RAILROAD COMMISSION OF TEXAS
OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET FOR THE TOYAH, NW (SHALE) FIELD,
NO. 08-0271001 REEVES AND CULBERSON
COUNTIES, TEXAS

FINAL ORDER

The Railroad Commission of Texas has received and docketed this application for a high cost/tight gas formation designation pursuant to 16 TAC §3.101, after hearing held on June 29, 2011 makes the following findings of fact and conclusions of law:

FINDINGS OF FACT

1. Chesapeake Operating, Inc. (P-5 Operator No. 147715) requests a Railroad Commission of Texas certification that wells completed in the Toyah, NW (Shale) Field (Field No. 90890700), Balmorhea (Woodford) Field (Field No. 05346503) and certain Wildcat Delaware Shale fields in Reeves and Culberson Counties, Texas, are completed in a high-cost / tight-gas formation pursuant to Statewide Rule 101.

2. Notice of the application was provided to all affected parties at least 21 days prior to the Commission review. No protests or comments were filed in response to this application.

3. The top of the applied for Delaware Shale formation is found at an average depth of 10,818 feet and is found within the correlative geologic interval from 11,978 feet to 13,040 feet as shown on the log of the Petro-Hunt, LLC Block 59 State 35 Well No. 1H (API No. 42-389-32371), Hearing Exhibit No. 2.

4. The proposed correlative interval for the field, within the requested area of the application, meets the Railroad Commission Statewide Rule 101 guidelines for a high cost/tight gas formation.
   a. 16 TAC §3.101(f)(3)(B) specifies that the in-situ horizontal permeability should not exceed 0.1 millidarcies, as determined by geometric mean or median methodology, in order to qualify as a high cost/tight gas formation.
   b. The proposed Delaware Shale formation tight gas interval averages 1,131 feet in gross thickness within the requested tight gas area; the average formation in-situ permeability is 0.0032 millidarcies;
   c. 16 TAC §3.101(f)(3)(B) specifies that the stabilized, pre-stimulation producing rate against atmospheric pressure, as determined by geometric-mean or median methodology, must not be expected to exceed 5 BOPD
crude oil and 802 MSCF per day for vertical wells completed in the subject field interval.

d. The calculated pre-stimulation stabilized absolute open flow rate for requested tight gas area is 188 MSCF per day; wells completed in the subject field and located within the proposed area are not expected to produce more than 5 BOPD crude oil prior to stimulation.

CONCLUSIONS OF LAW

1. Proper notice was issued to all affected persons as required by the applicable codes and regulatory statutes.

2. The Railroad Commission of Texas is the appropriate agency to make a determination concerning a high cost/tight gas formation certification pursuant to 16 TAC §3.101.

3. The area recognized in the application is considered to be a tight formation designation for State Severance Tax purposes and the Commission determines that wells completed in the Delaware Shale formation within said area are producing from a high cost/tight gas formation.

4. Gas produced from the wells completed in the Toyah, NW (Shale) Field (Field No. 90890700), Balmorhea (Woodford) Field (Field No. 05346503) and certain Wildcat Delaware Shale fields in Reeves and Culberson Counties, Texas, is a high cost/tight formation gas pursuant to 16 TAC §3.101.

Therefore, it is ORDERED by the Railroad Commission of Texas that effective September 13, 2011, the application of Chesapeake Operating, Inc. for the Commission's certification that the Toyah, NW (Shale) Field (Field No. 90890700), Balmorhea (Woodford) Field (Field No. 05346503) and certain Wildcat Delaware Shale fields within the correlative geologic Delaware Shale interval defined from 11,978 feet to 13,040 feet as shown on the log of the Petro-Hunt, LLC Block 59 State 35 Well No. 1H (API No. 42-389-32371) in Reeves and Culberson Counties, Texas, is a tight gas formation and therefore produces high cost gas pursuant to 16 TAC §3.101, be and it is hereby approved. All wells shall be completed in a Commission designated field prior to any filings pursuant to this order.

Done this 13th day of September, 2011.

RAILROAD COMMISSION OF TEXAS

Approved and signatures affixed by O&G Unprotested Master Order dated September 13, 2011)