



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 02-0283646

THE APPLICATION OF FREEPORT-MCMORAN OIL & GAS LLC TO AMEND AND MAKE PERMANENT FIELD RULES FOR THE SUGARKANE (EAGLE FORD) FIELD, BEE, DE WITT, KARNES AND LIVE OAK COUNTIES, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner
Marshall F. Enquist - Legal Examiner

HEARING DATE: December 13, 2013

APPEARANCES: **REPRESENTING:**

APPLICANT:

George C. Neale
Bob Tierney
Brian Voyles
Kimberly Landry
Amy Vanderhill

Freeport-McMoRan Oil & Gas LLC

INTERVENORS:

Jamie Nielson
Greg Cloud

Burlington Resources O & G Co LP

Sandra Bolz Buch

Pioneer Natural Resources USA, Inc.

Flip Whitworth

Freeport-McMoRan Oil & Gas LLC

D. Davin McGinnis

Marathon Oil EF, LLC

OBSERVER:

James M. Clark

Talisman Energy USA, Inc.

EXAMINERS' REPORT AND RECOMMENDATION**STATEMENT OF THE CASE**

Temporary Field Rules for the Sugarkane (Eagle Ford) Field were adopted in Final Order No. 02-0264837, effective June 22, 2010, as amended. The Temporary Field Rules are summarized as follows:

1. Designated correlative interval from 11,450 feet to 11,662 feet as shown on the log of the Burlington Resources O & G Co LP - Kunde Lease, Well No. 1 (API No. 42-297-34621);
2. 330' lease line spacing and no minimum between well spacing with special provisions for "take points", 100' leaseline spacing for the first and last take points, 33' "box" rule and "off-lease" penetration point for horizontal drainhole wells;
3. 320 acre gas units with special provisions for multiple drainholes, Statewide Rule 38 exceptions and a formula for the assignment of additional acreage to horizontal drainhole gas wells;
4. Allocation based on 100% acreage with AOF status.

The Temporary Field Rules also contain special provisions for annual G-10 testing and a permanent gas well classification for all wells with a gas-oil ratio of 3,000 cubic feet per barrel and above.

Freeport-McMoRan Oil & Gas LLC ("Freeport-McMoRan") proposes to amend and make permanent the Field Rules to provide for a field classification of associated-prorated, 80 acre oil units with optional 40 acre density, a formula for the assignment of additional acreage to horizontal drainhole oil wells, a MER oil allowable of 2,000 barrels of oil per day with unlimited net gas-oil ratio authority and special provisions for oil wells for an exception to Statewide Rule 13 for running tubing and Statewide Rule 51 for filing completion reports. Freeport-McMoRan also requests that all over-production in the Sugarkane (Eagle Ford) Field be canceled.

Since there was no evidence presented at the hearing to justify a formula for the assignment of additional acreage to horizontal drainhole oil wells, the examiners recommended that Statewide Rule 86 be used. Freeport-McMoRan did not consider this recommendation to be adverse. The application is unprotested and the examiners recommend that Field Rules be amended and made permanent for the Sugarkane (Eagle Ford) Field and all over-production be canceled in the field, as proposed by Freeport-McMoRan.

DISCUSSION OF THE EVIDENCE

The Sugarkane (Eagle Ford) Field was created in December 2009 when the Eagle Ford formation was removed from the Sugarkane (Cretaceous) Field interval. The field occurs at an average depth of 11,400 feet and is classified as non-associated-100% AOF. There are 312 producing gas wells and 13 operators carried on the gas proration schedule. Field Rules currently provide for 330'-0' well spacing and 320 acre gas units. Cumulative production from the field through December 2013 is 465.1 BCFG and 62.0 MMBO.

The Sugarkane (Eagle Ford) Field is under going rapid development with horizontal drainhole wells and has merged into the Eagleville (Eagle Ford-2) Field, which is an associated field. For consistency, Freeport-McMoRan is proposing the same oil field rules that exist in the Eagleville (Eagle Ford-2) Field and requests 80 acre oil units with optional 40 acre density, a MER oil allowable of 2,000 barrels of oil per day with unlimited net gas-oil ratio authority and special provisions for oil wells for an exception to Statewide Rule 13 for running tubing and Statewide Rule 51 for filing completion reports. For purposes of the assignment of additional acreage to horizontal drainhole oil wells, Freeport-McMoRan agreed with the examiners recommendation to use Statewide Rule 86, which is the same acreage assignment used in the Eagleville (Eagle Ford-2) Field.

The Eagle Ford formation is unique in that it contains an oil zone on top of a gas zone. Since the permeability is less than a micro-darcy, Freeport-McMoRan believes that there is no migration of fluids in the reservoir and wells only produce fluids that are contacted by the fracture treatment. As a result, the recovery factor is the same for both oil and gas wells. Since many wells in the Eagle Ford trend have high initial potentials of over 2,000 BOPD and there is no migration of reservoir fluids, Freeport-McMoRan requests a 2,000 BOPD allowable and that the daily casinghead gas limitation for oil wells be eliminated.

The proposed exceptions to Statewide Rule 13(b)(5)(a) and Statewide Rule 51(a) will allow operators of flowing oil wells in these two fields the flexibility to run tubing and file completion paperwork, without penalties, once the pressure and production rates have declined. Commission staff in the Field Operations Section have no issues with approving the proposed rules.

Freeport-McMoRan requests that the field be classified as associated-prorated and the allocation formula remain suspended, as there is a 100% market demand for all of the gas produced from the field. Freeport-McMoRan also requests that all over-production in the Sugarkane (Eagle Ford) Field be canceled.

FINDINGS OF FACT

1. Notice of this hearing was provided to all persons entitled to notice at least ten (10) days prior to the date of the hearing and no protests were received.

2. The Sugarkane (Eagle Ford) Field was created in December 2009 when the Eagle Ford formation was removed from the Sugarkane (Cretaceous) Field interval.
 - a. The field occurs at an average depth of 11,400 feet and is classified as non-associated-100% AOF.
 - b. There are 312 producing gas wells and 13 operators carried on the gas proration schedule.
 - c. Field Rules currently provide for 330'-0' well spacing and 320 acre gas units.
3. The Sugarkane (Eagle Ford) Field is under going rapid development with horizontal drainhole wells and has merged into the Eagleville (Eagle Ford-2) Field, which is an associated field.
4. Adopting the same oil field rules that exist in the Eagleville (Eagle Ford-2) Field of 80 acre oil units with optional 40 acre density is appropriate for the Sugarkane (Eagle Ford) Field.
5. Since many wells in the Eagle Ford trend have high initial potentials of over 2,000 BOPD and there is no migration of reservoir fluids, a 2,000 BOPD allowable and no daily casinghead gas limitation for oil wells is appropriate for the Sugarkane (Eagle Ford) Field.
 - a. The Eagle Ford formation is unique in that it contains an oil zone on top of a gas zone.
 - b. Since the permeability is less than a microdarcy, there is no migration of fluids in the reservoir.
 - c. Wells only produce fluids that are contacted by the fracture treatment.
 - d. The recovery factor is the same for both oil and gas wells.
6. Exceptions to Statewide Rule 13(b)(5)(a) and Statewide Rule 51(a) will allow operators of flowing oil wells in these two fields the flexibility to run tubing and file completion paperwork, without penalties, once the pressure and production rates have declined.
7. Classifying the Sugarkane (Eagle Ford) Field as associated-prorated with continued suspension of the allocation formula is appropriate, as there is a 100% market demand for all of the gas produced from the field.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was issued.
2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
3. Amending and making permanent Field Rules for the Sugarkane (Eagle Ford) Field is necessary to prevent waste, protect correlative rights and promote the orderly development of the field.
4. Cancellation of all overproduction in the Sugarkane (Eagle Ford) Field will not cause waste and will not harm correlative rights.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission amend and make permanent Field Rules for the Sugarkane (Eagle Ford) Field and cancel all over-production in the field, as requested by Freeport-McMoRan Oil & Gas LLC.

Respectfully submitted,



Richard D. Atkins, P.E.
Technical Examiner



Marshall F. Enquist
Legal Examiner