

**THE APPLICATION OF CHAPARRAL ENERGY LLC FOR BLANKET STATEWIDE  
RULE 10 AUTHORITY FOR ALL WELLS IN THE TUNSTILL, TUNSTILL (CHERRY  
CANYON -F-), TUNSTILL (OLDS), AND CHAPARRAL DRAW (OLDS) FIELDS IN  
REEVES AND LOVING COUNTIES, TEXAS**

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**HEARD BY:** Brian K. Fancher- Technical Examiner

**HEARING DATE:** October 21, 2011

**APPEARANCES:**

**REPRESENTING:**

**APPLICANT:**

Doug Dashiell  
Jason Elkin  
Warren Cadwell

Chaparral Energy, LLC

**EXAMINER'S REPORT AND RECOMMENDATION**  
**STATEMENT OF THE CASE**

Chaparral Energy, LLC ("Chaparral") requests Blanket Statewide Rule 10 Authority for any well in the following four fields:

<b><u>FIELD NAME</u></b>	<b><u>FIELD NUMBER</u></b>
Tunstill	91817 001
Tunstill (Cherry Canyon -F-)	91817 075
Tunstill (Olds)	91817 750
Chaparral Draw (Olds)	17001 260

Further, Chaparral requests that the operator be granted the authority to select the proper field of assignment among any of the fields down-hole commingled, as all wells may not be commingled in all fields.

This application was unopposed and the examiner recommends approval of the Blanket Statewide Rule 10 Authority for the four subject fields, as requested by Chaparral.

### DISCUSSION OF THE EVIDENCE

The four subject fields were discovered beginning with the Tunstill Field in 1947. The most recently discovered field, the Chaparral Draw (Olds) Field, was discovered in 2005. The Tunstill (Cherry Canyon -F-) and Chaparral Draw (Olds) are classified as associated fields, while the Tunstill and Tunstill (Olds) Fields are classified as oil fields. Currently, there are multiple operators listed among the four subject fields, with Chaparral operating the largest number of wells. Chaparral has previously applied for and received a Blanket Rule 10 authority for five wells currently producing from the Tunstill and Tunstill (Cherry Canyon -F-) Fields simultaneously. The applicant testified that if approved, this application will be the initial exception to Statewide Rule 10 for all four of the subject fields to be produced from a single wellbore.

Chaparral indicated the four subject fields are located within the Delaware Basin in Reeves and Loving Counties and produce from Permian-aged strata. Stratigraphically, the fields occur from youngest to oldest in age such that the Tunstill, Tunstill (Olds), and Chaparral Draw (Olds) produce from the Ramsey/Olds formation, and the Tunstill (Cherry Canyon -F-) produces from the Cherry Canyon formation.

Chaparral indicated that prior to the hearing, three produced water samples were collected from three separate wells completed in a different field, but being one of the four subject fields, and were tested for specific physical and chemical properties pertaining to water quality. The applicant testified the results of the laboratory tests indicated the three separate types of produced water contain similar concentrations of material in solution and/or suspension. The results further confirmed the individual fluids are compatible when combined and should not produce scaling adverse to one another. A representative of Chaparral testified that if scaling becomes an issue, scaling inhibitors will be used as necessary.

Chaparral opined that the current shut-in bottom-hole pressure (BHP) in the Cherry Canyon -F- reservoir is equivalent to 2,000 psia and the BHP for the three other reservoirs, situated stratigraphically above the Cherry Canyon -F-, report approximately 1,400 psia. Chaparral indicated that a pressure differential of 600 psia exists between the aforementioned reservoirs. However, Chaparral does not anticipate any cross-flow to occur while the wells are producing, as all of the wells will produce through artificial lift. In addition, any cross-flow which may occur will not cause reservoir damage due to the similar fluid types recorded from the laboratory test results.

Chaparral testified it is ultimately requesting the down-hole commingling of the four subject fields due to the economic limits each individual field provides. The applicant opined it would be economically prohibitive to dually produce any of the fields through separate tubing strings in the same well-bore. Chaparral further elucidated that upon commingling the subject fields, each separate field should be able to contribute production to it's respective individual economic limitation. Chaparral estimates that incremental reserves as a result of commingling are 10,700 BO and 21,400 MCF at five percent (5%) production

decline from 3 BOPD to 1.5 BOPD. This additional recovery is a result of a lower combined economic limit. Chaparral indicated it's plans to further develop the field by drilling additional wells in the future. It is requested that the commingled wells be assigned to the field selected by the operator, as all wells may not be commingled in all fields.

### **FINDINGS OF FACT**

1. Notice of this hearing was issued to all operators in the nine subject fields.
2. The four subject fields were discovered beginning with the Tunstill Field in 1947. The Chaparral Draw (Olds) was discovered in 2005.
3. Chaparral has received a Blanket Rule 10 authority for five wells currently producing from the Tunstill and Tunstill (Cherry Canyon -F-) Fields.
4. The four subject fields are located within the Delaware Basin in Reeves and Loving Counties and produce from Permian-aged strata.
5. Stratigraphically, the fields occur from youngest to oldest in age such that the Tunstill, Tunstill (Olds), and Chaparral Draw (Olds) produce from the Ramsey/Olds formations, and the Tunstill (Cherry Canyon -F-) produces from the Cherry Canyon formation.
6. Produced water from the individual fields contain similar concentrations of scaling material.
7. Cross-flow between the fields is not expected because wells will be producing through artificial lift.
8. It would be economically prohibitive to dually produce any of the fields through separate tubing strings in the same well-bore.
9. Incremental reserves will occur as a result of commingling and produce an additional 10,700 BO and 21,400 MCF at five percent (5%) production decline from 3 BOPD to 1.5 BOPD.

### **CONCLUSIONS OF LAW**

1. Proper notice was issued as required by all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Approval of the requested Blanket Rule 10 Authority for the four subject fields will prevent waste, will not harm correlative rights, and will promote development of the four fields.

**EXAMINER'S RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission approve the Blanket Rule 10 Authority for the four subject fields, as requested by Chaparral Energy, LLC.

Respectfully submitted,

Brian K. Fancher  
Technical Examiner