

THE APPLICATION OF SHELL WESTERN E&P TO AMEND FIELD RULE NOS. 2 AND 3 FOR THE JAVELINA (VICKSBURG CONS.) FIELD, HIDALGO AND STARR COUNTIES, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

DATE OF HEARING: August 5, 2009

APPEARANCES:

George Zimmerman
Amanda A. Dasch
Jill Thompson
Dennis C. Visos

REPRESENTING:

Shell Western E&P

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field Rules for the Javelina (Vicksburg Cons.) Field were adopted in Final Order No. 04-0208198, effective May 2, 1995, as amended. The rules in effect for the field are summarized as follows:

1. Designation of the field as the correlative interval from 10,370 feet to 15,880 feet (Top of the Eocene) as shown on the composite log based on the logs of the Shell Western E&P - W.J. Davis Lease, Well No. 11, and W.J. Davis "A" Lease, Well No. 2, Hidalgo County School Land Survey, A-227, Hidalgo County, Texas;
2. 467' - 933' well spacing;
3. 320 acre gas units with optional 40 acre density;
4. Allocation based on 95% deliverability and 5% per well with 100% AOF status.

Shell Western E&P ("Shell") requests that the Field Rules be amended to provide for 330' lease line spacing with no minimum between well spacing and 40 acre gas units with optional 20 acre density. Shell also requests that the filing of P-15's and plats not be required as long as the field is 100% AOF and the allocation formula in the field remain suspended.

This application was unopposed and the examiner recommends that the field rules be amended as proposed by Shell and the allocation formula in the field remain suspended.

DISCUSSION OF EVIDENCE

The Javelina (Vicksburg Cons.) Field was created in May 1995 when twenty two separate Vicksburg fields were consolidated. There are 169 wells carried on the gas proration schedule. The field is classified as a non-associated gas field and the allocation formula is currently suspended. Shell operates 75% of the wells and there are four other operators in the field. Although the cumulative production for the consolidated field through June 2009 is 432 BCFG and 7.5 MMBC, the Shell operated wells are producing 56 MMCFGPD and have a cumulative production of 572 BCFG.

The Javelina (Vicksburg Cons.) Field occurs as a series of stacked sandstone gas reservoirs of Oligocene age that occur in the Lower Vicksburg formation. The area of the field is laterally dissected by a series of North-South striking faults. Vertically, the field interval consists of several different correlatable sand packages that Shell has identified as the Vicksburg U, V, W, X, Y, Z and ZZ sands. All of the sands have similar log responses and petro-physical properties and are over-pressured, depletion drive reservoirs.

Within each of the separate sand packages the pay quality rock can vary in net thickness from just a few feet to over 100 feet. Furthermore, recent 3-D seismic studies suggest that there are small antithetic faults which are not easily identifiable when correlating well logs. Shell believes that these small faults tend to further compartmentalize the pay quality rock into reservoirs making it necessary to drill infill wells to maximize recovery.

For the consolidation hearing, Shell calculated volumetrically equivalent drainage areas for each of the current producing wells. Drainage areas ranged from 4 acres up to 261 acres. Shell has already drilled four 20 acre infill wells with Rule 37 and 38 exceptions and encountered virgin bottomhole pressures in each well. As a result, Shell believes that infill drilling on 20 acres will significantly improve recovery from the reservoirs and thereby prevent waste. The proposed 330' lease line spacing with no minimum spacing between wells will provide operators in the field the additional flexibility needed to drill wells at optimum locations without requiring Rule 37 Exceptions.

Shell requests that the filing of P-15's and plats not be required, as long as the field has 100% AOF status. Since the allocation formula is suspended, this request will eliminate unnecessary paperwork. Shell also requests that G-10 tests continue to be required on an annual basis instead of semi-annually, as required by Rule 28.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The Javelina (Vicksburg Cons.) Field was created in May 1995 when twenty two separate Vicksburg fields were consolidated.
3. There are 169 wells carried on the gas proration schedule. The field is classified as a non-associated gas field and the allocation formula is currently suspended.
4. The Javelina (Vicksburg Cons.) Field occurs as a series of stacked sandstone gas reservoirs of Oligocene age that occur in the Lower Vicksburg formation. The area of the field is laterally dissected by a series of North-South striking faults.
5. Recent 3-D seismic studies suggest that there are small antithetic faults which are not easily identifiable when correlating well logs. Shell believes that these small faults tend to further compartmentalize the pay quality rock into reservoirs making it necessary to drill infill wells to maximize recovery.
6. Drainage areas range from 4 acres up to 261 acres. Shell has already drilled four 20 acre infill wells with Rule 37 and 38 exceptions and encountered virgin bottomhole pressures in each well.
7. Shell believes that infill drilling on 20 acres will significantly improve recovery from the reservoirs and thereby prevent waste.
8. The proposed 330' lease line spacing with no minimum spacing between wells will provide operators in the field the additional flexibility needed to drill wells at optimum locations without requiring Rule 37 Exceptions.
9. Continued suspension of the allocation formula is appropriate, as there is a 100% market for all the gas produced.

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. Amending Field Rule Nos. 2 and 3 for the Javelina (Vicksburg Cons.) Field as proposed by Shell Western E&P is necessary to prevent waste, protect correlative rights and promote development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends that Field Rule Nos. 2 and 3 for the Javelina (Vicksburg Cons.) Field be amended as proposed by Shell Western E&P and that the allocation formula in the field remain suspended.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner