



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NOS. 08-0315178, 08-0315179, 08-0315180 & 08-0315181

APPLICATION OF OCCIDENTAL PERMIAN LTD. TO AMEND FIELD RULES FOR THE MIDLAND FARMS (ELLENBURGER), MIDLAND FARMS (WOLFCAMP), MIDLAND FARMS (CLEARFORK) AND MIDLAND FARMS DEEP FIELDS, ANDREWS COUNTY, TEXAS

HEARD BY: Richard Eyster, P.G.- Technical Examiner
Jennifer Cook, - Administrative Law Judge

HEARING DATE: November 6, 2018

APPEARANCES:

John Soule
Sharon Wyatt
Shawn Arndt

REPRESENTING:

Occidental Permian Ltd.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Occidental Permian Ltd. ("OXY") seeks to amend field rules for the Midland Farms (Ellenburger), Midland Farms (Wolfcamp), Midland Farms (Clearfork) and Midland Farms Deep Fields ("the Fields"), Andrews County, Texas. The application is unopposed and the Technical Examiner and Administrative Law Judge (collectively, "Examiners") recommend approval of the application.

DISCUSSION OF THE EVIDENCE

OXY is the only operator in the Fields. OXY's Midland Farms Deep Unit is the only "lease" in the Fields and all wells in the Fields are located on the Midland Farms Deep Unit. OXY seeks to amend field rules applicable to the Fields to facilitate the drilling of horizontal wells and the downhole commingling of production from the Fields in vertical wells. The Midland Farms (Ellenburger), Midland Farms (Wolfcamp) and Midland Farms Deep Fields have special field rules that OXY is seeking to amend. OXY is seeking

adoption of the proposed rules for the Midland Farms (Clearfork) Field, which is currently subject to Statewide Rules.

Horizontal Development

OXY plans to begin drilling horizontal wells in the Fields. OXY used the Emma (Mississippian) and Emma (Devonian) Fields, which are located approximately two miles northwest of the Midland Farms Unit, as analogs to evaluate the potential for horizontal drilling. OXY will first target primarily the Barnett/Mississippian and Devonian formations with its horizontal wells. OXY expects results similar to those experienced with horizontal wells drilled and completed in the Emma (Mississippian) and Emma (Devonian) Fields. OXY has permitted two horizontal wells in the Midland Farms Deep Field. OXY is drilling the first of those two wells, with planned completion in the Devonian formation. Subsequent drilling will likely target the Barnett/Mississippian, Devonian and Wolfcamp formations and perhaps the Clearfork formation.

Field Rules

OXY is proposing identical special field rules for the Fields. Specifically, OXY is proposing the following:

Lease-Line Spacing:	330' (100' First Take Point/Last Take Point)
Between-Well Spacing:	0'
Density	40-acre standard drilling and proration units; proration unit plats permitted, but not required; maximum diagonal and additional acreage for allowable per SWR 86
Allocation Formula	
Top Allowable	10-barrels of oil per day per acre assigned

OXY requests cancellation of other existing special field rules for the Midland Farms (Wolfcamp) Field (casing, GOR, injection authority, allowable credit for injection) and Midland Farms (Ellenburger) Field (GOR, casing, allowable transfer).

OXY plans to fracture stimulate the horizontal wells it drills in the Fields. A 330 foot lease-line spacing rule with a 100 feet first take-point/last take-point provision, is consistent with the anticipated fracture half-length of approximately 150 feet and the expected drainage orientation of the wells. A 0-feet between-well spacing rule will provide flexibility for locating laterals on the Midland Farms Deep Unit to maximize the recovery of hydrocarbons. A 0-feet between well spacing rule will also provide flexibility for drilling new horizontal wells between and among existing vertical wells and will eliminate the need for spacing exceptions when downhole commingling production from the Fields in existing vertical wellbores. The proposed spacing rules will also facilitate downhole commingling of production in existing vertical wells.

OXY is proposing standard 40-acre units for all wells. Existing vertical wells are no longer draining more than 40-acres and probably less. Being able to reduce the number of acres assigned to vertical wells will free acreage for use in permitting of horizontal wells and for assignment of acreage for allowable purposes as horizontal wells are completed. Uniform density rules in the Fields will also facilitate downhole commingling in vertical wells. OXY stated that a 100% acreage allocation formula is a fair and reasonable basis for allocating allowables in each of the Fields.

Top Allowable

OXY anticipates the assignment of 80-acres for allowable purposes to its horizontal wells in Fields. OXY is proposing a top allowable of 10-barrels of oil per day per acre ("bopd/acre"). That top allowable will provide an allowable of 800-bopd for wells assigned 80-acres. Wells being drilled and completed in the Emma (Mississippian) and Emma (Devonian) Fields often have initial potentials in excess of 800-bopd. OXY expects similar results in the Fields. Producing horizontal wells completed in the Fields at rates of 800-bopd or more will not adversely affect ultimate recovery.

OXY contends that wells downhole commingled in any combination of the Fields will not likely be capable of producing 10-barrels of oil per day per acre assigned, producing downhole commingled wells at capacity will have no adverse impact on ultimate recovery from any of the Fields.

Downhole Commingling

There is no problem with fluid compatibility between and among the Fields. If any crossflow occurs as a result of downhole commingling, the pressures will equalize with time and there will be no loss of or reduction in ultimate recovery.

FINDINGS OF FACT

1. Notice of hearing was sent to all affected persons.
2. Occidental Permian Ltd is the only operator in the Midland Farms (Clearfork), Midland Farms (Wolfcamp), Midland Farms Deep and Midland Farms (Ellenburger) Fields. All wells in those four fields are located on OXY's Midland Farms Deep Unit.
3. Amending field rules for the Midland Farms (Clearfork), Midland Farms (Wolfcamp), Midland Farms Deep and Midland Farms (Ellenburger) Fields, will facilitate horizontal drilling and downhole commingling of production, both of which will increase the ultimate recovery of oil from the Fields.
 - a. The proposed spacing, density and allocation formula rules are appropriate for planned horizontal development of the Midland Farms Deep, Midland Farms (Wolfcamp) and Midland Farms (Clearfork) Fields. Uniform spacing,

density and allocation formula rules will facilitate downhole commingling of production from vertical wells in the Midland Farms (Clearfork), Midland Farms (Wolfcamp), Midland Farms Deep and Midland Farms (Ellenburger) Fields.


- b. Top allowables of ten barrels of oil per day per acre assigned are appropriate. Production at those rates will not cause waste and is consistent with expected production from horizontal wells in the Fields.
4. Downhole commingling of production in the Midland Farms (Clearfork), Midland Farms (Wolfcamp), Midland Farms Deep and Midland Farms (Ellenburger) Fields can be done with no irreversible crossflow of fluids between Fields. Any crossflow that occurs will not reduce ultimate recovery and there are no known formation fluid incompatibilities.
5. At the hearing, the applicant agreed on the record that Final Orders in these matters can be final and effective when the Master Order relating to this Final Order is signed.

CONCLUSIONS OF LAW

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051
2. All notice requirements have been satisfied. 16 Tex. Admin. Code § 1.43 and 1.45
3. Approval of the application will prevent waste and protect correlative rights.
4. Pursuant to § 2001.144(a)(4)(A) of the Texas Government Code and the agreement of the applicant on the record, this Final Order is final and effective when a Master Order relating to this Final Order is signed.

RECOMMENDATION

The Examiners recommend approval of the applications of Occidental Permian Ltd. for to amend field rules for the Midland Farms (Clearfork), Midland Farms (Wolfcamp), Midland Farms Deep and Midland Farms (Ellenburger) Fields.


Richard Eyster, P.G.
Technical Examiner

Respectfully submitted,


Jennifer Cook
Administrative Law Judge