Sent: Wed 8/17/2005 2:55 PM

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#### Stogner, Michael, EMNRD

From:

Stogner, Michael, EMNRD

JAMES SCHULTZ; April McKay

To:

Cc:

Arrant, Bryan, EMNRD; Fesmire, Mark, EMNRD

Subject:

RE: McKay Oil / Samantha B #1, Four Mile Draw B Fed. #8, and Lookout B Fed. #5

Attachments: ABO.03.doc(30KB) ABO.04.doc(29KB) ABO.05.doc(28KB)

Dear Mr. Schultz and Ms. McKay:

Attached are final draft administrative orders for McKay Oil Corporation's (McKay) proposed Four Mile Draw "B" Federal #8 (NSL-5256), Lookout B Fed. #5 (NSL-5257), and Samantha B Fed. #1 (NSL-5258).

Per my conversation with Mr. Schultz yesterday, the three attempts for a well location exception for the Samantha B Fed. #1, and in reviewing McKay's applications over the last couple of years, I feel it necessary to remind you that the Division's well spacing and well location rules, rather by special pool rules or under Division Rule 104, are serious matters for the purpose of orderly development of New Mexico's valuable oil and gas resources. It is very easy to get into a mode of thinking that considers these rules as minor inconveniences and applications for exceptions as "open and shut" issues. Since the primary objective for the recent promulgation of and amendment to the two large Abo gas pools in Chaves County (see Division Orders No. R-9976-C and R-9976-D: copies will be provided in the mail) were to grant operators increased flexibility in locating wells and to decrease the number of applications for unorthodox locations. I will also provide you with copies of two Division Memorandums (LeMay's 3-89 and Wrotenbery's Memo of October 25, 1999) that further addresses location exceptions.

Any subsequent application for a location exception filed by McKay must contain sufficient reasoning and justification to support the request. If this is not submitted or such application is incomplete for any reason, that application, as well as all subsequent requests, will be set for hearing, hereby witnesses must appear in Santa Fe before a duly appointed hearing officer and present evidence for such request.

Thank you both for your understanding, cooperation, and continued support in making New Mexico's conservation rules a meaningful success.

Sincerely,

Michael E. Stogner, Engineer

From: JAMES SCHULTZ [mailto:jschultz80@hotmail.com]

Sent: Tue 8/16/2005 4:11 PM To: Stogner, Michael, EMNRD Cc: april@mckayoil.com

Subject: McKay Oil / Samantha B #1

Mr. Stogner:

As per our conversation of this date, this is to clarify your request for geological information for the Non-Standard Location Application (NSL) of the Samantha Federal B #1 Well. Again, the well is being moved to a non-standard location due to the Texas New Mexico Pipeline that runs northwest/southeast through the originally proposed standard location. The Federal APD was approved on January 20, 2005, but the local OCD (Artesia) wil not issued a API number until the NSL is approved.

At this time, McKay Oil Corporation does not have geological maps as to this particular area of the West Pecos Slope Area. The only

producing wells drilled in proximity to this proposed location are to the south. That is why McKay Oil Corp. proposed to the well in the south part of the SE4 proration unit. There was a dry hole drilled due east (Unit P) of this location. Therefore, in trying to avoid havinig a well pad that would trespass on the pipeline right-of-way, the only reasonable direction to move the location would be to the west 100 feet. This move would not impact any other operation since McKay Oil Corp. operates the surrounding leases and lands.

McKay Oil Corp. does hereby respectfully request an administrative approval of this Non-Standard Location Application for the Samantha Federal B #1 well,

Thank you.

Jim Schultz (505) 626-6879

# 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:

(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

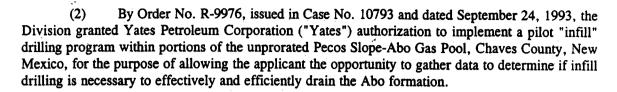
#### BY THE DIVISION:

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.



(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			TOWNSHIP	7 SOUTH, RANGE	25 EAST, NMPM
Section 16:	NE/4		(Cont.)		· :
Section 32:	SW/4	•	Section 13:	NW/4	
		•	Section 15:	NW/4	
TOWNSHIP 6 SOUTH, RANGE 26 EAST, NMPM			Section 22:	NW/4	
Section 7:	NE/4		Section 25:	NW/4	
Section 18:	SE/4	Section of the section of the section of	Section 27:	SE/4	
Section 19:	SE/4		Section 33:	SE/4	
Section 31:	NE/4				
			TOWNSHIP 7 SOUTH, RANGE 26 EAST, NMPM		
TOWNSHIP 7 SOUTH, RANGE 25 EAST, NMPM			Section 6:	NE/4	
Section 3:	SE/4		Section 18:	SE/4	
Section 10:	NW/4-	<b>.</b>	Section 19: =	== SW/4	•
Section 11:	SE/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.



- All three pools are considered to be "unprorated" (none are subject to the (11)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.
- 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.
- 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.
- 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.

THE REAL PROPERTY SERVE

- The South Pecos Slope-Abo Gas Pool is a geologic extension of the Finding: 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.
- The geologic evidence further indicates that the West Pecos Slope-Abo Gas (15)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;
  - (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
- 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;

- the average successful pilot project infill well will recover almost 800 MMCF;
- 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.
- 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 <u>approved</u>.

#### 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 <u>abolished</u>:

TOWNSHIP 8 SOUTH, RA	NGE 25 EAST. NMPM	TOWNSHIP 10 SOUTH. R	LANGE 24 EAST. NMP!	M
Section 32:	E/2	Section 1:	All	
		Sections 12 and 13:	All	
TOWNSHIP 9 SOUTH. R.	ANGE 24 EAST, NMPM	Sections 24 and 25:	Aii	
Sections 13 through 15:	All	Section 36:	Ail	
Sections 24 and 25:	All			
Section 36: All.		TOWNSHIP 10 SOUTH. RANGE 25 EAST. NMPM		
		Sections 1 through 26:	Ail	
TOWNSHIP 9 SOUTH. RA	NGE 25 EAST, NMPM	Sections 34 through 36:	Ail	
Sections 1 through 36:	All			
		TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPN		1
TOWNSHIP 9 SOUTH. R.	ANGE 26 EAST. NMPM	Section 2:	NE/4	
Sections 1 through 24:	All	Section 6:	N/2 and SW/4	
Section 26:	W/2	Section 7:	S/2:	•
Sections 27 through 34:	All	Sections 19 and 20:	All	
Section 35:	W/2	Section 31:	All	
=	#			
TOWNSHIP 9 SOUTH, RA	NGE 27 EAST, NMPM	TOWNSHIP 11 SOUTH. RANGE 25 EAST, NMPM		
Section 6:	Ail	Section 3:	All	
Sections 18 and 19:	All	Section 4:	S/2	
Section 20:	SW/4	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:

Case Nos. 10793 (reopened), 10981 (Reopened), 11004 (reopened), 11421, and 11422

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

and proration unit as follows:

All

All

SW/4

Order No. R-9976-C

Section 6:

Section 20:

Sections 18 and 19:

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**TOWNSHIP 8 SOUTH, RANGE 25 EAST, NMPM TOWNSHIP 10 SOUTH. RANGE 24 EAST, NMPM** Section 32: Section 1: All Sections 12 and 13: All TOWNSHIP 9 SOUTH. RANGE 24 EAST, NMPM Sections 24 and 25: All Sections 13 through 15: All Section 36: All Sections 24 and 25: All Section 36: All. TOWNSHIP 10 SOUTH. RANGE 25 EAST, NMPM Sections 1 through 26: **TOWNSHIP 9 SOUTH, RANGE 25 EAST, NMPM** Sections 34 through 36: All Sections 1 through 36: All TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPM TOWNSHIP 9 SOUTH. RANGE 26 EAST. NMPM Section 2: NE/4 Sections 1 through 24: All Section 6: N/2 and SW/4 Section 26: W/2 Section 7: S/2 Sections 27 through 34: All Sections 19 and 20: All Section 35: W/2 Section 31: All

Section 3:

Section 4:

Section 8:

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

All

S/2

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

# 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 nonstandard 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

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 nonstandard 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

Page 13

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

SEAL

# 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:

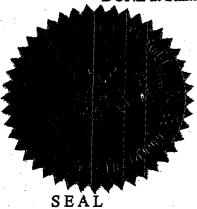
- (a) the South Pecos Slope-Abo Gas Pool in Chaves County was abolished and the acreage comprising this pool was included in the boundary of the Pecos Slope-Abo Gas Pool; and
- (b) mirroring special rules and regulations governing the West Pecos Slope-Abo Gas Pool and Pecos Slope-Abo Gas Pool were promulgated, 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:
  - "<u>RULE 3</u>: 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.

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



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

LORI WROTENBERY DIRECTOR

#### STATE OF NEW MEXICO



## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

#### OIL CONSERVATION DIVISION

GARREY CARRUTHERS

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

No. 3-89

#### **MEMORANDUM**

TO:

ALL OIL AND GAS OPERATORS

FROM:

WILLIAM J. LEMAY, DIRECTOR WILLIAM

SUBJECT:

UNORTHODOX WELL LOCATIONS

DATE:

MARCH 24, 1989

Previously, it has been the practice of the Division to approve applications for unorthodox well locations without penalty if they were not opposed by any off-setting operator. However, due to the increased applications for unorthodox locations based predominantly on "closeology", this Division policy may no longer be appropriate. In the future, applications for unorthodox locations, whether for administrative approval or through the hearing process, will have to be supported by substantial evidence.

The Division will be reviewing future applications in an effort to develop guidelines for approving or denying such applications. Generally, if the application is based upon surface conditions, i.e., topography, archaeological considerations, etc., it will have to be clearly shown what obstructions prevent the drilling of the well at a legal location and the unorthodox location will have to be as close as practicable to the orthodox location. If unorthodox location is being requested for geological reasons, the applicant should be prepared to present evidence showing the geological factors that dictate the necessity for drilling an unorthodox location.

As always, the Division welcomes industry input into the process.

dr/

#### **NOTICE**

TO:

All Oil and Gas Operators, Mineral Interest Owners,

and Interested Parties,

FROM:

Lori Wrotenbery, Director

**SUBJECT:** 

Implementation of Amended Division Rule 104

DATE:

October 25, 1999

Amendments to Division Rule 104 "Well Spacing and Location," adopted by the New Mexico Oil Conservation Commission in Order R-11231 (Case 12119) on August 12, 1999, became effective August 31, 1999. Attached to this notice are copies of Order No. R-11232, with the amended Rule 104 attached, and the recently amended Rule 1207 concerning notice requirements.

#### **Summary of Changes**

The amendments made five main changes in Rule 104:

- (1) the rule has been shortened and reorganized;
- (2) well location setbacks for all gas development on 160-acre spacing throughout the State are now standardized at 660 feet from the outer boundary of the quarter section line;
- (3) well location setbacks for deep gas development on 320-acre spacing in Southeast New Mexico have been relaxed from 1650 feet from an end boundary to 660 feet;
- (4) one optional infill well is now allowed within 320-acre deep gas units in Southeast New Mexico; and
- interior 330-foot setbacks from quarter-quarter section lines for both 160-acre and 320-acre gas units governed by Rule 104 have been reduced to 10 feet.

## **Effect of Changes**

Since the primary objectives of the rule changes were to grant operators increased flexibility in locating wells and decrease the number of applications for unorthodox locations, all future location

exceptions will require substantial justification, *i.e.*, unusual circumstances. Please also note the recent changes made to the notice requirements for unorthodox locations found in Division Rule 1207.A(2).

Furthermore, the well location requirement for oil wells on 40-acre spacing <u>has not</u> changed and remains 330 feet from the quarter-quarter section. Operators need to be wary if a well's main objective is a deeper gas-producing interval but there is the possibility of oil production and the location is closer to an interior quarter-quarter section line than 330 feet. In order to complete the well in a shallower oil-producing horizon, the operator will be required to obtain an exception for the unorthodox oil well location. Location exceptions in this situation will not be granted unless unusual circumstances justify the location, and the closer a well is to a neighboring property, the harder it will be to obtain an exception. For example, if the well is only 10 feet off a neighboring property, it is highly unlikely an exception will be granted.

Regarding the new provision authorizing one infill well in a 320-acre deep gas unit in Southeast New Mexico, application can be made to adopt or amend special pool rules to limit the number of wells per spacing unit in any pool where infill wells are not justified. The notice requirements for special pool rules were also recently amended to accommodate this type of action. See Division Rule 1207.A(4).

Unless otherwise provided by special pool rules or amended Rule 104 (e.g., the infill provision for deep gas pools in Southeast New Mexico), only one well per spacing unit is permitted in non-prorated pools. The Division Director, however, may grant administrative exceptions in appropriate circumstances.

#### **Effect on Existing Orders**

Any existing special pool rule or other order specific to well locations (e.g., a production penalty on an unorthodox well location now standard under amended Rule 104) shall remain in full force and effect until the order is amended. Operators should review these orders to determine whether to file applications to conform the orders to amended Rule 104.

In the near future, a hearing will be held before a Division Hearing Examiner addressing the few deep gas pools in Southeast New Mexico still spaced on 160 acres. At the hearing, the Division will consider whether to issue an order listing these pools and setting forth setback requirements mirroring, if applicable, the setbacks for shallow gas wells in Southeast New Mexico.

Division Memoranda dated July 27, 1988 and August 3, 1990 concerning the interpretation of old Rule 104 are hereby withdrawn.

Attachments

#### 1207 NOTICE REQUIREMENTS FOR SPECIFIC ADJUDICATIONS [1-1-86...2-1-96; A, 7-15-99]

- 1207.A. Applicants for the following adjudicatory hearings before the Division or Commission shall give notice in addition to that required by Rule 1204 as set forth below: [1-1-86...2-1-96; A, 7-15-99]
  - (1) Compulsory Pooling and Statutory Unitization: [1-1-86...2-1-96; A, 7-15-99]
- (a) Notice shall be given to any owner of an interest in the mineral estate whose interest is evidenced by a written document of conveyance either of record or known to the applicant at the time of filing the application and whose interest has not been voluntarily committed to the area proposed to be pooled or unitized (other than a royalty interest subject to a pooling or unitization clause). [Rn, 19 NMAC 15.N.1207.A.(1), 7-15-99, A, 7-15-99]
- (b) When an applicant is unable to locate all the owners of interests to be pooled and the application is unopposed by those located, the applicant may file under the following alternate procedure if notice is given as required in (a) above. The application shall include the following:
  - (i) a statement that no opposition for hearing is expected and why;
  - ii) a map outlining the spacing unit(s) to be pooled showing the nature and percentage of the ownership interests and location of the proposed well;
  - (iii) the names and last known addresses of the interest owners to be pooled and the nature and percent of their interests and an attestation that a diligent search has been conducted of all public records in the county where the well is located and of phone directories, including computer searches;
  - (iv) the names of the formations and pools to be pooled (Note: The Division cannot pool a spacing unit larger in size than provided in these rules or applicable special pool orders);
  - (v) a statement as to whether the pooled unit is for gas and/or oil production (see note under iv, above);
  - (vi) written evidence of attempts made to gain voluntary agreement including but not limited to copies of relevant correspondence;
  - (vii) geological map(s) of the formation(s) to be tested and a geological and engineering assessment of the risk involved in the drilling of the well and a proposed risk penalty to be assessed against any working interest owner who does not pay its share of

#### estimated well costs;

- (viii) proposed overhead charges (combined fixed rates) to be applied during drilling and production operations along with the basis for such charges;
- (ix) the location and proposed depth of the well to be drilled on the pooled units; and
- (x) a copy of the Authorization for Expenditure (AFE) to be submitted to the interest owners in the well. [Rn, 19 NMAC 15.N.1207.A.(2), 7-15-99, A, 7-15-99]
- (c) All submittals required shall be accompanied by sworn and notarized statements by those persons who prepared the submittals attesting that the information is correct and complete to the best of their knowledge and belief. [Rn, 19 NMAC 15.N.1207.A.(3), 7-15-99, A, 7-15-99]
- (d) All unopposed pooling applications will be set for hearing. If the Division finds the application complete, the information submitted with the application will constitute the record in the case and an order will be issued based on the record. [Rn, 19 NMAC 15.N.1207.A.(4), 7-15-99, A, 7-15-99]
- (e) At the request of any interested person or upon the Division's own initiative, any pooling application submitted shall be set for full hearing with oral testimony by the applicant. [Rn, 19 NMAC 15.N.1207.A.(4), 7-15-99; A, 7-15-99]
- (2) Unorthodox Well Locations: [1-1-87...2-1-96; Rn, 19 NMAC 15.N.1207.A.(5), 7-15-99; A, 7-15-99]
- (a) Definition: "Affected persons" are the following persons owning interests in the adjoining spacing units:
  - 1. the Division-designated operator;
  - 2. in the absence of an operator, any lessee whose interest is evidenced by a written document of conveyance either of record or known to the applicant as of the date the application is filed; and
  - 3. in the absence of an operator or lessee, any mineral interest owner whose interest is evidenced by a written document of conveyance either of record or known to the applicant as of the date the application was filed.

In the event the operator of the proposed unorthodox well is also the operator of an existing adjoining spacing unit and ownership is not common between the adjoining spacing unit and the spacing unit containing the proposed unorthodox well, then "affected persons" include all working interest owners in that spacing unit. [1-1-87...2-1-96; N, 7-15-99]

- (b) If the proposed location is unorthodox by being located closer to the outer boundary of the spacing unit than permitted by rule, notice shall be given to the affected persons in the adjoining spacing units towards which the unorthodox location encroaches. [Rn, 19 NMAC 15.N.1207.A.(5).(a), 7-15-99, A, 7-15-99]
- (c) If the proposed location is unorthodox by being located in a different quarter-quarter section or quarter section than provided in special pool orders, notice shall be given to all affected persons. [Rn, 19 NMAC 15.N.1207.A.(5).(a), A, 7-15-99]

#### (3) Non-Standard Proration Unit:

Notice shall be given to all owners of interests in the mineral estate to be excluded from the proration unit in the quarter-quarter section (for 40-acre pools or formations), the one-half quarter section (for 80-acre pools or formations), the quarter section (for 160-acre pools or formations), the half section (for 320-acre pools or formations), or section (for 640-acre pools or formations) in which the non-standard unit is located and to such other persons as required by the Division. [1-1-87...2-1-96; Rn, 19 NMAC 15.N.1207.A.(6), 7-15-99, A, 7-15-99]

#### (4) Special Pool Orders Regulating or Affecting a Specific Pool:

- (a) Except for non-standard proration unit applications, if the application involves changing the amount of acreage to be dedicated to a well, notice shall be given to:
  - (i) all Division-designated operators in the pool; and
  - (ii) all owners of interests in the mineral estate in existing spacing units with producing wells.
  - (b) If the application involves other matters, notice shall be given to:
    - (i) all Division-designated operators in the pool; and
    - (ii) all Division-designated operators of wells within the same formation as the pool and within one (1) mile of the outer boundary of the pool which have not been assigned to another pool. [1-1-87...2-1-96; Rn, 19 NMAC 15.N.1207.A.(7), 7-15-99, A, 7-15-99]

### (5) Special Orders Regarding any Division-Designated Potash Area:

Notice shall be given to all potash lessees, oil and gas operators, oil and gas lessees and unleased mineral interest owners within the designated potash area. [1-1-86...2-1-96; Rn, 19 NMAC 15.N.1207.A.(8); A, 7-15-99]

(a) through (d). The material on unorthodox locations was moved to 19 NMAC N.1207.A.(2). [1-1-86...2-1-96; A, 7-15-99]

#### (6) Downhole Commingling:

Notice shall be given to all owners of interests in the mineral estate in the spacing unit if ownership is not common for all commingled zones within the spacing unit. [1-1-86...2-1-96; Rn, 19 NMAC 15.N.1207.A.(9), 7-15-99, A, 7-15-99]

#### (7) Surface Disposal of Produced Water or Other Fluids:

Notice shall be given to any surface owner within one-half mile of the site. [1-1-86...2-1-96; Rn, 19 NMAC 15.N.1207.A.(10), 7-15-99, A, 7-15-99]

#### (8) Adjudications not listed above:

Notice shall be given as required by the Division. [1-1-86...2-1-96; Rn, 19 NMAC 15.N.1207.A.(11), 7-15-99, A, 7-15-99]

- (9) This paragraph has been moved and renumbered to 19 NMAC 15.N.1207.A.(6). [1-1-86...2-1-96; A, 7-15-99]
- (10) This paragraph has been moved and renumbered to 19 NMAC 15.N.1207.A.(7). [1-1-86...2-1-96; A, 7-15-99]
- (11) This paragraph has been moved and renumbered to 19 NMAC 15.N.1207.A.(8). [1-1-86...2-1-96; A, 7-15-99]
- 1207.B. Type and Content of Notice. Any notice required by this rule shall be sent by certified mail, return receipt requested, to the last known address of the person to whom notice is to be given at least 20 days prior to the date of hearing of the application and shall include: a copy of the application; the date, time and place of the hearing; and the means by which protests may be made. [1-1-86...2-1-96; A, 7-15-99]
- 1207.C. At the hearing, the applicant shall make a record, either by testimony or affidavit signed by the applicant or its authorized representative, that: (a) the notice provisions of this rule have been complied with; (b) the applicant has conducted a good-faith diligent effort to find the correct address of all persons entitled to notice; and (c) pursuant to this rule, notice has been given at that correct address as required by this rule. In addition, the record shall contain the name and address of each person to whom notice was sent and, where proof of receipt is available, a copy of the proof. [1-1-86...2-1-96; A, 7-15-99]
- 1207.D. Evidence of failure to provide notice as required in this rule may, upon proper showing, be considered cause for reopening the case. [1-1-86...2-1-96; A, 7-15-99]
- 1207.E. In the case of an administrative application where the required notice was sent and a timely filed protest was made, the Division shall notify the applicant and the protesting party in writing that the case has been set for hearing and the date of the hearing. No further notice is required. [7-15-99]

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

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING: Case No. 12119 Order No. R-11231

APPLICATION OF OIL CONSERVATION DIVISION TO AMEND DIVISION RULE 104 (19 NMAC 15.C.104) PERTAINING TO WELL SPACING.

#### **ORDER OF THE COMMISSION**

#### **BY THE COMMISSION:**

This case came on for hearing at 9 o'clock a.m. on August 12, 1999, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 12<sup>th</sup> day of August, 1999, the Commission, a quorum being present, having considered the record,

#### FINDS THAT:

- (1) Due public notice has been given and the Commission has jurisdiction of this case and its subject matter.
- (2) Evidence presented indicated developments in 3-D technology and the increasing need of operators to drill/exploit smaller and smaller reservoirs has resulted in the need for an expansion of allowable areas in which to drill.
- (3) The evidence indicated that Division Rule 104 is in need of amendment to relax the external and internal well setback requirements to allow operators greater latitude in locating wells so that additional oil and gas reserves can be accessed, thereby preventing waste.
- (4) Evidence also indicated that allowing an optional infill well on a 320-acre unit will substantially improve gas recovery by allowing operators to locate wells at more optimum locations, thereby preventing waste.
- (5) Using statewide 660-setbacks to any quarter section line for both 160 and 320 acre spacing provides operators a uniform setback for their well location decisions. This will also eliminate the "standup/laydown" orientation decision sometimes encountered when locating wells, which can pose a problem for operators and result in unnecessary gamesmanship. Since 660 feet is already allowed in cases where the side boundary of a 320-acre unit is the relevant boundary, changing the end boundary setback from 1650 feet to 660 feet should not, in effect, result in any increase in the impairment of correlative rights and will eliminate the 320-acre unit orientation decision.

- (6) The relaxed internal setbacks will also aid in the recovery of additional oil and gas reserves, thereby preventing waste, but will still require compliance with any rule for a formation different than the primary targeted formation.
- (7) The relaxed setback and infill requirements should not impair the correlative rights of offset operators since evidence indicated that the drainage areas of gas wells seldom exceed 160 acres.
- (8) Notice of intent to drill an infill well to offset operators and or interest owners in the unit is not necessary since the rule change allows such a well. There thus would be no basis for objecting to the well.
- (9) Opportunity is available to adopt or amend special pool orders to limit the number of wells per unit and/or require different setbacks to prevent waste and/or protect correlative rights. The Division's notice provisions in Rule 1207.A(4) for amending special pool orders was recently amended to facilitate such changes. Therefor, if an interest owner believes that the drainage areas for wells in a particular pool justify different well densities and/or setbacks, an action can be brought to institute such provisions.
- (10) Actions can be brought before the Division to amend special pool orders and/or other orders to take into account any of the changes made to Rule 104 by this order.
- (11) Compulsory pooling orders do not directly address the issue of subsequent wells on a unit. This is a separate issue being addressed by the Division.
- (12) Notice of administrative applications for and opportunity for objecting to (i) non-standard proration units---104.D(2)(d), (ii) unorthodox locations---104.F(4), and (iii) pooling and communitization of small oil lots---104.I(1)(b) should be given to affected parties as defined in 1207.A(2).
- (13) Due to the extensive changes being made to Rule 104, Rule 104 should be reformatted and rearranged. The language in Rule 104 should also be cleaned up and clarified.
- (14) It is necessary to adopt Rule 104 as amended and set forth in the attached Exhibit "A".

#### IT IS THEREFORE ORDERED

(1) Division Rule 104 is hereby amended and adopted as set forth in the attached Exhibit "A".

- (2) Rule 104 shall be effective as of the date of its publication in the New Mexico Register.
- (3) Jurisdiction of this case is retained for the entry of such further orders as the Commission may deem necessary.
- (4) Done at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JAMI BAILEY, Member

ROBERT L. LEE. Member

LORI WROTENBERY, Chairma

SEAL

# EXHIBIT "A" CASE NO. 12119 ORDER NO. R-11231

#### 104 WELL SPACING AND LOCATION

104.A. CLASSIFICATION OF WELLS: WILDCAT AND DEVELOPMENT WELLS

#### (1) WILDCAT WELL

- (a) In San Juan, Rio Arriba, Sandoval, and McKinley Counties a wildcat well is any well to be drilled the spacing unit of which is a distance of two miles or more from:
  - (i) the outer boundary of any defined pool that has produced oil or gas from the formation to which the well is projected to be drilled; and
  - (ii) any well that has produced oil or gas from the formation to which the proposed well is projected to be drilled.
- (b) In all counties except San Juan, Rio Arriba, Sandoval, and McKinley, a wildcat well is any well to be drilled the spacing unit of which is a distance of one mile or more from:
  - (i) the outer boundary of any defined pool that has produced oil or gas from the formation to which the well is projected to be drilled; and
  - (ii) any well that has produced oil or gas from the formation to which the proposed well is projected.

#### (2) DEVELOPMENT WELL

(a) Any well that is not a wildcat well shall be classified as a development well for the nearest pool that has produced oil or gas from the formation to which the well is projected to be drilled. Such development well shall be spaced, drilled, operated, and produced in accordance with the rules in effect for that pool, provided the well is completed in that pool.

(b) Any well classified as a development well for a pool but completed in a producing formation not included in the vertical limits of that pool shall be operated and produced in accordance with the rules in effect for the nearest pool that is producing from that formation within the two miles in San Juan, Rio Arriba, Sandoval, and McKinley Counties or within one mile everywhere else. If there is no designated pool for that producing formation within the two miles in San Juan, Rio Arriba, Sandoval, and McKinley Counties or within one mile everywhere else, the well shall be re-classified as a wildcat well.

### 104.B. OIL WELL ACREAGE AND WELL LOCATION REQUIREMENTS

- (1) Any wildcat well that is projected to be drilled as an oil well to a formation and in an area that in the opinion of the Division may reasonably be presumed to be productive of oil rather than gas and each development well for a defined oil pool, unless otherwise provided in special pool orders, shall be located on a spacing unit consisting of approximately 40 contiguous surface acres substantially in the form of a square which is a legal subdivision of the U.S. Public Land Surveys, which is a governmental quarter-quarter section or lot, and shall be located no closer than 330 feet to any boundary of such unit. Only those 40-acre spacing units committed to active secondary recovery projects shall be permitted more than four wells.
- (2) If a well drilled as an oil well is completed as a gas well but does not conform to the applicable gas well location rules, the operator must apply for administrative approval for a non-standard location before the well can produce. The Director may set any such application for hearing.

#### 104.C. GAS WELLS ACREAGE AND WELL LOCATION REQUIREMENTS

Any wildcat well that is projected to be drilled as a gas well to a formation and in an area that in the opinion of the Division may reasonably be presumed to be productive of gas rather than oil and each development well for a defined gas pool, unless otherwise provided in special pool orders, shall be spaced and located as follows:

(1) 640-ACRE SPACING applies to any deep gas well in Rio Arriba, San Juan, Sandoval or McKinley County that is projected to be drilled to a gas producing formation older than the Dakota formation or is a development well within a gas pool created and defined by the Division after June 1, 1997 in a formation older than the Dakota formation, which formation or pool is located within the surface-outcrop of the Pictured Cliffs formation (i.e., the San Juan Basin). Such well shall-be-located on a spacing unit consisting of 640 contiguous surface acres, more or less, substantially in the form of a square which is a section and legal subdivision of the U.S. Public Land Surveys and shall be located no closer than: 1200 feet to any outer boundary of the spacing unit, 130 feet to any quarter section line, and 10 feet to any quarter-quarter section line or subdivision inner boundary.

- (2) <u>320-ACRE SPACING</u> applies to any deep gas well in Lea, Chaves, Eddy or Roosevelt County, defined as a well that is projected to be drilled to a gas producing formation or is within a defined gas pool in the Wolfcamp or an older formation. Such well shall be located on a spacing unit consisting of 320 surface contiguous acres, more or less, comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U.S. Public Land Surveys provided that:
  - (a) the initial well on a 320-acre unit is located no closer than 660 feet to the 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;
  - (b) only one infill well on a 320-acre unit shall be allowed provided that the well is located in the quarter section of the 320-acre unit not containing the initial well and is no closer than 660 feet to the outer boundary of the quarter section and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; and
  - (c) the Division-designated operator for the infill well is the same operator currently designated by the Division for the initial well.
- (3) 160-ACRE SPACING applies to any other gas well not covered above. Such well shall be located in a spacing unit consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section and a legal subdivision of the U.S. Public Land Surveys and shall be located no closer than 660 feet to any outer boundary of such unit and no closer than 10 feet to any quarter-quarter section or subdivision inner boundary.

#### 104.D. ACREAGE ASSIGNMENT

- (1) Well Tests and Classification. It is the responsibility of the operator of any wildcat or development gas well to which more than 40 acres has been dedicated to conduct a potential test within 30 days following completion of the well and to file the test with the Division within 10 days following completion of the test. (See Rule 401)
  - (a) The date of completion for a gas well is the date of the conclusion of active completion work on the well.
  - (b) If the Division determines that a well should not be classified as a gas well, the Division will reduce the acreage dedicated to the well to the standard acreage for an oil well.
  - (c) Failure of the operator to file the test within the specified time will also subject the well to such acreage reduction.

- (2) Non-Standard Spacing Units. Any well that does not have the required amount of acreage dedicated to it for the pool or formation in which it is completed may not be produced until a standard spacing unit for the well has been formed and dedicated or until a non-standard spacing unit has been approved.
  - (a) Division District Offices have the authority to approve nonstandard spacing units without notice when the unorthodox size or shape is necessitated by a variation in the legal subdivision of the U. S. Public Land Surveys and/or consists of an entire governmental section and the nonstandard spacing unit is not less than 70% or more than 130% of a standard spacing unit. The operator must obtain Division approval of Division Form C-102 showing the proposed non-standard spacing unit and the acreage contained therein.
  - (b) The Director may grant administrative approval to nonstandard spacing units after notice and opportunity for hearing when an application has been filed and the unorthodox size or shape is necessitated by a variation in the legal subdivision of the U.S. Public Land Surveys or the following facts exist:
    - (i) the non-standard spacing unit consists of: (A) a single quarter-quarter section or lot or (B) quarter-quarter sections or lots joined by a common side; and
    - (ii) the non-standard spacing unit lies wholly within: a single quarter section if the well is completed in a pool or formation for which 40, 80, or 160 acres is the standard spacing unit size; a single half section if the well is completed in a pool or formation for which 320 acres is the standard spacing unit size; or a single section if the well is completed in a pool or formation for which 640 acres is the standard spacing unit size.
  - (c) Applications for administrative approval of non-standard spacing units pursuant to D(2)(b) shall be submitted to the Division's Santa Fe Office and accompanied by:-(i) a plat showing the spacing unit and an applicable standard spacing unit for that pool or formation, the proposed well dedications and all adjoining spacing units; (ii) a list of affected persons as defined in Rule 1207.A(2); and (iii) a statement discussing the reasons for the formation of the non-standard spacing unit.

- (d) The applicant shall submit a statement attesting that the applicant, on or before the date the application was submitted to the Division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in (c) above, by certified mail, return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the Division receives the application. The Director may approve the application upon receipt of waivers from all the notified persons or if no person has filed an objection within the 20-day period.
- (e) The Director may set for hearing any application for administrative approval.
- (3) Number of Wells Per Spacing Unit. 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 shall be given to those affected persons defined in Rule 1207.A.(2).

#### 104.E. FORMS

Form C-102 "Well Location and Acreage Dedication Plat" for any well shall designate the exact legal subdivision dedicated to the well. Form C-101 "Application for Permit to Drill, Deepen, or Plug Back" will not be approved without an acreage designation on Form C-102.

#### 104.F. UNORTHODOX LOCATIONS

- (1) Well locations for producing wells and/or injection wells that are unorthodox based on the requirements of B above and are necessary for an efficient production and injection pattern within a secondary recovery, tertiary recovery, or pressure maintenance project are hereby authorized, provided that the unorthodox location within the project is no closer than the required minimum distance to the outer boundary of the lease or unitized area, and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. These locations shall only require such prior approvals as are necessary for an unorthodox location.
- (2) The Director may grant an exception to the well location requirements of B and C above or special pool orders after notice and opportunity for hearing when the exception is necessary to prevent waste or protect correlative rights.
- (3) Applications for administrative approval pursuant to F(2) above shall be submitted to the Division's Santa Fe Office accompanied by (a) a plat showing the spacing unit, the proposed unorthodox well location and the adjoining spacing units and wells; (b) a list of affected persons as defined in Rule 1207.A(2); and (c) information evidencing the need for the exception. Notice shall be given as required in Rule 1207.A(2).

- (4) The applicant shall submit a statement attesting that applicant, on or before the date that the application was submitted to the Division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in F(3) above, by certified mail, return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the Division receives the application. The Director may approve the unorthodox location upon receipt of waivers from all the affected persons or if no affected person has filed an objection within the 20-day period.
- (5) The Director may set for hearing any application for administrative approval of an unorthodox location.
- (6) Whenever an unorthodox location is approved, the Division may order any action necessary to offset any advantage of the unorthodox location.

#### 104.G. EFFECT ON ALLOWABLES

- (1) If the drilling tract is within a prorated/allocated oil pool or is subsequently placed within such pool and the drilling tract consists of less than 39½ acres or more than 40½ acres, the top unit allowable for the well shall be increased or decreased in the proportion that the number of acres in the drilling tract bears to 40.
- (2) If the drilling tract is within a prorated/allocated gas pool or is subsequently placed within such pool and the drilling tract consists of less than 158 acres or more than 162 acres in 160-acre pools, or less than 316 acres or more than 324 acres in 320-acre pools, or less than 632 acres or more than 648 acres in 640-acre pools, the top allowable for the well shall be decreased or increased in the proportion that the number of acres in the drilling tract bears to a standard spacing unit for the pool.
- (3) In computing acreage under (1) and (2) above, less than ½ acre shall not be counted but ½ acre or more shall count as one acre.
- (4) The provisions of (1) and (2) above shall apply only to wells completed after January 1, 1950.

#### 104.H. DIVISION-INITATED EXCEPTIONS

In order to prevent waste, the Division may, after hearing, set different spacing requirements and require different acreage for drilling tracts in any defined oil or gas pool.

#### 104.I. POOLING OR COMMUNITIZATION OF SMALL OIL LOTS

(1) The Division may approve the pooling or communitization of fractional oil lots of 20.49 acres or less with a contiguous oil spacing unit when the ownership is common and the tracts are part of the same lease with the same royalty interests if the following requirements are satisfied:

- (a) Applications for administrative approval shall be submitted to the Division's Santa Fe Office and accompanied by: (i) a plat showing the dimensions and acreage involved, the ownership of such acreage, the location of all existing and proposed wells and all adjoining spacing units; (ii) a list of affected persons as defined in Rule 1207.A(2); and (iii) a statement discussing the reasons for the pooling or communitization.
- (b) The applicant shall submit a statement attesting that the applicant, on or before the date the application was submitted to the Division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in (a) above, by certified mail. return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the Division receives the application. The Director may approve the application upon receipt of waivers from all the notified persons or if no person has filed an objection within the 20-day period.
- (c) The Director may set for hearing any application for administrative approval.
- (2) The Division may consider the common ownership and common lease requirements met if the applicant furnishes with the application a copy of an executed pooling agreement communitizing the tracts involved.

[1-1-50...2-1-96; A, 6-30-97; A, 8-31-99]

# **DEFINATIONS**

<u>CORRELATIVE RIGHTS</u> shall mean the opportunity afforded, as far as it is practicable to do so, to the owner of each property in a pool to produce without waste his just and equitable share of the oil or gas, or both, in the pool, being an amount, so far as can be practically determined, and so far as can be practicably obtained without waste, substantially in the proportion that the quantity of recoverable oil or gas, or both, under such property bears to the total recoverable oil or gas, or both, in the pool, and for such purpose to use his just and equitable share of the reservoir energy.

#### WASTE, in addition to its ordinary meaning, shall include:

- (a) Underground Waste as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recovered from any pool, and the use of inefficient underground storage of natural gas.
- (b) Surface Waste as those words are generally understood in the oil and gas business, and in any event to embrace the unnecessary or excessive surface loss or destruction without beneficial use, however caused, of natural gas of any type or in any form, or crude petroleum oil, or any product thereof, but including the loss or destruction, without beneficial use, resulting from evaporation, seepage, leakage, or fire, especially such loss or destruction incident to or resulting from the manner of spacing, equipping, operating or producing a well or wells, or incident to or resulting from the use of inefficient storage or from the production of crude petroleum oil or natural gas, in excess of the reasonable market demand.

## TO SUMMARIZE:

Owners may not use their land in such a manner as to injure the properties of others.