

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

**OIL & GAS DOCKET
NO. 02-0267836**

**IN THE EAGLEFORD FORMATION,
BEE, DEWITT AND KARNES
COUNTIES, TEXAS**

FINAL ORDER

After statutory notice in the above-numbered docket heard on November 23, 2010, the Railroad Commission of Texas makes the following findings of fact and conclusions of law:

FINDINGS OF FACT

1. Pioneer Natural Resources USA, Inc. (P-5 Operator No. 665748) requests a Railroad Commission of Texas certification that gas wells completed in the Eagleford formation, currently including the DeWitt (Eagle Ford Shale), Sugarkane (Eagleford), Flintstone (Cretaceous Chalk) and Eagle Ridge (Eagle Ford Shale) Fields, in Bee, DeWitt and Karnes 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 proposed tight-gas area contains all of Bee, DeWitt and Karnes Counties. All of Webb, LaSalle, McMullen, Live Oak, Dimmitt and Maverick Counties have been approved for the tight gas certification of the Eagleford formation.
4. The Eagleford formation is the correlative interval found between 13,246 feet (MD) and 13,513 feet (MD) as shown on the log of the Migura Well No. 1 (API No. 123-32202). Within the proposed area, the top of the Eagleford is found at depths ranging from approximately 10,800 feet to approximately 14,200 feet.
5. The Eagleford 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. Formation in-situ permeability was determined for 11 wells in the area. The geometric mean calculated permeability for the 11 wells is 0.00018 md, which 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 of crude oil and 802 MCFD for vertical wells completed in the subject formation.

- d. The geometric mean of calculated pre-stimulation stabilized absolute open flow rates for the 11 data point wells completed in the subject formation is 5 MCFD. Gas wells completed in the Eagleford located within the proposed area are therefore not expected to produce more than 5 BOPD crude oil and 802 MCFD 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 Eagleford Shale formation, currently producing from fields including the DeWitt (Eagle Ford Shale), Sugarkane (Eagleford), Flintstone (Cretaceous Chalk) and Eagle Ridge (Eagle Ford Shale) Fields, within Bee, DeWitt and Karnes Counties, Texas, complies with the provisions of 16 TAC §3.101 and gas wells completed in the Eagleford Shale within the three counties are producing from a high cost/tight gas formation.
4. Gas produced from gas wells completed in the Eagleford formation, including the DeWitt (Eagle Ford Shale), Sugarkane (Eagleford), Flintstone (Cretaceous Chalk) and Eagle Ridge (Eagle Ford Shale) Fields and other Commission designated fields within that interval in Bee, DeWitt and Karnes 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 January 13, 2011, the application of Pioneer Natural Resources USA, Inc. for the Commission's certification that the Eagleford formation, recognized and identified as the correlative interval found between 13,246 feet (MD) and 13,513 feet (MD) as shown on the log of the Migura Well No. 1 (API No. 123-32202), in Bee, DeWitt and Karnes 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 13th day of January, 2011.

RAILROAD COMMISSION OF TEXAS

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