

THE APPLICATION OF PRIZE OPERATING COMPANY TO CONSIDER NEW FIELD DESIGNATION AND TEMPORARY FIELD RULES FOR THE PROPOSED ALTA LOMA, NE (S SAND) FIELD, GALVESTON COUNTY, TEXAS

Heard by: Donna K. Chandler on May 11, 2001

Appearances:

Mike McElroy
Rick Johnston

Representing:

Prize Operating Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Prize Operating Company requests that a new field designation called the Alta Loma, NE (S Sand) Field be approved. Prize also requests that the following rules be adopted for the field on a temporary basis:

1. Designation of the field as the correlative interval from 12,437 feet to 12,467 feet as shown on the log of the Bruce No. 1;
2. Well spacing a minimum of 467 feet from lease lines and 1,200 feet between wells;
3. 320 acre gas units with 10% tolerance and a maximum diagonal of 6,500 feet;
4. Allocation based on 100% acreage.

Prize also requests that the Bruce No. 1 be permanently classified as a gas well and that the accumulated overproduction for the well be canceled.

There were no protests to this application and the examiner recommends approval of the new field designation, field rules, gas well classification and cancellation of overproduction.

DISCUSSION OF EVIDENCE

Prize Operating Company completed the Bruce No. 1 in November 2000 with perforations in the Frio S Sand between 12,438 feet and 12,462 feet. On initial test, the well produced 2,171

MCFD. The initial bottomhole pressure in the Bruce No. 1 was 9,707 psi. Cumulative production through April 2001 is approximately 0.5 BCF of gas. April production averaged just over 3,000 MCFD.

The nearest production from the Frio S Sand is approximately 5 miles to the southwest of the Bruce No. 1. There are 139 wells within the 2 ½ mile radius of review. The nearest producing well is the Bruce No. 2. The No. 2 has the S Sand present but the sand has not been perforated.

The subject Frio reservoir has average porosity of 21% and average water saturation is 45%. The net pay thickness in the Bruce No. 1 is 8 feet. The Bruce No. 1 has not exhibited any decline in production thus far. Based on the performance of an analogous well, Prize estimate that the Bruce No. 1 will ultimately recover a minimum of 2.550 BCF. This equates to a drainage area of 229 acres.

Prize requests closer than normal spacing with the 320 acre density. There are at least 20 fields in the immediate area which operate under 320 acre rules with 467'-1,200' well spacing. There are many small lots in this area and the additional flexibility is necessary to locate wells without obtaining Rule 37 exceptions.

The Bruce No. 1 was classified as a gas well based on PVT analysis. At initial pressure, the reservoir is single phase gas. The dew point pressure is 6,111 psig. The gas-liquid ratio in the reservoir will fall below 100,000 cubic feet per barrel at approximately 5,000 psig. The PVT analysis shows that the maximum percentage of liquids in the reservoir is 11.3% at 964 psig. Prize believes that the abandonment pressure for the reservoir is 1,000 psig. Published literature supports Prize's opinion that this small percentage of retrograde liquid condensate is not mobile and will not be recovered as a liquid at the surface.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. The Bruce No. 1 was completed in November 2000 with perforations in the Frio S Sand between 12,438 feet and 12,462 feet.
3. The Bruce No. 1 is entitled to a new field designation.
 - a. The well had virgin pressure of 9,707 psi.
 - b. There is no comparable production within a 2 ½ mile radius.
4. Temporary rules providing for 320 acre density is appropriate for this field.

- a. The Bruce No. 1 will ultimately recover a minimum of 2.550 BCF of gas, assuming a 37% annual decline rate.
- b. The calculated drainage area for the well is 229 acres.
5. The requested 467'-1,200' well spacing rule will provide flexibility in locating wells at optimum locations in this area which consists of many small lots.
6. Allocation based on 100% acreage is a reasonable formula which meets statutory requirements for combining multiple stratigraphic intervals into a single field.
7. Cancellation of overproduction will not harm correlative rights.
8. The subject reservoir is a retrograde condensate reservoir with a dew point pressure of 6,111 psia.
9. The maximum percentage of hydrocarbon pore space occupied by retrograde liquid is 11.3% at a pressure of 964 psig. This liquid is not mobile.
11. Liquid hydrocarbons produced at the surface from this reservoir are the produce of condensation and should not be classified as crude petroleum oil or used in the determination of gas-oil ratio.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was issued.
2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
3. Approval of the requested new field designation, adoption of field rules and cancellation of overproduction will prevent waste, protect correlative rights and promote the orderly development of the field.
4. The Bruce No. 1 should be permanently classified as a gas well based on the definition of a gas well pursuant to Statewide Rule 79 (a) (11) (C).

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the new field designation, adoption of temporary field rules, cancellation of overproduction and permanent gas well classification for the Bruce No. 1.

Respectfully submitted,

Donna K. Chandler
Technical Examiner