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

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

CASE NO. 14133 ORDER NO. R-12984

APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION FOR POOL CREATION, PRE-APPROVED DOWN-HOLE COMMINGLING AND DESIGNATION OF SPECIAL POOL RULES, BASIN-MANCOS GAS POOL (97232), RIO ARRIBA, SAN JUAN AND SANDOVAL COUNTIES, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on May 29, 2008, at Santa Fe, New Mexico, before Examiners David K. Brooks and Terry G. Warnell.

NOW, on this 3rd day of September, 2008, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

- (1) Due notice has been given, and the Division has jurisdiction of the subject matter of this case.
- (2) The Division, through the District Supervisor of District Three, seeks an order creating a new pool in Rio Arriba and San Juan Counties, and a portion of Sandoval County, to be called the Basin-Mancos Gas Pool. The Division further seeks an order pre-approving down-hole commingling of gas produced from the new pool with gas produced from the Mesaverde and/or Dakota formations in the same wellbore. Finally,

the Division seeks expansion and contraction of certain existing pools to conform to the pattern of existing production.

- (3) At the hearing, the Division appeared through counsel and presented the testimony of Steven N. Hayden, District Geologist for the Division in District Three. Mr. Hayden testified as follows:
 - (a) The Mancos formation is a distinctive geologic formation that can be generally correlated throughout the San Juan Basin of Rio Arriba and San Juan Counties, New Mexico. Vertically, it lies above the Dakota formation, and beneath the Mesaverde formation.
 - (b) The Mancos formation has often been incorrectly called the Gallup. Accordingly, although the Gallup formation is not present in most of the San Juan Basin, there are several existing pools that are called "Gallup" within the area of the proposed new pool.
 - (c) The existing Gallup pools are governed by different spacing rules that require a variety of different unit sizes and setbacks.
 - (d) Spacing in the Mancos in areas not included in existing Gallup Pools is on 160-acre units, with setbacks of 660 feet from quarter-section lines. This is different from the spacing provided by special pool rules for the Mesaverde and Dakota Gas Pools, which require 320-acre units, with setbacks of 660 feet from unit boundaries and 10 feet from quarter section lines.
 - (e) The Mancos formation is marginally productive, such that, in most places, stand-alone Mancos wells would not be economic. However, the gas in the Mancos can be economically produced from wells that can also be completed in the Mesaverde and/or Dakota formations.
 - (f) To facilitate the drilling of wells with multiple completions in these three formations, there is a need for a new Mancos pool with pool rules establishing the same spacing pattern for the Mancos as is provided in existing special pool rules for the Mesaverde and Dakota.
 - (g) There is no reason not to provide the same spacing in the Mancos as in these other formations because a well will drain a lesser area in the Mancos than in the Mesaverde or Dakota, and the Mancos is so marginal that gas that cannot be produced from wells also completed in one or more other formations will generally not be economic to produce.
 - (h) Down-hole commingling of gas production from the Mesaverde and Dakota formations is already pre-approved. Pre-approval of downhole commingling of Mancos production with these other formations will further

facilitate production of Mancos gas through wells also completed in other formations.

- (i) To protect the correlative rights of owners of producing wells, the existing Gallup pools should be expanded to include the units held by those wells, but should be contracted to exclude units not so held, without, however, impairing the contiguity of these pools.
- (j) The Mancos formation in all other areas not included in the existing Gallup pools should be included in the new Basin-Mancos Pool.
- (4) Williams Production Company appeared at the hearing through counsel in support of the Division's application. No other party appeared at the hearing or otherwise opposed granting of the application.

The Director concludes that:

- (5) There is a need for the creation of a new gas pool to be called the Basin Mancos Gas Pool, including all of San Juan and Rio Arriba Counties, and a portion of Sandoval County, New Mexico not included in existing Gallup Pools. The vertical limits of this new pool should extend from the base of the Point Lookout formation (the lowest subdivision of the Mesaverde) to the base of the Greenhorn member of the Mancos formation.
- (6) In order to prevent waste by making possible production from the Mesaverde that would otherwise be uneconomic, special pool rules should be adopted for the new Basin-Mancos Gas Pool providing spacing identical to that now provided for the Blanco-Mesaverde and Basin-Dakota Gas Pools.
- (7) In order to protect correlative rights of owners of existing producing wells, there exists a need to expand certain existing Gallup pools to include units having producing wells that were drilled in accordance with the spacing rules for those pools. For the same reason, the special pool rules for the new Basin-Mancos Pool should provide for the preservation of existing 160-acre wildcat Mancos units on which wells capable of production from the Mancos have been drilled.
- (8) The Division has requested that the Special Pool Rules for the proposed new pool provide that exceptions to the well density provisions may be authorized only after hearing. Because no reason was shown why either division staff or operators should be burdened with hearings about uncontested matters, provision should be made for granting such exceptions only after notice to affected persons and opportunity for a hearing if requested.
- (9) With reference to the Division's application for pre-approval of down-hole commingling of production from the Basin-Mancos Gas Pool with production from the Dakota and Mesaverde formations, the Division did not present the evidence required for

pre-approval by Rule 303.C(4)(b). Accordingly, the Division's application for pre-approval of down-hole commingling should be <u>denied</u>, without prejudice to future applications for well-specific down-hole commingling between the subject pools, and also without prejudice to any new application for pre-approval that the Division or any operator may file either as a hearing application, or as an administrative application, in accordance with Rule 303.C(4).

IT IS THEREFORE ORDERED THAT:

- (1) A new pool is hereby established which shall be designated the "Basin-Mancos Gas Pool" (Pool Identification No. 97232). The vertical limits of the Basin-Mancos Gas Pool shall be from the base of the Point Lookout formation (the lowest subdivision of the Mesaverde) to the base of the Greenhorn member of the Mancos formation. The horizontal boundaries shall be all of San Juan and Rio Arriba Counties, New Mexico, and all of Section 21, Township 23 North, Range 5 West, N.M.P.M. in Sandoval County, New Mexico.
- (2) The Special Rules for the Basin-Mancos Gas Pool, as set forth in Exhibit A to this order are hereby adopted, to be effective on the date this order is issued.
- (3) The following existing pools are hereby **contracted** by removing therefrom the lands provided below:

B. S. Mesa Gallup Gas Pool (72920)

T27N R4W

Section 32 S/2

Devil's Fork Gallup Associated Pool (17610)

T24N R6W

Section 29 N/2 and SE/4

T24N R7W

Section 11 E/2

Section 14 E/2 and SW/4

T25N R6W

Section 17 E/2

Section 18 All

Section 21 NE/4

Section 26 SE/4

Section 35 NE/4

T25N R7W

Section 13 NW/4

Section 25 All Section 36 N/2

Dufer's Point Gallup-Dakota Oil Pool (19859)

T25N R8W

Section 5 SW/4

Section 19 W/2 and NE/4

Section 20 NW/4

Escrito Gallup Associated Pool (22619)

T24N R7W

Section 7 S/2SW/4

Section 23 W/2 NW/4 and SW/4

Section 33 E/2

Section 35 W/2 NW/4

Gallegos Gallup Associated Pool (26980)

T26N R11W

Section 6 SW/4

T26N R12W

Section 1,2 S/2

Section 3 S/2 and NW/4

Section 4 All

Section 24 SW/4

Section 25 NW/4

T27N R12W

Section 30 SW/4

Section 31 N/2

Section 32 S/2

Section 33 SW/4

T27N R13W

Section 22 SW/4

Section 25 S/2

Ice Canyon Gallup Gas Pool (93235)

T26N R7W

Section 23 W/2

Kutz Gallup Oil Pool (36550)

T27N R10W

Section 5 NW/4

T28N R10W

Section 32 SW/4

Laguna Seca Gallup Gas Pool (79870)

T31N R5W

Section 19 SE/4

Section 20 S/2

Section 21 S/2

Section 22 SW/4

All

Section 27 W/2

Section 28

Section 29 All

Section 30 NE/4

Section 32 N/2

Section 33 NW/4

T31N R6W

Section 14 E/2

Section 23 N/2

Section 36 NE/4

NE Ojito Gallup-Dakota Oil Pool (48025)

T26N R2W

Section 30 All

Section 31 All

Otero Gallup Oil Pool (48450)

T24N R5W

Section 1

W/2 and SE/4 of Nw/4

Section 2

N/2N/2

Tapacito Gallup Associated Pool (58090)

T26N R5W

Section 18 SW/4

Section 19 W/2 and SE/4

Section 20 S/2

Section 21 S/2

Totah Gallup Oil Pool (59750)

T28N R13W

Section 13 S/2 NE/4

T29N R13W

Section 18 S/2

Section 19 NE/4

Section 20 W/2 NW/4 and S/2

Section 21 W/2 SW/4

Section 27 N/2

Section 28 N/2

Section 35 N/2

T29N R14W

Section 11 S/2 SW/4

Section 15 N/2 NE/4

Section 23 E/2 NE/4

Section 24 NW/4, E/2 SE/4

Wild Horse Gallup Gas Pool (87360)

T26N R3W

Section 3 S/2

Section 4 S/2

Section 5 SE/4

Section 6 N/2

Section 19 W/2

Willow Gallup Gas Pool (96379)

T31N R4W

Section 10 E/2

Section 11 N/2 and SW/4

Section 14 · W/2

Section 22 NE/4

Section 23 SE/4

Section 24 W/2

(4) The following existing pools are hereby **expanded** by adding thereto the lands provided below:

Baca Gallup Oil Pool (3745)

T26N R8W

Section 5 SW/4 SE/4, W/2 W/2 and SE/4 SW/4

Section 8 N/2 SE/4 and NE/4 SW/4

Section 9 N/2 SW/4

B. S. Mesa Gallup Gas Pool (72920)

T26N R5W

Section 2 NW/4
Section 3 N/2

Counselors Gallup-Dakota oil Pool (13379)

T23N R6W

Section 13 NW/4

Devil's Fork Gallup Associated Pool (17610)

T24N R6W

Section 14 SE/4
Section 23 NE/4
Section 24 NW/4

Dufer's Point Gallup-Dakota Oil Pool (19859)

T25N R8W

Section 23 W/2 Section 26 W/2

Escrito Gallup Associated Pool (22619)

T24N R6W

Section 30 E/2 NE/4

Gallegos Gallup Associated Pool (26980)

T26N R11W

Section 19 SW/4
Section 22 S/2
Section 23 SW/4
Section 30 W/2
Section 31 NW/4

Gallo Canyon Gallup-Dakota Oil Pool (96369)

T23N R5W

Section 4 SW/4 SW/4 Section 5 E/2 NE/4 and SW/4 NE/4 and SE/4 Section 9 W/2 NW/4

Ice Canyon Gallup Gas Pool (93235)

T26N R7W

Section 14 SE/4

Laguna Seca Gallup Gas Pool (79870) <u>T31N R6W</u>

Section 19 SE/4 Section 20 SW/4 Section 30 E/2

La Jara Canyon Gallup Gas Pool (96483)

T30N R5W

Section 26 S/2 Section 27 S/2 Section 34 W/2

Lindrith GallupDakota, South Oil Pool (96483)

T23N R4W

Section 13 SE/4Undelete

Munoz Canyon Gallup Gas Pool (96767)

T28N R5W

Section 17 SW/4

Section 18 S/2 and NW/4

Otero Gallup Oil Pool (48450)

T24N R5W

Section 3 S/2 NE/4

Tapacito Gallup Associated Pool (58090)

T26N R5W

Section 13 SE/4 Section 24 NE/4

- (5) The Division's application for pre-approval of down-hole commingling is <u>denied</u>, without prejudice to future applications for well-specific down-hole commingling between the Basin-Mancos Gas Pool and applicable Mesaverde and/or Dakota pools, and also without prejudice to any new application for pre-approval that the Division or any operator may file either as a hearing application, or as an administrative application, in accordance with Rule 303.C(4).
- (6) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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SEAL

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.

Director

Exhibit A to Order No. R-12984

Special Rules for the Basin-Mancos Gas Pool

Rule 1: Applicability

- A. In General: Any well completed or to be completed in the Basin-Mancos Gas Pool, or within two miles of the outer boundaries thereof, and not closer to, or within, another Mancos or Gallup Pool, shall be drilled and spaced in accordance with the Special Rules for the Basin-Mancos Gas Pool.
- **B.** Exception: Any well drilled within the Basin-Mancos Gas Pool that is to be completed as a stand-alone oil well in the Mancos formation, and is within two miles of an outer boundary of any oil or associated pool identified in Order Paragraph (3) or (4) of Order R-12984 shall be drilled and spaced in accordance with the rules applicable to such pool, or, if there be more than one such pool within two miles, the rules applicable to the closest such pool.

Rule 2: Spacing and Well Density

A. Standard Spacing Unit: A standard gas spacing unit in the Basin-Mancos Gas Pool shall consist of 320 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.

B. Well density:

- (1) Up to four (4) wells may be drilled on a standard spacing unit, provided that:
 - (a) no more than two wells shall be located within any governmental quarter section in a standard or non-standard spacing unit;
 - (b) no more than one well shall be located within any governmental quarter-quarter section.
 - (c) any deviation from the above-described well density requirements shall be authorized only after notice to all affected persons, as defined in Rule 1210.A(2)(a), in all units or prospective units adjoining the spacing unit for which the deviation is sought, and opportunity for a hearing if requested by any party within twenty dates of the date notice is sent to such party.
- (2) The well location and acreage dedication plat (Form C-102) accompanying the "Application for Permit to Drill ("APD") for each proposed Mancos gas well to be located in any spacing unit in which there is an existing Mancos gas well shall show the location (well name, footage location, API number) of all existing Mancos wells in the spacing unit, and the proposed new well.

C. Well locations:

(1) Except as provided in subparagraph C.(2) below, any Basin-Mancos gas well shall be located not closer than 660 feet to the outer boundary of

- the spacing unit and not closer than 10 feet to any interior quarter or quarter-quarter section line or subdivision inner boundary.
- (2) Well locations inside federal exploratory units: Wells located within federal exploratory units are permitted an exception to the 660-foot setback requirement to the outer boundary of a spacing unit, but shall be no closer than 10 feet to any section, quarter section, or interior quarter-quarter section line or subdivision inner boundary, provided however:
 - (a) no well shall be closer than 660 feet to the outer boundary of the federal exploratory unit;
 - (b) a well located in a spacing unit that adjoins an existing or prospective spacing unit containing a non-committed tract or partially committed tract shall not be closer than 660 feet to the outer boundary of such existing or prospective unit;
 - (c) a well located within a non-committed or partially committed spacing unit shall not be closer than 660 feet to the outer boundary of its spacing unit;
 - (d) a well located within a participating area but adjacent to an existing or prospective spacing unit that is not within the same participating area shall not be closer than 660 feet to the outer boundary of the participating area; and
 - (e) a well located in an existing or prospective spacing unit that is a non-participating spacing unit shall not be closer than 660 feet to the outer boundary of such its spacing unit.
- (3) The operator filing an APD for any well within a unit area that is closer to the outer boundary of its assigned spacing unit than 660 feet shall provide proof in the form of a participating area plat that such well meets the requirements of Subparagraph C.(2) above.

Rule 3: Transitional Provisions:

A. Existing Wells: Any well that was permitted as a wildcat Mancos gas well prior to the effective date of these rules, and was spud prior to such date, shall be dedicated to a 160-acre unit, in accordance with Division Rule 104.C(3); provided that the operator of any such well may re-dedicate the well to a 320-acre unit by filing a form C-102 showing such unit, and all Basin-Mancos wells therein, and attaching thereto either (a) a signed statement by an attorney or landman certifying that ownership of all interests, including working interests, royalty interests and overriding royalty interests, is uniform throughout the proposed spacing unit, or (b) signed consents from all owners of interests in the portion of the spacing unit where the well is located who own no interest, or a lesser interest, in any other portion of the proposed spacing unit. A second Basin-Mancos gas well may be drilled on any 160-acre unit dedicated to an existing well under this paragraph, provided that such second well shall not be located within the same quarter-quarter section as the existing well.

B. Stranded Units: Any quarter section that cannot be paired with another quarter section in the same section by reason of the configuration of existing units may be approved as a non-standard unit by the Aztec district office, without the filing of an application other than an APD with a plat attached demonstrating that such quarter section is a stranded unit. Well density in such non-standard unit shall be governed by Subparagraphs B.(1)(a) and B.(1)(b) of Rule 2.