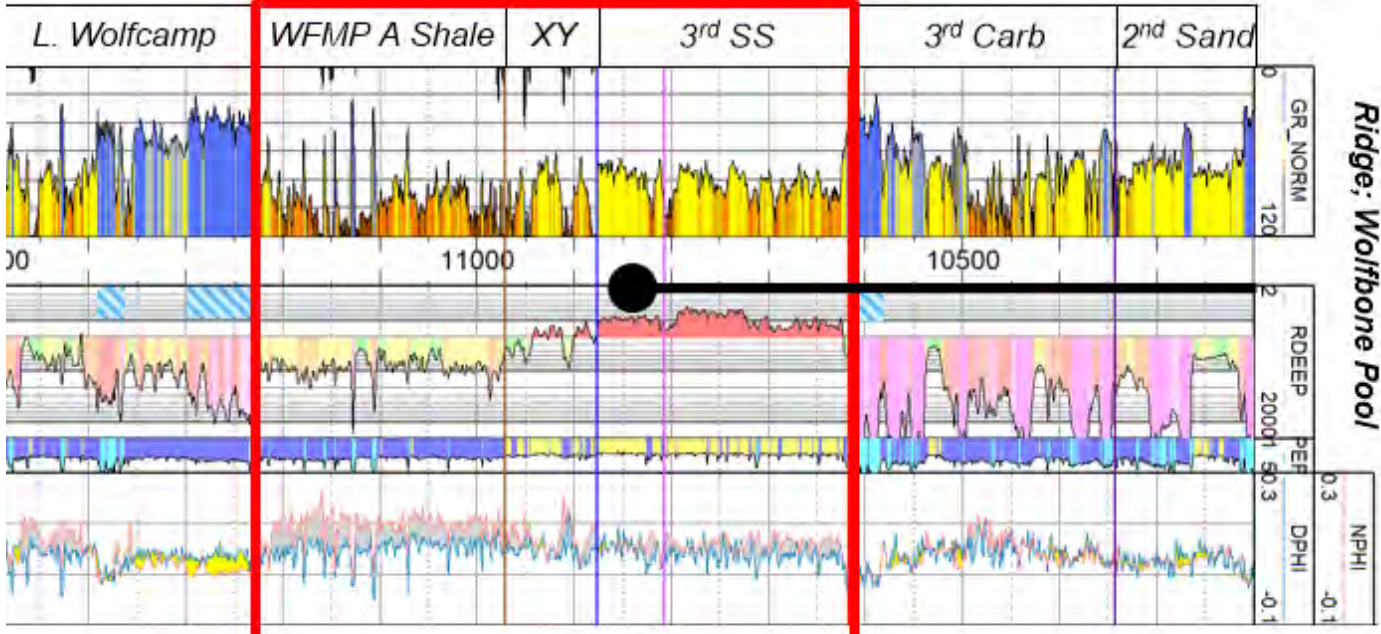
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STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

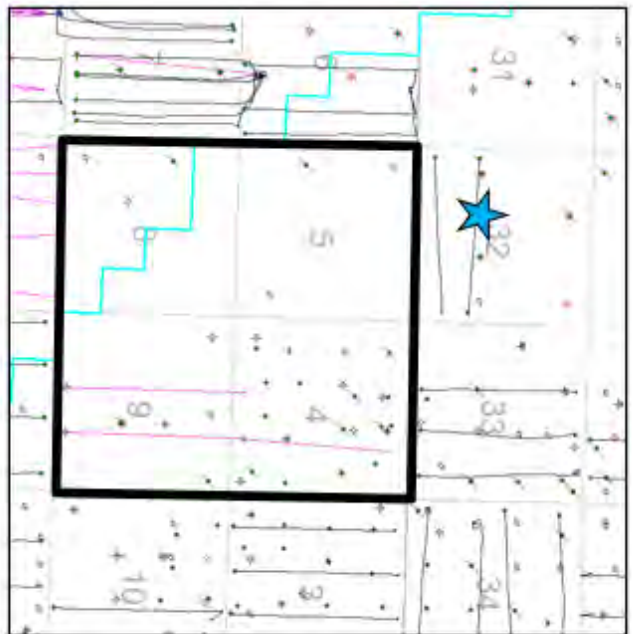
*Lori Wrotenbery*  
LORI WROTENBERY  
Director

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30025377030000

Type log for defining Quail Ridge; Wolfbone Pool



Allocation formula to be based on the percent  $\Phi_{iH}^X$  of the WFMP XY vs. 3rd SS (Exhibit B-10)



**WOLF BONE POOL**  
(Bound by frac baffles at top and base)



Probable Frac Baffle/Barrier



Cimarex Proposed Target  
3rd Bone Spring Sand

EXHIBIT 5