



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7B-0297693

THE APPLICATION OF ARNOT OIL COMPANY, LLC TO ADOPT PERMANENT FIELD RULES FOR THE DOWNING (MISSISSIPPIAN REEF) FIELD, COMANCHE COUNTY, TEXAS

HEARD BY: Peggy Laird, P.G. – Technical Examiner
Terry Johnson – Hearings Examiner

SUBMITTED BY: Peggy Laird, P.G. - Technical Examiner
Ryan Lammert - Administrative Law Judge

HEARING DATE: October 6, 2015
CONFERENCE DATE: March 8, 2016

APPEARANCES: **REPRESENTING:**
APPLICANT: Arnot Oil Company, LLC
Lloyd Muennink
Robert Arnot

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Arnot Oil Company, LLC ("Arnot") seeks to adopt permanent field rules for the Downing (Mississippian Reef) Field (the "Field"), Comanche County, Texas. The Field was discovered in 2013, and is currently on County Regular rules.

Arnot proposes to adopt the following field rules:

1. Designate a correlative interval from 2,750 feet to 2,800 feet as shown on Pioneer Energy Services' Dual Induction Focused Gamma Ray log of the W.G. Arnot Jr., Griffin Unit #1 Well, (API No. 42-093-31571), H&TC RR Co/LR Sechrist Survey, Sec-8, Blk-1, A-920, Comanche County, Texas;
2. Maintain 330-foot lease line and 660-foot between well spacing;

3. Establish 20-acre proration units with 10-acre tolerance provision; and
4. Establish allocation based on 100% acres with a top oil allowable based on the 1965 Yardstick.

Arnot is the only operator in the Field, and the application was not protested. The Examiners recommend that the permanent field rules be adopted for the Downing (Mississippian Reef) Field as requested by Arnot.

DISCUSSION OF THE EVIDENCE

The Downing (Mississippian Reef) Field was discovered in 2013 at a depth of about 2,900 feet. The Field is currently on County Regular Rules with a top allowable of 22 barrels of oil per day ("BOPD"). Seven oil wells have been completed in the Field, and each produce the maximum allowable of 22 BOPD.

The proposed correlative interval from 2,750 feet to 2,800 feet is based on Pioneer Energy Services' Dual Induction Focused Gamma Ray log of the W.G. Arnot Jr., Griffin Unit #1 Well, (API No. 42-093-31571), H&TC RR Co/LR Sechrist Survey, Sec-8, Blk-1, A-920, Comanche County, Texas.

The reservoir is within a pinnacle reef structure and has 350 feet of vertical relief from surrounding strata. It is primarily a water-drive reservoir covering approximately 151 acres above the water/oil contact, with some associated gas also being recovered. The reservoir has an average porosity of eight percent, and average water saturation is 30 percent. The average net effective oil pay thickness is 25 feet.

Arnot evaluated the production history and reservoir information and determined anticipated recovery of the wells is estimated to be 60,000 BO per well. Volumetrics estimate about 442,000 BO total recovery. Arnot reported a similar reef, (the W. Bibb field) located about nine miles to the west of the Field, had an ultimate recovery in excess of 500,000 BO.

Each of the seven wells is drilled on 20-acre spacing, and currently produces the maximum allowable of 22 BOPD. Arnot reported that the wells have the capability to produce 35 BOPD, and proposes a 20-acre standard density with 10-acre tolerance provision. The current lease line and between well spacing will remain the same with 330-foot lease line and 660-foot between well spacing. Allocation is requested based on 100% acres with a top oil allowable based on the 1965 Yardstick.

FINDINGS OF FACT

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

2. The Downing (Mississippian Reef) Field was discovered in 2013 at a depth of about 2,900 feet.
 - a. The Field is currently on County Regular Rules with a top allowable of 22 BOPD.
 - b. Seven oil wells have been completed in the Field, and each produces the maximum allowable of 22 BOPD.
3. The reservoir is within a pinnacle reef structure and has 350 feet of vertical relief from surrounding strata.
4. The reservoir has an average porosity of eight percent, and average water saturation is 30 percent. The average net effective oil pay thickness is 25 feet.

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 § 1.45
3. The proposed field rules will reduce waste, protect correlative rights, and promote the orderly development of the Field.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend that the Commission adopt field rules for the Downing (Mississippian Reef) Field and make the field rules permanent.

Respectfully submitted,



Peggy Laird, P.G.
Technical Examiner



Ryan Lammert
Administrative Law Judge