



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

**OIL AND GAS DOCKET NO. 04-0287829**

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**THE APPLICATION OF AWP OPERATING COMPANY TO CONSIDER AN MER ALLOWABLE FOR THE MARCHBANKS LEASE, WELL NO. 1, TESORO (5000 PETTUS) FIELD, DUVAL COUNTY, TEXAS**

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**HEARD BY:** Paul Dubois – Technical Examiner  
Marshall Enquist – Hearings Examiner

**DATE OF HEARING:** April 23, 2014

**APPEARANCES:** **REPRESENTING:**

**APPLICANT:**

Barney Deshron

AWP Operating Company

### EXAMINER'S REPORT AND RECOMMENDATION

#### STATEMENT OF THE CASE

This is the application of AWP Operating Company (AWP) to consider a most efficient rate (MER) allowable for its Marchbanks Lease Well No. 1 in the Tesoro (5000 Pettus) Field in Duval County, Texas. AWP requests authority to produce 110 BOPD. The request was not protested. The examiners recommend approval of the 110 BOPD MER allowable.

#### DISCUSSION OF EVIDENCE

The Tesoro (5000 Pettus) Field was discovered on May 29, 2005. The top allowable in the field is set at 82 bbl oil per day and a gas-oil ratio of 2,000 scf/bbl. AWP operates its Marchbanks Lease Well No. 1 in the Tesoro (5000 Pettus) Field in Duval County. AWP is the only operator in the field, and the Marchbanks No.1 is the only producing well in the field. The Marchbanks No. 1 well was completed on December 9, 2012, at a depth of 5,011 to 5,014 feet in the Pettus formation. On initial potential testing the well produced by flowing 121 bbl oil, 5 mcf gas and no water. The gas-oil ratio was 41

scf/bbl, and the flowing tubing pressure was 500 psi. The well is currently producing at about 110 bbl oil per day, and as accumulated an overproduction of oil.

In addition to the Marchbanks No. 1 well, two other wells were completed in the field and have since been plugged. The Teepee Petroleum Alta-Vanco 1 produced from 2005 to 2007. During this time it produced 40,371 bbl oil and 22 mmcf gas before being plugged. The average daily oil production was 61 bbl per day. The Teepee Petroleum Alta-Marchbanks 1 produced from 2005 to 2009. During this time it produced 118,421 bbl oil and 38 mmcf gas before being plugged. The average daily oil production was 81 bbl per day. The two wells were lower in structure than the Marchbanks No. 1; when the wells started to produce water the oil production ceased and the wells were plugged.

The field operates under a strong water drive mechanism. The closed structure is small and contained under AWP's leasehold by a fault to the east. The well is located in an up-dip attic structure bounded by the fault to the east and the oil water contact to the west. AWP estimates the average net pay to be 7 feet, porosity is 28 percent, and 40 percent water saturation. According to AWP, the reservoir has superior qualities allowing it to produce efficiently on an 8/64ths inch choke. The choke size has not been adjusted since the first week of production. AWP estimates the Marchbanks No. 1 well has a drainage area of 27 acres.

At some point, the well will begin to produce water. Until that time, AWP anticipates an above-average recovery factor of greater than 25 percent. When the water front hits the well oil production will decrease significantly, and perhaps completely. AWP believes the existing water drive is very strong and efficient, and that producing the well at 110 bbl oil per day will not cause waste.

#### **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. No protests were received.
2. The Tesoro (5000 Pettus) Field was discovered on May 29, 2005. The top allowable in the field is set at 82 bbl oil per day and a gas-oil ratio of 2,000 scf/bbl.
3. AWP operates its Marchbanks Lease Well No. 1 in the Tesoro (5000 Pettus) Field in Duval County.
  - a. The Marchbanks No. 1 well was completed on December 9, 2012, at a depth of 5,011 to 5,014 feet in the Pettus formation.
  - b. On initial potential testing the well produced by flowing 121 bbl oil, 5 mcf gas and no water.

- c. The well is currently producing at about 110 bbl oil per day, and as accumulated an overproduction of oil.
4. AWP is the only operator in the field, the Marchbanks No.1 is the only producing well in the field, and the hydrocarbon accumulation in the field is located entirely on AWP's leasehold.
5. The field operates under a strong water drive mechanism. The closed structure is small and contained under AWP's leasehold by a fault to the east. The well is located in an up-dip attic structure bounded by the fault to the east and the oil water contact to the west.
6. The average net pay is 7 feet, porosity is 28 percent, and 40 percent water saturation. The well produces efficiently on an 8/64ths inch choke. The choke size has not been adjusted since the first week of production.
7. An MER allowable of 110 BOPD is appropriate for the Marchbanks Lease Well No. 1 and will not harm the reservoir.
8. Cancelling overproduction will not harm correlative rights.

#### CONCLUSIONS OF LAW

1. Notice of this hearing was given as specified in the provisions of all regulatory codes.
2. All things have occurred or been accomplished to give the Commission jurisdiction in this matter.
3. An MER allowable of 110 BOPD for the Marchbanks Lease in the Tesoro (5000 Pettus) Field will not cause waste and will not harm correlative rights.
4. Cancelling overproduction for the Marchbanks Lease will not harm correlative rights.

#### RECOMMENDATION

Based on the above findings and conclusions of law, the examiners recommend approval of the MER allowable of 110 BOPD for all wells in the Marchbanks Lease, Tesoro Field, Duval County, Texas.

  
Paul Dubois  
Technical Examiner

Respectfully submitted,

  
Marshall Enquist  
Hearings Examiner