

APPLICATION OF PENN VIRGINIA OIL & GAS, LP TO AMEND THE FIELD RULES FOR THE WOODLAWN, SW. (COTTON VALLEY) FIELD, HARRISON COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E. on September 17, 2007

Appearances:

Bill Spencer
Jim Clark

Representing:

Penn Virginia Oil & Gas LP

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the unopposed application of Penn Virginia Oil & Gas LP to amend the field rules as adopted in Order No. 6-0241430, effective March 8, 2005, as amended, for the Woodlawn, SW. (Cotton Valley) Field that currently provide for the following:

1. The entire correlative interval from 8,620' to 10,265' as shown on the Dual Induction Focused Log of the Bachtell Oil & Gas Ltd, Sam B. Hall Gas Unit #2 Well No. 1, Jesse Robinson Survey, A-261, Harrison County, Texas should be designated as the Woodlawn, SW. (Cotton Valley) Field.
2. Minimum well spacing of 467'/1000';
3. 640 acre gas proration units with 10% tolerance and a maximum diagonal of 9,000' and optional 40 acre density with a maximum diagonal of 2,100'; and
4. 100% deliverability allocation formula. The allocation formula was suspended in 1995.

Penn Virginia Oil & Gas LP proposes the following:

1. No change

2. Minimum well spacing of 467'/500';
3. 640 acre gas proration units with 10% tolerance and optional 20 acre density, no proration unit plats be required as long as allocation formula is suspended and;
4. An allocation formula based on 95% deliverability and 5% per well. The allocation formula remain suspended.

During the hearing, Penn Virginia requested that the designated field interval remain unchanged.¹

The examiner recommends approval of the application.

DISCUSSION OF THE EVIDENCE

The Woodlawn, SW. (Cotton Valley) Field was discovered in 1977 at approximately 10,090' subsurface depth. Special field rules were adopted in 1979 and were last amended in 2005. The gas field is designated as a non-associated field with the allocation formula suspended. There are 11 operators and 27 wells in the field. The field has produced 6.3 BCF and 30,000 BC. The field currently produces 2.8 MMCFG and 32 BC per day or per well average of 103 MCF and 1.2 BC per day.

Penn Virginia believes that there is still unrecovered gas in the reservoir. Gas proration units of optional 20 acres should provide for the effective and efficient depletion of the reservoir. Penn Virginia performed drainage analysis on two wells, the Sam B. Hall Gas Unit 1, Well No. 1 and the Sam B. Hall Gas Unit 2, Well No. 1. Basic reservoir parameters are: porosity ranges from 9.5% - 12%, water saturation ranges from 28% - 30.0%; net pay ranges from 45' - 102'. The estimated ultimate recovery and calculated drainage area for the Sam B. Hall Gas Unit 1, Well No. 1 is 260 MMCF and 15 acres. The estimated ultimate recovery and calculated drainage area for the Sam B. Hall Gas Unit 2, Well No. 1 is 1.5 BCF and 27 acres.

Penn Virginia requests that the current between well spacing rule be reduced to 500' from the current 1,000'. The 500' between well spacing will allow greater flexibility in locating wells to recover hydrocarbon resources from the lenticular sands found in the Upper Cotton Valley.

Because the proposed designated intervals contains multiple sands, a two factor allocation formula is required by statute. Penn Virginia proposes that allocation be based on 95% deliverability and 5% per well. Penn Virginia requests that no proration plats be

¹ The Notice of Hearing listed a correlative interval for a different well in the field., the Sam B. Hall Gas Unit Well No. 1

required to be filed as acreage is not part of the allocation formula. This allocation formula is currently suspended and Penn Virginia requests continuation of this status as there is a market for 100% of the gas produced.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators of wells in the Woodlawn, SW. (Cotton Valley) Field at least ten days prior to the date of hearing.
2. The Woodlawn, SW. (Cotton Valley) Field was discovered in 1977 at a depth of 10,090'.
3. There are 11 operators and 27 wells in the field. Cumulative production from the field is about 6.3 BCF of gas and 30,000 BC. Current production rate is about 2.8 MMCFD.
4. The Woodlawn, SW. (Cotton Valley) Field is a non-associated gas field. Rules governing the gas wells provide for 467'-1,000' well spacing, 640/optional 40 acre density and 100% deliverability allocation. The allocation formula was suspended in 1995.
5. Gas proration units of optional 20 acres should provide for the effective and efficient depletion of the reservoir.
 - a. The estimated ultimate recovery and calculated drainage area for the Sam B. Hall Gas Unit 1, Well No. 1 is 260 MMCF and 15 acres.
 - b. The estimated ultimate recovery and calculated drainage area for the Sam B. Hall Gas Unit 2, Well No. 1 is 1.5 BCF and 27 acres.
6. The proposed minimum between well spacing of 500' will provide additional flexibility in locating wells in the field for 20 acre density.
7. Allocation based on 95% deliverability and 5% per well is a reasonable allocation formula which satisfies statutory requirements. The field is currently AOF status.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.
2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.

3. Consolidation of the proposed field interval and field rules as proposed by Penn Virginia Oil & Gas LP is necessary to prevent waste and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that field rules be amended for the Woodlawn, SW. (Cotton Valley) Field to reduce leaseline spacing, add 20 acre optional rules and amend the allocation formula. It is recommended that the allocation formula for the field remain suspended.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Hearings Examiner