

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

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

***CASE NO. 13301  
ORDER NO. R-8170-R  
NOMENCLATURE***

**APPLICATION OF HEC PETROLEUM, INC. TO AMEND THE SPECIAL RULES  
AND REGULATIONS FOR THE CATCLAW DRAW-MORROW GAS POOL,  
EDDY COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on July 22, 2004, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 4<sup>th</sup> day of October, 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) The Catclaw Draw-Morrow Gas Pool (74320) currently comprises the following described area in Eddy County, New Mexico:

**TOWNSHIP 21 SOUTH, RANGE 25 EAST, NMPM**

Irregular Section 1:	All
Irregular Section 2:	Lots 9 through 16 and S/2
Sections 11 through 14:	All
Sections 23 through 28:	All
Sections 34 through 36:	All

**TOWNSHIP 31 SOUTH, RANGE 26 EAST, NMPM**

Section 19:	All.
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(3) The Catclaw Draw-Morrow Gas Pool is currently governed by: (i) the "*Special Rules and Regulations for the Catclaw Draw-Morrow Gas Pool*," as promulgated by Division Order No. R-8170, as amended; and (ii) Division Rule 605, the Division's "*Gas Prorating Rules*". The spacing and well location requirements for this pool include provisions for standard 640-acre gas spacing and proration units ("GPU") with wells to be located no closer than 1650 feet from the outer boundary of a GPU nor closer than 330 feet from any governmental quarter-quarter section or subdivision inner boundary.

(4) Technically classified a "Prorated Gas Pool," gas prorating (the assignment of gas allowables) was suspended in the Catclaw Draw-Morrow Gas Pool by Division Order No. R-10328, issued by the New Mexico Oil Conservation Commission in Case No. 11211 on March 27, 1995, because there were no non-marginal gas wells in the pool and due to the fact that there were no "prorated wells" in the pool.

(5) The New Mexico Oil Conservation Commission found in December, 1997 by Order No. R-10872-B [see Ordering Paragraph No. (4)], that in suspending prorating in the Catclaw Draw-Morrow Gas Pool only the assignment of allowables to GPU's was discontinued and that all other rules, regulations, and policies governing this pool, including the authorization for a second well in each 640-acre GPU remained in effect.

(6) The applicant, HEC Petroleum, Inc. ("HEC"), seeks to amend the rules and regulations currently governing the Catclaw Draw-Morrow Gas Pool to provide for the following:

- (a) the option to drill a well on each quarter section within a standard 640-acre GPU;
- (b) the relaxation of the setback requirements for wells, such that wells can be located no closer than 660 feet to a quarter section line nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; and
- (c) one operator per GPU.

(7) By Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, Division Rule 104.C(2) was amended to read as follows:

"(2) 320-Acre Spacing 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."

(8) HEC presented geologic evidence, which demonstrates that:

(a) the Morrow reservoir in this area trends north south;

(b) there are several productive Morrow intervals in the Catclaw Draw-Morrow Gas Pool, which can be correlated across the pool; and

(c) the Morrow sands are lenticular in nature.

(9) HEC presented engineering evidence, which demonstrates that:

(a) the initial reservoir pressure was approximately 4500 psi;

(b) a pressure versus time chart for wells in the Catclaw Draw-Morrow Gas Pool shows no pattern, indicating the lenticular nature of the reservoir;

(c) since the Catclaw Draw-Morrow Gas Pool was discovered, it has produced approximately 128 BCF of gas and 127,000 barrels of condensate;

(d) current production from all wells in the Catclaw Draw-Morrow Gas Pool was approximately 3.5 MMCF/day; and

(e) HEC recently completed its Catclaw Draw Unit Well No. 18 (API No. 30-015-33320), located at an unorthodox infill gas well location 1310 feet from the North and West lines (Unit D) of Section 23, Township 21 South, Range 25 East, NMPM, Lea County, New Mexico [approved by Division Administrative Order NSL-5017 (SD)], as a third well within an existing 640-acre GPU. This well encountered virgin pressures in certain Morrow intervals and is currently producing at an approximate rate of 3.0 MMCF/day. Initial production within this GPU commenced in 1971 with Hanagan Petroleum Corporation's Catclaw Draw Unit Well No. 2 (API No. 30-015-20494), located at a standard gas well location 1650 feet from the North and east lines (Unit G) of Section 23. The Catclaw Draw Unit Well No. 14 (API No. 30-015-23370), was drilled in 1980 as an infill well at an unorthodox gas well (which location was grandfathered in as approved by Division Order No. R-4157-D, issued in Case No. 7326 on August 26, 1981) 990 feet from the South line and 2310 feet from the East line (Unit O) of Section 23. In 1999 the Catclaw Draw Unit Well No. 2 was plugged and abandoned.

(10) HEC's application in this case does not seek to change the status of the Catclaw Draw-Morrow Gas Pool as a prorated pool, nor is there evidence in the record to support such action.

(11) Applicant further presented evidence showing that:

- (a) Approximately half of the wells previously drilled in the Catclaw Draw-Morrow Gas Pool have been drilled at locations that are unorthodox under existing rules.
- (b) The proposed well setback requirements within the Catclaw Draw-Morrow Gas Pool will allow for greater flexibility in locating all future wells.
- (c) Infill development in southeast New Mexico of deep gas pools and formations, including the Morrow interval, with one well per quarter section is now commonplace.
- (d) The continuation of the current well location and density restrictions are no longer necessary, and the continuation of such constitutes an unreasonable burden on the operators in the pool and for the Division to implement and enforce.

(12) The geologic and engineering evidence presented demonstrates that approval of additional infill drilling (one well per quarter section) within the McMillan-Morrow Gas Pool will provide the operators in the pool the opportunity to recover additional gas reserves, which may otherwise not be recovered by the existing wells or development under the existing rules currently governing the pool, thereby preventing waste.

(13) HEC's proposal to allow up to four wells per section is supported by geologic and engineering evidence, and is consistent with current Division rules governing Morrow formation development in Southeast New Mexico.

(14) This application was filed under the provisions of Division Rule 1207.A (4) (a). No interested party appeared at the hearing in opposition to the application.

(15) Approval of this application is in the best interest of conservation, promotes sound engineering practices, and serves to protect correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of HEC Petroleum, Inc. to amend the special rules governing the Catclaw Draw-Morrow Gas Pool (74320) in Sections 1, 2, 11 through 14, 23 through 28, and 34 through 36, Township 21 South, Range 25 East, NMPM, and Section 19, Township 21 South, Range 26 East, NMPM, Eddy County, New Mexico, is hereby approved.

(2) Rule 2 (b) of the *"Special Rules and Regulations for the Catclaw Draw-Morrow Gas Pool,"* as set forth in Division Order No. R-8170, as amended, is hereby revised to read in its entirety as follows:

**"RULE 2 (b):** The initial well within a gas spacing and proration unit ("GPU") shall be 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. Each infill well within an existing GPU shall be located in a quarter section that does not contain a producing Morrow gas well and shall be located with respect to the assigned unit boundaries as described above.

**HOWEVER,** no more than one Morrow gas well shall be located within a single governmental quarter section. Any deviation from this well density requirement shall be authorized only after hearing."

(3) These special pool rules are further amended by the addition of Rule 2 (c) as follows:

**"RULE 2 (c);** The Division-designated operator for an infill well is the same operator currently designated by the Division for the initial well."

(4) 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

MARK E. FESMIRE, P. E.  
Director

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