



Filed

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

July 19, 2005

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

**McKay Oil Corporation**  
c/o **Southwest Petroleum Land Services, LLC**  
**100 N. Pennsylvania**  
**Roswell, New Mexico 88203**

**Attention: Jim Schultz**

**Re:** *Administrative application for an exception to the well location provisions of the rules and regulations governing the West Pecos Slope-Abo Gas Pool (82740) for McKay Oil Corporation's proposed Samantha "B" Federal Well No. 1 to be drilled at an unorthodox gas well location 660 feet from the South line and 2080 feet from the East line (unit O) of Section 31, Township 5 South, Range 22 East, NMPM, Chaves County, New Mexico.*

Dear Mr. Schultz:

This letter acknowledges receipt of your above-described refilling of the administrative application dated May 20, 2005 for administrative review to the New Mexico Oil Conservation Division ("Division") by telefax on June 29, 2005. This matter has been assigned **administrative application reference No. pSEM0-518128518**. Please refer to this number in future correspondence with the Division.

Since you are proposing to complete this well in the Abo formation, it is subject to the special pool rules governing the West Pecos Slope-Abo Gas Pool (see copies of Division Orders No. R-9976-C and R-9976-D attached). The well location and spacing provisions for this pool require: (i) a spacing unit of 160 acres being a single quarter section that is a legal subdivision of the U. S. Public Land Surveys; (ii) wells to be located no closer than 660 feet to any outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; and (iii) allows for an optional infill within an existing unit without the necessity of a hearing.

My preliminary review indicates that the information provided in the application is insufficient to process an administrative order. You mention in your application a couple of times that the proposed unorthodox location is also "due to geological concerns;" however, no details were provided nor were there any geological or engineering support data included. Please provide me with a detailed discussion how the proposed unorthodox location is geologically necessary and a geological interpretation on the Abo structure underlying the immediate area. Also, provide sufficient information (plats, maps, cross-sections, calculations) to support your claim. There still is no explanation why this well cannot be moved to a standard location to the north in either the NE/4 or NW/4 of the SE/4 of Section 31.

**McKay Oil Corporation c/o Southwest Petroleum Land Services, LLC**  
**Division Administrative Application Reference No. pSEM0-518128518**

**July 19, 2005**

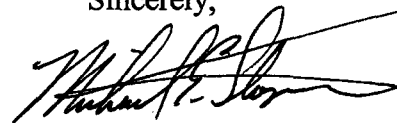
**Page 2**

Since the submitted information is insufficient to review, the application was ruled as incomplete on July 19, 2005. Please submit the above stated information by Friday, July 29, 2005.

The Division cannot proceed with your application until the required information is submitted. Upon receipt, the Division will continue to process your application. The additional information can be: (i) faxed to (505) 476-3462; (ii) e-mailed to "[michael.stogner@state.nm.us](mailto:michael.stogner@state.nm.us)"; or (iii) mailed to the address shown above.

Should you have any questions concerning this matter, please contact me in Santa Fe at (505) 476-3465. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael E. Stogner", with a long horizontal flourish extending to the right.

Michael E. Stogner  
Engineer

cc: New Mexico Oil Conservation Division – Artesia  
U. S. Bureau of Land Management – Carlsbad  
April McKay, Vice President – McKay Oil Corporation, Roswell

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

See Also Order  
No.  
R-9976  
R-9976-A  
R-9976-B  
R-9976-D

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

(Reopened) CASE No. 10793  
APPLICATION OF YATES PETROLEUM CORPORATION FOR A PILOT GAS ENHANCED  
RECOVERY PROJECT, CHAVES COUNTY, NEW MEXICO.

(Reopened) CASE No. 10981  
APPLICATION OF YATES PETROLEUM CORPORATION TO AMEND DIVISION ORDER NO.  
R-9976 TO EXPAND ITS PILOT GAS ENHANCED RECOVERY PROJECT WITHIN PORTIONS  
OF THE PECOS SLOPE-ABO GAS POOL, CHAVES COUNTY, NEW MEXICO.

(Reopened) CASE No. 11004  
APPLICATION OF YATES PETROLEUM CORPORATION FOR THIRTEEN UNORTHODOX  
INFILL GAS WELL LOCATIONS, CHAVES COUNTY, NEW MEXICO.

CASE No. 11421  
APPLICATION OF YATES PETROLEUM CORPORATION FOR THE PROMULGATION OF  
SPECIAL RULES AND REGULATIONS FOR THE SOUTH PECOS SLOPE-ABO GAS POOL,  
CHAVES COUNTY, NEW MEXICO.

CASE No. 11422  
APPLICATION OF YATES PETROLEUM CORPORATION FOR THE PROMULGATION OF  
SPECIAL RULES AND REGULATIONS FOR THE WEST PECOS SLOPE-ABO GAS POOL,  
CHAVES COUNTY, NEW MEXICO.

NOMENCLATURE  
Order No. R-9976-C

ORDER OF THE DIVISION

BY THE DIVISION:

This cause first came on for hearing at 8:15 a.m. on November 2, 1995, at Roswell, New Mexico and again on January 11, 1996, in Santa Fe, New Mexico, both before Examiner Michael E. Stogner.

NOW, on this 19th day of March, 1996 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) By Order No. R-9976, issued in Case No. 10793 and dated September 24, 1993, the Division granted Yates Petroleum Corporation ("Yates") authorization to implement a pilot "infill" drilling program within portions of the unprorated Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, for the purpose of allowing the applicant the opportunity to gather data to determine if infill drilling is necessary to effectively and efficiently drain the Abo formation.

(3) Yates was initially authorized by said Order No. R-9976 to drill an infill gas well within each of the following described five standard 160-acre gas spacing units, and within a non-standard 201.29-acre gas spacing unit comprising all of irregular Section 1, Township 6 South, Range 25 East, NMPM, Chaves County, New Mexico:

**TOWNSHIP 6 SOUTH, RANGE 25 EAST, NMPM**

Section 8: NE/4  
Section 11: SE/4  
Section 24: SW/4  
Section 26: NE/4  
Section 35: NE/4.

(4) Division Order No. R-9976-A, issued to both Case Nos. 10981 and 11004 and dated July 26, 1994, granted Yates the authority to expand its pilot infill drilling project to include the following 19 standard 160-acre gas spacing units in the Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, and on a non-standard 166.0-acre gas spacing unit comprising all of irregular Section 5, Township 6 South, Range 26 East, NMPM, Chaves County, New Mexico:

**TOWNSHIP 5 SOUTH, RANGE 25 EAST, NMPM**

Section 16: NE/4  
Section 32: SW/4

**TOWNSHIP 6 SOUTH, RANGE 26 EAST, NMPM**

Section 7: NE/4  
Section 18: SE/4  
Section 19: SE/4  
Section 31: NE/4

**TOWNSHIP 7 SOUTH, RANGE 25 EAST, NMPM**

Section 3: SE/4  
Section 10: NW/4  
Section 11: SE/4

**TOWNSHIP 7 SOUTH, RANGE 25 EAST, NMPM**

**(Cont.)**

Section 13: NW/4  
Section 15: NW/4  
Section 22: NW/4  
Section 25: NW/4  
Section 27: SE/4  
Section 33: SE/4

**TOWNSHIP 7 SOUTH, RANGE 26 EAST, NMPM**

Section 6: NE/4  
Section 18: SE/4  
Section 19: SW/4  
Section 21: SE/4.

(5) Further, Division Order No. R-9976-A, as amended by Order No. R-9976-B, provided for 13 of the proposed infill gas well locations within said expanded area to be drilled at unorthodox gas well locations.

(6) Two provisions common to both Order Nos. R-9976 and R-9976-A:

(a) authorized Yates to produce both wells within each of the two spacing units within the pilot project area at unrestricted rates until August, 1995; at which time,

(b) Yates would be required to appear at an examiner hearing to present the geologic and engineering data it had acquired and to make recommendations to the Division concerning amendments, if applicable, to the rules governing the Pecos Slope-Abo Gas Pool.

(7) The Division caused Case Nos. 10793, 10981, and 11004 to be reopened and advertised for the August 24, 1995 examiner's hearing in such a manner to include Yates as applicant in seeking the adoption of special rules and regulations for the Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, authorizing the drilling of an optional second gas well ("infill well") within each standard 160-acre, more or less, gas spacing unit. This matter was continued on several occasions until November 2, 1995, at which time the preponderance of the testimony was presented.

(8) In Case 11421 Yates is seeking the adoption of special rules and regulations for the South Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, authorizing the drilling of an optional second gas well ("infill well") within each standard 160-acre, more or less, gas spacing unit.

(9) In Case 11422 Yates is seeking the adoption of special rules and regulations for the West Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, authorizing the drilling of an optional second gas well ("infill well") within each standard 160-acre, more or less, gas spacing unit.

(10) The Pecos Slope-Abo Gas Pool currently comprises approximately 199,000 acres in all or portions of Townships 4, 5, 6, 7, and 8 South, Ranges 24, 25, 26, and 27 East, NMPM, Chaves County, New Mexico. The South Pecos Slope-Abo Gas Pool currently comprises approximately 73,440 acres in portions of Townships 8, 9, 10, and 11 South, Ranges 24, 25, 26, and 27 East, NMPM, Chaves County, New Mexico. The West Pecos Slope-Abo Gas Pool currently comprises approximately 92,480 acres in portions of Townships 5, 6, 7, 8, and 9 South, Ranges 21, 22, and 23 East, NMPM, Chaves County, New Mexico. Within this 364,920-acre, more or less, area, henceforth to be referred to as the "Pecos Slope Area", there are currently in excess of 800 wells producing gas from the Abo formation.

(11) All three pools are considered to be "unprorated" (none are subject to the Division's "General Rules For The Prorated Gas Pools of New Mexico", as promulgated by Division Order No. R-8170, as amended), and at the time of the hearings all three were subject to the Division's Statewide Rule 104.C(2)(a) that was in effect prior to the issuance of Division Order No. R-10533, which order effected changes to the statewide spacing and well location rules, and to Division Memorandums dated July 27, 1988 and August 3, 1990. The applicable rules in place for these three pools provide for only one single well for each 160-acre spacing and proration unit and that each well can produce at an unrestricted rate and is to be located no closer than 660 feet from the outer boundary of such tract 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 Abo formation.

(12) Inasmuch as the subject matter of reopened Case Nos. 10793, 10981, and 11004 and in Case Nos. 11421 and 11422 are related, the cases were consolidated for the purposes of hearing.

(13) Tide West Oil Company ("Tide West") and Great Western Drilling Company ("Great Western") appeared through their attorney at the November 2, 1995 hearing but did not present evidence. At the conclusion of Yates' presentation, Tide West and Great Western requested certain information from Yates and a 60-day continuance to determine what position to take on this application. The continuance was granted and the data requested by Tide West and Great Western was provided for their analysis. When the case was reopened on January 11, 1996, Tide West and Great Western elected not to present evidence but instead submitted closing statements.

(14) *The northern boundary of the South Pecos Slope-Abo Gas Pool is contiguous with the southern boundary of the Pecos Slope-Abo Gas Pool. The technical evidence presented by the applicant indicates that the Abo formation in the Pecos Slope-Abo Gas Pool and South Pecos Slope-Abo Gas Pool is a fluival clastic wedge deposit comprised of channel sands which are stacked vertically of varying lateral continuity.*

**Finding:** The South Pecos Slope-Abo Gas Pool is a geologic extension of the Pecos Slope-Abo Gas Pool and no geologic reasons exist to separate the two pools. Therefore the South Pecos Slope-Abo Gas Pool should be deleted and the horizontal limits of the Pecos Slope-Abo Gas Pool should concomitantly be extended to incorporate that acreage comprising the South Pecos Slope-Abo Gas Pool.

(15) The geologic evidence further indicates that the West Pecos Slope-Abo Gas Pool is located approximately 5 miles west of the Pecos Slope-Abo Gas Pool and that the

pay zones in the West Pecos Slope-Abo Gas Pool are equivalent to the pay zones in the Pecos Slope-Abo Gas Pool except that in the West Pecos Slope-Abo Gas Pool the wells are poorer and have smaller drainage areas than wells in the Pecos Slope-Abo Gas Pool.

(16) The pilot infill drilling program in the Pecos Slope-Abo Pool was implemented by Yates in two phases. Phase I consisted of the drilling of the six infill wells approved by Division Order No. R-9976 and Phase II consisted of nine additional infill wells drilled pursuant to Division Order R-9976-A, as amended by Division Order No. R-9976-B.

(17) The location of each of the fifteen pilot infill well locations drilled by Yates was selected based on:

- (a) available sand thickness;
- (b) areas with wells that had good cumulative production; and
- (c) distance from existing wells and calculated drainage areas.

(18) Per Yates' testimony the fifteen wells drilled in this pilot infill drilling program were located throughout a five township area that is representative of the Abo formation throughout this portion of southeastern New Mexico.

(19) The geologic information obtained from the Pecos Slope-Abo pilot project establishes that:

- (a) the Abo formation is comprised of channel sands which are vertically stacked with varying lateral continuity;
- (b) the individual producing stingers are not continuous from well to well;
- (c) there is partial communication between wells as shown by the aggregate bottomhole pressure data obtained from offsetting wells; and
- (d) infill wells encounter new reserves that will not be recovered by existing wells.

(20) The engineering results of the Pecos Slope-Abo pilot infill drilling program are:

- (a) of the fifteen infill wells which were drilled in the pilot project area, ten were successful wells, three were marginal wells and two were dry holes;
- (b) Bottomhole Pressures:
  - (1) the pilot project wells produce from multiple zones in the Abo formation;
  - (2) because the bottomhole pressures obtained from each well is an aggregate pressure from all zones producing into the wellbore, no pilot infill well encountered the original reservoir pressure for the Abo formation of 1,125 psia;
  - (3) twelve of the fifteen pilot infill wells encountered higher bottomhole pressures than offsetting wells;
  - (4) the average pilot infill well bottomhole pressure is almost 800 psia; and
  - (5) the average pressure of offsetting wells is less than 300 psia.
- (c) Production Rates:
  - (1) the production rate for the average pilot infill wells is approximately 750 MCFD; and
  - (2) the production rate for the average offsetting well is less than 100 MCFD.
- (d) Reserves:
  - (1) the average pilot project infill well (including the three marginal wells and the two dry holes) will recover 544 MMCF;



- (2) the average successful pilot project infill well will recover almost 800 MMCF;
- (3) the average remaining reserves in each offset well is less than 200 MMCF; and
- (4) overall the fifteen pilot infill wells will produce a total of 8.0 BCF of reserves that would otherwise be left in the ground.

(21) Conclusions from this pilot project indicate that with the current engineering and geological technology, operators of Abo gas wells within the Pecos Slope Area:

- (a) will have the ability to select well locations that will enable the remaining reserves in the Abo formation to be produced;
- (b) will encounter substantial new reserves that will not be recovered by existing wells thereby preventing waste; and
- (c) will have the opportunity to determine if an infill well is necessary for an existing 160-acre spacing unit and the ability to drill it.

(22) Such infill development of the Pecos Slope Area will result in the drilling of wells that are necessary to produce the remaining reserves in the Abo formation.

(23) Such infill development in unprorated gas pools is contrary to the current Division rules and to Division policy at the time of the hearing. Historically, prorationing is instituted in gas pools for the following reasons:

- (a) there is more than one producer of gas;
- (b) the total deliverability of the producing wells in the pool exceeds the reasonable market demand for the gas from that pool;
- (c) the pool contains several wells with fractional acreage factors or non-standard gas spacing and proration units; and,
- (d) multiple-well units exist.

(24) Within the Pecos Slope Area there are numerous wells and numerous operators.

(25) There is sufficient market for all gas produced from this pool and, therefore, prorationing of this pool is not required to assure each operator in the pool access to market.

(26) For the reasons stated above artificial allowable restrictions on production from this pool, at this time, could damage the economics of proposed infill development so that necessary wells would not be drilled.

(27) *However, in pools with multiple well units, violations of correlative rights can result where unrestricted production creates the potential for drainage that is not equalized by counter-drainage. 660 feet from the outer boundary of a spacing unit with unrestricted flow is the rule in the Abo formation. Operators of offsetting acreage can counter such drainage with wells that are set back of equal distance. Such wells with unrestricted production located closer than the required 660 foot set back could serve to drain acreage to which that well is not entitled. If a well to counter this drainage is not drilled or cannot be drilled then restricted flow rates on the close well would serve to offset any inequities. However, there currently is no mechanism in place to adequately restrict production on wells in such a large and well developed area that has unrestricted production. In the Division consolidated hearing of Case Nos. 11283 and 11355 such a situation developed where two wells were drilled 330 feet off of a common quarter section line or proration unit boundary. Further, there exists only in a relatively small area in the upper tier of Township 6 South, NMPM, Chaves County, New Mexico the potential for and/or existence of non-standard gas spacing and proration units due to a variation in the legal subdivision of the U. S. Public Land Surveys. The creation of non-standard gas spacing and proration units for any other reason, such as the formation of two 80-acre units within a quarter section, could also be detrimental to prudent and reasonable development of Abo gas within this "Pecos Slope Area".*

**Finding:** To assure integrity of further and unrestricted development of Abo gas wells within the Pecos Slope Area, non-standard gas well locations and non-standard spacing and proration units for reasons other than a variation in the legal subdivision of the U. S. Public Land Surveys should be authorized only after notice and hearing.

(28) Evidence presented by the applicant and Division records indicate only a few shallower 40-acre oil wells within the Pecos Slope Area. Therefore to ease the administrative burden on operators, the requirement for authorizing non-standard gas well locations that are closer than 330 feet from the quarter-quarter section or subdivision inner

boundary should be eliminated. However, a 10 foot from such quarter-quarter section or subdivision inner boundary restriction should be implemented for well location and identification purposes.

(29) If infill development results in the impairment of correlative rights at a later date, the Division on its own motion or on the application of any operator in the pool can call a hearing to determine whether prorationing would serve to protect correlative rights in this pool.

(30) Infill drilling of an optional second Abo gas well on each 160-acre spacing unit in the Pecos Slope Area will serve to prevent the waste of natural gas and with the above-described restrictions will not impair the correlative rights of operators in this pool and should be approved.

**IT IS THEREFORE ORDERED THAT:**

(1) The South Pecos Slope-Abo Gas Pool in Chaves County, New Mexico, consisting of the following described area, is hereby abolished:

**TOWNSHIP 8 SOUTH, RANGE 25 EAST, NMPM**

Section 32: E/2

**TOWNSHIP 9 SOUTH, RANGE 24 EAST, NMPM**

Sections 13 through 15: All

Sections 24 and 25: All

Section 36: All.

**TOWNSHIP 9 SOUTH, RANGE 25 EAST, NMPM**

Sections 1 through 36: All

**TOWNSHIP 9 SOUTH, RANGE 26 EAST, NMPM**

Sections 1 through 24: All

Section 26: W/2

Sections 27 through 34: All

Section 35: W/2

**TOWNSHIP 9 SOUTH, RANGE 27 EAST, NMPM**

Section 6: All

Sections 18 and 19: All

Section 20: SW/4

**TOWNSHIP 10 SOUTH, RANGE 24 EAST, NMPM**

Section 1: All

Sections 12 and 13: All

Sections 24 and 25: All

Section 36: All

**TOWNSHIP 10 SOUTH, RANGE 25 EAST, NMPM**

Sections 1 through 26: All

Sections 34 through 36: All

**TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPM**

Section 2: NE/4

Section 6: N/2 and SW/4

Section 7: S/2

Sections 19 and 20: All

Section 31: All

**TOWNSHIP 11 SOUTH, RANGE 25 EAST, NMPM**

Section 3: All

Section 4: S/2

Section 8: All

Section 9: N/2.

(2) The Pecos Slope-Abo Gas Pool in Chaves County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

**TOWNSHIP 8 SOUTH, RANGE 25 EAST, NMPM**

Section 32: E/2

**TOWNSHIP 9 SOUTH, RANGE 24 EAST, NMPM**

Sections 13 through 15: All  
Sections 24 and 25: All  
Section 36: All.

**TOWNSHIP 9 SOUTH, RANGE 25 EAST, NMPM**

Sections 1 through 36: All

**TOWNSHIP 9 SOUTH, RANGE 26 EAST, NMPM**

Sections 1 through 24: All  
Section 26: W/2  
Sections 27 through 34: All  
Section 35: W/2

**TOWNSHIP 9 SOUTH, RANGE 27 EAST, NMPM**

Section 6: All  
Sections 18 and 19: All  
Section 20: SW/4

**TOWNSHIP 10 SOUTH, RANGE 24 EAST, NMPM**

Section 1: All  
Sections 12 and 13: All  
Sections 24 and 25: All  
Section 36: All

**TOWNSHIP 10 SOUTH, RANGE 25 EAST, NMPM**

Sections 1 through 26: All  
Sections 34 through 36: All

**TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPM**

Section 2: NE/4  
Section 6: N/2 and SW/4  
Section 7: S/2  
Sections 19 and 20: All  
Section 31: All

**TOWNSHIP 11 SOUTH, RANGE 25 EAST, NMPM**

Section 3: All  
Section 4: S/2  
Section 8: All  
Section 9: N/2.

(3) Special Rules and Regulations for the Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, as previously defined, described, and amended above, are hereby promulgated to permit the optional drilling of a second well on each 160-acre gas spacing and proration unit as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE PECOS SLOPE-ABO GAS POOL**

**Rule 1.** Each well completed in the Pecos Slope-Abo Gas Pool or in the Abo formation within one mile thereof, and not nearer to or within the limits of another designated Abo gas pool, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.

**Rule 2.** The initial well and the infill well, in the event a second well is drilled on any spacing unit, shall be located on a standard unit containing 160 acres, more or less, consisting of the NE/4, SE/4, SW/4 or NW/4 of a governmental quarter section.

**Rule 3.** The Director of the Division may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a single governmental quarter section and the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Lands Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application. The formation of a non-standard gas spacing and proration unit for reasons other than a variation in the legal subdivision will only be granted after notice and hearing.

**Rule 4.** The initial well and the infill well, in the event a second well is drilled on any spacing unit, may be located at any location on the spacing unit provided neither well shall be located closer than 660 feet to any outer boundary of a governmental quarter section nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. The plats (Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or Federal Form 9-331-C) for the second well on a spacing unit shall have outlined thereon the boundaries of the unit and shall show the location of the first well on the unit as well as the proposed new well.

**Rule 5.** Location exceptions to Rule 4 above shall only be granted after notice and hearing.

**IT IS FURTHER ORDERED THAT:**

(4) Special Rules and Regulations for the West Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, as previously defined, described, and amended above, are hereby promulgated to permit the optional drilling of a second well on each 160-acre gas

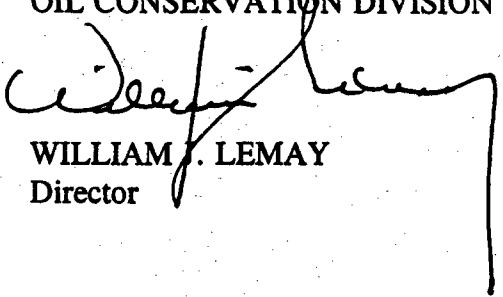
of a governmental quarter section nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. The plats (Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or Federal Form 9-331-C) for the second well on a spacing unit shall have outlined thereon the boundaries of the unit and shall show the location of the first well on the unit as well as the proposed new well.

**Rule 5.** Location exceptions to Rule 4 above shall only be granted after notice and hearing.

(5) Jurisdiction of this cause 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

  
WILLIAM J. LEMAY  
Director

S E A L

spacing and proration unit as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE WEST PECOS SLOPE-ABO GAS POOL**

**Rule 1.** Each well completed in the Pecos Slope-Abo Gas Pool or in the Abo formation within one mile thereof, and not nearer to or within the limits of another designated Abo gas pool, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.

**Rule 2.** The initial well and the infill well, in the event a second well is drilled on any spacing unit, shall be located on a standard unit containing 160 acres, more or less, consisting of the NE/4, SE/4, SW/4 or NW/4 of a governmental quarter section.

**Rule 3.** The Director of the Division may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a single governmental quarter section and the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Lands Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application. The formation of a non-standard gas spacing and proration unit for reasons other than a variation in the legal subdivision will only be granted after notice and hearing.

**Rule 4.** The initial well and the infill well, in the event a second well is drilled on any spacing unit, may be located at any location on the spacing unit provided neither well shall be located closer than 660 feet to any outer boundary

**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:**

**NOMENCLATURE  
CASE NO. 13057  
ORDER NO. R-9976-D**

**APPLICATION OF YATES PETROLEUM CORPORATION FOR AMENDMENT  
OF THE SPECIAL RULES GOVERNING BOTH THE PECOS SLOPE-ABO GAS  
POOL AND THE WEST PECOS SLOPE-ABO GAS POOL, CHAVES COUNTY,  
NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on April 24, 2003, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 4<sup>th</sup> day of February, 2004, 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) By Division Order No. R-6876, issued in Case 7447, dated January 22, 1982 and made effective January 1, 1982, the Division created and defined the Pecos Slope-Abo Gas Pool (82730) for the production of gas from the Abo formation. The horizontal limits for this pool currently comprise a vast area in Townships 4 and 5 South, Ranges 24 and 25 East; Townships 6, 7, 8, and 9 South, Ranges 24, 25, 26 and 27 East; Township 10 South, Ranges 24, 25, and 26 East; and Township 11 South, Range 25 East, all in Chaves County, New Mexico.

(3) Division Order No. R-6876 also created and defined the West Pecos Slope-Abo Gas Pool (82740) for the production of gas from the Abo formation. The horizontal limits for this pool currently comprise a rather large area in Township 5 South, Ranges 21 and 22 East and in Townships 6, 7, 8, and 9 South, Ranges 22 and 23 East, all in Chaves County, New Mexico.



(4) By Division Order No. R-7193, issued in Case 7785, dated January 26, 1983 and made effective February 1, 1983, the Division created and defined the South Pecos Slope-Abo Gas Pool (82735) for the production of gas from the Abo formation underlying portions of Townships 9 and 10 South, Ranges 25 and 26 East, NMPM, Chaves County, New Mexico.

(5) By Order No. R-9976, issued in Case No. 10793 and dated September 24, 1993, the Division granted Yates Petroleum Corporation ("Yates") authorization to implement a pilot "infill" drilling program within portions of the unprorated Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, for the purpose of allowing Yates the opportunity to gather data to determine if infill drilling is necessary to effectively and efficiently drain the Abo gas-bearing formation.

(6) Division Order No. R-9976 further authorized Yates to drill an infill gas well within each of the five following-described standard 160-acre gas spacing units, and within a non-standard 201.29-acre gas spacing unit comprising all of irregular Section 1, Township 6 South, Range 25 East, NMPM, Chaves County, New Mexico:

**TOWNSHIP 6 SOUTH, RANGE 25 EAST, NMPM**

Section 8: NE/4  
Section 11: SE/4  
Section 24: SW/4  
Section 26: NE/4  
Section 35: NE/4.

(7) Division Order No. R-9976-A, issued in Cases No. 10981 and 11004 on July 26, 1994, granted Yates the authority to expand its pilot infill drilling project to include the following 19 standard 160-acre gas spacing units in the Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, and on a non-standard 166.0-acre gas spacing unit comprising all of irregular Section 5, Township 6 South, Range 26 East, NMPM, Chaves County, New Mexico:

**TOWNSHIP 5 SOUTH, RANGE 25 EAST, NMPM**

Section 16: NE/4  
Section 32: SW/4

**TOWNSHIP 6 SOUTH, RANGE 26 EAST, NMPM**

Section 7: NE/4  
Section 18: SE/4  
Section 19: SE/4  
Section 31: NE/4

**TOWNSHIP 7 SOUTH, RANGE 25 EAST, NMPM**

Section 3: SE/4  
Section 10: NW/4  
Section 11: SE/4  
Section 13: NW/4  
Section 15: NW/4  
Section 22: NW/4  
Section 25: NW/4  
Section 27: SE/4  
Section 33: SE/4

**TOWNSHIP 7 SOUTH, RANGE 26 EAST, NMPM**

Section 6: NE/4  
Section 18: SE/4  
Section 19: SW/4  
Section 21: SE/4

(8) Further, Division Order No. R-9976-A, as amended by Order No. R-9976-B, issued in Cases No. 11283 and 11355 on November 28, 1995, provided for 13 of the proposed infill gas well locations within the expanded area to be drilled at unorthodox gas well locations.

(9) Two provisions are common to Division Orders No. R-9976 and R-9976-A:

- (a) They authorized Yates to produce both wells within each of the two spacing units within the pilot project area at unrestricted rates until August, 1995.
- (b) At such time, Yates would then be required to appear at an examiner hearing to present the geologic and engineering data it had acquired and to make recommendations to the Division concerning amendments, if applicable, to the rules governing the Pecos Slope-Abo Gas Pool.

(10) By Division Order No. R-9976-C, issued on March 19, 1996 in consolidated Cases No. 10793 (Reopened), 10981 (Reopened), 11004 (Reopened), 11421, and 11422:

- (a) the South Pecos Slope-Abo Gas Pool in Chaves County was abolished and the acreage comprising this pool was included in the boundary of the Pecos Slope-Abo Gas Pool; and
- (b) mirroring special rules and regulations governing the West Pecos Slope-Abo Gas Pool and Pecos Slope-Abo Gas Pool were promulgated, which included provisions for:
  - (i) pool-wide infill development with two wells per standard 160-acre gas spacing unit;
  - (ii) well location requirements that neither well on a single spacing unit be closer than 660 feet to the outer boundary of its unit or closer than 10 feet to any quarter-quarter section or subdivision inner-boundary;
  - (iii) the granting of well location exceptions only after notice and hearing;
  - (iv) a 30-day notification period for administrative applications seeking exception to the 160-acre spacing requirements where a non-standard unit comprises a single governmental quarter section and the unorthodox size or shape is due to a variation in the legal subdivision of the United States Public Lands Survey; and
  - (v) the approval of a non-standard gas spacing unit for reasons other than a variation in the legal subdivision only after notice and hearing.

(11) Yates at this time seeks the amendment of the special pool rules governing both the West Pecos Slope-Abo and Pecos Slope-Abo Gas Pools to abolish the requirement that all applications for unorthodox well locations and some applications for non-standard gas spacing units be set for hearing. Yates also requests that the provisions governing administrative applications for unorthodox well locations and non-standard gas spacing units in these two pools be amended to conform to the applicable provisions of Rules 104.D (2) and 104.F of the Division's statewide rules and regulations.

(12) The West Pecos Slope-Abo and Pecos Slope-Abo Gas Pools were the first high volume, unprorated gas pools in the State of New Mexico to have infill development. Therefore, at the time Order No. R-9976-C was adopted, the Division was concerned about the potential for correlative rights violations and for the possibility of imprudent and unreasonable development practices that could result from wells drilled at unorthodox gas well locations or on non-standard spacing units in this unprorated pool and therefore adopted strict rules to discourage the filing of frivolous and unnecessary location and spacing exception applications.

(13) There have been many applications filed with the Division for location exceptions since the inception of Division Order No. R-9976-C. Early in the process all applicants appeared at the hearing and presented the evidence necessary to support such an application. However, in the past few years, to streamline the process, the applicant provided the Division with the necessary evidence to support a request for an unorthodox well location along with its application. The application was then placed on a Division hearing docket and was styled such that in the absence of objection the application would be taken under advisement.

(14) There is no record of an application for a non-standard gas spacing unit in either the Pecos Slope-Abo Gas Pool or West Pecos Slope-Abo Gas Pool ever being considered at a hearing since the inception of Division Order No. R-9976-C. However, since infill development of unprorated gas pools and formations is now commonplace statewide, the current rules in place are sufficient to address the operator's, mineral interest owners', and Division's concerns.

(15) Therefore, the requirement set out in Division Order No. R-9976-C that all well location and some spacing unit size exception applications be set for hearing is no longer necessary and is an unreasonable burden on the operators in the pools and the Division, and the current Division statewide rules for such well location and spacing exceptions are adequate in protecting correlative rights and preventing waste.

(16) No other operator in the pool or interested party appeared at the hearing in opposition to the application.

(17) Approval of these amendments to the special rules governing both the Pecos Slope-Abo Gas Pool and the West Pecos Slope-Abo Gas Pool are also in the best interest of conservation.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Yates Petroleum Corporation to amend the "*Special Rules and Regulations for the Pecos Slope-Abo Gas Pool*" and the "*Special Rules and Regulations for the West Pecos Slope-Abo Gas Pool*," both promulgated by Division Order No. R-9976-C dated March 19, 1996, is hereby approved.

(2) Rules 3 of the "*Special Rules and Regulations for the Pecos Slope-Abo Gas Pool*" and the "*Special Rules and Regulations for the West Pecos Slope-Abo Gas Pool*," are hereby amended, each respectively to read in its entirety as follows:

**"RULE 3:** The Division Director may grant an exception to the requirements of Rule 2 above without notice and hearing when an application has been duly filed under the provisions of Division Rule 104.D (2)."

(3) Rules 5 of the "*Special Rules and Regulations for the Pecos Slope-Abo Gas Pool*" and the "*Special Rules and Regulations for the West Pecos Slope-Abo Gas Pool*," are hereby amended, each respectively to read in its entirety as follows:

**"RULE 5:** The Division Director may grant an exception to the requirements of Rule 4 without hearing when an application has been duly filed under the provisions of Division Rule 104.F. However, any deviation from the allowed well density in this pool (the initial well and one infill well) shall be authorized only after notice and hearing."

(4) The above amendments to the special rules governing the Pecos Slope-Abo Gas Pool (82730) and West Pecos Slope-Abo Gas Pool (82740), both in Chaves County, New Mexico, are hereby made permanent and those portions of Division Order No. R-9976-C not affected by these changes shall continue in full force and effect until further notice.

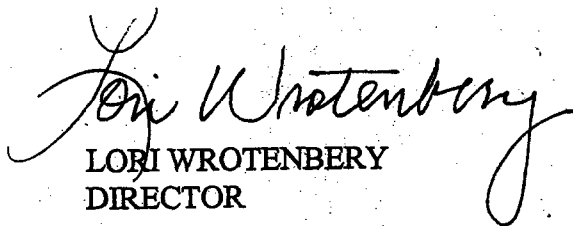
(5) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

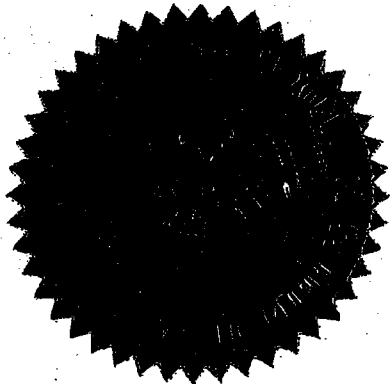
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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
LORI WROTENBERY  
DIRECTOR



SEAL