112-A MULTIPLE COMPLETIONS

112-A.A.)District	Approval

OIL CONSERVATION COMMISSION Sonto Fa, New Modeo			
Case No. 12118 Exhibit Mo. 1			
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- (1) The supervisor of the appropriate Division district office may authorize the multiple completion (conventional, tubingless, or combination) of any oil and/or gas well provided waste will not be caused. [2-1-82... -99]
- (2) Operators shall file four copies of Form C-107 (Application for Multiple Completion) with the appropriate district office accompanied by:
 - (a) a complete wellbore diagram showing all casing strings, including diameters and setting depths; cement quantities used, cement class/quality with additives, and cement tops; perforated intervals; completion treatments; tubing strings, including diameters and setting depth; location of packers; and other pertinent information; and
 - (b) An electrical or other acceptable well log with producing zone tops and bottoms and perforation intervals indicated thereon. If such log is not available at the time the application is filed, it shall be submitted within 20 days of well completion. [2-1-82... -99]

112-A.B. Director Approval

- (1) The district supervisor or an operator may request that any application be reviewed by the Director. [2 -1-82... -99]
- (2) Operators shall file four copies of Form C-107 (two copies with the Division's Santa Fe office and two copies with the appropriate district office) accompanied by the information listed in 112-A.A.(2) above.[2-1-82... -99]
- (3) Upon receipt of a complete application, the Director may approve the application or set it for hearing. [2-1-82... -99]
- (Whether Approved by the District or Director or After Hearing)
- (1) Prior to multiple completion, the operator shall make adequate casing pressure tests to determine no leaks exist. Test results shall be reported on Form C-103. [2-1-82... -99]

- (2) Wells shall be completed and produced so that no commingling of hydrocarbons from separate pools occurs. [2-1-82... -99]
- The operator shall commence a segregation and/or packer leakage test within twenty (20) days after the multiple completion. Segregation tests and/or packer leakage tests shall also be made any time the packer is disturbed and at any time the Division requires. The operator shall also conduct any other tests and determinations required by the Division. appropriate district office shall be notified 48 hours in advance of tests so the district office may schedule personnel to witness the tests. Offset operators may witness such tests at their election and shall advise the operator in writing if they desire to be notified of the tests. Test results shall be filed with the Division within fifteen (15) days of test completion. In the event a segregation and/or packer leakage test indicates communication between separate pools, the operator shall immediately notify the Division and commence corrective action on the well. [2-1-82... - -99]
- (4) Wells shall be equipped so that (i) reservoir pressure may be determined for each of the separate pools, and (ii) meters may be installed so that the gas and/or oil produced from each of the separate pools may be accurately measured and the gas-oil or gas-liquid ratio determined. [2-1-82... -99]
- (5) Within 20 days after well completion, the operator shall furnish the Division with: (i) a diagram of the mechanical installation used in completing the well, (ii) a report of the gravity, gas-oil or gas-liquid ratio, and surface or bottomhole pressure, for each of the separate zones, and (iii) the well log, if not previously submitted. [2-1-82... -99]
- (6) No multiple completion shall produce in a manner unnecessarily wasting reservoir energy. [2-1-82... -99]
- (7) The Division may require the plugging of any abandoned zone of a multiple-completed well if the plugging appears necessary to prevent waste, protect correlative rights or protect groundwater, public health or the environment. [2-1-82... -99]

11.D. Additional Matters:

- (1) Directional surveys required under the provisions of this rule shall have shot points no more than 200 feet apart and shall be run by competent surveying companies that are approved by the Division Director. Exceptions to the minimum shot point spacing will be allowed provided the accuracy of the survey is still within acceptable limits. [7-26-95, 2-1-96; Rn, 19 NMAC 15.C.111.F.(1), 7-31-97; A, 7-31-97]
- (2) The Division Director, may, at his discretion, set any application for administrative approval whereby the operator shall submit appropriate information and give notice as requested by the Division Director. Unprotested applications may be approved administratively within 20 days of receipt of the application and supporting information. If the application is protested, or the Division Director decides that a public hearing is appropriate, the application may be set for public hearing. [7-26-95, 2-1-96; Rn, 19 NMAC 15.C.111.E.(1) & 19 NMAC 15.C.111.F(1)&(2), 7-31-97; A, 7-31-97]
- (3) Permission to deviate or directionally drill any wellbore for any reason or in any manner not provided for in this rule shall be granted only after notice and opportunity for hearing. [7-26-95, 2-1-96; Rn, 19 NMAC 15.C.111.F.(3), 7-31-97; A, 7-31-97]

111.E. Reserved. [7-26-95, 2-1-96; 7-31-97]

- (1) Reserved. [7-26-95, 2-1-96; 7-31-97]
- (2) Reserved. [7-26-95, 2-1-96; 7-31-97]
- 111.F Reserved. [8-28-62...2-1-96; 7-31-97]
 - (1) Reserved. [8-28-62...2-1-96; 7-31-97]
 - (2) Reserved. [3-2-84...2-1-96; 7-31-97]
 - (3) Reserved. [3-2-84...2-1-96; 7-31-97]

BEFORE THE OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

Case No. 12118 Exhibit No. _

Submitted by____

Hearing Date 1/14/99

112-A MULTIPLE COMPLETIONS

112-A.A. The multiple completion of any well may be permitted only as hereinafter provided. Multiple completion of any well without prior approval by the Division shall be solely at the operator's risk and shall in no way commit the Division to subsequent approval thereof. [7-3-58...2-1-96]

112-A.B. District Approval

(1) The Supervisor of the appropriate Division district may authorize the multiple completion (qualifying conventional, tubingless, or combination) whenever the zones to be completed are to be produced through tubing or through casing where such casing has an outside diameter of 2.875 inches or less. The supervisor may authorize one gas zone to be produced through a casing-tubing annulus if such zone produces no more than one barrel of liquids per day. [2-1-82...2-1-96]

- (2) To obtain approval for multiple completion the operator shall file four copies of Division Form C-107 (Application for Multiple Completion) with the appropriate district office. Form C-107 shall be accompanied by a diagrammatic sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location of packers, side door chokes, and such other information as may be pertinent. [2-1-82...2-1-96]
- (3) The district supervisor may forward any application to the Director of the Division for approval. [2-1-82...2-1-96]

112-A.C. Administrative Approval (Division Director)

- (1) The Division Director may authorize the multiple completion (qualifying conventional, tubingless, or combination) not qualifying for District approval or referred to him by the district supervisor. [2-1-82...2-1-96]
- When any gas zone of a proposed multiple completion is to be produced through a casing-tubing annulus and such zone produces more than one barrel per day of liquids, the applicant shall furnish proof that such liquids may be efficiently produced without undue use of reservoir energy for the expected producing life of the well. [2-1-82...2-1-96]
- (3) Application for administrative approval of a multiple completion shall be made in QUADRUPLICATE, with two copies of the application to be mailed to the Division's Santa Fe Office, and two copies to the District office for the area in which the well is located. Application shall be made on the Division Form C-107 (Application for Multiple Completion) and shall be accompanied by the following:
 - (a) Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location of packers, side door chokes, and such other information as may be pertinent.
 - (b) Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as hereinafter provided.)

[2-1-82...2-1-96]

(4) Upon receipt of a complete application the Division Director may approve the matter administratively or he may set any such application for public hearing. [2-1-82...2-1-96]

112-A.D. Qualifying Multiple Completions

- (1) The following defines those mechanical installations qualifying for District or Administrative approval of multiple completion. [2-1-82...2-1-96]
 - (a) The applicant proposes to utilize one of the <u>conventional</u> mechanical installations described below:

- (i) The well is to be completed as a gas-gas dual or as a gas-gas-gas triple and the hydrocarbons from each of the zones can be safely and efficiently produced through parallel strings of tubing or a combination of tubing string(s) and the tubing-casing annulus; or
- (ii) The well is to be completed as an oil-oil dual or as an oil-oil-oil triple and the hydrocarbons from each of the zones can be safely and efficiently produced through parallel strings of tubing; or
- (iii) The well is to be completed as a combination oil and gas multiple completion and the hydrocarbons from each oil zone can be safely and efficiently produced through parallel strings of tubing and the hydrocarbons from each gas zone can be safely and efficiently produced through parallel string(s) of tubing or through a combination of tubing and the tubing-casing annulus; and
- (iv) All strings of tubing used for the production of oil in the proposed multiple completion will have a nominal inside diameter of not less than 1.670 inches nor greater than 2.50 inches; and
- (v) The downhole equipment used to segregate the separate zones of the multiple completion will be production-type packer(s), polished bore receptacles, or the equivalent, and shall effectively prevent communication between all producing zones.

[2-1-82...2-1-96]

- (b) The applicant proposes to employ one of the following <u>tubingless and/or</u> <u>combination</u> methods of completion:
 - (i) Multiple Completion (Tubingless) utilizing two or more small diameter casing strings (2.875 inches OD or less), one to each common source of supply, all cemented in a common well-bore; or
 - (ii) Multiple Completion (Combination) utilizing a combination of small diameter (2.875 inches OD or less) and conventional diameter (greater than 2.875 inches) casing strings, all cemented in a common well-bore; and demonstrates that
 - (iii) Sufficient cement will be used in said multiple completion to extend throughout each pay and a minimum of 100 feet; and
 - (iii) Centralizers and/or turbolizers will be installed on each joint of casing throughout each pay and on a minimum of three joints above; and

(iv) Directional perforating equipment will be used in perforating all intervals in any casing string in said multiple completion which intervals are in a zone through which one or more other casing strings pass.

[2-1-82...2-1-96]

(2) The requirements of paragraphs (iii) and (iv) may be modified for multiple completions within given common sources of supply and within a given area if, in the opinion of the Division Director, circumstances warrant such modification. [2-1-82...2-1-96]

112-A.E. Hearings

- (1) Any multiple completion not qualifying for district or administrative approval must be set for public hearing. [2-1-82...2-1-96]
- (2) Application for public hearing to authorize a multiple completion shall be made in TRIPLICATE to the Division's Santa Fe office. Application may be made in accordance with Rule 1203 or on the Division Form C-107, Application for Multiple Completion, setting forth all material facts relative to the common sources of supply involved and the manner and method of completion proposed. [2-1-82...2-1-96]

112-A.F. Operation and Testing

- (1) All multiple completions, whether approved after hearing or by district or administrative procedure, shall be subject to the following rules:
 - (a) Prior to actual multiple completion of a well, the operator shall make adequate pressure tests of the casing to determine that no casing leaks exist. Results of casing tests shall be reported to the Division on Form C-103. [2-1-82...2-1-96]
 - (b) The well shall be completed and thereafter produced in such a manner that there will be no commingling of hydrocarbons from the separate strata. [2-1-82...2-1-96]
 - (c) The operator shall commence a segregation test and/or packer leakage test not later than fifteen (15) days after actual multiple completion of the well. Segregation tests and/or packer leakage tests shall also be made any time the packer is disturbed and at such other intervals as the Division may prescribe. The Operator shall also make all other tests and determinations deemed necessary by the Division. The Division shall be notified of the time such tests are to be commenced and tests may be witnessed by the Division at its election. Representatives of offset operators may witness such tests at their election and shall advise the producer in writing if they desire to be notified when such tests are to be conducted. Results of such tests shall be filed with the Division within fifteen (15) days after the completion of tests; provided, however, that in the event a segregation test or packer leakage test indicates that there is communication between the separate strata, the operator, shall immediately notify the Division and commence remedial action on the well. [2-1-82...2-1-96]

- (d) The well shall be so equipped that reservoir pressure may be determined for each of the separate strata and further be so equipped that meters may be installed and the gas, oil and gas, and oil produced from each of the separate strata may be accurately measured, and the gas-oil ratio or the gas-liquid ratio thereof determined. [2-1-82...2-1-96]
- (e) Within 20 days after the completion of the well, the operator shall furnish the Division with a diagrammatic sketch of the mechanical installation which was actually used in completing the well together with a report of the gravity, gas-oil ratio or gas-liquid ratio, and surface or bottomhole pressure for each of the separate zones, and the log of the well if the same has not been previously submitted. [2-1-82...2-1-96]
- (f) No multiple completion may continue to produce in a manner which is unnecessarily wasteful of reservoir energy. [2-1-82...2-1-96]
- (g) The Division may require the proper plugging of any abandoned zone of a multiply completed well if such plugging appears necessary to prevent waste or protect correlative rights. [2-1-82...2-1-96]

112-B BRADENHEAD GAS WELLS

- 112-B.A. The production of gas from a bradenhead gas well may be permitted only by order of the Division upon hearing, except as noted by the provisions of paragraph C. of this rule. [4-30-53...2-1-96]
- 112-B.B. The application for such hearings shall be submitted in TRIPLICATE and shall include an exhibit showing the location of all wells on applicant's lease and all offset wells on offset leases, together with a diagrammatic sketch showing the casing program, formation tops, estimated top of cement on each casing string run and any other pertinent data, including drill stem tests. [4-30-53...2-1-96]
- 112-B.C. The Division Director shall have authority to grant an exception to the requirements of paragraph A. above without notice and hearing where application has been filed in due form, and when the lowermost producing zone involved in the completion is an oil or gas producing zone within the defined limits of an oil or gas pool and the producing zone to be produced through the bradenhead connection is a gas producing zone within the defined limits of a gas pool. [4-30-53...2-1-96]
- 112-B.D. Applicants shall furnish all operators who offset the lease upon which the subject well is located a copy of the application to the Division, and applicant shall include with his application a written stipulation that all offset operators have been properly notified. The Division Director shall wait at least 10 days before approving the production of gas from the bradenhead gas well, and shall approve such production only in the absence of objection from any offset operator. In the event an operator objects to the completion the Division Director shall consider the matter only after proper notice and hearing. [4-30-53...2-1-96]
- 112-B.E. The Division may waive the 10-day waiting period requirement if the applicant furnishes the Division with the written consent to the production of gas from the bradenhead connection by all offset operators involved. [4-3-53...2-196]
 - 112-B.F. This rule shall apply only to wells hereinafter completed as bradenhead gas wells. [4-30-53...2-1-96]