OIL AND GAS DOCKET NO. 08-0287470

THE APPLICATION OF SILVER HILL ENERGY PARTNERS LLC FOR A NEW FIELD DESIGNATION AND TO ADOPT TEMPORARY FIELD RULES FOR THE PROPOSED McGILLCUTTY (BRUSHY CANYON) FIELD, LOVING COUNTY, TEXAS

HEARD BY: Paul Dubois – Technical Examiner
Michael Crnich – Hearings Examiner

HEARING DATE: April 16, 2014

APPEARANCES: REPRESENTING:

APPLICANT:
Bill Spencer
Jim Clark

Silver Hill Energy Partners LLC

EXAMINERS’ REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the application of Silver Hill Energy Partners LLC (Silver Hill) for a new field designation and to adopt field rules for the McGillicutty (Brushy Canyon) Field (ID No. 59489 500) in Loving County, Texas. Silver Hill is requesting a suite of field rules commonly adopted to facilitate field development with horizontal or vertical wells. The examiners recommend that the proposed field rules be adopted on a temporary basis for a period of 18 months as requested by Silver Hill.

DISCUSSION OF THE EVIDENCE

Silver Hill completed its Rudd Draw 75-10 Well No. 1 (API No. 301-31984) on November 29, 2013. The well is about 15 miles northeast of Mentone, Loving County. The vertical well was drilled to a total depth of 9,145 feet and was perforated from 7,540 to 8,971 feet in the Brushy Canyon member of the Delaware Mountain Group. On initial potential testing the well produced by pumping 96 bbl of oil, 69 mcf gas, and 1,111 bbl of
water. The gas-oil ratio was 718 cf/bbl. The well was permitted in a wildcat field. Upon completion, Silver Hill filed a Form P-7 for a new field designation.

Through April 7, 2014, the well has produced 5,741 bbl oil, 8,615 mcf gas, and 81,259 bbl water. The well is producing on an electric submersible pump. Oil production is currently stable at about 30-40 bbl oil per day. The relatively flat decline oil curve causes difficulty in estimating ultimate recovery.

The Brushy Canyon is the lowest of three members of the Delaware Mountain Group (Bell Canyon is the upper member, and Cherry Canyon is the middle member). Silver Hill interprets the field correlative interval to be from a depth of 7,493 feet to 9,014 feet as shown on the Compensated Photo Density/Compensated Neutron with Gamma Ray log of the Rudd Draw 75-10 No. 1 discovery well. The Brushy Canyon is sandstone with inter-bedded siltstone and minor carbonates. Porosity ranges from 10 to 20 percent. The reservoir operates under a water drive mechanism, and permeability in the reservoir is highly variable. Measured bottom-hole pressure in the subject well was lower than expected, suggesting poor permeability in this well. The productive strata within the formation are relatively clean sandstone stratigraphic pinch-out traps that grade into siltstone. The Brushy Canyon sits unconformably on top of the Bone Springs Formation, whose carbonate matrix represents a lithology change.

The nearest production to the subject well is approximately one-half mile to the northeast. The Bold Energy LP Leiman 10 Well No. 1 (API No. 301-31197) was originally completed in 2004 as a gas well in the Kennedy, Bill (Atoka Strawn Cons) Field with a total depth of 17,507 feet. The well was plugged in 2007. In 2008 it was re-entered and re-completed as an oil well in the Haley, S. (Bone Springs) Field at a depth of 11,866 to 11,958 feet.

There is no production from the Brushy Canyon within 2.5 miles of the subject well. The nearest Brushy Canyon completion is about 8 miles from the subject well. There are eight fields within a 2.5 mile radius of the subject well. The Dimmit (Delaware Cons) Field is within this area, but it does not include the Brushy Canyon member, only the Bell Canyon and Cherry Canyon members. There are about 20 past and present completions within a 2.5 mile radius of the subject well. Again, none of these completions are in the Brushy Canyon.

The Collie (Delaware) Field is about 25 miles away from the subject well. The Collie (Delaware) Field includes all three members (Bell, Cherry, and Brushy Canyon). The Final Order in Oil & Gas Docket No. 08-0281323, effective May 24, 2013, established horizontal rules for wells completed in the field. The field rules Silver Hill is requesting for the McGillicutty (Brushy Canyon) Field are similar to those adopted for the Collie (Delaware) Field. Specifically, Silver Hill is requesting the following:
• Correlative interval from a depth of 7,493 feet to 9,014 feet;
• 467-foot lease line spacing and 933-foot between well spacing;
• For horizontal wells, dual lease line spacing provisions (467-foot perpendicular, and 200-foot first/last take points);
• Horizontal well provisions for no perforation zones, off-lease penetration points, and a 47-foot box rule;
• 80-acre proration units;
• A two-factor allocation formula for gas wells based on 5 percent per well and 95 percent deliverability;
• A two-factor allocation formula for oil wells based on 5 percent per well and 95 percent acreage; and
• Provisions for stacked lateral wells.

Silver Hill requests that these rules be adopted on a temporary basis for a period of 18 months.

**FINDINGS OF FACT**

1. Notice of this application and hearing was provided to all persons entitled to notice at least ten (10) days prior to the date of the hearing.

2. Silver Hill completed its Rudd Draw 75-10 Well No. 1 (API No. 301-31984) on November 29, 2013.
   a. The well is about 15 miles northeast of Mentone, Loving County.
   b. The vertical well was drilled to a total depth of 9,145 feet and was perforated from 7,540 to 8,971 feet in the Brushy Canyon member of the Delaware Mountain Group.
   c. On initial potential testing the well produced by pumping 96 bbl of oil, 69 mcf gas, and 1,111 bbl of water.
   d. The well has produced 5,741 bbl oil, 8,615 mcf gas, and 81,259 bbl water on an electric submersible pump. Oil production is currently
stable at about 30-40 bbl oil per day.

3. The Brushy Canyon is sandstone with inter-bedded siltstone, with minor carbonates.
   a. The Brushy Canyon member corresponds to the correlative interval from a depth of 7,493 feet to 9,014 in the Rudd Draw 75-10 Well No. 1.
   b. Porosity in the reservoir ranges from 10 to 20 percent.
   c. The reservoir operates under a water drive mechanism, and permeability in the reservoir is highly variable. Measured bottom-hole pressure in the subject well was lower than expected, suggesting poor permeability in this well.
   d. The productive strata within the formation are relatively clean sandstone stratigraphic pinch-out traps that grade into siltstone.

4. The nearest production to the subject well is approximately one-half mile to the northeast in the Haley, S. (Bone Springs) Field at a depth of 11,866 to 11,958 feet.

5. There is no production from the Brushy Canyon within 2.5 miles of the subject well. The nearest Brushy Canyon completion is about 8 miles from the subject well.

6. A new field designation for the McGillicutty (Brushy Canyon) Field is appropriate.

7. The Temporary Field Rules requested by Silver Hill will facilitate field development with horizontal or vertical wells.

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 and adoption of Field Rules for the McGillicutty (Brushy Canyon) Field will prevent waste, protect
correlative rights and promote the orderly development of the field.

**RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the new field designation and adopt Field Rules for the proposed McGillicutty (Brushy Canyon) Field, as requested by Silver Hill Energy Partners LLC.

Respectfully submitted,

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Technical Examiner

Michael Crnich  
Hearings Examiner