Tulsa Law Review

Volume 23
Number 4 *Mineral Law Symposium*

Volume 23 | Number 4

Summer 1988

Forced Pooling by Well Bore: Just and Reasonable

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FORCED POOLING BY WELL BORE: JUST AND REASONABLE?*

I. INTRODUCTION

In two recent decisions,[1] the Oklahoma Court of Appeals held that the Oklahoma Corporation Commission (the Commission) lacks authority to force pool by the well bore.[2] Although the Commission has statutory authority to force pool various owners by a unit,[3] the court concluded in each case that forced pooling by the well bore is beyond the Commission's authority.[4] These two decisions apparently conflict with previous Oklahoma decisions[5] which indicated that the Commission may have authority to force pool by the well bore.[6] Therefore, the issue of whether the Commission can force pool by the well bore is ripe for decision.

The Commission derives its authority to force pool from the forced pooling statute.[7] The Commission is authorized to pool various interest owners in a common source of supply, and is required to establish a spacing unit to be developed as a unit.[8] The Commission is not given explicit

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1. Amoco Prod. Co. v. Corporation Comm'n, 58 OKLA. B.J. 3180 (1987) [hereinafter Amoco II]; Amoco Prod. Co. v. Corporation Comm'n, 57 OKLA. B.J. 1961 (1986) [hereinafter Amoco I].

2. *Amoco II*, 58 OKLA. B.J. at 3181; *Amoco I*, 57 OKLA. B.J. at 1964. Forced pooling by the well bore can be briefly explained as follows: The Commission has statutory authority to pool the interests of various interest owners in a common source of hydrocarbons. The Commission can exercise its authority to force pool if it finds that forced pooling will prevent waste or protect correlative rights. *See infra* notes 23-24 and accompanying text.

When the Commission force pools various interest owners, forced pooling by the well bore restricts the pooled owners' rights to the first well drilled on the spaced unit. 8 H. WILLIAMS & C. MEYERS, OIL AND GAS LAW 728 (1987). If the Commission, based on additional information, later decides that more wells need to be drilled on the same unit in order to efficiently produce all the reserves, the Commission has the authority to redetermine the rights of all the interested parties in each of the new wells. In contrast, if the Commission force pools by the unit, the rights of the parties as determined in the first well remain unchanged in the additional wells in that unit.

3. OKLA. STAT. tit. 52, § 87.1(e) (1981 & Supp. 1987). Forced pooling by a unit gives an interest owner an interest in any additional wells that is equal to his interest in the first well.

4. *Amoco II*, 58 OKLA. B.J. at 3181-82; *Amoco I*, 57 OKLA. B.J. at 1962-63.

5. *See* Union Texas Petroleum v. Corporation Comm'n, 651 P.2d 652 (Okla. 1981), *cert. denied*, 459 U.S. 837 (1982); Union Oil Co. v. Brown, 641 P.2d 1106 (Okla. 1981); *see also infra* notes 88-100 and accompanying text.

6. *Union Texas*, 651 P.2d at 664; *see also infra* notes 88-100 and accompanying text.

7. OKLA. STAT. tit. 52, § 87.1 (1981 & Supp. 1987).

8. *Id.*

authority in the statute to force pool by the well bore. However, the Commission has assumed that such authority is implicitly included in the statute,[9] and some court decisions tend to support this assumption.[10] This implicit authority gives the Commission more power than is explicitly conferred by the statute, because it allows the Commission to redefine the rights of all the interest owners in any additional wells drilled on a previously defined unit.

Analysis of the forced pooling statute and subsequent court cases indicates that the Commission does not have authority to force pool by the well bore. Although the Commission has the power to modify a pooling order,[11] it cannot modify the order by force pooling by the well bore for three reasons. First, the language of the forced pooling statute clearly contemplates that rights vested are in the entire unit, rather than in the well bore.[12] Second, considerations of fairness and justice counsel against force pooling by the well bore.[13] Finally, forced pooling by the well bore creates problems with substantive due process.[14] Because of the problems raised by forced pooling by the well bore, the Commission should apply a prudent operator standard, rather than force pool by the well bore, when it modifies pooling orders.

II. THE FORCED POOLING ORDER: AN OVERVIEW

A. *Interpretation of the Forced Pooling Statute*

The Oklahoma Corporation Commission is authorized to establish well spacing and drilling units covering any common source of supply of hydrocarbons, or any prospective common source of supply.[15] Once the unit[16] is established, the Commission can force pool the interests of all the owners who own interests in that unit and who have not voluntarily joined in the development of that unit.[17] However, the Commission's

9. *See infra* notes 40-46 and accompanying text.
10. *See supra* notes 5-6.
11. *See infra* notes 47-49 and accompanying text.
12. *See infra* notes 62-63 and accompanying text.
13. *See infra* notes 56-61 and accompanying text.
14. *See infra* notes 78-103 and accompanying text.
15. *See* OKLA. STAT. tit. 52, § 87.1(a) (1981 & Supp. 1987).
16. A unit is a fixed spacing (such as 40 acres) in which a single well will be initially drilled.
17. OKLA. STAT. tit. 52, § 87.1(a) (1981 & Supp. 1987) states that

> To prevent or to assist in preventing the various types of waste of oil or gas . . . or to protect or assist in protecting the correlative rights of interested parties, the Corporation Commission . . . shall have the power to establish well spacing and drilling units of specified and approximately uniform size . . . covering any common source of supply, or prospective common source of supply . . . .

See also Dancy & Dancy, *Regulation of the Oil and Gas Industry by the Oklahoma Corporation*

authority to establish a unit is limited by several constraints. The Commission must satisfy these constraints before it can establish a valid spacing unit.

First, the Commission can establish a spacing unit only on a common source of supply or potential common source of supply.[18] The Commission looks at several factors to decide the size of a common source of supply.[19] Most important are the nature and character of the formations and the geological interpretations of the unit.[20] However, because so many uncertainties are involved in determining the size of a common source of supply and spacing unit, the Oklahoma Supreme Court has given the Commission wide latitude in determining the size of the supply.[21] As a rule, disputes will be resolved in favor of the Commission so long as its decision is based on substantial evidence.[22] Once the Commission establishes the size of the common source of supply, it can establish the size of the unit such that the unit covers only that common source.

The second constraint requires that the Commission establish a unit only if the unit will prevent waste[23] or protect the correlative rights[24] of interested parties.[25] Prevention of waste is tied to the concept of efficient

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Commission, 21 TULSA L.J. 613, 632 (1986) [hereinafter Dancy & Dancy]; Nesbitt, *A Primer on Forced Pooling of Oil and Gas Interests in Oklahoma*, 50 OKLA. B.J. 648 [hereinafter *Forced Pooling*].

18. *See supra* note 17. A "common source of supply" is defined as "area which is underlaid or which, from geological or other scientific data, or from drilling operations, . . . appears to be underlaid, by a common accumulation of [hydrocarbons]. . . ." OKLA. STAT. tit. 52, § 86.1(c) (1981).

19. OKLA. STAT. tit. 52, § 87.1(c)(1) (1981 & Supp. 1987)

20. Other factors include:

> (1) The lands embraced in the actual or prospective common source of supply; (2) the plan of well spacing then being employed or contemplated in said source of supply; (3) the depth at which production from said common source of supply has been or is expected to be found; (4) the nature and character of the producing or prospective producing formation or formations; and (5) the available geological or scientific data pertaining to said actual or prospective common source of supply . . . .

Id.

21. *See* Calvert Drilling Co. v. Corporation Comm'n, 589 P.2d 1064, 1068 (Okla. 1979).

22. *See id.* at 1068; *see also* Dancy & Dancy, *supra* note 17, at 633.

23. Waste refers to the loss of oil and gas that occurs when too many wells are drilled on a reservoir to produce the resources efficiently. *See* 8 H. WILLIAMS & C. MEYERS, OIL AND GAS LAW 1058 (1987).

24. The correlative rights doctrine establishes that each producer may produce as much oil or gas as possible from a well, but cannot produce so much that the production harms the interests of other owners in the common source or supply. *Id.* at 198.

25. OKLA. STAT. tit. 52, § 87.1(a) (1981 & Supp. 1987); *see also supra* note 17; OKLA. STAT. tit. 52, §§ 86.3, 237 (1981). According to sections 86.3 and 237, waste includes inefficient utilization of gas from a common source of supply; minimizing the reservoir pressure by unnecessary excessive production of gas; escape of gas into an open air, and internal drowning with water of a gas stratum (water coning) capable of producing gas in commercial quantities.

production of hydrocarbon reserves. Efficient production is achieved through maximum recovery at minimum cost. Therefore, waste can be minimized by reducing the number of wells required to produce the same amount of hydrocarbons,[26] maximizing the reserves that can be produced to the surface with minimum amount of cost, and limiting the loss of hydrocarbons once they are produced to the surface.[27] The correlative rights doctrine is tied to the notion of every owner getting a fair share of the minerals.[28] The doctrines of correlative rights and prevention of waste require the Commission to locate a well so it will efficiently produce hydrocarbons from the entire drilling unit.[29] Additionally, the doctrines require adjusting allowable production from the unit, and giving each interest owner an option of either participating in the well or accepting a bonus.[30]

As a third constraint, the Commission's authority to establish a unit "is limited to situations where common rights to drill within an existing spacing unit and separate or undivided ownership exist."[31] This means that the Commission cannot establish several units simultaneously unless all of the units have the same common owners.[32] Otherwise, the Commission would have to consider each spacing unit separately, and determine the respective rights of the interested owners in that unit.

The final constraint on the Commission's authority is its ability to establish the size of the unit.[33] The Commission will determine the size of

26. *See* Calvert Drilling Co. v. Corporation Comm'n, 589 P.2d 1064, 1066 (Okla. 1979).

27. *See* Kuykendall v. Corporation Comm'n, 634 P.2d 711, 715 (Okla. 1981). In *Kuykendall*, the Oklahoma Supreme Court held that waste may include the lack of development of a common source. *Id.* at 717.

28. *See* Kingwood Oil Co. v. Hall-Jones Oil Corp., 396 P.2d 510, 512 (Okla. 1964) (the protection of correlative rights includes "(1) not to injure the common source of supply and (2) not to take an undue proportion of the oil and gas"); *see also* Dancy & Dancy, *supra* note 17, at 632.

29. By producing the hydrocarbons from the entire unit, each owner will be given his rightful share of hydrocarbons, thereby protecting his correlative rights. By producing the hydrocarbons efficiently (i.e., with minimum amount of cost) the "waste" of resources is minimized.

30. *Forced Pooling*, *supra* note 17, at 649-53.

Once the owner chooses an option, the Commission will establish the proportionate cost of the well or the amount of bonus to be paid for each owner, depending upon the choice and the size of interest owned by each party. *Id.* at 652-53. *See also* OKLA. STAT. tit. 52, § 87.1(e) (1981 & Supp. 1987).

31. Helmerich & Payne, Inc. v. Corporation Comm'n, 532 P.2d 419, 422 (Okla. 1975). The Oklahoma Supreme Court further stated that "[w]hen the statute says the Commission shall require the owners 'to pool and develop their lands in the spacing unit as a unit' it is limiting pooling within the designated drilling and spacing unit of 640 acres." *Id.* (emphasis omitted).

32. *Id.*

33. *See* OKLA. STAT. tit. 52, § 87.1(d) (1981 & Supp. 1987).

the unit[34] by looking at the "common source" and the types of hydrocarbon the source is capable of producing. Typically, a spacing unit for a shallow oil reservoir is approximately 40 acres; whereas a spacing unit for a gas reservoir is approximately 160 acres.[35]

Once the Commission is satisfied that the unit covers a common source of supply and is necessary to prevent waste or to protect correlative rights, the Commission will give each owner the option of either participating in the cost and risk of the well, or accepting a bonus determined by the Commission.[36] The Commission typically provides 15 days to choose the option. Depending upon the choice, the owner either has to pay the proportional share of the well cost (as determined by the Commission) or has to accept the cash bonus.[37] By accepting a bonus, the mineral owner relinquishes his share of working interest, but retains his 1/8 royalty interest. If drilling results in successful production, the owner will receive a proportionate share of the 1/8 royalty free of expense.[38] The amount of bonus is determined by a lease bonus which would be paid for a lease between working interest owners and the nonparticipating owners under current market conditions.[39]

B. *The Commission's Interpretation of the Forced Pooling Statute*

In 1984, the Commission added a new twist to the above procedure[40] by adopting a policy which restricted the rights of the participating owners to the well bore rather than to the entire unit.[41] Policy Statement Number 45 stated that "the policy of this Commission is to

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34. The statute states:

> The Commission shall not establish well spacing units of more than forty (40) acres in size covering common sources of supply of oil, the top of which lies less than four thousand (4,000) feet below the surface as determined by the original or discovery well in said common source of supply. The Commission shall not establish well spacing units of more than eighty (80) acres in size covering common sources of supply of oil, the top of which lies less than nine thousand nine hundred ninety (9,990) feet and more than four thousand (4,000) feet below the surface as determined by the original or discovery well in said common source of supply.

Id.

35. *See Forced Pooling, supra* note 17, at 649.

36. *Id.* at 650-52.

37. OKLA. STAT. tit. 52, § 87.1(e) (1981 & Supp. 1987). *See* Nesbitt, *The Forced Pooling Order: How Long? How Wide? How Deep?*, 52 OKLA. B.J. 2799, 2799-2800 (1981) [hereinafter Nesbitt].

38. See *Forced Pooling, supra* note 17, at 650. Typically, the bonus is paid either as cash, or as an overriding royalty interest, or as a combination of the two.

39. "[T]he amount . . . of the bonus [is] intended to equal the current fair market value of an oil and gas lease; that is, the bonus which would be paid for a lease between willing contracting parties, neither under compulsion." *Id.*

40. *See supra* notes 36-39 and accompanying text.

41. Corporation Commission of the State of Oklahoma, Policy Order No. 45 (May 3, 1984).

pool, without exception, by the well bore."[42] The Commission shifted its policy to honor the statutory intent to allow only one well per drilling or spacing unit, to promote development of the entire unit, and to maintain a certain degree of consistency in the Commission's decision making.[43] By restricting rights of the interested parties to the well bore, Policy Statement Number 45 allowed the Commission to redetermine the rights of the parties in subsequent wells that may be drilled on the same unit.[44] However, the uncertainty as to rights in any additional wells in the same unit created confusion among the participating owners. Subsequently, the Commission withdrew the Policy Statement on January 14, 1987.[45] Currently, the Commission allows pooling by either the well bore or by the unit depending upon the choice of the interested parties in that unit.[46]

III. MODIFICATION OF A POOLING ORDER

The Commission has statutory authority to modify or alter a previously established spacing unit.[47] In modifying the unit, the Commission may either decrease or increase the spacing unit, or permit additional

42. *Id.* at 2.

43. *Id.* Policy Order No. 45 listed several reasons why the Commission should force pool by the well bore:

> 1. Although [the statute] speaks to development of the unit as a unit, it is also equally clear that, by the same statute, only one well is authorized per drilling and spacing unit.
> . . . .
> 3. By pooling per unit, development and the flow of participation dollars is being inhibited. Parties who would otherwise invest and participate in the drilling of developmental wells are precluded from such participation based on their . . . decision regarding the initial well in the unit.
> 4. Due to the prospect of inhibited development . . . the only alternative available is that of despacing. Such alternative is not desirable since such a scheme will only serve to leave spacing "windows" and therefore not serve to protect correlative rights.
> 5. [I]t is of prime importance that this commission provide some degree of certainty in its decision making . . . .

44. Corporation Commission of the State of Oklahoma, Order No. 307751 (Jan. 14, 1987).

45. *Id.* The Commission heard the testimony of several witnesses before it withdrew Policy Order No. 45. Many witnesses complained about Policy Order No. 45. Some of the complaints were that (1) the pooling should be on a unit basis, because in Oklahoma, due to particular stratigraphic formations, it is hard to predict which formations would produce either oil or gas before drilling a well; (2) Policy Order No. 45 may promote rapid development, but may not promote good conservation practices (by forcing the interested parties in drilling unnecessary wells); (3) Policy Order No. 45 created budgeting problems, because it was difficult to predict exploration and development budgets for a particular pooled unit; (4) the Order was unfair, because it provided free information to nonparticipating owners before deciding to participate in increased density wells; and (5) although the pooling of a unit costs about the same as signing a lease, the operator gets less rights in a pooled unit then if he had signed a lease. *Id.* at 2.

46. Letter from Bonita J. Hyatt to Balmohan Kelkar (July 24, 1987) (discussing the current practices of the Corporation Commission).

47. OKLA. STAT. tit. 52, § 87.1(d) (1981 & Supp. 1987).

wells to be drilled on the established unit.[48] Before modifying a unit, the Commission must determine that the proposed modification will either prevent waste or protect correlative rights.[49] Other factors which limit the Commission's action are unclear. Thus, the extent of the Commission's authority to redefine the rights of interested parties in the previously pooled unit remains unanswered.

The Commission's policy allowing forced pooling by the well bore is an attempt to exercise authority which the Commission may not have. Because the rights of all the interested parties are vested in the entire unit,[50] rather than in the well bore, the Commission's authority to modify a previous order seems limited.[51] In fact, the Commission must consider several factors before modifying the pooling order. Analysis of those factors shows that forced pooling by the well bore can be both unwise and illegal.

A. *Vested Interests in the Entire Unit*

The property rights created by a pooling order provide a starting point for deciding if the Commission can force pool by the well bore. As stated before, the interest owner has the option of either participating in the cost of the well or accepting a bonus.[52] The working interests of all the interest owners who chose not to participate in the actual development of the unit are transferred to participating owners by operation of law.[53] At that moment, the property interests of the working interest owners become vested and cannot be extinguished by the Commission.[54] Furthermore, after the interests are vested, the Commission has no power to modify those rights; however, a change of circumstances may require modification of a previous pooling order.[55]

The rights vested should be in the entire unit, and not merely in the well bore, for two reasons. The most important reasons for rights to vest

48. "The Commission shall have jurisdiction . . . to decrease the size of the well spacing units or to permit additional wells to be drilled within the established units . . . or . . . to enlarge the area covered by the spacing order . . . ." *Id.*

49. "[S]uch modification . . . will prevent or assist in preventing the various types of wastes prohibited by statute . . . or will protect or assist in protecting the correlative rights of persons interested in said common source of supply . . . ." *Id.*

50. *See infra* notes 56-63 and accompanying text.

51. *See infra* notes 78-102 and accompanying text.

52. *See supra* notes 36-38 and accompanying text.

53. *See* Texas Oil & Gas Corp. v. Phillips Petroleum Co., 277 F. Supp. 366, 369 (W.D. Okla. 1967), *aff'd*, 406 F.2d 1303 (10th Cir.), *cert. denied*, 396 U.S. 829 (1969).

54. *See* Crest Resources & Exploration Corp. v. Corporation Comm'n, 617 P.2d 215, 218 (Okla. 1980).

55. *Id.* at 218 n.4; *see also infra* notes 104-110 and accompanying text.

in the entire unit are the notions of risk and fairness.[56] The forced pooling statute provides that the pooling order "shall be upon such terms as are just and reasonable and will afford to the owner of such tract in the unit the opportunity to recover or receive without unnecessary expense his just and fair share of the oil and gas."[57] The statute's reference to the ability of the owner to obtain a just and fair share of the hydrocarbons from the pooled unit must contemplate the inherent risks of drilling and participation. The original election to participate was based upon available information—or lack of available information.[58] Normally, the initial information is essentially restricted to geological interpretation of seismic data and data obtained from the surrounding wells. Most of this information is qualitative, and interpretation of this data is more of an art than a science. As a result, the risks involved in drilling the first well are substantial. However, once production begins, additional information becomes available.[59] The additional information may indicate the type or size of the reservoir, producing zones, reservoir capacity, communication between the layers, and additional geological data.[60] With this data, the operator's risk of drilling another producing well in the same unit is substantially reduced. Allowing the nonparticipating owners to participate in subsequent development of the unit is unfair under these circumstances because they have reduced their risk of drilling at the expense of original participating owners.[61]

The second reason for vesting rights in the entire unit is the language of the forced pooling statute. As the Oklahoma Supreme Court noted in *Helmerich & Payne, Inc. v. Corporation Commission*,[62] the Commission is required by statute "to pool and develop their lands *in the spacing unit* as a *unit*."[63] The statute clearly indicates that the Commission, before making the pooling order, should consider the development and pooling of the entire *unit*. Therefore, the rights vested are related to the entire unit. Even if subsequent information reveals that additional

56. OKLA. STAT. tit. 52, § 87.1(e) (1981 & Supp. 1987); *see also* Nesbitt, *supra* note 37, at 2799.

57. OKLA. STAT. tit. 52, § 87.1(e) (1981 & Supp. 1987).

58. *See Amoco I*, 57 OKLA. B.J. 1961, 1963 (1986); *see also* Nesbitt, *supra* note 37, at 2800.

59. *See infra* notes 106-108 and accompanying text.

60. For example, the analysis of produced hydrocarbons may indicate if the reservoir is oil or gas; the reservoir limit test may indicate the size of the reservoir; well logging and well testing may indicate which zones are producing and which zones are communicating with each other; and production data may indicate how much the reservoir is capable of producing.

61. *See Amoco I*, 57 OKLA. B.J. at 1963.

62. 532 P.2d 419 (Okla. 1975).

63. *Id.* at 422 (quoting OKLA. STAT. tit. 52, § 87.1(d) (1981 & Supp. 1987)) (emphasis by the court).

wells are needed for a complete development of the unit, the working interests with respect to the additional wells should not be reestablished. Instead, development would ensue pursuant to the rights established in the original pooling order.

The Oklahoma Court of Appeals has cited vested rights and fairness as principal reasons for rejecting forced pooling by the well bore.[64] In *Amoco Production Co. v. Corporation Commission*, the operator under a forced pooling order requested to drill another well on the unit.[65] The Commission decided that it would redetermine rights in the new well.[66] In effect, the Commission decided to force pool by the well bore. The appellate court disagreed with the Commission's interpretation that the Commission had statutory authority to force pool by the well bore.[67] Under the forced pooling statute, an operator has vested rights which he purchased in the unit. The court ruled that it is unreasonable for the Commission to divest the operator of his vested rights. By allowing interest owners to have a second election in subsequent wells, the Commission deprived the operator of a property interest without due process of law.[68] Thus, working interest owners have vested rights in the entire unit which are protected from unreasonable state action.

In spite of statutory language and appellate decisions to the contrary,[69] some Oklahoma cases, albeit in dicta, have indicated that the rights of interest owners are restricted to a well bore. In *Woods Petroleum Corporation v. Sledge*,[70] the Oklahoma Supreme Court, referring to a previous pooling order, stated that "[t]he Commission . . . adjusted the equities only on the first well,"[71] but went further by stating that the Commission had authority to adjust the equities in the subsequent wells to be drilled on the same unit.[72] The court, however, did state that the appropriateness of the order which pooled by the well bore "is not an issue in this appeal."[73]

Recent court of appeals decisions have not followed the dictum in *Woods*. Instead, they assert that the supreme court in *Woods* did not

64. *Amoco I*, 57 OKLA. B.J. at 1962.
65. *Id.*
66. Amoco Prod. Co. v. Corporation Comm'n, 57 OKLA. B.J. 1173, 1174 (1986).
67. *Amoco I*, 57 OKLA. B.J. at 1962.
68. *Id.* at 1963. For a discussion of the due process issues raised by forced pooling by the well bore, see *infra* notes 78-102 and accompanying text.
69. *See, e.g., Amoco II*, 58 OKLA. B.J. 3180 (1987); *Amoco I*, 57 OKLA. B.J. 1961.
70. 632 P.2d 393 (Okla. 1981).
71. *Id.* at 396.
72. *Id.*
73. *Id.*

resolve the issue of pooling by a well bore.[74] The Oklahoma Court of Appeals, in *Southern Union Production Co. v. Eason Oil Co.*,[75] stated that "a spacing order is a condition precedent to a forced pooling order,"[76] indicating that if the Commission respaces the previous pooling order, the previous pooling order is no longer effective. This implies that the rights of the interested parties can be reestablished once the spacing is reestablished. However, the same court of appeals, in a later decision, indicated that *Southern Union* did not deal with the issue of pooling by a well bore.[77]

B. *Statutory and Constitutional Restrictions*

As *Amoco I* indicated, rights that are vested under a pooling order cannot be taken away without due process of law.[78] As a check on the state's police power, due process requires that state actions which deprive an owner of property be rationally related to some legitimate state goal.[79] However, the state failed to meet this test in *Amoco I* when it allowed new owners to participate in a new well.[80] Under the initial pooling order, the operator's rights are preserved in the entire unit so long as drilling is commenced within 180 days from the date of the order.[81] When it force pooled by the well bore, the Commission unreasonably deprived the operator of his vested rights in the unit.[82] As a result, *Amoco I* calls into question the validity of force pooling by the well bore.

As a function of the state's police power, the Commission may modify a pooling order even if rights are vested in the entire unit.[83] However, while "private rights yield to the exercise of police power, they are not to be totally annihilated thereby, or interfered with to a greater extent than reasonably necessary, taking into consideration the real object to be accomplished."[84] Therefore, in modifying a previously established order, the Commission has a duty to minimize the impact on vested

74. *Amoco II*, 58 OKLA. B.J. 3180, 3182 (1987); *Amoco I*, 57 OKLA. B.J. 1961 (1986).
75. 540 P.2d 603 (Okla. Ct. App. 1975).
76. *Id.* at 608 (quoting Helmerich & Payne, Inc. v. Corporation Comm'n, 532 P.2d 419, 422 (1975)).
77. *Amoco I*, 57 OKLA. B.J. at 1962.
78. *Id.* at 1963.
79. Stated another way, the state's actions cannot be arbitrary. *Id.*
80. *Id.*
81. *Id.*
82. *Id.*
83. OKLA. STAT. tit. 52, § 112 (1981).
84. Union Texas Petroleum v. Corporation Comm'n, 651 P.2d 652, 669 (Okla.), *cert. denied*, 459 U.S. 837 (1982) (Barnes, V.C.J., dissenting) (quoting Oklahoma Natural Gas Co. v. Choctaw Gas Co., 205 Okla. 255, 236 P.2d 970 (1951)).

rights,[85] and at the same time accomplish the statutory objectives of preventing waste[86] and protecting correlative rights.[87]

Two recent Oklahoma Supreme Court cases suggest that the court is unwilling to give vested interests significant due process protection.[88] Although neither of these cases deal with the issue of pooling by a well bore, they do deal with drilling of additional wells on a pooled unit. In *Union Oil Co. v. Brown*,[89] the court allowed the Commission to despace the units and reestablish the vested rights in the new units,[90] instead of allowing the participating interest owners to drill additional wells. Although Union Oil had asked the Commission for permission to drill additional wells,[91] instead of granting the request, the Commission authorized despacing of the original unit, which destroyed Union's vested rights in the originally established unit.[92] In approving the Commission's order, the court reaffirmed the Commission's authority to either change the size of the unit or to permit additional drilling of wells on the same unit.[93] However, the court did not consider due process constraints, which would have minimized the effects of the modification on Union's vested interests.[94] Instead, the court gave equal weight to the statutory provisions allowing either despacing the unit or drilling additional wells on the same unit, and stated that the participating interest owner's claim to vested rights must rest in his lease contract.[95] This implies that the Commission can modify the order without any consideration to due process, and the parties whose vested rights are affected can only appeal if the rights are included in a private contract such as a lease. It is not enough, according to the court, that the rights are created by force pooling a unit.

85. The dissent further stated that " '[t]he Corporation Commission's power to regulate the taking from the reservoir to prevent waste and protect correlative rights . . . does not extend to overturning private contracts where not necessary for such accomplishment.' " *Id.* (quoting Cabot Carbon Co. v. Phillips Petroleum Co., 287 P.2d 675, 679 (Okla. 1978)).

86. *See supra* notes 23-28 and accompanying text.

87. *Id.*

88. *See, e.g., Union Texas* 651 P.2d 652; Union Oil Co. v. Brown, 641 P.2d 1106 (Okla. 1981).

89. 641 P.2d 1106.

90. *Id.* at 1109.

91. *Id.* at 1108.

92. *Id.*

93. *Id.* at 1109.

94. *See supra* notes 78-87 and accompanying text.

95. *Union*, 641 P.2d at 1109.

A similar conclusion is reached in *Union Texas Petroleum v. Corporation Commission*.[96] In *Union Texas*, the Oklahoma Supreme Court allowed the Commission to despace the existing unit, although the Commission had an option to let the participating owners drill additional wells.[97] In his lengthy dissent, Judge Barnes compared the relative advantages and disadvantages of either drilling additional wells or despacing the unit.[98] The dissent noted that drilling additional wells would have accomplished the objectives of preventing waste and protecting correlative rights.[99] As a result, Justice Barnes felt that the result achieved by the majority was both unreasonable and illegal.[100]

In both of the *Union* cases the Commission could have protected correlative rights by simply allowing the original participating owners to drill additional wells. Instead, the Commission chose to despace the original unit and redefine the interests in the newly pooled units. The Oklahoma Supreme Court seemed to have approved the Commission's actions in both these cases. Although these cases do not explicitly discuss pooling by a well bore, by ignoring due process requirements the decisions seem to imply that the vested interests in the original pooling order can be destroyed once the original units are despaced. These decisions are in apparent conflict with other Oklahoma Supreme Court decisions[101] and recent Oklahoma Court of Appeals decisions.[102] This apparent contradiction can be reconciled only if the operators in *Union Oil* and *Union Texas* had acted imprudently. Then, the Commission could have recreated the interests in newly defined units. Enough details

96. 651 P.2d 652 (Okla. 1981), *cert. denied*, 459 U.S. 837 (1982).

97. *Id.* at 657. The Oklahoma Supreme Court quoted the Corporation Commission's order which stated that "establishment of 160-acre units is the proper relief [i.e., despacing the units], notwithstanding the fact that other relief [i.e., allowing additional wells to be drilled] is available based on substantial evidence herein." *Id.*

98. *Id.* at 667-68 (Barnes, V.C.J., dissenting).

99. *Id.* at 668.

100. The Commission's order took the participating owners' "property for the benefit of others and is an unreasonable extension of the police power . . . and thereby violates the constitutional rights [of these owners]. . . ." *Id.* at 669.

101. See, *e.g.*, Helmerich & Payne, Inc. v. Corporation Comm'n, 532 P.2d 419, 422 (Okla. 1975) where the Oklahoma Supreme Court stated that "Commission *shall* require the owners to pool and develop their lands *in the spacing unit* as a *unit*," implying that the Commission is not allowed to pool by a well bore; Cotton Petroleum Corp. v. Harry Carlile Trust, 57 OKLA. B.J. 998, 1000 (1986) (the Commission should follow "minimum norms of federal and state due process" in any pooling proceeding).

102. *See Amoco I*, 57 OKLA. B.J. 1961, 1963 (1986) (citing *Helmerich & Payne* and *Cotton Petroleum*); *see also Amoco II*, 58 OKLA. B.J. 3180, 3181 (1987) (citing *Helmerich & Payne* in support of its decision).

are not given in either decision to reach any conclusion as to the imprudence of the operators.

If all the cases are considered together with the statutory authority, it seems that *Union Oil* and *Union Texas* should not be viewed as allowing the Commission to force pool by a well bore. Instead, these two decisions should be viewed as ignoring due process considerations. Other cases seem to indicate that the Commission has no authority to force pool by the well bore.[103]

C. *Changed Conditions Which Allow Modification*

The Commission can constitutionally modify a pooling order if "there is a substantial change of knowledge of conditions existing in the area since the former order was made."[104] Several possible changes can take place once the Commission establishes the pooling order.[105] First, there may be changes in the physical condition of the reservoir, as evidenced by production performance,[106] well interpretation,[107] or

103. *See supra* notes 64-68 and accompanying text.

104. Phillips Petroleum Corp. v. Corporation Comm'n, 482 P.2d 607, 609 (Okla. 1971). The Oklahoma Supreme Court stated that "the authority to modify must necessarily involve a changed factual situation from that existing at the time of the prior order." *Id.*

105. The Oklahoma Supreme Court recognizes three changes which would allow the Corporation Commission to modify the previous order.

> The first may be designated as an internal change of condition. It is characterized by an actual change in the physical behavior of the reservoir occasioned by development and depletion . . . . The second kind may be called an external change of condition. In this instance, the physical behavior of the reservoir remains constant, but the information gained through development or depletion experience demonstrates that the conclusions reached originally were incorrect . . . . The third possible kind of change of condition defies tagging with an appropriate label . . . . In this case . . . new scientific knowledge and technology may add new dimensions to the basic legal concepts of waste and correlative rights . . . .

Id. at 610. The present investigation extends the above analysis by combining the first two types of change into one, and adding the third type of change as an economic change.

106. Production performance is the rate at which the well is producing, the type of fluid it is producing, and the changes in reservoir parameters (such as pressure), expressed as a function of time. For example, the composition of produced fluids may indicate the reservoir contains mostly gas instead of oil or vice versa. *See, e.g.*, Union Texas Petroleum v. Corporation Comm'n, 651 P.2d 652, 654-55 (Okla. 1981), *cert. denied*, 459 U.S. 837 (1982) (gas producing formation produces increasing amounts of oil); Union Oil Co. v. Brown, 641 P.2d 1106, 1109 (Okla. 1981) (single oil producing section found among several predominantly gas producing sections). Fluid composition may also indicate problems of water or gas coning, which suggests that recovery from the reservoir will be limited. The underlying acquifer or the overlying gas cap of the oil zone may provide energy to produce oil. However, if coning occurs, some of that water or gas, instead of helping to produce oil, will itself start producing.

A well's production data may indicate the type of reservoir. For example, a reservoir may be fractured or unfractured. The data may also indicate that the "common source of supply" is either smaller or larger than the pooled unit. *See, e.g.*, Calvert Drilling Co. v. Corporation Comm'n, 589 P.2d 1064 (Okla. 1979) (spacing order modified after the Commission was presented evidence which suggested the common source of supply was larger than originally thought).

production performance by wells in any adjacent unit.[108] Second, there may be changes in scientific technology which enhance efficient production of hydrocarbons.[109] Finally, changes in economic conditions may prompt modification of a pooling order.[110]

These changes may also occur if an operator has acquired an operating interest by a private lease from a mineral owner, typically a nonparticipating interest owner. Because the bonus paid to nonparticipating owners in a pooled unit is determined by an equivalent bonus which would be paid for signing a lease,[111] the rights and obligations of the participating owners in a pooled unit should be similar to the rights and obligations of a lessee in an oil and gas lease. During the secondary term of oil and gas lease the courts use a prudent operator standard to determine if the lease should be sustained.[112] The prudent operator may be defined as an operator who is aware of the current technology which will

107. Well logging and well test analysis reveals the reservoir characteristics. Well logging indicates the feasibility of production from pooled zones, and may also indicate communication between various zones. Well interpretation determines whether it is feasible to produce from zones simultaneously. This may involve problems with dual completion of the zones, inability to drill to designated zones, or other related problems. *See also* Nesbitt, *supra* note 37, at 2803.

108. If the wells from adjacent units are producing, it may indicate that the hydrocarbons from existing units are being drained by these wells, and as a result the owners are deprived of correlative rights. *See, e.g.*, Corporation Comm'n v. Union Oil Co., 591 P.2d 711, 715 (Okla. 1979). In this case, the Supreme Court of Oklahoma noted that prevention of drainage from adjacent units is a part of protection of correlative rights. Therefore, the Commission has the authority to modify a pooled unit to prevent such a drainage. *Id.*

109. There are three basic types of technological changes which affect production. First, improved secondary recovery techniques may increase recovery from what would otherwise be a depleted reservoir. Secondary recovery techniques include water flooding. Second, new drilling techniques may make new reserves accessible. Finally, well completion or stimulation techniques can increase productivity. Technology may allow for simultaneous production from several zones. Techniques such as dual completion allow the operator to use two tubing strings in one well to produce from two different zones having different pressures. New stimulation techniques allow a producer to have access to previously inaccessible parts of a reservoir. The production capacity of a well is a direct function of the ability of the reservoir to transmit or conduct reservoir fluids. The conductivity can be improved by several techniques including fracturing or acidizing.

110. Changes in economic conditions fall into two categories. First, fluctuations in the price or availability of hydrocarbons influence decisions of whether to drill. Second, costs of operation or exploration may rise, making further operation or exploration unlikely. *See, e.g.*, Kuykendall v. Corporation Comm'n, 634 P.2d 711, 716-17 (Okla. 1981). The Oklahoma Supreme Court noted that:

> [T]he cost of drilling and producing [hydrocarbons] is ever increasing, and that the market price being paid for the product will vary with time are economic realities which cannot be ignored. . . . [T]hat which is feasible from a monetary standpoint today, may not be tomorrow . . . because economic conditions have materially altered the feasibility of development of the field. We therefore hold, that if by increasing the size of a drilling or spacing unit, or if by decreasing it the practicable recoverability of minerals may be affected, the Corporation Commission may consider such factors as constituting "waste."

111. *See supra* note 35 and accompanying text.

112. *See, e.g.*, Henry v. Clay, 274 P.2d 545, 546 (Okla. 1954); Walden v. Potts, 194 Okla. 453, 455, 152 P.2d 923, 924 (1944).

maximize the production of the hydrocarbons from an area of interest in the most efficient and profitable manner. The same definition can easily be applied to pooled units to determine when the Commission can modify the pooling order.

IV. APPLYING THE PRUDENT OPERATOR STANDARD

Because of the problems associated with forced pooling by the well bore, the Commission should look to other alternatives when modification of the pooling order is necessary. In particular, the Commission should apply a prudent operator standard to decide when modification is appropriate. Using this standard, the Commission would simply ask whether the well operator is acting prudently to protect correlative rights and prevent waste. If so, then the operator's interest in the first well will be preserved in subsequent wells. Otherwise, the Commission should allow different working interest owners to operate any additional wells.

The prudent operator standard can apply to several common situations. For example, sometimes a well unexpectedly produced oil rather than gas. Because oil is less mobile than gas, the well may not be able to efficiently produce hydrocarbons from the pooled unit (say 640 acres). To protect correlative rights, the operator has a duty to apply for a modification of a pooling order which will allow him to drill additional wells on a smaller spacing.[113] So long as the operator was acting in a prudent manner, the Commission, by allowing the *same* working interest owners to drill additional wells, can protect the correlative rights without interfering with vested interests. This will also satisfy the constraint of due process.

Other situations can benefit from the prudent operator standard. As a general rule, if additional wells need to be drilled as a result of changes in scientific knowledge or economic conditions, the Commission can first determine if the operator is acting in a prudent manner. If the Commission determines that the operator is indeed acting in a prudent fashion, it should allow the same working interest owners to develop the entire unit.

In some instances, the Commission may have to affect vested interests of a prudent operator in order to protect correlative rights or prevent

113. This duty may be termed as an implied covenant to develop. *See, e.g.*, Chenoweth v. Pan Am. Petroleum Corp., 314 F.2d 63, 66 (10th Cir. 1963); Sparks v. Midstates Oil Corp., 251 F.2d 71, 72 (10th Cir. 1958). According to these cases, the prudent operator has an implied duty to develop the lease if "there is reasonable expectation that the cost of such development, as well as some profit on the investment, might be returned." *Id. See also* 5 E. KUNTZ, A TREATISE ON THE LAW OF OIL AND GAS § 58.1 (12th rev. ed. 1964).

waste. However, those instances should be rare. For example, if the Commission determines that hydrocarbons are being produced from a area which is smaller than a spacing unit, the Commission may reduce the spacing unit. The original unit is established on very limited information. There is always a doubt as to the exact boundary of a common source of supply. If subsequent information reveals that the common source of supply is smaller than the size of the pooled unit, the Commission may reduce the original spacing unit, and if desired, may reassign the interests in the rest of the portion. This will allow production from "other common sources of supply" in the same unit.

V. CONCLUSION

The Corporation Commission has statutory authority to establish drilling or spacing units over a common source of supply to prevent waste and to protect correlative rights. Once the rights of interest owners are determined, they become vested and are protected by due process. The rights are vested in the entire pooled unit, and not in a single well bore. In choosing an appropriate modification in the previously pooled unit, the Commission should use the prudent operator standard. Using this standard, the Commission could redefine vested rights only if the operator acts imprudently. Otherwise, before modifying a previous pooling order, the Commission has a duty to choose an alternative which will minimize the impact on vested rights.

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