

**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. 15932
ORDER NO. R-14625**

**AMENDED APPLICATION OF HILCORP ENERGY COMPANY FOR AN
EXCEPTION TO THE WELL DENSITY REQUIREMENTS OF THE SPECIAL
RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL,
SAN JUAN COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on February 8, 2018, at Santa Fe, New Mexico, before Examiner Phillip R. Goetze.

NOW, on this 6th day of April, 2018, 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) Hilcorp Energy Company ("Applicant"), seeks approval for an additional vertical well completion within an existing, standard 320-acre (more or less) Mesaverde formation gas spacing and proration unit ("GPU") within the Blanco-Mesaverde (Prorated Gas) Pool (Pool code 72319) consisting of the W/2 of Section 24, Township 29 North, Range 8 West, NMPM, San Juan County, New Mexico.

(3) The following wells currently produce within this GPU:

(a) Hardie A Well No. 2R (API No. 30-045-20560) Unit K;

(b) Hardie A Well No. 2A (API No. 30-045-21766) Unit C;

(c) Hardie Well No. 4M (API No. 30-045-33984) Unit L;
and

(d) Hardie Well No. 4P (API No. 30-045-34531) Unit F.

(4) Well density, well locations, and gas spacing and proration unit size, within the Blanco-Mesaverde (Prorated Gas) Pool, are governed by Special Rules detailed in Division Order No. R-10987-A(1) effective December 2, 2002. That portion of those Special Rules pertaining to GPU size and well density (shown below) limit each GPU to simultaneous dedication and production from four wells, each quarter section within the GPU to two wells, and each quarter-quarter section within the GPU to one well. The relevant provisions are stated as follows:

I. ACREAGE AND WELL LOCATION REQUIREMENTS

A. Standard GPU (Gas Proration Unit): *A standard GPU in the Blanco-Mesaverde Pool shall be 320 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.*

B. Well density:

(1) *Up to four (4) wells may be drilled on a standard GPU, as follows:*

(a) *the FIRST OPTIONAL INFILL WELL drilled on a GPU shall be located in the quarter section not containing the INITIAL Mesaverde well;*

(b) *the SECOND OPTIONAL INFILL WELL drilled on a GPU shall be located in a quarter-quarter section not containing a Mesaverde well and within a quarter section not containing more than one (1) Mesaverde well;*

(c) *the THIRD OPTIONAL INFILL WELL drilled on a GPU shall be located in a quarter-quarter section not containing a Mesaverde well and within a quarter section not containing more than one (1) Mesaverde well;*

(d) *at the discretion of the operator, the second or third optional infill well may be drilled prior to the drilling of the first optional infill well;*

(e) *no more than two wells shall be located within either quarter section in a GPU; and*

(f) any deviation from the above-described well density requirements shall be authorized only after hearing.

(5) The following well is proposed as the fifth Mesaverde well completion to be produced and dedicated to the GPU and the third completion within the NW/4 of the section:

Hardie Well No. 4E (API No. 30-045-24938) Unit E.

(6) The Applicant appeared at the hearing through counsel and presented testimony and facts as follows:

- (a) Applicant has done a reservoir study of its properties in the Blanco-Mesaverde (Prorated Gas) Pool and identified areas of underperformance. Applicant used decline analysis and log derived volumetric parameters to calculate ultimate recovery and original gas in place values and to map these points for its wells in the pool.
- (b) The GPU consisting of the W/2 of Section 24 has been developed with four Mesaverde wells but estimated ultimate recovery from the GPU is still a low percentage of the original gas in place.
- (c) The Mesaverde formation members contribute each in varying amounts to the total production but the Point Lookout member is considered to produce more gas than does the Cliff House member.
- (d) The GPU has a wellbore currently producing from the Dakota formation that is available for completion in prospective members of the Mesaverde formation.
- (e) The proposed well could be downhole commingled without harm to the existing Dakota completion. Both the Dakota and Mesaverde formations in this area produce little water.
- (f) The proposed well is expected to recover additional gas in place within this GPU that would not otherwise be recovered.
- (g) The additional well-completion in this gas reservoir is not expected to cause harm to offsetting interests.
- (h) This GPU is bounded on all sides by other units operated by BP America Production Company.

- (i) Notice of the intended well density exception was provided as per Rule 19.15.4.12A(2) NMAC to all affected parties and no objections have been received.

The Division finds as follows:

- (7) Applicant has shown this GPU is underdeveloped and the existing wells will not recover the percentage of gas in place that would be expected.
- (8) The proposed additional well is needed to recover additional gas and is not expected to harm offsetting gas proration units.
- (9) Notice was provided to affected parties and no other party entered an appearance in this case or otherwise opposed this application.
- (10) This application should be approved to prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Hilcorp Energy Company (OGRID No. 372171; the "Operator") is hereby approved and an exception is granted as follows to the well density provisions (Rule I.B) of the Special Rules and Regulations of the Blanco-Mesaverde (Prorated Gas) Pool (Pool code 72319) as promulgated by Division Order No. R-10987-A(1).

(2) These five wells shall be simultaneously dedicated to and may produce from within an existing standard 320-acre (more or less) Mesaverde gas spacing and proration unit ("GPU") consisting of the W/2 of Section 24, Township 29 North, Range 8 West, NMPM, San Juan County, New Mexico:

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|-----|----------------------|------------------------|--------|
| (a) | Hardie A Well No. 2R | (API No. 30-045-20560) | Unit K |
| (b) | Hardie A Well No. 2A | (API No. 30-045-21766) | Unit C |
| (c) | Hardie Well No. 4M | (API No. 30-045-33984) | Unit L |
| (d) | Hardie Well No. 4P | (API No. 30-045-34531) | Unit F |

Additional Well:

- | | | | |
|-----|--------------------|------------------------|--------|
| (e) | Hardie Well No. 4E | (API No. 30-045-24938) | Unit E |
|-----|--------------------|------------------------|--------|

(3) The Operator may substitute the additional well with any of the wells within this GPU after providing notice to affected parties as required in Rule 19.15.4.12A(2) NMAC and obtaining the approval of the Director.

(4) Except as granted above, all spacing and location provisions of the Special Rules and Regulations of the Blanco-Mesaverde (Prorated Gas) Pool remain in effect.

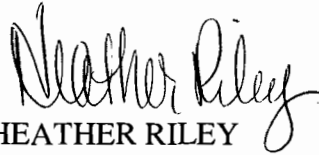
(5) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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



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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


HEATHER RILEY
Director