WAYNE CHRISTIAN, *CHAIRMAN* CHRISTI CRADDICK, *COMMISSIONER* RYAN SITTON, *COMMISSIONER* 



# RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

## OIL AND GAS DOCKET NO. 09-0319957

# APPLICATION OF WHITE KNIGHT PRODUCTION LLC (918507) FOR A MAXIMUM EFFICIENT RATE (MER) ALLOWABLE AND CANCELLATION OF OVERPRODUCTION FOR THE RUMAGE (33806) LEASE, WELL NOS. 5, 10, AND 11, LUCKY RIDGE, SW. (2100) FIELD, JACK COUNTY, TEXAS

**HEARD BY:** Ashley Correll, P.G. – Technical Examiner Ezra A. Johnson – Administrative Law Judge

HEARING DATE: July 15, 2019

CONFERENCE DATE: October 1, 2019

**APPEARANCES:** 

Applicant: Steve Towns Nguyen Bao Ngoc (Engineer) **REPRESENTING:** White Knight Production LLC

# **EXAMINERS' REPORT AND RECOMMENDATION**

#### STATEMENT OF THE CASE

White Knight Production LLC ("White Knight") is seeking a maximum efficient rate ("MER") allowable of 285 barrels of oil per day ("BOPD") for Well No. 5, 30 BOPD for Well No. 10, and 200 BOPD for Well No. 11 on the Rumage (33806) Lease ("Lease") in the Lucky Ridge, SW. (2100) Field ("Field"), in Jack County, Texas. The current maximum oil allowable for the Field is 41 BOPD. White Knight is also requesting that accumulated overproduction on the Lease be canceled.

The application was not protested. The technical examiner and the administrative law judge (collectively "Examiners") recommend that the application be granted as requested.

#### DISCUSSION OF THE EVIDENCE

The Field (No. 55531700) was discovered on June 1, 1977. The Lease has three wells completed in a relatively shallow 2,100-foot deep zone in the Lucky Ridge, SW.

(2100) Field. The Field currently has an allowable of 41 BOPD. The oil proration schedule reflects that there are two other operators in addition to White Knight with wells completed in the Field. All wells operated in the Field by other operators are over one (1) mile away to the west of the Lease. Nearby wells are primarily producing from the KRS (Marble Falls) Field at a depth of approximately 5,200 feet.

Well No. 5 was initially completed in September 2014 in the KRS (Marble Falls) Field at an approximate depth of the 5,200 feet. White Knight purchased the well and plugged the well back to produce from the Weir sand at an approximate depth 2,100 feet in the Lucky Ridge, SW. (2100) Field. The initial potential test following the plug back showed the well producing 380 BOPD, 115 barrels of water per day ("BWPD") and no gas.

White Knight drilled Well No. 10 in November 2018, and completed the well in the Field at an approximate depth of 2,100 feet. The initial potential test for Well No. 10 shows initial production rates are 53 BOPD and no water or gas. White Knight drilled Well No. 11 in March 2019, and completed the well in 2,100 foot zone in the Field. The initial potential test for Well No. 11 shows initial production rates were 192 BOPD, 7 BWPD, and no gas. Well Nos. 5, 10, and 11 initially flowed upon completion in the Field until the wells loaded up and died. All three wells were later placed on pump.

On June 12, 2019, the Hearings Division requested a step-rate test be performed on the wells on the Lease. In June 2019, White Knight choked back Well No. 11 to 15/64<sup>th</sup> of an inch. The well died and production did not return after swabbing for two days. Well No. 11 was placed on pump on June 6, 2019, and production returned. White Knight presented evidence showing that choking back the well to produce at the allowable would damage the wellbore, and based on the test run on the Well No. 11, Well Nos. 10 and 5 would react similarly to Well No. 11 if choked back to produce at the 41 BOPD allowable.

White Knight submitted production data from Well Nos. 5, 10, and 11 that the wells produce over the oil allowable of 41 BOPD. Production data for Well No. 5 shows daily production in the range of 200 to 300 BOPD. Oil and water are being produced at a combined total oil and water volume ranging from 400 to 500 barrels per day with approximately 50 percent of the total volume being oil and 50 percent being water. Production data for Well No. 10 show the well is producing between 20 and 80 BOPD. Oil and water are being produced at a total oil and water volume ranging from 70 to 100 barrels per day with approximately 50 percent of the total volume being oil and 50 percent being water. Production data for Well No. 10 show the well is producing between 20 and 80 BOPD. Oil and water are being produced at a total oil and water volume ranging from 70 to 100 barrels per day with approximately 50 percent of the total volume being oil and 50 percent being water. Production data indicates Well No. 11 is producing oil between 200 to 260 BOPD with low water production. Low gas volumes are being produced from the Lease.

During the hearing, Mr. Nguyen Bao Ngoc, engineer for White Knight, testified that water is the primary drive mechanism for the Field. Mr. Ngoc presented a cross section showing a water sand underneath the oil-bearing sand unit on top. The initial potential test for all three wells showed water was produced from Well Nos. 5 and 11, and none of the three wells produced gas during the test. Daily production curves show low volumes of gas are being produced from wells on the Lease. In testimony, Mr. Ngoc stated that

the low volumes of gas are indicative of a water drive reservoir, and the water drive would kill the wells if production is reduced to the allowable. Evidence presented during the hearing stated that the Field is benefiting from a strong water drive, and if production was curtailed by the allowable, the water below the oil would encroach the oil column and would cause a reduction in oil production and cause a waste of resources.

The cumulative overproduction for the Lease as of June 2019 was 57,699 barrels. White Knight requests that this overage be canceled to prevent shutting-in the wells on the Lease.

A Notice of Hearing was issued by the Commission on June 14, 2019, to all parties entitled to notice, at least ten days prior to the date of the hearing. No protest was received from the Notice of Hearing.

The Examiners recommend approval of the requested MER oil allowable and cancellation of over-production from Well Nos. 5, 10 and 11.

At the hearing, White Knight agreed on the record that the Final Order in this docketed case is to be final and effective when a Master Order relating to this Final Order is signed.

## FINDINGS OF FACT

- White Knight Production LLC ("White Knight") sent a letter to the Commission on May 6, 2019 to request a hearing to apply for a maximum efficient rate ("MER") allowable of 285 barrels of oil per day ("BOPD") for Well No. 5, 30 BOPD for Well No. 10, 200 BOPD for Well No. 11 on the Rumage (33806) Lease ("Lease"), in the Lucky Ridge, SW. (2100) Field ("Field"), in Jack County, Texas. White Knight also requested that accumulated overproduction on the Lease be canceled.
- 2) The Field (No. 55531700) was discovered on June 1, 1977. The Field is observed beneath the Lease at an approximate depth of 2,100 feet. Two other operators produce from the Field, and those wells are located over one (1) mile away from the Lease.
- 3) The Lease has three oil wells identified as Well Nos. 5, 10, and 11. Well No. 5 was previously completed in the KRS (Marble Falls) Field in September 2014. Well No. 5 was plugged back and recompleted in August 2018 in the Field at an approximate depth of 2,100 feet. Well No. 10 was completed in November 2018 and Well No. 11 was completed in March 2019. Both Well Nos. 10 and 11 were completed in the Field to produce from the 2,100 foot deep zone known as the Weir sand.
- 4) On June 12, 2019, the Hearings Division requested a step-rate test be performed on Well Nos. 5, 10 and 11, to demonstrate efficient production volumes.

- 5) In June 2019, White Knight reduced the choke size for Well No. 11 to 15/64<sup>th</sup> of an inch. The well died and production did not return after swabbing for two days. Well No. 11 was placed on pump on June 6, 2019, and production returned. Based on the test run on the Well No. 11, White Knight believes that Well Nos. 10 and 5 would react similarly if choked back to produce at the 41 BOPD allowable.
- 6) A Notice of Hearing was issued by the Commission on June 14, 2019, to all parties entitled to notice, at least ten days prior to the date of the hearing. No protest was received from the Notice of Hearing ("Notice").
- 7) The initial potential tests for Wells Nos. 5, 10, and 11 showed the following:
  - a) Well No. 5 shows initial production rates were 380 BOPD, 115 barrels of water per day ("BWPD"), and no gas;
  - b) Well No. 10 shows initial production rates are 53 BOPD and no water or gas; and,
  - c) Well No. 11 shows initial production rates are 192 BOPD, 7 BWPD, and no gas.
- 8) White Knight has completed three wells in the Field, and all three wells are producing over the current field allowable.
- 9) Well Nos. 5, 10, and 11 on the Lease initially flowed upon completion in the Field until the wells loaded up and died. All three wells were subsequently placed on pump.
- 10) The top allowable for the Field is 41 BOPD.
- 11) The Field is benefiting from a strong water drive, and if production was curtailed by the allowable, the water below the oil would encroach the upper oil column and would cause a reduction in oil production and cause a waste of resources.
- 12) Production data for Well No. 5 produced between approximately 200 to 300 BOPD. The total oil and water volume ranges from 400 to 500 barrel per day with approximately 50 percent of the total volume being oil and 50 percent being water.
- 13) Production data shows Well No. 10 produced between 20 and 80 BOPD. The total oil and water volume produced from the well ranges from 70 to 100 barrels per day with approximately 50 percent of the total volume being oil and 50 percent being water.
- 14) Production data Well No. 11 is producing oil between 200 to 260 BOPD with no gas being produced and low water production.
- 15) White Knight testified that producing oil from the Well Nos. 5, 10, and 11 on this Lease at the requested MERs is necessary to effectively recover the remaining oil reserves

on the Lease.

- 16) White Knight indicated that as of June 2019, the Lease overproduced 57,699 barrels of oil, and White Knight requests the cancellation of the overproduction.
- 17) Cancellation of the overage for the Lease is proper to prevent shutting-in the wells on the Lease.
- 18) At the hearing, the applicant agreed on the record that the Final Order in this case is to be effective when the Master 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. Cancellation of overproduction for the Rumage (33806) Lease in the Lucky Ridge, SW. (2100) Field will not harm correlative rights and will not cause waste.
- 4. Pursuant to § 2001.144 (a)(4)(A) of the Texas Government Code and the agreement of the applicant, this Final Order is effective when a Master Order relating to the Final Order signed at Conference.

#### RECOMMENDATION

Based on the above findings of facts and conclusions of law, the Examiners recommend that the Commission enter an order granting the application of White Knight Production LLC ("White Knight") for a maximum efficient rate ("MER") oil allowable of 285 barrels of oil per day ("BOPD") for Well No. 5, 30 BOPD for Well No. 10, and 200 BOPD for Well No. 11 on the Rumage (33806) Lease ("Lease") in the Lucky Ridge, SW. (2100) Field ("Field") in Jack County, Texas. White Knight is also requesting that accumulated overproduction on the Lease be canceled.

Respectfully submitted,

Ashley Correll, P.G. Technical Hearings Examiner

Ezra Johnson Administrative Law Judge