# 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:

APPLICATION OF GRUY PETROLEUM MANAGEMENT FOR AN UNORTHODOX GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO. CASE NO. 12015

APPLICATION OF GRUY PETROLEUM MANAGEMENT FOR AN UNORTHODOX GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO.

CASE NO. 12017

**ORDER NO. R-11476** 

### ORDER OF THE DIVISION

#### BY THE DIVISION:

These cases came on for hearing at 8:15 a.m. on September 3, 1998, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 1st day of November, 2000, 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 these cases and their subject matter.
- (2) In <u>Case No. 12015</u> the applicant, Gruy Petroleum Management ("Gruy"), seeks an exception to Division Rule 104.D (3) to continuously and concurrently produce gas from the Rhodes-Yates-Seven Rivers Gas Pool from its: (i) existing Rhodes Federal Unit Well No. 43 (API No. 30-025-11949), to be recompleted from the Langlie Mattix-Seven Rivers-Queen-Grayburg Pool up-hole into the gas-bearing Yates/Seven Rivers interval at an unorthodox infill gas well location 2310 feet from the South line and 990 feet from the West line (Unit L) of Section 4, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico; (ii) existing Rhodes Federal Unit Well No. 41 (API No. 30-025-11952), located at a

standard gas well location 990 feet from the South line and 1650 feet from the West line (Unit N) of Section 4; and (iii) existing Rhodes Federal Unit Well No. 415 (API No. 30-025-34396), located at a standard gas well location 660 feet from the South and West lines (Unit M) of Section 4. All three wells are to be simultaneously dedicated to the existing standard 160-acre gas spacing and proration unit comprising the SW/4 of Section 4.

- (3) In Case No. 12017 Gruy seeks an exception to Division Rule 104.D (3) to continuously and concurrently produce gas from the Rhodes-Yates-Seven Rivers Gas Pool from its: (i) recently drilled Rhodes State Com. Well No. 5 (API No. 30-025-34417), located at an unorthodox infill gas well location 330 feet from the North line and 2310 feet from the West line (Unit C) of Section 16, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico; (ii) existing Rhodes State Com. Well No. 18 (API No. 30-025-24504), located at a standard gas well location 660 feet from the North line and 860 feet from the West line (Unit D) of Section 16; and (iii) existing Rhodes State Com. Well No. 19 (API No. 30-025-24505), located 2080 feet from the North line and 1980 feet from the West line (Unit F) of Section 16. All three wells are to be simultaneously dedicated to the existing standard 160-acre gas spacing and proration unit comprising the NW/4 of Section 16.
- (4) These two cases were consolidated for the purpose of presenting testimony and, since each application raises similar issues and both involve the same applicant, gas pool, and subject matter, one order should be entered.
- (5) Doyle Hartman, Oil Operator ("Hartman"), an oil and gas operator with operating interests in the Rhodes-Yates-Seven Rivers Gas Pool in Sections 10 and 15, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico ("Bates lease") appeared at the hearing and presented evidence in opposition to Gruy's request for simultaneous dedication to allow second and third gas-producing wells on the two existing standard 160-acre gas spacing and proration units.
- (6) Armstrong Energy Corporation, an operator in the pool, also appeared at the hearing in opposition to Gruy's requests but did not present evidence.
- (7) The Rhodes-Yates-Seven Rivers Gas Pool was created on January 1, 1982 by Division Order No. R-6891 issued in Case No. 7416. The vertical limits include the Yates and Seven Rivers formations. The horizontal limits for this pool currently include the following described lands in Lea County, New Mexico:

TOWNSHIP 26 SOUTH, RANGE 37 EAST, NMPM

Sections 4 and 5:

All

Section 6:

E/2

Section 8:

N/2, SE/4 SW/4, NE/4 SE/4, and S/2 SE/4

Section 9:

All

Section 10:

W/2

Section 14:

W/2

Sections 15 and 16:

**A11** 

Section 17:

NE/4, E/2 W/2, and E/2 SE/4

Section 21:

N/2 NE/4 and SE/4 NE/4

Section 22:

N/2, NE/4 SW/4, N/2 SE/4, and SE/4 SE/4

Section 23:

W/2 and SE/4

Section 26:

NE/4.

- The Rhodes-Yates-Seven Rivers Gas Pool is an "unprorated gas pool" not subject to Division Rule 605. At the time of the hearing this pool was subject to: (i) Division Rule 104.C (2) (b), which required standard 160-acre gas spacing and proration units with wells to be located no closer than 660 feet from outer boundary of a unit nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary nor closer than 1320 feet to the nearest well drilling to or capable of producing from the same pool; and (ii) Division Rule 104.D (3), which restricted the number of producing wells within a single gas spacing unit within a non-prorated pool to only one unless otherwise permitted by special pool rules or authorized after notice and hearing. Gas wells within this pool are allowed to produce at capacity.
- Prior to the creation of the Rhodes-Yates-Seven Rivers Gas Pool in 1982, both the Jalmat (Tansill-Yates-Seven Rivers) Gas Pool and the Rhodes (Yates-Seven Rivers Oil) Pool, having substantially the same vertical limits, horizontally overlapped the same acreage in Township 26 South, Range 37 East, NMPM, Lea County, New Mexico [see Finding Paragraph No. (5) of Division Order No. R-6891].
- The Jalmat Gas Pool is a prorated gas pool governed under Rule 605 and the "Special Rules and Regulation for the Jalmat Gas Pool," as promulgated by Division Order No. R-8170, as amended.
- At the time of the hearing the Rhodes (Yates-Seven Rivers Oil) Pool was governed by Division Rule 104.C (1), which required standard 40-acre oil spacing and proration units with wells to be located no closer than 330 feet from the outer boundary of a 40acre unit. The poolwide depth bracket allowable for the Rhodes (Yates-Seven Rivers Oil) Pool, set forth by Division Rule 505.A, is 80 barrels of oil per day. By Division Order No. R-520, issued in Case No. 673 and dated August 12, 1954, the limiting gas/oil ratio ("GOR") factor for this pool was established as 10,000 to one; therefore, the casinghead gas allowable is 800 MCF per day for each 40-acre oil proration unit. Its horizontal limits currently comprise the

following described acreage in Lea County, New Mexico:

TOWNSHIP 26 SOUTH, RANGE 37 EAST, NMPM

Section 8:

N/2 SW/4, SW/4 SW/4, and NW/4 SE/4

Section 17:

W/2 W/2 and W/2 SE/4

Section 20:

N/2 and SE/4

Section 21:

SW/4 NE/4, W/2, and SE/4

Section 22:

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

Section 26:

W/2 and SE/4

Sections 27 and 28:

All

Sections 34 and 35:

All.

From 1944 to 1982, El Paso Natural Gas Company operated the Rhodes (Gas) Storage Area within the defined limits of the Jalmat Gas Pool (see Ordering Paragraph No. 13 of Order No. R-520). The Rhodes (Gas) Storage Area encompassed the following described area in Lea County, New Mexico:

TOWNSHIP 26 SOUTH, RANGE 37 EAST, NMPM

Section 4:

W/2 NW/4, SW/4, W/2 SE/4, and SE/4 SE/4

Section 5:

Section 6:

NE/4, NE/4 NW/4, N/2 SE/4, and SE/4 SE/4

Section 7:

**NE/4 NE/4** 

Section 8:

N/2, N/2 S/2, SE/4 SW/4, and S/2 SE/4

Section 9:

All

Section 10:

W/2 NW/4, SE/4 NW/4, and S/2

Sections 15 and 16:

All

Section 17:

E/2 and E/2 NW/4

Section 20:

E/2

Sections 21 and 22:

All

Section 23:

SW/4 NW/4 and SW/4

Sections 26 through 28:

All

Section 29:

E/2 NE/4.

- (13)Several policies and rules have addressed the number of wells allowed within a single 160-acre gas spacing and proration unit in the Rhodes-Yates-Seven Rivers Gas Pool:
  - (A) On July 22, 1988, the Division Director took steps to prevent waste from the drilling of unnecessary wells and to protect correlative rights of all parties in unprorated gas pools by issuing a memorandum stating that:

- (i) "unprorated" was not the same as "unregulated";
- (ii) since allowables are not issued in unprorated gas pools, the only method available to protect correlative rights is the control of well density and locations:
- (iii) if added well density is absolutely necessary in a pool because of special geological situations or for drainage, then a special pool rules hearing can address those issues;
- (iv) applications for additional wells on existing gas spacing and proration units will be approved <u>only</u> on the understanding that upon completion of the additional well the operator of the unit will elect which well will be allowed to produce and which will be abandoned; and
- (v) applications to produce both wells will be approved only after hearing and upon compelling evidence that the applicant's correlative rights will be impaired unless both wells are produced;
- (B) By memorandum dated August 3, 1990, the Division clarified its policy disfavoring simultaneous dedication in unprorated gas pools. This August 3, 1990 Memorandum confirmed the July 22, 1988 Memorandum requiring a showing of compelling evidence for simultaneous dedication. The August 3, 1990 Memorandum further provided for the alternating operation of wells on units within unprorated gas pools (one well shut-in while the other produces);
- (C) By Division Order No. R-10533, issued by the New Mexico Oil Conservation Commission in Case 11,351 on January 18, 1996, Division Rule 104.D (3) was promulgated as follows:

Unless otherwise permitted by special pool rules or authorized after notice and hearing, only one (1) well per spacing unit is permitted in non-prorated pools; and

(D) On August 12, 1999, Rule 104.D (3) was changed to read:

Exceptions to the provisions of statewide rules or special pool orders concerning the number of wells allowed per spacing unit may be permitted by the Director only after notice and opportunity for hearing. Notice is to be given pursuant to Division Rule 1207.A (2).

- (14) Prior to the entry of Division Order No. R-6891 and prior to the issuance of the July 22, 1988 Memorandum, there existed many non-standard gas spacing and proration units within this area and there were numerous 160-acre gas spacing and proration units within the Rhodes-Yates-Seven Rivers Gas Pool with more than one producing gas well.
- (15) At the hearing the Division Examiner suggested that the Rhodes-Yates-Seven Rivers Gas Pool be abolished and the acreage placed in the Jalmat Gas Pool since all indications are that the pools are from the same common source of supply; further, this pool change would enable the operators to develop/deplete the remaining marginal reserves in the Rhodes-Yates-Seven Rivers Gas Pool using infill wells and non-standard gas spacing and proration units more freely.
  - (16) Both Gruy and Hartman opposed this idea.
- (17) Any discussion or testimony related to amending the rules currently governing the Rhodes-Yates-Seven Rivers Gas Pool or amending pool boundaries is beyond the scope of these proceedings.
- (18) Gruy acquired its interests in the Rhodes-Yates-Seven Rivers Gas Pool in May, 1997, and thereafter "Applications for Permits to Drill" ("APD") for additional wells on certain spacing and proration units in the pool were submitted to the Division and subsequently approved. Some of these proposed locations offset Hartman-operated properties.
- (19) Gruy, despite the provisions of Division Rule 12, first learned of the Division Rule 104.D (3) by a letter from Hartman dated May 21, 1998, after which Gruy: (i) limited its drilling activities to locations offset only by Gruy-operated properties; (ii) advised Hartman that Gruy would not proceed with the wells offsetting his tracks until OCD approval had been received; and (iii) filed the subject applications seeking exceptions to Rule 104.D (3).

- (20) Hartman does not own an interest in either of the spacing units that are the subject of these consolidated cases or in any 160-acre unit that immediately offsets either spacing unit. Furthermore, Hartman contends that neither of the two Gruy applications impairs his correlative rights.
- (21) In support of Gruy's request for an exception to Rule 104.F, applicable at the time Case No. 12015 was filed, for the existing Rhodes Federal Unit Well No. 43 the applicant presented evidence showing:
  - (A) when Gruy acquired the SW/4 of Section 4, this acreage was dedicated to the Rhodes Federal Unit Well No. 41 located at a standard gas well location in Unit "N" of Section 4;
  - (B) since acquiring this interest, Gruy has drilled its Rhodes Federal Unit Well No. 415 at a standard gas well location in Unit "M" of Section 4, but this well remains shut-in pending the outcome of these proceedings;
  - (C) the Rhodes Federal Unit Well No. 43 was originally drilled in 1958 by Jal Oil Company, Inc. at a standard oil well location within the Langlie Mattix-Seven Rivers-Queen-Grayburg Pool;
  - (D) all acreage directly and diagonally offsetting the Rhodes Federal Unit Well No. 43 is operated by Gruy and, in accordance with the notification requirements applicable at the time this application was filed, there are no other parties adversely affected by this unorthodox gas well location; and
  - (E) the recompletion of uneconomical oil wells in the deeper Langlie Mattix-Seven Rivers-Queen-Grayburg Pool into the shallower Rhodes-Yates-Seven Rivers Gas Pool provides Gruy with the best opportunity to produce additional reserves from this pool thereby preventing waste, while protecting correlative rights, by producing gas that would otherwise not be drained by the existing wellbores.
- (22) In support of Gruy's request for an exception to Rule 104.F, applicable at the time Case No. 12017 was filed, for the existing Rhodes State Com. Well No. 18, the applicant presented evidence showing:

- (A) when Gruy acquired the NW/4 of Section 16, this acreage was simultaneously dedicated to the: (i) Rhodes State Com. Well No. 18 located at a standard gas well location in Unit "D" of Section 16; and (ii) Rhodes State Com. Well No. 19 located in Unit "F" of Section 16;
- (B) the simultaneous dedication of these two wells was approved when the Rhodes-Yates-Seven Rivers-Gas Pool was created by Order No. R-6891;
- (C) since acquiring this interest, Gruy has drilled its Rhodes State Com. Well No. 5; this well was permitted in June, 1998, and erroneously drilled at a location 330 feet from the North line and 2310 feet from the West line (Unit C) of Section 16, but has remained shut-in since that time;
- (D) based on volumetric calculations and a drainage map of the Rhodes area, the Rhodes State Com. Well No. 5 is necessary to effectively produce reserves that will otherwise not be recovered from the other two wells in the NW/4 of Section 16; and
- (E) all acreage directly and diagonally offsetting the Rhodes State Com. Well No. 5 is operated by Gruy and, in accordance with the notification requirements applicable at the time this application was filed, there are no other parties adversely affected by this unorthodox gas well location.
- (23) The geological evidence presented by Gruy indicates areas, both vertically and horizontally, within the Rhodes-Yates-Seven Rivers Gas Pool that are undrained by wells currently capable of producing from the reservoir. Both the Rhodes Federal Unit Well No. 43 and 415 and Rhodes State Com. Well No. 5 are in portions of the reservoir that had not been adequately drained by the existing wells within the two respective 160-acre gas spacing and proration units.
- (24) The simultaneous dedication of the Rhodes Federal Unit Wells No. 41, 43, and 415 to the standard 160-acre unit comprising the SW/4 of Section 4 and the Rhodes State Com. Wells No. 5, 18, and 19 to the standard 160-acre unit comprising the NW/4 of Section 16, both in Township 26 South, Range 37 East, NMPM, Lea County, New Mexico, will not impair the correlative rights of any operator in the pool and is necessary to afford Gruy the opportunity to produce its fair share of the reserves under these two units.

(25) Approval of both applications of Gruy for the two subject unorthodox gas well locations and the simultaneous dedication of the two subject 160-acre gas spacing and proration units will serve to avoid the abandonment of any of the existing valuable wellbores capable of producing from this reservoir thereby preventing waste.

## IT IS THEREFORE ORDERED THAT:

- (1) In Case No. 12015 the applicant, Gruy Petroleum Management ("Gruy"), is hereby granted an exception to Division Rule 104.D (3) for its existing standard 160-acre gas spacing and proration unit within the Rhodes-Yates-Seven Rivers Gas Pool comprising the SW/4 of Section 4, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico, and is authorized to continuously and concurrently produce Rhodes-Yates-Seven Rivers Gas Pool production from its: (i) existing Rhodes Federal Unit Well No. 43 (API No. 30-025-11949), located at an unorthodox infill gas well location 2310 feet from the South line and 990 feet from the West line (Unit L) of Section 4; (ii) existing Rhodes Federal Unit Well No. 41 (API No. 30-025-11952), located at a standard gas well location 990 feet from the South line and 1650 feet from the West line (Unit N) of Section 4; and (iii) existing Rhodes Federal Unit Well No. 415 (API No. 30-025-34396), located at a standard gas well location 660 feet from the South and West lines (Unit M) of Section 4.
- (2) In Case No. 12017 Gruy is hereby granted an exception to Division Rule 104.D (3) for its existing standard 160-acre gas spacing and proration unit within the Rhodes-Yates-Seven Rivers Gas Pool comprising the NW/4 of Section 16, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico, and is authorized to continuously and concurrently produce Rhodes-Yates-Seven Rivers Gas Pool production from its: (i) existing Rhodes State Com. Well No. 5 (API No. 30-025-34417), located at an unorthodox infill gas well location 330 feet from the North line and 2310 feet from the West line (Unit C) of Section 16; (ii) existing Rhodes State Com. Well No. 18 (API No. 30-025-24504), located at a standard gas well location 660 feet from the North line and 860 feet from the West line (Unit D) of Section 16; and (iii) existing Rhodes State Com. Well No. 19 (API No. 30-025-24505), located 2080 feet from the North line and 1980 feet from the West line (Unit F) of Section 16.
- (3) Jurisdiction of this case is 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.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY

Director