# 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

- (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

JAMI BAILEY, Member

ROBERT L. LEE, Member

LORI WROTENBERY, Chairman

SEAL

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

TITLE 19 NATURAL RESOURCES & WILDLIFE

CHAPTER 15 OIL AND GAS

PART 5 OIL, 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.

#### B. Surface Commingling

- (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

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

and

(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 preapproved 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 administrative or by hearing. Upon Division a proval of such "reference cases" for a seifer a division is proval of such "reference cases" for a seifer a seife

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 area-wide 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).

<u>Pre-Approved Pools or Geographic Areas for Downhole Commingling, Permian Basin</u>
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 20 South, Ranges 36, 37 and 38 East;
Township 21 South, Ranges 36, 37 and 38 East;
Township 22 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;

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Blinebry Pools						
6660	Blinebry Oil & Gas Pool (Oil)	34200	Justis-Blinebry Pool			
72480	Blinebry Oil & Gas Pool (Pro Gas)		Monument-Blinebry Pool			
6670	West Blinebry Pool	47395	Nadine-Blinebry Pool			
12411	Cline Lower Paddock-Blinebry Pool	47400	West Nadine Paddock-Blinebry Pool			
29710	Hardy-Blinebry Pool		Oil Center-Blinebry Pool			
31700	East Hobbs-Blinebry Pool	96314	North Teague Lower Paddock-Blinebry			
Assoc.			-			
31680	Hobbs Upper-Blinebry Pool	58300	Teague Paddock-Blinebry Pool			
31650	Hobbs Lower-Blinebry Pool	59310	East Terry-Blinebry Pool			
33230	House-Blinebry Pool	63780	Weir-Blinebry Pool			
33225	South House-Blinebry Pool	63800	East Weir-Blinebry Pool			
Tubb Pools						
12440	Cline-Tubb Pool	47530	West Nadine-Tubb Pool			
77120	Fowler-Tubb Pool	58910	Teague-Tubb Pool			
26635	South Fowler-Tubb Pool	96315	North Teague-Tubb Associated Pool			
78760	House-Tubb Pool	60240	Tubb Oil & Gas Pool (Oil)			
33460	East House-Tubb Pool	86440	Tubb Oil & Gas Pool (Pro Gas)			
33470	North House-Tubb Pool	87080	Warren-Tubb Pool			
47090	Monument-Tubb Pool	87085	East Warren-Tubb Pool			

Drinkar	d Pools						
7900	South Brunson Drinkard-Abo Pool	47505	West Nadine-Drinkard Pool				
12430	Cline Drinkard-Abo Pool	47510	Nadine Drinkard-Abo Pool				
15390	D-K Drinkard Pool	57000	Skaggs-Drinkard Pool				
19190	Drinkard Pool	96768	Northwest Skaggs-Drinkard Pool				
19380	South Drinkard Pool	58380	Teague-Drinkard Pool				
26220	Fowler-Drinkard Pool	96313	North Teague Drinkard-Abo Pool				
28390	Goodwin-Drinkard Pool	63080	Warren-Drinkard Pool				
31730	Hobbs-Drinkard Pool	63120	East Warren-Drinkard Pool				
33250	House-Drinkard Pool	63840	Weir-Drinkard Pool				
47503	East Nadine-Drinkard Pool	050-0	Weil-Dimmita 1 001				
Blinebry-Tubb Pools							
62965	Warren Blinebry-Tubb Oil & Gas Pool						
	rinkard Pools						
18830	Dollarhide Tubb-Drinkard Pool	33600	Imperial Tubb-Drinkard Pool				
29760	Hardy Tubb-Drinkard Pool	35280	Justis Tubb-Drinkard Pool				
96356	North Hardy Tubb-Drinkard Pool	50200	VALUE 1 400 DIMMINI 1 001				
	mbinations, Lea County						
Airstrip-Bone Spring (960) & Airstrip-Wolfcamp (970) Pools							
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	Baish-Wolfcamp (4480) & Maljamar-Abo (43250) Pools						
	Blinebry Oil & Gas & Wantz-Abo (62700) Pools Blinebry Oil & Gas & South Brunson-Ellenburger (8000) Pools						
		oudy ru	O19				
	Oil & Gas & Paddock (49210) Pools		: /11810\ P1-				
	ower-Wolfcamp (11800) & Cerca Upper-Per	nnsylvam	ian (11810) Poois				
	1 (19190) & Paddock (49210) Pools						
	1 (19190) & Wantz-Abo (62700) Pools	1_					
Drinkard (19190) & Wantz-Granite Wash (62730) Pools							
	enn (37430) & South Baum-Wolfcamp (496						
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	) 2001S	(£380£) D1-				
	iste Draw-Delaware (59945) & South Sand I						
	raw-Delaware (59930) & Triste Draw-Bone	Spring (	90003) P001S				
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-Perm (62320) & Vacuum-Wolfcamp (62340) Pools							
	Abo (62700) & Wantz-Granite Wash (62730)	Pools					
	mbinations, Eddy County						
	e Queen-Grayburg-San Andres (51300) & N	Iortheast	Red Lake-Glorieta Yeso (96836) Pools				
	mbination, 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
Rasin-Dakota (71599) & Kutz-Gallup (36550) Pools

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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
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