# 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 TO CONSIDER:

**CASE NO. 16118 ORDER NO. R-14705** 

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 May 03, 2018, at Santa Fe, New Mexico, before Examiner Michael A. McMillan.

NOW, on this 18th day of June 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 315.92-acre (more or less) Mesaverde formation gas spacing within the Blanco-Mesaverde (Prorated Gas) Pool (72319) consisting of the E/2 of Section 35, Township 31 North, Range 9 West, NMPM, San Juan County, New Mexico.
  - (3) The following wells currently produce within this gas spacing unit:

•	Johnston Federal Well No. 9	(API No. 30-045-10135) Lot 8 or
	Unit H	
•	Johnston Federal Well No. 9A	(API No. 30-045-21641) Lot 9 or
	Unit I	
•	Johnston Federal Well No. 9M	(API No. 30-045-35151) Unit B

(4) Well density, well locations, and gas spacing 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 gas spacing unit size and well density limit each gas spacing unit to

simultaneous dedicate and produce from a maximum of four wells, limit each quarter section within the spacing unit to two wells, and each quarter-quarter section within the spacing unit 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 an additional well and would be the fourth Mesaverde well completion to be produced and dedicated to this gas spacing unit and the third completion within the NE/4 quarter section:
  - Johnston Federal Well No. 9F, (API No. 30-045-35152) Lot 2 or Unit B (BHL in Unit G)
- (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 estimated ultimate gas recovery from the subject gas spacing unit is low relative to the average gas spacing unit despite the presence of existing well completions.
- (c) The subject gas spacing unit has a wellbore currently producing from a deeper formation that is available for completion up-hole in the Mesaverde formation.
- (d) The proposed well could be downhole commingled without harm to the existing deeper completion. Both the deeper completion and the prospective Mesaverde completion are expected to produce little water.
- (e) The proposed well is expected to recover additional gas in place within this gas spacing unit that would not otherwise be recovered.
- (f) The additional well-completion in this gas reservoir is not expected to cause harm to offsetting interests.
- (g) All offset spacing units are operated by either Hilcorp or BP America Production Company. The rule exception is being sought to place three wells in the NE/4 and complete four wells in the gas spacing unit.
- (h) Notice of the intended well density exception was provided as per 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 gas spacing unit is underdeveloped and the existing wells will not recover the percentage of gas in place that would be expected.
- (8) The proposed additional well completion is needed to recover additional gas and is not expected to harm offsetting gas spacing units.
- (9) Notice was provided to affected parties and no other party 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 is hereby approved. An exception is granted as follows to the well density provisions of the Special Rules of the Blanco-Mesaverde (Prorated Gas) Pool (72319).
- (2) The following wells may be simultaneously dedicated to and may produce from within an existing standard 315.92-acre (more or less) Mesaverde gas spacing unit comprised of the E/2 of Section 35, Township 31 North, Range 9 West, NMPM, San Juan County, New Mexico:

• Johnston Federal Well No. 9 Unit H (API No. 30-045-10135) Lot 8 or

 Johnston Federal Well No. 9A Unit I (API No. 30-045-21641) Lot 9 or

• Johnston Federal Well No. 9M

(API No. 30-045-35151) Unit B

#### **Approved Additional Well:**

- Johnston Federal Well No. 9F, (API No. 30-045-35152) Lot 2/Unit B (BHL in Unit G)
- (3) Substitutions of other wells within this GPU for any of the wells detailed herein may be granted administratively after providing notice to affected parties as required in Paragraph 2 of Subsection A of 19.15.4.12 NMAC.
- (4) Except as granted above, all spacing and location provisions of the Special Rules of the Blanco-Mesaverde (Prorated Gas) Pool remain in effect.
- (5) The location of the approved additional well is governed by Division rules or by Special Pool Rules and the well may only be produced if the location is orthodox or if Hilcorp Energy Company applies for and obtains a location exception from the Division.
- (6) 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.

SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

HEATHER RILEY

Director