

**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. 16223  
ORDER NO. R-14781**

**APPLICATION OF HILCORP ENERGY COMPANY FOR AN EXCEPTION TO  
THE WELL DENSITY REQUIREMENTS OF THE SPECIAL RULES AND  
REGULATIONS FOR THE AZTEC-PICTURED CLIFFS 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 June 14, 2018, at Santa Fe, New Mexico, before Examiner Michael A. McMillan.

NOW, on this 9<sup>th</sup> day of July 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 one or more additional vertical well completion(s) within an existing 205.08-acre (more or less) Pictured Cliffs formation gas spacing unit within the Aztec Pictured Cliffs (Gas) Pool (71280) consisting of Lots 1-3, SE/4 SW/4, and the S/2 SE/4 of irregular Section 8, Township 28 North, Range 09 West, NMPM, San Juan County, New Mexico.

(3) The following wells currently produce within this gas spacing unit:

- Reid Well No. 011 (API No. 30-045-07536) Unit O(O)

(4) The following additional wells are proposed and would be the second and third Pictured Cliffs well completions to be produced and dedicated to this gas spacing unit:

- Reid Well No. 022M (API No. 30-045-35359) SHL: Unit M BHL: Unit N
- Jackson Com Well No. 001E (API No. 30-045-25592) Unit I(1)

(5) The Aztec Pictured Cliffs (Gas) Pool was governed by Order No. R-1670 (as amended) which order defines and regulates prorated gas pools in the northeast of New Mexico; the original order was effective April 13, 1960. Gas prorationing in several of the Pictured Cliffs Gas Pools of northwest New Mexico, including this pool, was suspended by the Commission by Order No. R-1670-R, effective April 1, 1974.

(6) In the absence of Special Pool Rules, 19.15.15.10 NMAC governs gas wells in New Mexico. Subsection C of said rule states that shallow [vertical] gas wells in New Mexico (those wells not covered by preceding portions of 19.15.15.10 NMAC) shall be located in a spacing unit consisting of 160 surface contiguous acres, more or less, substantially in the form of a square that is a quarter section and a legal subdivision of the United States public land surveys and shall be located no closer than 660 feet to an outer boundary of the unit and no closer than 10 feet to a quarter-quarter section or subdivision inner boundary.

(7) Subsection C of 19.15.15.11 NMAC specifies that the director may grant exceptions to the [limited] number of [vertical] wells per spacing unit after notice to all affected persons as defined in Paragraph (2) of Subsection A of 19.15.4.12 NMAC.

(8) 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 Aztec Pictured Cliffs (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 one or more wellbores currently producing from a deeper formation that is available for completion up-hole in the Pictured Cliffs formation.
- (d) The proposed well could be downhole commingled without harm to the existing deeper completion. Both the deeper completion and the prospective Pictured Cliffs 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) The Commission in Case No. 904, issued Order No. R-658 on July 14, 1955, establishing this gas spacing unit. The non-standard location for the Reid Well No. 11 was approved October 15, 1956 with administrative order NSL-67.
- (h) Notice of the intended well density exception was provided as per Paragraph (2) of Subsection A of 19.15.4.12 NMAC to all affected persons.

The Division finds that

(9) The Reid Well No. 22M is deviated from a surface location in Unit M. Applicant intends to complete it uphole in the Pictured Cliffs, but this location must be surveyed and determined to be standard or non-standard. If non-standard, the well will need a non-standard location permit prior to producing.

(10) Applicant has shown this gas spacing unit is underdeveloped and the existing well or wells will not recover the percentage of gas in place that would be expected. The proposed additional well completion(s) is needed to recover additional gas and is not expected to harm offsetting gas spacing units.

(11) Notice was provided as required and there has been no objection. 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 Aztec Pictured Cliffs (Gas) Pool (71280).

(2) The following wells may be simultaneously dedicated to and may produce from within an existing 205.08-acre (more or less) Pictured Cliffs gas spacing unit comprised of Lots 1-3, SE/4 SW/4, and the S/2 SE/4 of irregular Section 8, Township 28 North, Range 9 West, NMPM, San Juan County, New Mexico:

- Reid Well No. 011 (API No. 30-045-07536) Unit O(O)

Approved Additional Well(s):

- Reid Well No. 022M (API No. 30-045-35359) SHL: Unit M BHL: Unit N
- Jackson Com Well No. 001E (API No. 30-045-25592) Unit I(1)

(3) The Reid Well No. 22M shall not be produced as a well in this spacing unit until it is determined to be at a standard location or a non-standard location permit is obtained from the Division. Hilcorp shall supply a downhole survey to the Aztec office of the Division sufficient to determine the well location at the depths of the Pictured Cliffs. If that location is non-standard, then Hilcorp shall apply to the Division for a non-standard location permit. If the well's location is not in the subject gas spacing unit, the well shall not be dedicated to such unit.

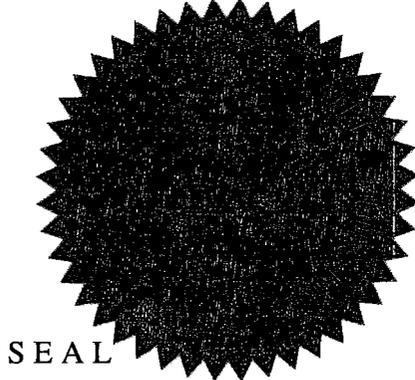
(4) Substitutions of other wells within this GPU for any of the wells detailed herein may be granted administratively in the absence of objection after providing notice to affected persons as required in Paragraph (2) of Subsection A of 19.15.4.12 NMAC.

(5) Except as granted above, all spacing and location provisions of the Aztec Pictured Cliffs (Gas) Pool remain in effect.

(6) The location of the approved additional well or wells is governed by Division rules or by Special Pool Rules and the well or wells may only be produced if the location is orthodox or if Hilcorp Energy Company applies for and obtains a location exception from the Division.

(7) 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



HEATHER RILEY  
Director