

~~(3) Where State and Federal lands are involved, applicant shall furnish evidence that the Commissioner of Public Lands for the State of New Mexico or the Regional Supervisor of the United States Bureau of Land Management has consented to the proposed commingling. [1-1-69...2-1-96]~~

~~303.C. DOWNHOLE COMMINGLING~~

(1) The Director of the Division shall have the authority to grant an exception to Rule 303-A to permit the downhole commingling of multiple producing zones in existing or proposed wells when the following facts exist and the following conditions are met:

(a) For Wells Involving Oil Zones:

- (i) The total combined daily oil or casinghead gas production from the zones before commingling does not exceed the top allowable rate for the shallowest producing horizon;
- (ii) The operator utilizes a method of production which results in the efficient recovery of oil and gas reserves from the respective producing formations;
- (iii) Total water production from all commingled zones does not exceed twice the oil limit as described in (i) above;
- (iv) The fluids from each zone are compatible with the fluids from the other(s), and combining the fluids will not result in the formation of precipitates which might damage any of the reservoirs;
- (v) The commingling will not jeopardize the efficiency of present or future secondary recovery operations in any of the zones to be commingled.

(b) For Wells Involving A Gas Zone:

- (i) That the commingling is necessary in order to allow the recovery of gas reserves from marginal producing zones. (In determining whether a zone or zones should be classified as marginal for the purpose of this rule, the Division may consider economic factors such as drilling and operating costs, and engineering and geologic factors such as producing rates, reserve calculations, decline rates, proration status, geologic data, etc.);
- (ii) The bottomhole pressure of the highest pressured commingled zone does not exceed the original reservoir pressure of any other commingled zone in the wellbore, adjusted to a common datum. Such bottomhole pressure shall be determined by downhole measurement for each zone capable of flowing;
- (iii) The commingling will not result in the permanent loss of reserves due to cross-flow in the wellbore;

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico	Case No. <u>1214</u> Exhibit No. <u>1</u>
	Submitted by <u>OCD</u>
	Hearing Date <u>7/15/99</u>

- (iv) That any zone which is producing from fluid-sensitive formations, which may be subject to damage from water or other produced liquids, is protected from contact from such liquids produced from other zones in the well;
- (v) The fluids from each zone are compatible with the fluids from the other(s), and combining the fluids will not result in the formation of precipitates which might damage any of the reservoirs.

[1-1-69...3-30-96]

303.D. To obtain approval for downhole commingling, the applicant shall submit Division Form C-107-A to the Division Director plus one copy to the appropriate District Office of the Division. In addition to the name and address of the operator, lease name, well number, well location, county, operator OGRID number, property code, API number and identification of spacing unit lease types, the applicant shall submit the following information (which numbers below correspond to the numbers on Form C-107-A):

- (1) The name of the pool and the pool code for each zone to be commingled;
- (2) The top and bottom of each commingled pay section as identified by existing or projected perforations;
- (3) The type of production, oil or gas, for each commingled zone;
- (4) The method of production, flowing or artificial lift, for each commingled zone;
- (5)(a) The estimated bottomhole pressure for each artificially lifted zone. A current (within 60 days) measured bottomhole pressure for each zone capable of flowing;
- (b) The original bottomhole reservoir pressure of each gas zone to be commingled;
- (6) The oil gravity (degree, API) or gas BTU content for each commingled zone;
- (7)(a) Statement that each existing zone is either currently producing or shut-in;
- (b) Statement as to whether or not each zone is marginal or expected to be marginal. The Division may require additional data to support applicant's statement as to the marginal nature of the zone(s);
- (c) For each existing zone that is shut-in, give the date and the oil, gas and water rates of the last production;
- (d) For each existing zone currently producing, give the date and the oil, gas and water rates of a recent (within 60-days) test;
- (e) For new zones with no production history, an attachment showing estimated producing rates and supporting data;
- (8) A fixed percentage formula for the allocation of production to each of the commingled zones, if method is applicable;

(9) In those cases where the allocation formula is based upon something other than current or past production as shown in Parts 7(c) and 7(d), or is based upon some other method (i.e. changing percentages, subtraction, etc.) submit data which supports proposed allocation;

(10)(a) A statement as to whether all working, royalty and overriding royalty interests are common in all of the spacing units for the commingled zones; ~~and~~ X

(b) A statement that in the case where ownership is not common among the zones to be commingled, the applicant has given notification, by certified mail, of the application to all owners (including working, royalty and overriding royalty interests) for the spacing unit for each of the commingled zones;

~~(c) A statement that all offset operators have been given written notice of the proposed downhole commingling;~~ X

(11)(a) A statement as to whether cross-flow will occur among any of the commingled zones;

(b) A statement that if cross-flow should occur between any of the commingled zones, the fluids will be compatible, the formations will not be damaged, cross-flowed production will be ultimately recovered, and the allocation formula will still be reliable;

(12) A statement that produced fluids from all commingled zones will be compatible with each other. Applicant shall consider and address any relevant issues of potential waste and formation damage including resultant emulsions or precipitates and other factors which might result in permanent loss of reserves. The Division may require a description of fluid characteristics in areas where such data is limited;

(13) A statement that the value of production will not be decreased by commingling;

(14) A statement that in the case of a well on or communitized with state or federal lands, the Commissioner of Public Lands for the State of New Mexico or the United States Bureau of Land Management have been sent a completed Form C-107-A and attachments notifying them of the proposed commingling;

(15) Order numbers for Division "reference cases" (See Paragraph 303.E.);

(16) The following attachments shall be included with Form C-107-A:

- (a) a C-102 for each zone to be commingled showing the acreage dedicated to each completion;
- (b) a production curve for each zone for at least one year; (Briefly explain if this data is not available);
- (c) For zones with no production history, estimated producing rates and supporting data;
- (d) data to support allocation method or formula;
- (e) a notification list of all working, royalty and overriding royalty interests for cases where ownership is not common;
- (f) a notification list of all offset operators;
- (g) any additional statements, data or documents required to support commingling.

[1-1-69...3-30-96]

303.E. If sufficient data exists on a lease, pool, formation, geographic area, etc., so as to render it unnecessary to repeatedly provide such data on Form C-107-A, an operator may except any of the various criteria required under Paragraph 303.D. of this rule by establishing a "reference case". The Division, upon its own motion or by application from an operator, may establish "reference cases" either administratively or by hearing. Upon Division approval of such "reference cases" for specific criteria, subsequent applications to downhole commingle (Form C-107-A) will be required only to cite the Division order number which established such exceptions and shall not be required to submit data for those criteria. [1-1-69...3-30-96]

303.F. The process and timing for approval of downhole commingling as to approval authority, common or non-common interests, Form C-107-A filing, and administrative or hearing formats shall be determined as follows:

(1) The Division Director may approve the proposed downhole commingling in the absence of a valid objection from ~~any offset operator or~~ any interest owner in those instances where ownership is not common in the zones to be commingled within 20 days after the receipt of the application if, in his opinion, waste will not result thereby, and correlative rights will not be violated;

(2) The Division Director, may, at his discretion, set any administratively filed Form C-107-A for hearing.

[1-1-69...3-30-96]

303.G. Upon such approval, the well shall be operated in accordance with the provisions of the administrative order which authorized the commingling, and allocation of the commingled production from the well to each of the producing zones shall be in accordance with the allocation formula set forth in the order. The production from a well with commingled oil zones shall be subject to the lower of the daily gas-oil ratio limitations applicable to the reservoirs. The production attributable to an oil zone commingled with a gas zone shall be subject to the daily gas-oil ratio limitation applicable to such oil zone or pool. Wells shall be tested on a commingled basis annually, except that a well penalized for a high gas-oil ratio shall be tested semi-annually. [1-1-69...3-30-96]

303.H. The Division Director may rescind authority to commingle production in the wellbore and require the zones to be produced separately, if, in his opinion, waste or reservoir damage is resulting thereby or the efficiency of any secondary recovery project is being impaired, or if any change of conditions renders the installation no longer eligible for downhole commingling. [1-1-69...3-30-96]

304 CONTROL OF MULTIPLE COMPLETED WELLS

Multiple completed wells which have been authorized by the Division shall at all times be operated, produced, and maintained in a manner to ensure the complete segregation of the various common sources of supply. The Division may require such tests as it deems necessary to determine the effectiveness of segregation of the different common sources of supply. [1-1-50...2-1-96]