

**THE APPLICATION OF SHELL WESTERN E & P TO CONSIDER FIELD  
CONSOLIDATION AND FIELD RULES FOR THE PROPOSED MCALLEN RANCH  
(VKSBG L-V,N CONS) FIELD, HIDALGO COUNTY, TEXAS**

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**Heard by:** Donna K. Chandler, Technical Hearings Examiner

**Hearing Date:** December 6, 2000

**Appearances:**

George Zimmerman  
Debasish Sihi  
Berton Coxe

**Representing:**

Shell Western E & P

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Shell Western E & P requests that the following three McAllen Ranch fields be consolidated into a new field called the McAllen Ranch (Vksbg L-V,N Cons) Field.

McAllen Ranch (Vicksburg L) Field  
McAllen Ranch (Vicksburg L,R-1) Field  
McAllen Ranch (Vksbg. S-T-U, N.) Field

Shell also requests that the following rules be adopted for the McAllen Ranch (Vksbg L-V,N Cons) Field:

1. Designation of the field as the correlative interval between 11,120 feet and 14,400 feet as shown on the log of the A. A. McAllen "B" Well No. 11;
2. 467'-933' well spacing;
3. 80 acre density plus 10% tolerance and a maximum diagonal of 3,250 feet; optional 40 acre density with a maximum diagonal of 2,100 feet;
4. Allocation based on 95% deliverability and 5% acreage.

Shell also requests that the allocation formula for the consolidated field be suspended.

This application was unopposed and the examiner recommends approval of the field consolidation and field rules.

### **DISCUSSION OF THE EVIDENCE**

The McAllen Ranch (Vicksburg L) Field was discovered in 1962 at a depth of approximately 9,380 feet. There are currently no producing wells in this non-associated gas field. Rules in effect for the field provide for 467'-1,200' well spacing and 160 acre density.

The McAllen Ranch (Vicksburg L,R-1) Field is a non-associated gas field which was created on April 25, 1994 by Final Order No. 04-0204177. Seven fields were consolidated to form the field. There are currently 25 wells carried in the field. Rules in effect for the field provide for 467'-1,200' well spacing and 160/optional 80 acre units.

The McAllen Ranch (S-T-U, N.) Field is a non-associated gas field which was created on March 19, 1990 by Final Order No. 4-94,240. Four fields were consolidated to form this field. There are currently 41 wells carried in this field. Rules in effect for this field provide for 467'-1,200' well spacing and 80 acre units.

The proposed consolidated field will include the three named fields as well as the Vicksburg V interval which has not been designated as a Commission field. The rock and fluid properties of all four of the intervals are similar. Porosities range from 16-17% and permeabilities are 0.05 md. or less. All are tight reservoirs with depletion drives. The Commission has previously approved numerous Rule 10 exceptions for the various fields since 1990.

Shell calculated drainage areas for 30 wells which have produced from the various fields to be consolidated. Estimated ultimate recoveries range from less than 1 BCF to 14 BCF. The calculated drainage areas for the 30 wells range from almost 200 acres down to 24 acres, with an average of 68 acres. By consolidating the fields, Shell estimates that additional reserves of 40 BCF can be recovered as a result of producing otherwise non-commercial intervals.

Because the consolidated field will have multiple, lenticular accumulations of hydrocarbons, a two factor allocation formula is required. Shell proposes that allocation in the consolidated field be based on 95% deliverability and 5% acreage.

Shell also requests that the allocation formula in the consolidated field be suspended. The two fields which have producing wells are AOF status currently.

**FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. The McAllen Ranch (Vicksburg L) Field is a non-associated gas field with no producing wells. This field operates under rules providing for 467'-1,200' well spacing and 160 acre density.
3. The McAllen Ranch (Vicksburg L,R-1) Field is a non-associated gas field which was created in 1994 by consolidation of seven fields. There are currently 25 wells carried in the field and the field operates under rules providing for 467'-1,200' well spacing and 160/optional 80 acre units.
4. The McAllen Ranch (S-T-U, N.) Field is a non-associated gas field which was created in 1990 by consolidation of four fields. There are currently 41 wells carried in this field and the field operates under rules providing for 467'-1,200' well spacing and 80 acre units.
5. The Vicksburg V interval is a Wildcat field which has not been designated as a Commission field.
6. The rock and fluid properties of all four of the intervals are similar. All are tight reservoirs with depletion drives.
7. The Commission has previously approved numerous Rule 10 exceptions for the various fields since 1990.
8. A density rule providing for 80 acre density with 40 acre options is appropriate for the consolidated field. Calculated drainage areas for 30 wells studied range from almost 200 acres down to 24 acres, with an average of 68 acres.
9. Consolidation of the fields will result in the recovery of approximately 40 BCF which would otherwise not be recovered.
10. Allocation based on 95% deliverability and 5% acreage in the McAllen Ranch (Vksbg L-V, N Cons) Field meets the statutory requirements.
11. Suspension of the allocation formula in the McAllen Ranch (Vksbg L-V, N Cons) Field is appropriate pursuant to Rule 31.

**CONCLUSIONS OF LAW**

1. Proper notice was given as required by all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction to decide this matter.
3. The proposed field consolidation and field rules will prevent waste and protect correlative rights.
4. The subject field meets all the criteria established for suspension of the allocation formula under Statewide Rule 31(j).

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the three fields be consolidated into the McAllen Ranch (Vksbg L-V,N Cons) Field and that the rules proposed by Shell be adopted for the field, including suspension of the allocation formula for the consolidated field.

Respectfully submitted,

Donna K. Chandler  
Technical Hearings Examiner