

THE APPLICATION OF COBRA OIL & GAS CORPORATION TO ADOPT THE FIELD RULES FOR THE BIG SPRING, W. (PENN) FIELD, HOWARD COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E. on June 15, 2007

Appearances:

Jim Cowden
Rick Johnston

Representing:

Cobra Oil & Gas Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

The Big Spring, W. (Penn) Field currently operates under Special field rules adopted by Order No. 08-0215947 issued effective July 22, 1997 .

1. Designation of the field as the correlative interval from 9,037 feet to 9,298 feet as shown on the log of the Cobra Guitar 7 Well No. 1 :
2. Minimum well spacing of 467' from lease lines and 1,200' between wells on a lease/unit;
3. 80 acre units with a 40 acre tolerance for the last well on the lease; the maximum diagonal distance is 3,250', and,
4. Allocation is based on 100% acreage.

At the hearing Cobra Oil & Gas Corporation proposed the allocation formula remain unchanged and based on 100% acreage¹. Cobra requests that the following rules be adopted for the field :

1. Designation of the field as the correlative interval from 8,914 feet to 9,352 feet as shown on the log of the Cobra Oil & Gas Corporation's Guitar 7 Lease, Well No. 1 (API 42-227-34913), Howard County, Texas:
2. 467' - 660' well spacing for vertical wells;

For horizontal wells, lease line spacing rule shall be at least 100 feet from the penetration point and terminus of the horizontal drainhole to any property line.

¹ Notice of Hearing proposes an Allocation formula based on 95% deliverability and 5% per well. Request amended at hearing.

The distance measured perpendicular to a horizontal drainhole to a property line shall be at least 467 feet.

The minimum between well spacing rule for horizontal wells shall be 660 feet, provided that no between well spacing restrictions shall apply (i) between any horizontal drainhole well and any vertical well, or (ii) between the the drainholes of any horizontal drainhole wells within the first 200 feet or the last 200 feet of any horizontal drainhole well;

3. 80 acre units with a 40 acre tolerance for the last well on the lease; the maximum diagonal distance is 3,250', and,
4. Allocation is based on 100% acreage (No Change).

This application was unopposed and the examiner recommends that the field rules for the Big Spring, W. (Penn) Field be adopted as proposed by Cobra Oil & Gas Corporation.

DISCUSSION OF EVIDENCE

The Big Spring, W. (Penn) Field was discovered as an oil field in November 1994. The discovery well had an initial potential of 220 BOPD. The correlative interval from 8,914 feet to 9,352 feet is being expanded to include to top and bottom of the Penn formation. A total of 2 wells have been completed in the field with a cumulative production of 70,800 BO. The discovery well, the Guitar Costilla 5 Well No. 1 was plugged within one year after producing 16,460 BO. The Guitar 7 Well No. 1 is currently the only well in the field. The well has a cumulative production of 54,350 BO and currently produces at an approximate rate of 5 BOPD.

Cobra is planning to redevelop this oil field by drilling horizontal wells. The horizontal drainholes will maximize reservoir contact and will penetrate fractures within the Pennsylvanian Formation. Cobra requests 467' - 660' well spacing for vertical wells and no between well spacing for horizontal drainhole wells and any vertical well, or between the drainholes of two horizontal drainhole wells with in the first 200' or the last 200' of either horizontal well. The spacing request will provide flexibility in planning and placing the horizontal wells. Adoption of the amended rules will allow the development of additional reserves that would otherwise not be developed.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.

2. The Big Spring, W. (Penn) Field was discovered in November 1994 as an oil field and operates under Special Field Rules as adopted by Order No. 08-0215947 issued effective July 22, 1997.
3. Cobra Oil & Gas Corporation sole operator in the Big Spring, W. (Penn) Field. The only well in the field, the Guitar 7 No. 1 has a cumulative production of 54,350 BO and currently produces approximately 5 BOPD.
4. The Penn Formation is a mature, tight oil reservoir that is fractured and contains additional hydrocarbon accumulations that are not in communication.
5. In order to efficiently and effectively drain the reservoir, horizontal wells must be drilled. Horizontal drainholes will maximize reservoir contact and will penetrate fractures which contain additional hydrocarbon accumulations within the Penn Formation.
6. A 330' - 660' well spacing for vertical wells and no between well spacing for horizontal drainhole wells and any vertical well, or between the drainholes of two horizontal drainhole wells with in the first 200 feet or the last 200 feet of either horizontal well will provide flexibility in developing this field using horizontal drainhole wells.
7. Adoption of the amended rules will allow the development of additional hydrocarbon reserves that would otherwise not be developed.

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. Adopting the proposed field rules for the Big Spring, W. (Penn) Field is necessary to prevent waste, protect correlative rights and promote development of the field.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that the Commission adopt the field rules for the Big Spring, W. (Penn) Field as proposed by Cobra Oil & Gas Corporation.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Examiner