#### 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. 12139 Order No. R-11189

APPLICATION OF PHILLIPS PETROLEUM COMPANY FOR THE ESTABLISHMENT OF A DOWNHOLE COMMINGLING REFERENCE CASE FOR ITS SAN JUAN 32-8 UNIT PURSUANT TO DIVISION RULE 303.E. AND THE ADOPTION OF SPECIAL ADMINISTRATIVE RULES THEREFOR, SAN JUAN COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

#### BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on March 18, 1999, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 25<sup>th</sup> day of May, 1999, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner.

#### **FINDS THAT:**

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) Cases No. 12136, 12137, 12138 and 12139 were consolidated at the time of the hearing for the purpose of testimony.
- (3) The applicant, Phillips Petroleum Company (Phillips), pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas, and (d) modification of notice rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 32-8 Unit located in Townships 31 and 32 North, Range 8 West, NMPM, San Juan County, New Mexico.

#### (4) Division Rule 303.E. currently states:

"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."

- (5) The applicant is the current operator of the San Juan 32-8 Unit, which encompasses some 18,290 acres, more or less, in Townships 31 and 32 North, Range 8 West, NMPM, San Juan County, New Mexico.
- (6) Within the San Juan 32-8 Unit, the applicant currently operates two (2) Basin-Dakota Gas Pool wells, forty-two (42) Blanco-Mesaverde Gas Pool wells, forty (40) Basin-Fruitland Coal Gas Pool wells, and nine (9) Albino-Pictured Cliffs Gas Pool wells.
  - (7) According to its evidence and testimony, Phillips seeks to:
  - a) establish a "reference case" for marginal economic criteria in the Basin-Dakota and Blanco-Mesaverde Gas Pools whereby these pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the San Juan 32-8 Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these pools should be classified as "marginal";
  - b) establish a "reference case" for pressure criteria in the Basin-Dakota and Blanco-Mesaverde Gas Pools whereby the Division may utilize the data provided in the immediate case to verify the pressure data provided on Form C-107-A's subsequently filed for wells within the San Juan 32-8 Unit;
  - c) establish a "reference case" whereby the Division utilizes the data presented in the immediate case to endorse or approve certain methods of allocating production whereby the applicant need not submit additional data or justification when proposing a certain method of allocating production on Form C-107-A's subsequently filed for wells within the San Juan 32-8 Unit; and
  - d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 32-8 Unit without additional notice to each affected interest owner as required by Rule No. 303.D.
- (8) In support of its request to except marginal economic criteria, the applicant presented engineering evidence and testimony indicating that within the San Juan 32-8 Unit:

- a) the average estimated Mesaverde and Dakota ultimate recoverable gas reserves within the San Juan 32-8 Unit on a per well basis are approximately .69 BCFG and .76 BCFG, respectively;
- b) the average initial producing rate for a Mesaverde and Dakota gas well (either newly drilled or recompleted) is approximately 345 MCFGD and 145 MCFGD, respectively; and
- c) the estimated ultimate gas recoveries and initial producing rates from the Mesaverde and Dakota formations within the San Juan 32-8 Unit are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.
- (9) The evidence and testimony presented by the applicant indicates that the Blanco-Mesaverde and Basin-Dakota Gas Pools within the San Juan 32-8 Unit should be properly classified as "marginal".
- (10) In support of its request to except pressure criteria within the Mesaverde and Dakota formations within the San Juan 32-8 Unit, the applicant presented engineering evidence and testimony indicating that:
  - a) the average shut-in bottomhole pressure within the Mesaverde and Dakota formations at the time of initial development was approximately 1,350 psi and 3,190 psi, respectively; and
  - b) the average current shut-in bottomhole pressure within the Mesaverde and Dakota formations is approximately 646 psi and 1050 psi, respectively.
- (11) Testimony by the applicant indicates that the pressure data described above was obtained from four (4) Mesaverde and two (2) Dakota wells within the San Juan 32-8 Unit.
- (12) The applicant presented insufficient pressure data within the San Juan 32-8 Unit area to except pressure criteria.
- (13) The applicant testified that various allocation methods would be utilized for downhole commingled wells within the San Juan 32-8 Unit depending on the circumstances. Some of the methods and circumstances are described as follows:
  - a) in those instances where a newly completed zone is commingled with an existing producing interval with an established decline, the subtraction method will be utilized for a period of +/- 12 months. Subsequent to that time, and assuming that the production rate has stabilized, a fixed allocation will be determined and utilized; and

- b) in those instances where a well is newly drilled, the lower zone will be production tested for a period of several weeks to several months, whatever time period is necessary to establish a stabilized production rate. A production forecast will then be obtained from the lower zone based upon the stabilized production rate. The upper zone will be completed and the subtraction method will be utilized for a period of +/- 12 months. Once the production rate has stabilized, a fixed allocation will be determined and utilized.
- (14) The allocation methods proposed by the applicant are routinely utilized by industry and approved by the Division and therefore the proposal to except allocation methods should be approved.
- (15) In support of its request to establish a "reference case" or administrative procedure whereby additional notice of Form C-107-A within the San Juan 32-8 Unit need not be given to interest owners, the applicant presented evidence and testimony indicating that:
  - a) the interest ownership between zones within a given wellbore in the San Juan 32-8 Unit is generally not common;
  - b) pursuant to Rule No. 303.D., it is currently required to notify all interest owners within the San Juan 32-8 Unit every time a Form C-107-A is submitted to the Division. There are a considerable number of such interest owners within the unit;
  - c) the downhole commingling of wells within the San Juan 32-8 Unit will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 32-8 Unit should not violate the correlative rights of any interest owner; and
  - d) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.
- (16) An administrative procedure should be established within the San Juan 32-8 Unit for obtaining approval for subsequently downhole commingled wells without notice to unit interest owners, provided however that the applicant shall comply with all other provisions contained within Division Rule 303.C.
- (17) Approval of the proposed "reference case" for marginal economic criteria, allocation formulas and notice will lessen the burden on the applicant insofar as providing the data required pursuant to Division Rule 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approval within the San Juan 32-8 Unit, and will not violate correlative rights.

#### IT IS THEREFORE ORDERED THAT:

- (1) The application of Phillips Petroleum Company to establish a "reference case" for a) marginal economic criteria within the Blanco-Mesaverde and Basin-Dakota Gas Pools, b) allocation formulas, and c) modification of notice rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 32-8 Unit, San Juan County, New Mexico, is hereby approved.
- (2) The application of Phillips Petroleum Company to establish a "reference case" for pressure criteria on a unit-wide basis for downhole commingling of Blanco-Mesaverde and Basin-Dakota Gas Pools within the San Juan 32-8 Unit is hereby <u>denied</u>.
- (3) Upon filing of Form C-107-A's for wells subsequently downhole commingled within the San Juan 32-8 Unit, the applicant shall not be required to submit supporting data: (a) to justify the classification of the Blanco-Mesaverde and Basin-Dakota Gas Pools as "marginal" and (b) support or justify the utilization of a given method or formula for allocation of production, provided however, in the event any of the data described above appearing on Form C-107-A appears to be beyond the data range provided in this case, the Division may require the submittal of additional supporting data.
- (4) In order to obtain Division authorization to downhole commingle wells within the San Juan 32-8 Unit, the applicant shall file Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Division Rule 303.C., provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 32-8 Unit of such proposed commingling.
- (5) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

LORI WROTENBERY

Director

SEAL

Entered May 3, 1983

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

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

CASE NO. 7859 Order No. R-7277

THE APPLICATION OF THE OIL CONSERVATION DIVISION ON ITS OWN MOTION FOR AN ORDER CREATING, ABOLISHING, AND EXTENDING CERTAIN POOLS IN SAN JUAN, RIO ARRIBA, SANDOVAL, AND McKINLEY COUNTIES, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on April 27, 1983, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 5th day of May, 1983, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That there is need for the creation of a new oil pool in McKinley County, New Mexico, for the production of oil from the Mesaverde formation, said pool to bear the designation of Blue Mesa-Mesaverde Oil Pool. Said Blue Mesa-Mesaverde Oil Pool was discovered by the Folk & Burge Oil Co. FBC Federal Well No. 1 located in Unit L of Section 12, Township 19 North, Range 5 West, NMPM. It was completed in the Mesaverde formation on October 8, 1982. The top of the perforations is at 1,946 feet.
- (3) That there is need for the creation of a new gas pool in Rio Arriba County, New Mexico, for the production of gas from the Gallup formation, said pool to bear the designation of Cabrestro-Gallup Pool. Said Cabrestro-Gallup Pool was discovered

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by the Southland Royalty Company Simms Federal Well No. 1 located in Unit J of Section 13, Township 30 North, Range 4 West, NMPM. It was completed in the Gallup formation on September 11, 1981. The top of the perforations is at 7,541 feet.

- (4) That there is need for the creation of a new gas pool in San Juan County, New Mexico, for the production of gas from the Gallup formation, said pool to bear the designation of Calloway-Gallup Pool. Said Calloway-Gallup Pool was discovered by the Southland Royalty Company Nye Well No. 17 located in Unit L of Section 1, Township 30 North, Range 11 West, NMPM. It was completed in the Gallup formation on August 7, 1981. The top of the perforations is at 6,154 feet.
- (5) That there is need for the creation of a new gas pool in San Juan County, New Mexico, for the production of gas from the Gallup formation, said pool to bear the designation of Dusenberry-Gallup Pool. Said Dusenberry-Gallup Pool was discovered by the Southland Royalty Company Dusenberry Well No. 3E located in Unit H of Section 1, Township 31 North, Range 12 West, NMPM. It was completed in the Gallup formation on October 30, 1979. The top of the perforations is at 6,818 feet.
- (6) That there is need for the creation of a new gas pool in San Juan County, New Mexico for the production of gas from the Gallup formation, said pool to bear the designation of Eagle Nest-Gallup Pool. Said Eagle Nest-Gallup Pool was discovered by the Aztec Energy Corporation Stock Well No. 1 located in Unit J of Section 36, Township 30 North, Range 16 West, NMPM. It was completed in the Gallup formation on September 30, 1981. The top of the perforations is at 3,701 feet.
- (7) That there is need for the creation of a new gas pool in Rio Arriba County, New Mexico, for the production of gas from the Gallup formation, said pool to bear the designation of Laguna Seca-Gallup Pool. Said Laguna Seca-Gallup Pool was discovered by the Northwest Pipeline Corporation Rosa Unit Well No. 77 located in Unit L of Section 33, Township 31 North, Range 5 West, NMPM. It was completed in the Gallup formation on May 5, 1981. The top of the perforations is at 7,660 feet.
- (8) That there is need for the creation of a new gas pool in San Juan County, New Mexico, for the production of gas from the Farmington formation, said pool to bear the designation of Manzanares-Farmington Pool. Said Manzanares-Farmington Pool

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was discovered by the Amoco Production Company W. D. Heath A Well No. 14 located in Unit L of Section 9, Township 29 North, Range 9 West, NMPM. It was completed in the Farmington formation on April 3, 1981. The top of the perforations is at 1,116 feet.

- (9) That there is need for the creation of a new gas pool in San Juan County, New Mexico, for the production of gas from the Gallup formation, said pool to bear the designation of McDermott-Gallup Pool. Said McDermott-Gallup Pool was discovered by the Amoco Production Company Stanolind Gas Com B Well No. 1 located in Unit I of Section 9, Township 32 North, Range 12 West, NMPM. It was completed in the Gallup formation on January 15, 1981. The top of the perforations is at 5,968 feet.
- (10) That there is need for the creation of a new oil pool in McKinley County, New Mexico, for the production of oil from the Gallup formation, said pool to bear the designation of North Miguel Creek-Gallup Oil Pool. Said North Miguel Creek-Gallup Oil Pool was discovered by the Capital Oil & Gas Corporation State Well No. 1 located in Unit M of Section 16, Township 16 North, Range 6 West, NMPM. It was completed in the Gallup formation on July 23, 1981. The top of the perforations is at 1,153 feet.
- (11) That there is need for the creation of a new gas pool in San Juan County, New Mexico, for the production of gas from the Gallup formation, said pool to bear the designation of Trail Canyon-Gallup Pool. Said Trail Canyon-Gallup Pool was discovered by the Oxoco Production Company Trail Canyon Well No. 2 located in Unit H of Section 18, Township 32 North, Range 8 West, NMPM. It was completed in the Gallup formation on April 28, 1981. The top of the perforations is at 7,559 feet.
- (12) That there is need for the abolishment of the Gonzales-Mesaverde Pool in Rio Arriba County, New Mexico, and the abolished acreage will be placed in the Blanco-Mesaverde Pool.
- (13) That there is need for the redesignation of the Rusty-Gallup Gas Pool in Sandoval County, New Mexico, as the Rusty-Gallup Oil Pool and the extension of the horizontal limits thereof.
- (14) That there is need for the extension of the Alamito-Gallup Oil Pool and the Rusty-Chacra Pool, both in Sandoval County, New Mexico, and the Albino-Pictured Cliffs Pool, the Armenta-Gallup Oil Pool, the Aztec-Pictured Cliffs Pool, the Bisti-Lower Gallup Oil Pool, the Cha Cha-Gallup Oil Pool, the Dufers Point Gallup-Dakota Oil Pool, the Flora Vista-Fruitland Pool, the Flora Vista-Gallup Pool, the Fulcher Kutz-Pictured Cliffs Pool, the Glades-Fruitland Pool, the Horseshoe-Gallup Oil Pool, the Many Rocks-Gallup Oil Pool,

the Nageezi-Gallup Oil Pool, the Twin Mounds-Pictured Cliffs Pool, and the WAW Fruitland-Pictured Cliffs Pool, all in San Juan County, New Mexico, and the Ballard-Pictured Cliffs Pool and the South Blanco-Pictured Cliffs Pool, both in Rio Arriba, Sandoval, and San Juan Counties, New Mexico, and the Blanco-Mesaverde Pool, the Blanco-Pictured Cliffs Pool, and the Otero-Chacra Pool, all in Rio Arriba and San Juan Counties, New Mexico, and the Chacon-Dakota Associated Pool and the Lybrook-Gallup Oil Pool, both in Rio Arriba and Sandoval Counties, New Mexico, and the Counselors-Gallup Oil Pool, the Devils Fork-Gallup Associated Pool, the Gavilan-Pictured Cliffs Pool, the Gobernador-Pictured Cliffs Pool, the South Lindrith Gallup-Dakota Oil Pool, the West Lindrith Gallup-Dakota Oil Pool, the Ojito Gallup-Dakota Oil Pool, the Otero-Gallup Oil Pool, and the Tapacito-Pictured Cliffs Pool, all in Rio Arriba County, New Mexico, and the South Hospah-Lower Sand Oil Pool in McKinley County, New Mexico.

#### IT IS THEREFORE ORDERED:

(a) That a new pool in McKinley County, New Mexico, classified as an oil pool for Mesaverde production, is hereby created and designated as the Blue Mesa-Mesaverde Oil Pool, consisting of the following described area:

## TOWNSHIP 19 NORTH, RANGE 5 WEST, NMPM Section 12: NW/4 SW/4

(b) That a new pool in Rio Arriba County, New Mexico, classified as a gas pool for Gallup production, is hereby created and designated as the Cabrestro-Gallup Pool, consisting of the following described area:

## TOWNSHIP 30 NORTH, RANGE 4 WEST, NMPM Section 13: SE/4

(c) That a new pool in San Juan County, New Mexico, classified as a gas pool for Gallup production, is hereby created and designated as the Calloway-Gallup Pool, consisting of the following described area:

## TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM Section 1: SW/4

(d) That a new pool in San Juan County, New Mexico, classified as a gas pool for Gallup production, is hereby created and designated as the Dusenberry-Gallup Pool, con-5-Case No. 7859 Order No. R-7277

sisting of the following described area:

## TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM Section 1: NE/4

(e) That a new pool in San Juan County, New Mexico, classified as a gas pool for Gallup production, is hereby created and designated as the Eagle Nest-Gallup Pool, consisting of the following described area:

## TOWNSHIP 30 NORTH, RANGE 16 WEST, NMPM Section 36: SE/4

(f) That a new pool in Rio Arriba County, New Mexico, classified as a gas pool for Gallup production, is hereby created and designated as the Laguna Seca-Gallup Pool, consisting of the following described area:

## TOWNSHIP 31 NORTH, RANGE 5 WEST, NMPM Section 33: SW/4

(g) That a new pool in San Juan County, New Mexico, classified as a gas pool for Farmington production, is hereby created and designated as the Manzanares-Farmington Pool, consisting of the following described area:

## TOWNSHIP 29 NORTH, RANGE 9 WEST, NMPM Section 9: SW/4

(h) That a new pool in San Juan County, New Mexico, classified as a gas pool for Gallup production, is hereby created and designated as the McDermott-Gallup Pool, consisting of the following described area:

#### TOWNSHIP 32 NORTH, RANGE 12 WEST, NMPM

Section 9: E/2 Section 16: N/2 Section 17: E/2

(i) That a new pool in McKinley County, New Mexico, classified as an oil pool for Gallup production, is hereby created and designated as the North Miguel Creek-Gallup Oil Pool, consisting of the following described area:

## TOWNSHIP 16 NORTH, RANGE 6 WEST, NMPM Section 16: S/2 SW/4

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(j) That a new pool in San Juan County, New Mexico, classified as a gas pool for Gallup production, is hereby created and designated as the Trail Canyon-Gallup Pool, consisting of the following described area:

#### TOWNSHIP 32 NORTH, RANGE 8 WEST, NMPM

Section 16: SW/4

Section 17: N/2 and SE/4

Section 18: NE/4

(k) That the Gonzales-Mesaverde Pool in Rio Arriba County, New Mexico, consisting of the following described area:

#### TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM

Section 3: S/2

Sections 4 through 6: All

Section 7: NE/4

Section 8: All

Section 9: N/2

Section 10: All

#### TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM

Section 1: E/2

Section 12: NE/4

#### TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM

Section 29: SW/4

Section 30: SE/4

Section 31: All

Section 32: W/2 and SE/4

Section 33: W/2

#### is hereby abolished.

(1) That the Alamito-Gallup Oil Pool in Sandoval County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

#### TOWNSHIP 22 NORTH, RANGE 7 WEST, NMPM

Section 3: W/2 NE/4 and NW/4 SE/4

#### TOWNSHIP 23 NORTH, RANGE 7 WEST, NMPM

Section 27: SW/4 SW/4

Section 32: S/2

Section 33: S/2 N/2 and S/2

Section 34: SW/4 NE/4, W/2 NW/4, SE/4 NW/4, SW/4, and

W/2 SE/4

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(m) That the Albino-Pictured Cliffs Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 32 NORTH, RANGE 7 WEST, NMPM Section 7: W/2

#### TOWNSHIP 32 NORTH, RANGE 8 WEST, NMPM

Section 12: All Section 14: NW/4 Section 15: NE/4

(n) That the Armenta-Gallup Oil Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 28 NORTH, RANGE 10 WEST, NMPM Sections 10 through 12: All

#### TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM

Section 33: SE/4 Section 34: S/2

Section 35: SW/4 and S/2 SE/4

(o) That the Aztec-Pictured Cliffs Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM Section 35: NW/4

#### TOWNSHIP 32 NORTH, RANGE 12 WEST, NMPM

Section 28: SW/4
Section 29: E/2
Section 33: N/2
Section 34: W/2

(p) That the Ballard-Pictured Cliffs Pool in Rio Arriba, Sandoval, and San Juan Counties, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM

Section 26: SW/4 Section 27: SE/4 Section 35: NE/4 -8-Case No. 7859 Order No. R-7277

(q) That the Bisti-Lower Gallup Oil Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 24 NORTH, RANGE 9 WEST, NMPM Section 18: SW/4 Section 19: N/2 NW/4

(r) That the Blanco-Mesaverde Pool in Rio Arriba and San Juan Counties, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM Sections 3 through 10: All

TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM Section 1: All Section 12: All

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM

Section 15: S/2 Section 16: All

Section 17: E/2

Section 19: All

Section 20: E/2

Sections 21 through 23: All

Section 27: N/2

Sections 28 through 33: All

Section 34: W/2

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMPM

Section 24: E/2 Section 25: E/2

TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM Section 15: S/2

TOWNSHIP 29 NORTH, RANGE 11 WEST, NMPM Section 26: All

TOWNSHIP 31 NORTH, RANGE 5 WEST, NMPM

Section 8: E/2 Section 9: W/2

(s) That the Blanco-Pictured Cliffs Pool in Rio Arriba and San Juan Counties, New Mexico, as heretofore classified,

defined, and described, is hereby extended to include therein:

TOWNSHIP 31 NORTH, RANGE 11 WEST, NMPM Section 22: NW/4

(t) That the South Blanco-Pictured Cliffs Pool in Rio Arriba, Sandoval, and San Juan Counties, New Mexico, as here-tofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM Section 12: SW/4 Section 13: NW/4

TOWNSHIP 24 NORTH, RANGE 4 WEST, NMPM Section 23: SE/4

TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM Section 26: SE/4

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM Section 25: SW/4

TOWNSHIP 28 NORTH, RANGE 6 WEST, NMPM Sections 7 and 8: All Sections 17 and 18: All Section 19: N/2

Section 20: N/2

TOWNSHIP 28 NORTH, RANGE 7 WEST, NMPM Sections 12 through 14: All

Section 15: E/2 Section 22: SE/4 Sections 23 and 24

Sections 23 and 24: All

(u) That the Cha Cha-Gallup Oil Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 29 NORTH, RANGE 15 WEST, NMPM Section 11: NW/4

(v) That the Chacon-Dakota Associated Pool in Rio Arriba and Sandoval Counties, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM

Section 15: NW/4 Section 35: SW/4 -10-Case No. 7859 Order No. R-7277

(w) That the Counselors-Gallup Oil Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

## TOWNSHIP 23 NORTH, RANGE 6 WEST, NMPM Section 5: SE/4

(x) That the Devils Fork-Gallup Associated Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM

Section 21: N/2 and SW/4 Section 28: NW/4 and SE/4

Section 33: NE/4

(y) That the Dufers Point Gallup-Dakota Oil Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 24 NORTH, RANGE 8 WEST, NMPM Section 3: N/2

TOWNSHIP 25 NORTH, RANGE 8 WEST, NMPM Section 34: S/2

(z) That the Flora Vista-Fruitland Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM Section 28: W/2 Section 33: N/2

(aa) That the Flora Vista-Gallup Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM Section 31: W/2 and SE/4

TOWNSHIP 31 NORTH, RANGE 13 WEST, NMPM

Section 25: S/2

Section 26: N/2 and SE/4

Section 27: NE/4

Section 35: E/2

Section 36: All

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(bb) That the Fulcher Kutz-Pictured Cliffs Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

> TOWNSHIP 27 NORTH, RANGE 10 WEST, NMPM Section 34: N/2

That the Gavilan-Pictured Cliffs Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

> TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM Section 31: S/2

> TOWNSHIP 27 NORTH, RANGE 3 WEST, NMPM Section 34: NW/4

(dd) That the Glades-Fruitland Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

#### TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM

Section 1: W/2

Section 2: E/2

Section 10: S/2

Section 11: NE/4 and S/2

Section 12: W/2

Section 13: W/2

Sections 14 and 15: All

Section 23: NE/4

That the Gobernador-Pictured Cliffs Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

#### TOWNSHIP 29 NORTH, RANGE 5 WEST, NMPM

Section 10: S/2

Section 15: NW/4

Section 25: S/2

#### TOWNSHIP 30 NORTH, RANGE 5 WEST, NMPM

Section 33: SE/4

(ff) That the Horseshoe-Gallup Oil Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

> TOWNSHIP 32 NORTH, RANGE 17 WEST, NMPM Section 32: SE/4 NW/4, E/2 SW/4, and S/2 SE/4

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(gg) That the South Hospah-Lower Sand Oil Pool in McKinley County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

## TOWNSHIP 17 NORTH, RANGE 8 WEST, NMPM Section 6: W/2 NW/4

(hh) That the South Lindrith Gallup-Dakota Oil Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

#### TOWNSHIP 23 NORTH, RANGE 4 WEST, NMPM

Section 3: SW/4 Section 10: NE/4 Section 11: N/2

(ii) That the West Lindrith Gallup-Dakota Oil Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

#### TOWNSHIP 24 NORTH, RANGE 5 WEST, NMPM

Section 1: S/2 Section 2: S/2 Section 11: All Section 12: N/2

TOWNSHIP 25 NORTH, RANGE 3 WEST, NMPM Section 31: S/2

## TOWNSHIP 25 NORTH, RANGE 4 WEST, NMPM Section 36: SW/4

(jj) That the Lybrook-Gallup Oil Pool in Rio Arriba and Sandoval Counties, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 23 NORTH, RANGE 6 WEST, NMPM Section 29: SW/4 NW/4 and N/2 SW/4

Section 30: NE/4 and N/2 SE/4

TOWNSHIP 23 NORTH, RANGE 7 WEST, NMPM

Section 7: S/2 Section 8: SW/4

TOWNSHIP 23 NORTH, RANGE 8 WEST, NMPM

Section 12: E/2 SE/4 Section 13: NE/4 NE/4 TOWNSHIP 24 NORTH, RANGE 8 WEST, NMPM

Section 26: SW/4, W/2 SE/4, and

SE/4 SE/4

Section 27: E/2 SE/4

Section 34: E/2 NE/4 and NE/4 SE/4

Section 35: N/2, N/2 SW/4, and

NW/4 SE/4

(kk) That the Many Rocks-Gallup Oil Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 32 NORTH, RANGE 17 WEST, NMPM Section 28: NW/4 NE/4, N/2 NW/4, and SW/4 NW/4

(11) That the Nageezi-Gallup Oil Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

#### TOWNSHIP 23 NORTH, RANGE 8 WEST, NMPM

Section 2: SW/4
Section 3: S/2
Section 9: SE/4
Section 10: W/2
Section 15: N/2

Section 16: NE/4

(mm) That the Ojito Gallup-Dakota Oil Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 25 NORTH, RANGE 3 WEST, NMPM

Section 16: W/2 NW/4

Section 17: NE/4

(nn) That the Otero-Chacra Pool in Rio Arriba and San Juan Counties, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMPM Section 25: SE/4

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM

Section 6: NE/4

Section 25: SW/4

TOWNSHIP 27 NORTH, RANGE 7 WEST, NMPM

Section 34: S/2 Section 35: W/2

TOWNSHIP 27 NORTH, RANGE 10 WEST, NMPM

Section 1: NW/4

TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM

Section 20: NE/4 and S/2 Section 21: N/2 and SW/4

Section 28: W/2 Section 29: All

(oo) That the Otero-Gallup Oil Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM Section 25: S/2 NW/4

(pp) That the Rusty-Chacra Pool in Sandoval County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

#### TOWNSHIP 21 NORTH, RANGE 6 WEST, NMPM

Sections 2 and 3: All

Section 4: N/2 and SE/4

Section 5: NE/4

Section 7: NE/4 Section 8: N/2

Section 9: E/2

Sections 10 and 11: All

Section 12: W/2

Section 13: N/2

Section 14: N/2

Section 15: N/2

#### TOWNSHIP 22 NORTH, RANGE 6 WEST, NMPM

Section 32: SE/4

Section 33: All

Section 34: S/2

Section 35: SW/4

#### TOWNSHIP 22 NORTH, RANGE 7 WEST, NMPM

Section 24: SW/4

Section 25: N/2

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(qq) That the Rusty-Gallup Pool in Sandoval County, New Mexico, as heretofore classified, defined, and described, is hereby redesignated as the Rusty-Gallup Oil Pool and extended to include therein:

#### TOWNSHIP 22 NORTH, RANGE 7 WEST, NMPM

Section 16: E/2

Section 21: N/2 NE/4

Section 22: W/2 and SE/4

Section 23: W/2 SW/4

Section 27: N/2 NW/4

(rr) That the Tapacito-Pictured Cliffs Pool in Rio Arriba County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 25 NORTH, RANGE 3 WEST, NMPM Section 2: NE/4

TOWNSHIP 27 NORTH, RANGE 3 WEST, NMPM Section 30: NE/4

(ss) That the Twin Mounds-Pictured Cliffs Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 29 NORTH, RANGE 14 WEST, NMPM Section 6: N/2

TOWNSHIP 29 NORTH, RANGE 15 WEST, NMPM Section 1: NE/4

(tt) That the WAW Fruitland-Pictured Cliffs Pool in San Juan County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 27 NORTH, RANGE 13 WEST, NMPM

Section 21: SE/4 Section 22: SW/4

#### IT IS FURTHER ORDERED:

(1) That pursuant to Section 70-2-18, NMSA 1978, contained in Chapter 271, Laws of 1969, any well which by virtue of any of the above pool extensions, is subject to pool rules providing for spacing or proration units larger than the one which is presently dedicated thereto, shall have 60 days from the effective date of this order in which to file new Forms

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C-102 dedicating a standard unit for the pool to said well, or to obtain a non-standard unit approved by the Division. Pending such compliance, the well shall receive a maximum allowable in the same proportion to a standard allowable for the pool that the acreage dedicated to the well bears to a standard unit for the pool. Failure to file Form C-102 dedicating a standard unit to the well or to obtain a non-standard unit approved by the Division within said 60-day period shall subject the well to cancellation of allowable.

(2) That the effective date of this order and all creations, abolishments, and extensions included herein shall be May 1, 1983.

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

STATE OF NEW MEXICO

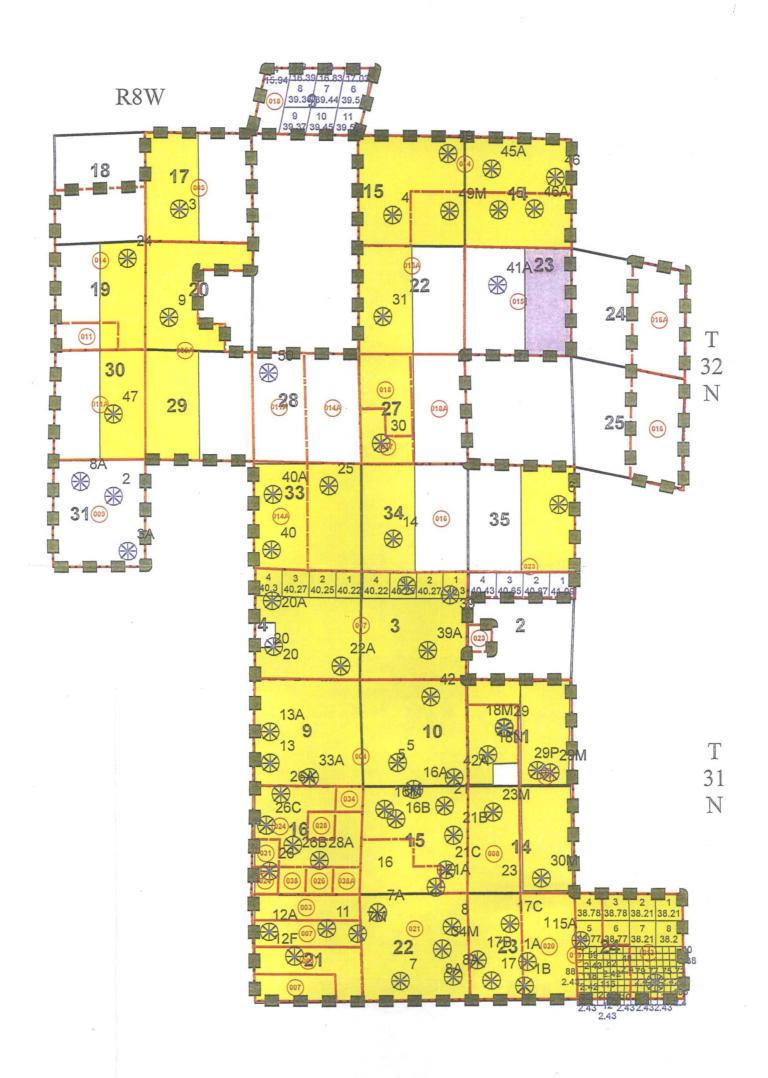
OIL CONSERVATION DIVISION

JOE D. RAMEY

Director

SEAL

# SAN JUAN 32-8 UNIT MESAVERDE FORMATION



#### MESAVERDE PARTICIPATING AREA

MESAVERDE

Approved 22nd Expansion, Effective 12/1/2008

Proposed 23rd Expansion, Effective, 9/1/2009



L48 Land Dept. San Juan Business Unit 2011

## SAN JUAN 32-8 UNIT DAKOTA PARTICIPATING AREA

R8W



### **DAKOTA PARTICIPATING AREA**

DAKOTA

APPROVED 5TH EXPANSION, EFFECTIVE 9/1/2008

L48 Land Dept. San Juan Business Unit 2010