

**RAILROAD COMMISSION OF TEXAS  
OFFICE OF GENERAL COUNSEL  
HEARINGS SECTION**

**OIL & GAS DOCKET  
NO. 09-0262139**

**IN THE NEWARK, EAST (BARNETT  
SHALE), FIELD, DALLAS AND ELLIS  
COUNTIES, TEXAS**

**FINAL ORDER**

After statutory notice in the above-numbered docket heard on August 6, 2009, the Railroad Commission of Texas 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 a portion of the Newark, East (Barnett Shale) Field (Field No. 65280-200) in Dallas and Ellis 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 Barnett Shale formation at an average depth of 8,697 feet is found within the correlative geologic interval from 9,266 feet to 9,650 feet TVD (9,353 feet to 9,736 feet MD) as shown on the log of the Chesapeake Operating, Inc. - Campbell Lease, Well No. 1H (API No. 42-113-30119), in the Newark, East (Barnett Shale) Field (Field No. 65280-200), Dallas County, Texas, shown on Exhibit No. 5.
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 Barnett Shale tight gas interval averages 240 feet in gross thickness within Somervell and Bosque Counties; fifteen (15) wells have penetrated, tested and/or produced from the proposed tight gas interval within the requested area; formation in-situ permeability was calculated for the wells from analysis of single point flow data tests; the average calculated formation permeability is 0.003 millidarcies; the calculated formation in-situ permeability for the data-point wells is less than the 0.1 millidarcies limit imposed by 16 TAC §3.101(f)(3)(B).

- 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 449 MCFGPD for vertical wells completed in the subject field interval.
5. The average calculated pre-stimulation stabilized absolute open flow rate for the wells completed in the requested field interval is 19 MCFGPD; the stabilized absolute open flow rate for the wells were calculated using a modified Darcy Radial Flow equation, the net feet of vertical pay at the respective well locations and the calculated in-situ permeability value; wells completed in the subject field and located within the proposed area are not expected to produce more than 5 BOPD crude oil and 449 MCFGPD 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 proposed portions of the Newark, East (Barnett Shale) Field (Field No. 65280-200), within Dallas and Ellis Counties, comply with the provisions of 16 TAC §3.101(f)(3)(B) and the Commission determines that wells completed in the subject field within said area are producing from a high cost/tight gas formation.
4. Gas produced from the wells completed in the Newark, East (Barnett Shale) Field (Field No. 65280-200), located within Dallas and Ellis Counties, 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 9, 2009, the application of Chesapeake Operating, Inc. for the Commission's certification that the Barnett Shale formation within the correlative geologic interval from 9,266 feet to 9,650 feet TVD (9,353 feet to 9,736 feet MD) as shown on the log of the Chesapeake Operating, Inc. - Campbell Lease, Well No. 1H (API No. 42-113-30119), in the Newark, East (Barnett Shale) Field (Field No. 65280-200), in the entirety of Dallas and Ellis Counties, Texas, be designated a tight gas formation and therefore produces high cost gas pursuant to 16 TAC §3.101, be and is hereby approved.

Done this 1st day of September, 2009.

**RAILROAD COMMISSION OF TEXAS**

**Approved and signatures affixed by O&G  
Unprotested Master Order dated  
September 1, 2009)**