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

## IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

Case No. 12346 Order No. R-11363

## APPLICATION OF OIL CONSERVATION DIVISION TO AMEND DIVISION RULE 303.C GOVERNING DOWNHOLE COMMINGLING.

## **ORDER OF THE COMMISSION**

#### **BY THE COMMISSION:**

This case came on for hearing at 9 o'clock a.m. on February 25, and March 24, 2000, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 26<sup>th</sup> day of April, 2000, the Commission, a quorum being present, having considered the record,

## FINDS THAT:

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

(2) Testimony indicated Rule 303.C should be amended as follows: (i) to relax certain prerequisites to qualify for downhole commingling such as pressure criteria and marginal production criteria; (ii) to adopt a "pre-approved pool" list and simplify the approval process for downhole commingling for wells within a "pre-approved pool"; (iii) to require operators to file Form C-107-A for wells not within a "pre-approved pool"; and (iv) to allow operators to file a Form C-107-A with sufficient data to qualify a pool combination for "pre-approved pool" status.

(3) Rule 303.C of New Mexico Oil Conservation Division Rules should be amended as shown on the attached Exhibit "A."

(4) It is necessary to adopt the amendments to Rule 303.C set forth in the attached Exhibit "A."

## **IT IS THEREFORE ORDERED:**

(1) Rule 303.C is hereby amended and adopted as set forth in the attached Exhibit "A."

(2) Amended Rule 303.C is effective as of the date of publication in the New Mexico Register.

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

(4) Done at Santa Fe, New Mexico, on the day and year hereinabove designated.

## STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

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JAMI BAILEY, Member

ROBERT L. LEE, Member

Du Writenberg LORI WROTENBERY, Chairman



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## EXHIBIT "A" CASE NO. 12346 ORDER NO. R-11363

# TITLE 19NATURAL RESOURCES & WILDLIFECHAPTER 15OIL AND GASPART 5OIL PRODUCTION OPERATING PRACTICES

#### 19.15.5.303 SEGREGATION OF PRODUCTION FROM POOLS:

A. Segregation Required - Each pool shall be produced as a single common source of supply and wells therein shall be completed, cased, maintained, and operated so as to prevent communication within the wellbore with any other specific pool or horizon. The production shall at all times be segregated, and the commingling or confusion of production, before marketing, with production from any other pool or pools is strictly prohibited.

Surface Commingling

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(1) The Director shall have the authority to grant an exception to Rule 303A to permit the commingling in common facilities of the commonly owned production from two or more common sources of supply, without notice and hearing, provided that the liquid hydrocarbon production from each common source of supply is to be accurately measured or determined prior to such commingling in accordance with the applicable provisions of the Division's "Manual for the Installation and Operation of Commingling Facilities," then current.

(2) Application for administrative approval to commingle the production from two or more common sources of supply shall be filed in triplicate with the Santa Fe Office of the Division. The application must contain detailed data as to the gravities of the liquid hydrocarbons, the values thereof, and the volumes of the liquid hydrocarbons production from each pool, as well as the expected gravity and value of the commingled liquid hydrocarbons production; a schematic diagram of the proposed installation; a plat showing the location of all wells on the applicant's lease and the pool from which each well is producing. The application shall also state specifically whether the actual commercial value of such commingled production will be less than the sum of the values of the production from each common source of supply and, if so, how much less.

(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.

C. Downhole Commingling

(1) The Director may grant an exception to Rule 303A to permit the commingling of multiple producing pools in existing or proposed wellbores when the following conditions are met:

(a) the fluids from each pool are compatible and combining the fluids will not result in damage to any of the pools;

(b) the commingling will not jeopardize the efficiency of present or future secondary recovery operations in any of the pools to be commingled;

(c) the bottom perforation of the lower zone is within 150% of the depth of the top perforation in the upper zone and the lower zone is at or below normal pressure with normal pressure assumed to be 0.433 psi per foot of depth. If the pools to be commingled are not within this vertical interval, then evidence will be required to demonstrate that commingling will not result in shut-in or flowing wellbore pressures in excess of the fracture parting pressure of any commingled pool. The fracture parting pressure shall be assumed to be 0.65 psi per foot of depth unless the applicant submits other measured or calculated pressure data acceptable to the Division;

(d) the commingling will not result in the permanent loss of reserves due to cross-flow in the wellbore;

(e) fluid-sensitive formations that may be subject to damage from water or other produced liquids shall be protected from contact with such liquids produced from other pools in the well;

(f) if any of the pools being commingled is prorated, or the well's production has been restricted by Division order in any manner, the allocated production from each producing pool in the commingled wellbore shall not exceed the top oil or gas allowable rate for a well in that pool or rate restriction applicable to such well;

(g) the commingling will not reduce the value of the total remaining production;

(h) correlative rights will not be violated.

(2) The Director may rescind authority to commingle production in a wellbore and require the pools to be produced separately if, in the Director's opinion, waste or reservoir damage is resulting, correlative rights are being impaired or the efficiency of any secondary recovery project is being impaired, or any changes or conditions render the installation no longer eligible for downhole commingling.

(3) When the conditions set forth in Rule 303C(1) are satisfied, the Director may approve a request to downhole commingle production in one of the following ways:

(a) **Individual exceptions**: Applications to downhole commingle in wellbores located outside of an area subject to a downhole commingling order issued in a "reference case" and not within a pre-approved pool or area shall be filed on Division Form C-107-A with the Division.

(i) The Director may administratively approve a Form C-107-A application in the absence of a valid objection filed within 20-days after receipt of the application by the Division if, in the Director's opinion, waste will not occur and correlative rights will not be impaired.

(ii) In those instances where the ownership or percentages between the pools to be commingled is not identical, applicant shall send a copy of Form C-107-A to all interest owners in the spacing unit by certified mail (return receipt).

(iii) Applicant shall send copies of Form C-107-A to the Commissioner of Public Lands for the State of New Mexico for wells in spacing units containing state lands or the Bureau of Land Management for wells in spacing units containing federal lands.
(iv) The Director may set any administratively filed Form C-107-A application for

hearing.

## (b) Exceptions for wells located in pre-approved pools or areas:

Applications to downhole commingle in wellbores within pools or areas that have been established by the Division as "pre-approved pools or areas" pursuant to Rule 303C(4)(b) shall be filed on Form C-103 (Sundry Notice of Intent) at the appropriate Division District Office. The supervisor of the appropriate Division District Office may approve the proposed downhole commingling following receipt of Form C-103. In addition to the information required by Form C-103, the applicant shall include:

- (i) number of Division order that established pre-approved pool or area;
- (ii) names of pools to be commingled;
- (iii) perforated intervals;
- (iv) allocation method and supporting data;
- (v) a statement that the commingling will not reduce the value of the total remaining

production;

(vi) in those instances where the ownership or percentages between the pools to be commingled is not identical, a statement attesting that applicant sent notice to all interest owners in the spacing unit by certified mail (return receipt) of its intent to apply for downhole commingling and no objection was received within 20 days of sending this notice; and

(vii) a statement attesting that applicant sent a copy of the Division Form C-103 to the Commissioner of Public Lands for the State of New Mexico for wells in spacing units containing state lands or the Bureau of Land Management for wells in spacing units containing federal lands using Sundry Notice Form 3160-5.

#### (c) **Exceptions for wells located in areas subject to a downhole commingling order issued in a "reference case":** Applications to downhole commingle in wellbores within an area subject to a Division order that excepted any of the criteria required by Rule 303C or Division Form C-107-A shall be filed with the supervisor of the appropriate Division District Office and, except for the place of filing, shall meet the requirements of the applicable order issued in that "reference case."

(4) Applications for establishing a "reference case" or for pre-approval of downhole commingling on an area-wide or pool-wide basis:

(a) **Reference cases:** If sufficient data exists for a lease, pool, formation, or geographical area 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 Rule 303C or set forth in Form C-107-A by establishing a "reference case." The Division, upon its own motion or application from an operator, may establish "reference cases" either administratively or by hearing. Upon Division approval of such "reference cases" for specific criteria, subsequent Form C-107-A applications to downhole commingle will be required only to cite the Division order number that established such exceptions and shall not be required to submit data for those criteria. Cases

and

involving exceptions to the specific criteria required by Rule 303C or by Division Form C-107-A may be approved by the Division after notice sent to all interest owners in the affected spacing units by certified mail (return receipt) and based on evidence that such approval would adequately satisfy the conditions of Rule 303C(1).

#### (b) **Pre-approval of downhole commingling on a pool-wide or area-wide**

**basis:** If sufficient data exists for multiple formations or pools that have previously been commingled or are proposed to be commingled, the Division, upon its own motion or application from an operator, may establish downhole commingling on a pool-wide or area-wide basis either administratively or by hearing:

(i) Applications for pre-approval shall include all of the data required by Division Form C-107-A, a list of the names and address of all operators in the pools, all previous orders authorizing downhole commingling for the pools or area, and a map showing the location of all wells in the pools or area and indicating those wells approved for downhole commingling.

(ii) Applications for pre-approval of downhole commingling on a pool-wide or areawide basis may be approved by the Director after notice sent to operators in the affected pools or area by certified mail (return receipt) and based on evidence that such approval would adequately satisfy the conditions of Rule 303C.

(iii) Upon approval of certain pools or areas for downhole commingling, subsequent applications for approval to downhole commingle wells within those pools or areas may be obtained by filing a Division Sundry Notice (Form C-103) in accordance with the procedure set forth in Rule 303C(3)(b).

(c) The Division will maintain and continually update a list of pre-approved pools or areas as set forth in Rule 303C(5).

(5) Pre-approved pools and areas: Downhole commingling is hereby approved within the described pool combinations or geographical areas set forth in Exhibit "A," provided, however, that the operator shall file Form C-103 (Sundry Notice of Intent) with the appropriate Division District office in accordance with the procedure set forth in Rule 303C(3)(b).

## Pre-Approved Pools or Geographic Areas for Downhole Commingling, Permian Basin

All Blinebry, Tubb, Drinkard, Blinebry-Tubb, Blinebry-Drinkard & Tubb-Drinkard pool combinations within the following described geographic area in Lea County:

Township 18 South, Ranges 37, 38 and 39 East;

Township 19 South, Ranges 36, 37, 38 and 39 East;

Township 20 South, Ranges 36, 37, 38 and 39 East;

Township 21 South, Ranges 36, 37 and 38 East;

Township 22 South, Ranges 36, 37 and 38 East;

**Blinebry Pools** 

6660 Blinebry Oil & Gas Pool (Oil)

72480 Blinebry Oil & Gas Pool (Pro Gas)

6670 West Blinebry Pool

12411 Cline Lower Paddock-Blinebry Pool

29710 Hardy-Blinebry Pool

31700 East Hobbs-Blinebry Pool

Assoc.

- 31680 Hobbs Upper-Blinebry Pool
- 31650 Hobbs Lower-Blinebry Pool

33230 House-Blinebry Pool

33225 South House-Blinebry Pool

#### Tubb Pools

12440 Cline-Tubb Pool

77120 Fowler-Tubb Pool

- 26635 South Fowler-Tubb Pool
- 78760 House-Tubb Pool
- 33460 East House-Tubb Pool
- 33470 North House-Tubb Pool
- 47090 Monument-Tubb Pool
- 47525 Nadine-Tubb Pool

- 34200 Justis-Blinebry Pool
- 46990 Monument-Blinebry Pool
- 47395 Nadine-Blinebry Pool
- 47400 West Nadine Paddock-Blinebry Pool
- 47960 Oil Center-Blinebry Pool
- 96314 North Teague Lower Paddock-Blinebry

Township 23 South, Ranges 36, 37 and 38 East;

Township 24 South, Ranges 36, 37 and 38 East;

Township 25 South, Ranges 36, 37 and 38 East;

Township 26 South, Ranges 36, 37 and 38 East:

58300 Teague Paddock-Blinebry Pool

- 59310 East Terry-Blinebry Pool
- 63780 Weir-Blinebry Pool
- 63800 East Weir-Blinebry Pool

47530 West Nadine-Tubb Pool

- 58910 Teague-Tubb Pool
- 96315 North Teague-Tubb Associated Pool
- 60240 Tubb Oil & Gas Pool (Oil)
- 86440 Tubb Oil & Gas Pool (Pro Gas)
- 87080 Warren-Tubb Pool
- 87085 East Warren-Tubb Pool
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**Drinkard** Pools 47505 West Nadine-Drinkard Pool 7900 South Brunson Drinkard-Abo Pool 47510 Nadine Drinkard-Abo Pool 12430 Cline Drinkard-Abo Pool 15390 D-K Drinkard Pool 57000 Skaggs-Drinkard Pool 19190 Drinkard Pool 96768 Northwest Skaggs-Drinkard Pool South Drinkard Pool Teague-Drinkard Pool 58380 19380 Fowler-Drinkard Pool 96313 North Teague Drinkard-Abo Pool 26220 Goodwin-Drinkard Pool Warren-Drinkard Pool 28390 63080 31730 Hobbs-Drinkard Pool 63120 East Warren-Drinkard Pool 33250 House-Drinkard Pool 63840 Weir-Drinkard Pool 47503 East Nadine-Drinkard Pool **Blinebry-Tubb Pools** 62965 Warren Blinebry-Tubb Oil & Gas Pool **Tubb-Drinkard Pools** Dollarhide Tubb-Drinkard Pool 33600 Imperial Tubb-Drinkard Pool 18830 Hardy Tubb-Drinkard Pool Justis Tubb-Drinkard Pool 29760 35280 North Hardy Tubb-Drinkard Pool 96356 **Pool Combinations, Lea County** Airstrip-Bone Spring (960) & Airstrip-Wolfcamp (970) Pools Baish-Wolfcamp (4480) & Maljamar-Abo (43250) Pools Blinebry Oil & Gas & Wantz-Abo (62700) Pools Blinebry Oil & Gas & South Brunson-Ellenburger (8000) Pools Blinebry Oil & Gas & Paddock (49210) Pools Cerca Lower-Wolfcamp (11800) & Cerca Upper-Pennsylvanian (11810) Pools Drinkard (19190) & Paddock (49210) Pools Drinkard (19190) & Wantz-Abo (62700) Pools Drinkard (19190) & Wantz-Granite Wash (62730) Pools Lazy J Penn (37430) & South Baum-Wolfcamp (4967) Pools Mesa Verde-Delaware (96191) & Mesa Verde-Bone Spring (96229) Pools West Red Tank-Delaware (51689) & Red Tank-Bone Spring (51683) Pools South Shoe Bar-Wolfcamp (56300) & South Shoe Bar Upper-Penn (56285) Pools Skaggs-Glorieta (57190) & Skaggs-Drinkard (57000) Pools West Triste Draw-Delaware (59945) & South Sand Dunes Bone Spring (53805) Pools Triste Draw-Delaware (59930) & Triste Draw-Bone Spring (96603) Pools Tubb Oil & Gas & Paddock (49210) Pools North Vacuum-Abo (61760) & Vacuum-Wolfcamp (62340) Pools Vacuum-Blinebry (61850) & Vacuum-Glorieta (62160) Pools Vacuum-Blinebry (61850) & Vacuum-Drinkard (62110) Pools Vacuum Upper-Penn (62320) & Vacuum-Wolfcamp (62340) Pools Wantz-Abo (62700) & Wantz-Granite Wash (62730) Pools Pool Combinations, Eddy County Red Lake Queen-Grayburg-San Andres (51300) & Northeast Red Lake-Glorieta Yeso (96836) Pools Pool Combination, San Juan Basin Basin-Dakota (71599) & Angels Peak-Gallup Associated (2170) Pools Basin-Dakota (71599) & Armenta-Gallup (2290) Pools Basin-Dakota (71599) & Baca-Gallup (3745) Pools Basin-Dakota (71599) & Bisti Lower-Gallup (5890) Pools Basin-Dakota (71599) & BS Mesa-Gallup (72920) Pools Basin-Dakota (71599) & Calloway-Gallup (73700) Pools Basin-Dakota (71599) & Devils Fork-Gallup Associated (17610) Pools Basin-Dakota (71599) & Ensenada-Gallup (96321) Pools Basin-Dakota (71599) & Flora Vista-Gallup (76640) Pools Basin-Dakota (71599) & Gallegos-Gallup Associated (26980) Pools Basin-Dakota (71599) & Ice Canyon-Gallup (93235) Pools Basin-Dakota (71599) & Kutz-Gallup (36550) Pools Basin-Dakota (71599) & Largo-Gallup (80000) Pools Basin-Dakota (71599) & Otero-Gallup (48450) Pools

Basin-Dakota (71599) & Tapacito-Gallup Associated (58090) Pools Basin-Dakota (71599) & Wild Horse-Gallup (87360) Pools Basin-Dakota (71599) & Aztec-Pictured Cliffs (71280) Pools Basin-Dakota (71599) & Ballard-Pictured Cliffs (71439) Pools Basin-Dakota (71599) & Blanco-Pictured Cliffs (72359) Pools Basin-Dakota (71599) & South Blanco-Pictured Cliffs (72439) Pools Basin-Dakota (71599) & Fulcher Kutz-Pictured Cliffs (77200) Pools Basin-Dakota (71599) & West Kutz-Pictured Cliffs (79680) Pools Basin-Dakota (71599) & Tapacito-Pictured Cliffs (85920) Pools Basin-Fruitland Coal (71629) & Aztec-Pictured Cliffs (71280) Pools Basin-Fruitland Coal (71629) & Ballard-Pictured Cliffs (71439) Pools Basin-Fruitland Coal (71629) & Blanco-Pictured Cliffs (72359) Pools Basin-Fruitland Coal (71629) & East Blanco-Pictured Cliffs (72400) Pools Basin-Fruitland Coal (71629) & South Blanco-Pictured Cliffs (72439) Pools Basin-Fruitland Coal (71629) & Carracas-Pictured Cliffs (96154) Pools Basin-Fruitland Coal (71629) & Choza Mesa-Pictured Cliffs (74960) Pools Basin-Fruitland Coal (71629) & Fulcher Kutz-Pictured Cliffs (77200) Pools Basin-Fruitland Coal (71629) & West Kutz-Pictured Cliffs (79680) Pools Basin-Fruitland Coal (71629) & Gavilan-Pictured Cliffs (77360) Pools Basin-Fruitland Coal (71629) & Gobernador-Pictured Cliffs (77440) Pools Basin-Fruitland Coal (71629) & Huerfano-Pictured Cliffs (78840) Pools Basin-Fruitland Coal (71629) & Potwin-Pictured Cliffs (83000) Pools Basin-Fruitland Coal (71629) & Tapacito-Pictured Cliffs (85920) Pools Basin-Fruitland Coal (71629) & Twin Mounds Fruitland Sand-Pictured Cliffs (86620) Pools Basin-Fruitland Coal (71629) & W. A. W. Fruitland Sand-Pictured Cliffs (87190) Blanco-Mesaverde (72319) & Basin-Dakota (71599) Pools Blanco-Mesaverde (72319) & Blanco-Pictured Cliffs (72359) Pools Blanco-Mesaverde (72319) & South Blanco-Pictured Cliffs (72439) Pools Blanco-Mesaverde (72319) & Gobernador-Pictured Cliffs (77440) Pools Blanco-Mesaverde (72319) & West Lindrith Gallup-Dakota (39189) Pools Blanco-Mesaverde (72319) & Tapacito-Pictured Cliffs (85920) Pools Blanco-Mesaverde (72319) & Armenta-Gallup (2290) Pools Blanco-Mesaverde (72319) & BS Mesa-Gallup (72920) Pools Blanco-Mesaverde (72319) & Calloway-Gallup (73700) Pools Blanco-Mesaverde (72319) & Ensenada-Gallup (96321) Pools Blanco-Mesaverde (72319) & Flora Vista-Gallup (76640) Pools Blanco-Mesaverde (72319) & Largo-Gallup (80000) Pools Blanco-Mesaverde (72319) & West Lindrith Gallup-Dakota (39189) Pools Blanco-Mesaverde (72319) & McDermott Gallup (81050) Pools Blanco-Mesaverde (72319) & Potter-Gallup (50387) Pools Blanco-Mesaverde (72319) & Tapacito-Gallup Associated (58090) Pools Blanco-Mesaverde (72319) & Wild Horse-Gallup (87360) Pools Otero-Chacra (82329) & Aztec-Pictured Cliffs (71280) Pools Otero-Chacra (82329) & Basin-Dakota (71599) Pools Otero-Chacra (82329) & Blanco-Mesaverde (72319) Pools Otero-Chacra (82329) & South Blanco-Pictured Cliffs (72439) Pools Otero-Chacra (82329) & Fulcher Kutz-Pictured Cliffs (77200) Pools [1-1-50...2-1-96; 19.15.5.303 NMAC - Rn, 19 NMAC 15.E.303 & A, 5-15-00]