

operator(s) of such well(s) have been furnished a copy of the permit.

[1-1-50, 5-22-73...2-1-96; 19.15.3.102 NMAC - Rn, 19 NMAC 15.C.102, 11-15-01]

#### 19.15.3.103 SIGN ON WELLS

A. All wells and related facilities regulated by the Division shall be identified by a sign, which sign shall remain in place until the well is plugged and abandoned and the related facilities are closed.

B. For drilling wells, the sign shall be posted on the derrick or not more than 20 feet from the well. C.

The sign shall be of durable construction and the lettering shall be legible and large enough to be read under normal conditions at a distance of 50 feet.

D. The wells on each lease or property shall be numbered in non-repetitive, logical and distinctive sequence.

E. An operator will have 90 days from the effective date of an operator name change to change the operator name on the well sign unless an extension of time, for good cause shown along with a schedule for making the changes, is granted.

F. Each sign shall show the:

(1) number of well;

(2) name of property;

(3) name of operator;

(4) location by footage, quarter-quarter section, township and range (or Unit Letter can be substituted for the quarter-quarter section); and

(5) API number.

[1-1-50, 2-1-96, 6-30-97, 3-31-00; 19.15.3.103 NMAC - Rn, 19 NMAC 15.C.103, 11-15-01; A, 01-31-03]

#### 19.15.3.104 WELL SPACING AND LOCATION

A. Classification Of Wells: Wildcat And Development Wells

(1) Wildcat Well

(a) In San Juan, Rio Arriba, Sandoval, and McKinley Counties a wildcat well is any well to be drilled the spacing unit of which is a distance of two miles or more from:

(i) the outer boundary of any defined pool that has produced oil or gas from the formation to which the well is projected to be drilled; and

(ii) any well that has produced oil or gas from the formation to which the proposed well is projected to be drilled.

(b) In all counties except San Juan, Rio Arriba, Sandoval, and McKinley, a wildcat well is any well to be drilled the spacing unit of which is a distance of one mile or more from:

(i) the outer boundary of any defined pool that has produced oil or gas from the formation to which the well is projected to be drilled; and

(ii) any well that has produced oil or gas from the formation to which the proposed well is projected.

(2) Development Well

(a) Any well that is not a wildcat well shall be classified as a development well for the nearest pool that has produced oil or gas from the formation to which the well is projected to be drilled. Such development well shall be spaced, drilled, operated, and produced in accordance with the rules in effect for that pool, provided the well is completed in that pool.

(b) Any well classified as a development well for a pool but completed in a producing formation not included in the vertical limits of that pool shall be operated and produced in accordance with the rules in effect for the nearest pool that is producing from that formation within the two miles in San Juan, Rio Arriba, Sandoval, and McKinley Counties or within one mile everywhere else. If there is no designated pool for that producing formation within the two miles in San Juan, Rio Arriba, Sandoval, and McKinley Counties or within one mile everywhere else, the well shall be re-classified as a wildcat well.

B. Oil Well Acreage And Well Location Requirements

(1) Any wildcat well that is projected to be drilled as an oil well to a formation and in an area that in the opinion of the Division may reasonably be presumed to be productive of oil rather than gas and each development well for a defined oil pool, unless otherwise provided in special pool orders, shall be located on a spacing unit consisting of approximately 40 contiguous surface acres substantially in the form of a square which is a legal subdivision of the U.S. Public Land Surveys, which is a governmental quarter-quarter section or lot, and shall be located no closer than 330 feet to any boundary of such unit. Only those 40-acre spacing units committed to active secondary recovery projects shall be permitted more than four wells.

(2) If a well drilled as an oil well is completed as a gas well but does not conform to the applicable gas well location rules, the operator must apply for administrative approval for a non-standard location before the well can produce. The Director may set any such application for hearing.

C. Gas Wells Acreage And Well Location Requirements

Any wildcat well that is projected to be drilled as a gas well to a formation and in an area that in the opinion of the Division may reasonably be presumed to be productive of gas rather than oil and each development well for a defined gas pool, unless otherwise provided in special pool orders, shall be spaced and located as follows:

(1) 640-Acre Spacing applies to any deep gas well in Rio Arriba, San Juan, Sandoval or McKinley County that is projected to be drilled to a gas producing formation older than the Dakota formation or is a development well within a gas pool created and defined by the Division after June 1, 1997 in a formation older than the Dakota formation, which formation or pool is located within the surface outcrop of the Pictured Cliffs formation (i.e., the San Juan Basin). Such well shall be located on a spacing unit consisting of 640 contiguous surface acres, more or less, substantially in the form of a square which is a section and legal subdivision of the U.S. Public Land Surveys and shall be located no closer than: 1200 feet to any outer boundary of the spacing unit, 130 feet to any quarter section line, and 10 feet to any quarter-quarter section line or subdivision inner boundary.

(2) 320-Acre Spacing applies to any deep gas well in Lea, Chaves, Eddy or Roosevelt County, defined as a well that is projected to be drilled to a gas producing formation or is within a defined gas pool in the Wolfcamp or an older formation. Such well shall be located on a spacing unit consisting of 320 surface contiguous acres, more or less, comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U.S. Public Land Surveys provided that:

(a) the initial well on a 320-acre unit is located no closer than 660 feet to the outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary;

(b) only one infill well on a 320-acre unit shall be allowed provided that the well is located in the quarter section of the 320-acre unit not containing the initial well and is no closer than 660 feet to the outer boundary of the quarter section and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; and

(c) the Division-designated operator for the infill well is the same operator currently designated by the Division for the initial well.

(3) 160-Acre Spacing applies to any other gas well not covered above. Such well shall be located in a spacing unit consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section and a legal subdivision of the U.S. Public Land Surveys and shall be located no closer than 660 feet to any outer boundary of such unit and no closer than 10 feet to any quarter-quarter section or subdivision inner boundary.

D. Acreage Assignment

(1) Well Tests and Classification. It is the responsibility of the operator of any wildcat or development gas well to which more than 40 acres has been dedicated to conduct a potential test within 30 days following completion of the well and to file the test with the Division within 10 days following completion of the test. (See Rule 401)

(a) The date of completion for a gas well is the date of the conclusion of active completion work on the well.

(b) If the Division determines that a well should not be classified as a gas well, the Division will reduce the acreage dedicated to the well to the standard acreage for an oil well.

Failure of the operator to file the test within the specified time will also subject the well to such acreage reduction.

(2) Non-Standard Spacing Units. Any well that does not have the required amount of acreage dedicated to it for the pool or formation in which it is completed may not be produced until a standard spacing unit for the well has been formed and dedicated or until a non-standard spacing unit has been approved.

(a) Division District Offices have the authority to approve non-standard spacing units without notice when the unorthodox size or shape is necessitated by a variation in the legal subdivision of the U. S. Public Land Surveys and/or consists of an entire governmental section and the non-standard spacing unit is not less than 70% or more than 130% of a standard spacing unit. The operator must obtain Division approval of Division Form C-102 showing the proposed non-standard spacing unit and the acreage contained therein.

(b) The Director may grant administrative approval to non-standard spacing units after notice and opportunity for hearing when an application has been filed and the unorthodox size or shape is necessitated by a variation in the legal subdivision of the U.S. Public Land Surveys or the following facts exist:

(i) the non-standard spacing unit consists of: (A) a single quarter-quarter section or lot or (B) quarter-quarter sections or lots joined by a common side; and

(ii) the non-standard spacing unit lies wholly within: a single quarter section if the well is completed in a pool or formation for which 40, 80, or 160 acres is the standard spacing unit size; a single half section if the well is completed in a pool or formation for which 320 acres is the standard spacing unit size; or a single section if the well is completed in a pool or formation for which 640 acres is the standard spacing unit size.

(c) Applications for administrative approval of non-standard spacing units pursuant to Subsection D, Paragraph (2), Subparagraph (b) of 19.15.3.104 NMAC shall be submitted to the Division's Santa Fe Office and accompanied by: (i) a plat showing the spacing unit and an applicable standard spacing unit for that pool or formation, the proposed well dedications and all adjoining spacing units; (ii) a list of affected persons as defined in Rule 1207.A(2); and (iii) a statement

discussing the reasons for the formation of the non-standard spacing unit.

(d) The applicant shall submit a statement attesting that the applicant, on or before the date the application was submitted to the Division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in Subparagraph (c) above, by certified mail, return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the Division receives the application. The Director may approve the application upon receipt of waivers from all the notified persons or if no person has filed an objection within the 20-day period.

(e) The Director may set for hearing any application for administrative approval.

(3) Number of Wells Per Spacing Unit. Exceptions to the provisions of statewide rules or special pool orders concerning the number of wells allowed per spacing unit may be permitted by the Director only after notice and opportunity for hearing. Notice shall be given to those affected persons defined in Rule 1207.A.(2).

E. Forms - Form C-102 "Well Location and Acreage Dedication Plat" for any well shall designate the exact legal subdivision dedicated to the well. Form C-101 "Application for Permit to Drill, Deepen, or Plug Back" will not be approved without an acreage designation on Form C-102.

F. Unorthodox Locations

(1) Well locations for producing wells and/or injection wells that are unorthodox based on the requirements of Subsection B above and are necessary for an efficient production and injection pattern within a secondary recovery, tertiary recovery, or pressure maintenance project are hereby authorized, provided that the unorthodox location within the project is no closer than the required minimum distance to the outer boundary of the lease or unitized area, and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. These locations shall only require such prior approvals as are necessary for an unorthodox location.

(2) The Director may grant an exception to the well location requirements of Subsections B and C above or special pool orders after notice and opportunity for hearing when the exception is necessary to prevent waste or protect correlative rights.

(3) Applications for administrative approval pursuant to Subsection F, Paragraph (2) above shall be submitted to the Division's Santa Fe Office accompanied by (a) a plat showing the spacing unit, the proposed unorthodox well location and the adjoining spacing units and wells; (b) a list of affected persons as defined in Rule 1207.A(2); and (c) information evidencing the need for the exception. Notice shall be given as required in Rule 1207.A(2).

(4) The applicant shall submit a statement attesting that applicant, on or before the date that the application was submitted to the Division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in Subsection F, Paragraph (3) above, by certified mail, return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the Division receives the application. The Director may approve the unorthodox location upon receipt of waivers from all the affected persons or if no affected person has filed an objection within the 20-day period.

(5) The Director may set for hearing any application for administrative approval of an unorthodox location.

(6) Whenever an unorthodox location is approved, the Division may order any action necessary to offset any advantage of the unorthodox location.

G. Effect On Allowables

(1) If the drilling tract is within a prorated/allocated oil pool or is subsequently placed within such pool and the drilling tract consists of less than 39½ acres or more than 40½ acres, the top unit allowable for the well shall be increased or decreased in the proportion that the number of acres in the drilling tract bears to 40.

(2) If the drilling tract is within a prorated/allocated gas pool or is subsequently placed within such pool and the drilling tract consists of less than 158 acres or more than 162 acres in 160-acre pools, or less than 316 acres or more than 324 acres in 320-acre pools, or less than 632 acres or more than 648 acres in 640-acre pools, the top allowable for the well shall be decreased or increased in the proportion that the number of acres in the drilling tract bears to a standard spacing unit for the pool.

(3) In computing acreage under Paragraphs (1) and (2) above, less than ½ acre shall not be counted but ½ acre or more shall count as one acre.

(4) The provisions of Paragraphs (1) and (2) above shall apply only to wells completed after January 1, 1950.

H. Division-Initiated Exceptions - In order to prevent waste, the Division may, after hearing, set different spacing requirements and require different acreage for drilling tracts in any defined oil or gas pool.

I. Pooling Or Communitization Of Small Oil Lots

(1) The Division may approve the pooling or communitization of fractional oil lots of 20.49 acres or less with a contiguous oil spacing unit when the ownership is common and the tracts are part of the same lease with the same royalty interests if the following requirements are satisfied:

(a) Applications for administrative approval shall be submitted to the Division's Santa Fe Office and accompanied by: (i) a plat showing the dimensions and acreage involved, the ownership of such acreage, the location of all

existing and proposed wells and all adjoining spacing units; (ii) a list of affected persons as defined in Rule 1207.A(2); and (iii) a statement discussing the reasons for the pooling or communitization.

(b) The applicant shall submit a statement attesting that the applicant, on or before the date the application was submitted to the Division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in (a) above, by certified mail, return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the Division receives the application. The Director may approve the application upon receipt of waivers from all the notified persons or if no person has filed an objection within the 20-day period.

(c) The Director may set for hearing any application for administrative approval.

(2) The Division may consider the common ownership and common lease requirements met if the applicant furnishes with the application a copy of an executed pooling agreement communitizing the tracts involved.

[1-1-50...2-1-96; A, 6-30-97; A, 8-31-99; 19.15.3.104 NMAC - Rn, 19 NMAC 15.C.104, 11-15-01]

#### **19.15.3.105 PIT FOR CLAY, SHALE, DRILL FLUID AND DRILL CUTTINGS**

A. In order to assure a supply of proper material for mud-laden fluid to confine oil, gas, or water to their native strata during the drilling of any well, operators shall provide before drilling is commenced an adequate pit for the accumulation of drill cuttings. Drilling fluids and drill cuttings must be disposed of at the well site in a manner to prevent contamination to surface or subsurface waters. Removal of drilling fluids or drill cuttings for offsite disposal will be permitted only by approval of the appropriate Division district supervisor.

B. To protect migratory birds, pits used for drilling, completion, blowdown, workover or an emergency immediately after cessation of the activity must have oil removed from their surface or be screened, netted or covered.

[1-1-50, 9-1-89...2-1-96; 19.15.3.105 NMAC - Rn, 19 NMAC 15.C.105, 11-15-01]

#### **19.15.3.106 SEALING OFF STRATA**

A. During the drilling of any oil well, injection well or any other service well, all oil, gas, and water strata above the producing and/or injection horizon shall be sealed or separated in order to prevent their contents from passing into other strata.

B. All fresh waters and waters of present or probable value for domestic, commercial, or stock purposes shall be confined to their respective strata and shall be adequately protected by methods approved by the Division. Special precautions by methods satisfactory to the Division shall be taken in drilling and abandoning wells to guard against any loss of artesian water from the strata in which it occurs, and the contamination of artesian water by objectionable water, oil, or gas.

C. All water shall be shut off and excluded from the various oil- and gas-bearing strata which are penetrated. Water shut-offs shall ordinarily be made by cementing casing.

[1-1-50, 3-1-91...2-1-96; 19.15.3.106 NMAC - Rn, 19 NMAC 15.C.106, 11-15-01]

#### **19.15.3.107 CASING AND TUBING REQUIREMENTS**

A. Any well drilled for oil or natural gas shall be equipped with such surface and intermediate casing strings and cement as may be necessary to effectively seal off and isolate all water-, oil-, and gas-bearing strata and other strata encountered in the well down to the casing point. In addition thereto, any well completed for the production of oil or natural gas shall be equipped with a string of properly cemented production casing at sufficient depth to ensure protection of oil- and gas-bearing strata encountered in the well, including the one(s) to be produced.

B. Sufficient cement shall be used on surface casing to fill the annular space behind the casing to the top of the hole, provided however, that authorized field personnel of the Division may, at their discretion, allow exceptions to the foregoing requirement when known conditions in a given area render compliance impracticable.

C. All cementing shall be by pump and plug method unless some other method is expressly authorized by the Division.

D. All cementing shall be with conventional-type hard-setting cements to which such additives (lighteners, densifiers, extenders, accelerators, retarders, etc.) have been added to suit conditions in the well.

E. Authorized field personnel of the Division may, when conditions warrant, allow exceptions to the above paragraph and permit the use of oil-base casing packing material in lieu of hard-setting cements on intermediate and production casing strings; provided however, that when such materials are used on the intermediate casing string, conventional-type hard-setting cements shall be placed throughout all oil- and gas-bearing zones and throughout at least the lowermost 300 feet of the intermediate casing string. When such materials are used on the production casing string, conventional-type hard-setting cements shall be placed throughout all oil- and gas-bearing zones and shall extend upward a minimum of 500 feet above the uppermost perforation or, in the case of an open-hole completion, 500 feet above the production casing shoe.

F. All casing strings shall be tested and proved satisfactory as provided in Subsection I. below.