

APPLICATION OF FOREST OIL CORPORATION TO CONSOLIDATE VARIOUS GILMER (COTTON VALLEY) FIELDS INTO THE GILMER (COTTON VALLEY SANDS) FIELD AND TO CONSOLIDATE VARIOUS GILMER (JURASSIC) FIELDS INTO THE GILMER (JURASSIC) FIELD AND TO ADOPT FIELD RULES FOR BOTH THE GILMER (COTTON VALLEY SANDS) FIELD AND THE GILMER (JURASSIC) FIELD , UPSHUR COUNTY, TEXAS

HEARD BY: Andres J. Trevino, P.E.

DATE OF HEARING: November 3, 2010

APPEARANCES:

Michael McElroy
Rick Johnston

John Soule

Glenn E. Johnson
Buddy Richter, P.E.

REPRESENTING:

Forest Oil Corporation

Sulphur River Exploration

CW Resources, Inc.

EXAMINER'S REPORT AND RECOMMENDATION
STATEMENT OF THE CASE

This is the unprotested application of Forest Oil Corporation for the Commission to consider consolidation of the Gilmer (Bossier Sand), Gilmer, N.E. (Cotton Valley) and Wilkins, N. (Cotton Valley Sand) Fields into the Gilmer (Cotton Valley Sands) Field and to consolidate the Gilmer, S. (Cotton Valley), Gilmer, S. (Cotton Valley, Up), Mings Chapel (Cotton Valley LM), Wilkins, N. (Haynesville) and Gilmer (Cotton Valley) Fields into the Gilmer (Jurassic) Field located in Upshur County, Texas.

Forest Oil Corporation requests that the following rules be adopted for the consolidated fields:

1. Designated interval for the Gilmer (Cotton Valley Sands) Field is from 9,185' to 11,640' as shown on the Dual Induction log of the Sulphur River Exploration, Indian Rock GU12, Well No. 1,
Designated interval for the Gilmer (Jurassic) Field is from 11,640' to 13,055' as shown on the Dual Induction log of the Sulphur River Exploration, Indian Rock GU12, Well No. 1;
2. Well spacing a minimum of 467 feet from lease lines and 660 between-well spacing, no minimum between well spacing for vertical to horizontal wells,

take point language, off lease penetration, 50 foot drill box rule;

3. 640 acre unit density plus 10% tolerance, optional 40 acre units for gas wells, 40 acre oil units, no proration plats required while the allocation formula remains suspended;
4. Allocation based 90% deliverability and 10% acreage, allocation formula remains suspended.

Originally, Forest had requested to consolidate all fields into the Gilmer (Cotton Valley) Field. CW Resources was opposed as it would require the entire field interval to be classified as “sour” and make all operators to comply with Rule 36. Forest compromised by consolidating the fields into a “sweet” field, the Gilmer (Cotton Valley Sands) Field and a “sour” field, the Gilmer (Jurassic) Field. It is also proposed that the a Blanket Rule 10 exception to commingle the Gilmer (Cotton Valley Sands) Field and the Gilmer (Jurassic) Field. The examiner recommends approval of the proposed consolidation and proposed rules.

DISCUSSION OF THE EVIDENCE

Forest Oil proposes the ten fields be consolidated into two fields, the Gilmer (Cotton Valley Sands) Field for fields that are classified as sweet and the Gilmer (Jurassic) Field for fields that are classified as sour. The separation of the fields by whether sour gas is produced prevents the unnecessary compliance of Rule 36 by operators only producing sweet gas. The ten fields have grown together and wells are intermingled with wells from other Gilmer Cotton Valley fields. Well density and spacing rules vary from field to field making horizontal well development difficult in the area. Forest proposes similar rules for both fields as it anticipates horizontal well development for both fields. The primary targets for horizontal development include the Taylor Sands (sweet) and the Cotton Valley Lime (sour).

The two fields will be identified based on the depth of the completed interval. The formations that produce the sweet gas includes the Cotton Valley sands and the Bossier sands. The designated interval from 9,185 to 11,640 feet as shown on the log of the Sulphur River Exploration, Indian Rock GU12, Well No. 1 includes the Upper Cotton Valley, the Taylor Sands and the Bossier Sands. These zones produce sweet gas. The Gilmer (Bossier Sand), Gilmer, N.E. (Cotton Valley), Wilkins, N. (Cotton Valley Sand) Fields and the Gilmer (Cotton Valley Sands) Field produce from these sweet gas zones and will be consolidated into the Gilmer (Cotton Valley Sands) Field.

The formations that produce the sour gas includes the Cotton Valley Lime, the Jurassic, the Smackover and the Haynesville Shale. The designated interval from 11,640 to 13,055 feet as shown on the log of the Sulphur River Exploration, Indian Rock GU12, Well No. 1 includes the Cotton Valley Lime, the Jurassic, the Smackover and the Haynesville Shale. These zones produce sour gas. The Gilmer, S. (Cotton Valley), Gilmer,

S. (Cotton Valley, Up), Mings Chapel (Cotton Valley LM), Wilkins, N. (Haynesville), Gilmer (Cotton Valley) Fields and the Gilmer (Jurassic) Field produce from these sour gas zones and will be consolidated into the Gilmer (Jurassic) Field. Consolidation will prevent waste by extending the economic life of all zones. Waste will be prevented by encouraging new drilling and recompletion of existing wells.

The Gilmer (Bossier Sand), Gilmer, N.E. (Cotton Valley), Wilkins, N. (Cotton Valley Sand) Fields and the Gilmer (Cotton Valley Sands) Fields were discovered beginning in 1979 at a depth of 10,804' subsurface depth. All fields are non-associated fields except the Gilmer (Bossier Sand) Field is an associated field with one oil well. None of the fields are classified as sour gas fields. The fields are governed by Statewide field rules except for the Gilmer (Bossier Sand) Field has special rules with 640 acre density with 320 optional units. There are 30 active gas wells and one oil well in the fields. The fields have cumulative production of 19.6 BCF of gas. The Gilmer (Cotton Valley Sands) Field is the predominant field with 18 active gas well completions.

The Gilmer, S. (Cotton Valley), Gilmer, S. (Cotton Valley, Up), Mings Chapel (Cotton Valley LM), Wilkins, N. (Haynesville), Gilmer (Cotton Valley) Fields and the Gilmer (Jurassic) Fields were discovered beginning in 1964 at a depth of 11,657' subsurface depth. All fields are non-associated fields except the Gilmer, S. (Cotton Valley) Field is an associated field with one oil well. All of the fields are classified as sour gas fields. The fields are governed by Statewide field rules or Special rules with 640 acre density with 160 optional units. There are 197 active gas wells and one oil well in the fields. The fields have cumulative production of 467.6 BCF of gas. The Gilmer (Jurassic) Field is the predominant field with 102 active gas well completions.

Forest requests both fields adopt identical field rules, except for the designated interval. The well density for the consolidated fields will be 640 acre density with optional 40 acre units and 40 acre oil units. The well spacing of 467'/660' (leaseline/between well) and 0' between vertical and horizontal wells will allow the flexible placement of new wells between existing wells.

Forest requests several standard horizontal well provisions commonly adopted when horizontal well development is anticipated. The provisions include take point language to allow flexible drilling of the laterals and off-lease penetration to allow the additional recovery of reserves by allowing the lateral to be horizontal at a legal lease line location. An additional stage frac could be placed on each lateral if off lease penetration is allowed. Forest proposes a 50 foot "box rule" for horizontal drainhole wells that would allow drainholes to deviate 50 feet from either side of their permitted track without the necessity of obtaining a Statewide Rule 37 exception.

The fields proposed for consolidation overlap each other and currently production is being commingled with each other. The fields are in mid to late stages of production. There currently are 34 wells which have Rule 10 commingling exceptions approved. Many of these commingling permits involve wells completed in both the sweet and sour gas

completions. There has been no adverse effect caused by commingling the sweet fields with the sour fields. Forest request a Blanket Rule 10 exception for any operator to commingle the Gilmer (Cotton Valley Sands) Field and the Gilmer (Jurassic) Field together.

Because the proposed designated intervals contains multiple sands, a two factor allocation formula is required by statute. Forest proposes that allocation be based on 90% deliverability and 10% acreage. This allocation formula is currently suspended for all fields and Forest requests continuation of this status. Forest additionally requests that the filing of proration plats not be required while the allocation formula remains suspended.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing.
2. There was no protest at the call of the hearing.
3. The Gilmer (Bossier Sand), Gilmer, N.E. (Cotton Valley), Wilkins, N. (Cotton Valley Sand) Fields and the Gilmer (Cotton Valley Sands) Fields were discovered beginning in 1979 at a depth of 10,804' subsurface depth.
 - a. The fields are governed by Statewide field rules except for the Gilmer (Bossier Sand) Field that has Special Rules allowing 640 acre density with optional 320 acres.
 - b. All fields produce sweet gas. All fields are non-associated gas fields except for the Gilmer (Bossier Sand) Field which is an associated field with one oil well.
 - c. Cumulative production from the fields is 19.6 BCF of gas.
 - d. There are 30 active gas wells and one oil well in the fields.
 - e. The Gilmer (Cotton Valley Sands) Field is the predominant field with 18 active gas well completions.
4. The Gilmer, S. (Cotton Valley), Gilmer, S. (Cotton Valley, Up), Mings Chapel (Cotton Valley LM), Wilkins, N. (Haynesville), Gilmer (Cotton Valley) Fields and the Gilmer (Jurassic) Fields were discovered beginning in 1964 at a depth of 11,657' subsurface depth.
 - a. The fields are governed by Statewide and Special field rules allowing between 640 acre density to 40 acre density.

- b. All fields produce sour gas. All fields are non-associated gas fields except for the Gilmer, S. (Cotton Valley) Field which is an associated field with one oil well.
 - c. Cumulative production from the fields is 467.6 BCF of gas.
 - d. There are 197 active gas wells and one oil well in the fields.
 - e. The Gilmer (Jurassic) Field is the predominant field with 102 active gas well completions.
5. The designated interval for the Gilmer (Cotton Valley Sands) Field from 9,185 to 11,640 feet as shown on the log of the Sulphur River Exploration, Indian Rock GU12, Well No. 1 includes the Upper Cotton Valley, the Taylor Sands and the Bossier Sands. These zones produce sweet gas.
 6. The designated interval for the Gilmer (Jurassic) Field from 11,640 to 13,055 feet as shown on the log of the Sulphur River Exploration, Indian Rock GU12, Well No. 1 includes the Cotton Valley Lime, the Jurassic, the Smackover and the Haynesville Shale. These zones produce sour gas.
 7. The proposed 640 acre density with optional 40 acre gas units and 40 acre oil units and well spacing of 467'/660' (lease line/between well) with 0' between vertical and horizontal wells for the consolidated fields will allow the flexible placement of new wells between existing wells.
 8. The proposed horizontal provisions are similar to horizontal provisions commonly adopted when horizontal well development is anticipated. The provisions include take point language to allow flexible drilling of the laterals and off-lease penetration, a 50 foot "box rule" for horizontal drainhole wells that would allow drainholes to deviate 50 feet from either side of their permitted track.
 9. There are over 34 Rule 10 commingling exceptions approved between the various fields, including between sweet gas fields and sour gas fields without any adverse effects.
 10. The proposed field consolidations will encourage horizontal development, recovery of additional reserves and remove the burden on operators and Commission staff of processing unnecessary Rule 10 exceptions.
 11. Allocation based on 90% deliverability and 10% acreage is a reasonable allocation formula which satisfies statutory requirements.
 12. Continuation of the administrative suspension of the allocation formula for the proposed field is appropriate as there was no protest to the continuation presented

at this hearing and there is 100% market demand for gas in the field.

CONCLUSIONS OF LAW

1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Consideration of field rules, a determination of their effectiveness and appropriate actions is a matter within the Commission jurisdiction.
4. Consolidation of fields and adoption of the proposed field rules will prevent waste, foster conservation and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the field consolidations, Blanket Rule 10 exception and field rules for Gilmer (Cotton Valley Sands) Field and the Gilmer (Jurassic) Field.

Respectfully submitted,

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