



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7C-0299068

**THE APPLICATION OF MERCURY OPERATING, LLC TO ADOPT PERMANENT
FIELD RULES FOR THE DON PFLUGER (DETRITAL) FIELD, CONCHO COUNTY,
TEXAS**

HEARD BY: Paul Dubois – Technical Examiner
Ryan D. Larson – Administrative Law Judge

HEARING DATE: February 1, 2016

CONFERENCE DATE: March 8, 2016

APPEARANCES:

REPRESENTING:

Greg Cloud, P. E.

Mercury Operating, LLC

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Mercury Operating, LLC (Mercury) requests the Commission adopt permanent field rules for the Don Pfluger (Detrital) Field in Concho County, Texas. Mercury requests the following field rules be adopted:

1. A designated correlative interval from 3,220 feet to 3,260 feet, as seen on the log of the discovery well, the Spalding Energy, Inc., Pfluger No. 1 (API No. 42-095-31530).
2. 330-foot lease line spacing and 660-foot between well spacing.
3. 20 acre standard oil proration units with a maximum standard diagonal of 1,500 feet.
4. Allocation based on 100 percent acreage.
5. An maximum efficient rate (MER) allowable of 120 barrels of oil per day (bopd) for any 20-acre well completed in the field.

Mercury agreed in the hearing that the available evidence from the field at this time supports an MER allowable of 84 bopd. The application was not protested. The Administrative Law Judge and Technical Examiner (collectively, "Examiners") recommend Mercury's application be approved, with an MER allowable of 84 bopd.

DISCUSSION OF EVIDENCE

The Don Pfluger (Detrital) Field was discovered on April 13, 1993, at a depth of 3,259 feet. The current proration schedule indicates two wells are carried in the field. The discovery well was the Spalding Energy, Inc. (now operated by Concho Oilfield Services), Pfluger No. 1 (API No. 42-095-31530). The Don Pfluger (Detrital) Field is a sandstone stratum within the Strawn Formation. On initial potential testing the well produced 34 barrels of oil, 51 thousand cubic feet (mcf) gas, and 14 barrels of water. The gas to oil ratio was 1,500 standard cubic feet per barrel. The discovery well has produced a total of 10,840 barrels of oil and 390 mcf gas; it does not currently report any production.

The field is currently on Statewide Rules, which include 467-foot lease line spacing, 1,200 foot between well spacing, and 40-acre standard proration units. The 1965 yardstick allowable is 84 bopd for 40-acre density.

Mercury has recently begun to further develop the field. It's Don Pfluger Well No. 1 (API No. 1 (API No. 42-095-32422) was completed on October 11, 2015. An acid cleanup job was performed on the well, after which its initial potential test demonstrated a 24-hour production rate of 32 barrels of oil, no gas and no water. The well currently produces about 55 bopd. In January 2016 Mercury completed two additional wells in the field, but the initial production from swabbing those two wells ranged from 2 to 12 bopd.

The reservoir characteristics include a 40-foot gross pay interval from a depth of 3,220 feet to 3,260 feet in the discovery well. The average porosity ranges from about 10 to 13 percent, and the net pay is about 8 feet. The average water saturation is 30 percent, and the produced oil exhibits a gravity of 38 API. The original reservoir pressure was 1,300 pounds per square inch gauge (psig) and the reservoir temperature is 115° F. The reservoir operates on a solution gas drive pressure depletion mechanism, and is sealed by a stratigraphic trap.

Production and reservoir data from Concho's Pfluger Well No. 1 indicate the well drains about 16 acres. Mercury estimates the reservoir contains 583 barrels of oil per acre foot. At 15 percent recovery, there is about 87 barrels of recoverable oil per acre foot. Mercury asserts that, given the 16-acre drainage area, 20-acre units are appropriate for the field. Mercury identified two nearby Strawn Formation fields as good analogs for the Don Pfluger (Detrital) Field. The Celery (Strawn 2975) and Celery (Strawn B) fields are located about 3 miles to the south of the subject field, and both of these fields have permanent field rules that provide for 20 acre standard proration units.

Finally, Mercury requested an MER allowable of 120 bopd. However, the evidence to demonstrate the appropriateness of such an allowable is lacking. The one producing well in the field produces 55 bopd. The current field allowable is 84 bopd. However, if the field is reduced from 40-acre to 20-acre units, the standard allowable will correspondingly be reduced to 44 bopd, which will cause overproduction problems for Mercury. The Examiners believe the evidence in the record is sufficient to show that continuing the 84 bopd allowable as an MER allowable for the field is appropriate. As Mercury continues to develop the field and finds the need for greater allowable relief, it can seek such relief at that time. Mercury's representative, Greg Cloud, P.E., stated that Mercury does not find this to be an adverse recommendation.

FINDINGS OF FACT

1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.
2. The Don Pfluger (Detrital) Field was discovered on April 13, 1993, at a depth of 3,259 feet.
3. The current proration schedule indicates two wells are carried in the field.
4. The discovery well was the Spalding Energy, Inc. (now operated by Concho Oilfield Services), Pfluger No. 1 (API No. 42-095-31530).
 - a. On initial potential testing the well produced 34 barrels of oil, 51 thousand cubic feet (mcf) gas, and 14 barrels of water.
 - b. The discovery well has produced a total of 10,840 barrels of oil and 390 mcf gas; it does not currently report any production.
5. The Don Pfluger (Detrital) Field is a sandstone stratum within the Strawn Formation.
6. The field is currently on Statewide Rules, which include 467-foot lease line spacing, 1,200 foot between well spacing, and 40-acre standard proration units. The 1965 yardstick allowable is 84 bopd for 40-acre density.
7. Mercury Operating, LLC has recently completed it's Don Pfluger Well No. 1 (API No. 1 (API No. 42-095-32422)).
 - a. On initial potential testing the well demonstrated a 24-hour production rate of 32 barrels of oil, no gas and no water.
 - b. The well currently produces about 55 bopd.

8. The reservoir characteristics include a 40-foot gross pay interval from a depth of 3,220 feet to 3,260 feet in the discovery well.
 - a. The average porosity ranges from about 10 to 13 percent, and the net pay is about 8 feet.
 - b. The average water saturation is 30 percent, and the produced oil exhibits a gravity of 38 API.
 - c. The original reservoir pressure was 1,300 pounds per square inch gauge (psig) and the reservoir temperature is 115° F.
 - d. The reservoir operates on a solution gas drive pressure depletion mechanism, and is sealed by a stratigraphic trap.
9. Production and reservoir data from Concho's Pfluger Well No. 1 indicate the well drains about 16 acres.
10. 20-acre units, 330-foot lease line and 660-foot between well spacing provisions are appropriate for the field.
11. Two nearby Strawn Formation fields, the Celery (Strawn 2975) and Celery (Strawn B) Fields, located about 3 miles to the south, both have permanent field rules that provide for 20 acre standard proration units.
12. An MER allowable of 84 bopd is appropriate for the field.

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. Findings of fact may be based only on the evidence and on matters that are officially noticed. Tex. Gov't Code §2001.141 (b).
3. All notice requirements have been satisfied. 16 Tex. Admin. Code § 1.45
4. Adoption of the proposed field rules will prevent waste, protect correlative rights, and promote the orderly development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend the Commission enter an order granting the application of Mercury Operating, LLC to adopt permanent field rules for the Don Pfluger (Detrital) Field in Concho County, Texas.

Respectfully submitted,



Paul Dubois
Technical Examiner



Ryan D. Larson
Administrative Law Judge