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RAILROAD COMMISSION OF TEXAS **HEARINGS DIVISION**

OIL AND GAS DOCKET NO. 04-0313454

APPLICATION OF SMITH PRODUCTION, INC. (789662) FOR A MER AND TO CANCEL OVERPRODUCTION FOR THE DROUGHT 156 (14068) LEASE, WELL NOS. 7, 8, AND 9. NEELY, EAST (700) FIELD, DUVAL COUNTY, TEXAS

HEARD BY: Robert Musick - Technical Hearings Examiner

Lynn Latombe - Administrative Law Judge

HEARING DATE: October 12, 2018

APPEARANCES:

Applicant

REPRESENTING:

Dale E. Miller, P.E. Charley Bucek

Smith Production, Inc.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Smith Production, Inc. ("Smith Production") seeks a maximum efficient rate ("MER") allowable of 70 barrels of oil per day ("BOPD") per well for its Drought 156 (14068) Lease, Well Nos. 7, 8 & 9 in the Neely, East (700) Field, Duval County, Texas. Smith Production also requests that all of the accumulated overproduction on the Drought 156 (14068) Lease ("Lease") be canceled. Evidence in the record support the Smith Production's request to establish a MER for wells on the Lease.

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. 64816498) was discovered on January 30, 1966. The Field is observed beneath the Lease from 1,059 feet to 1,096 feet. Based on the October 2018 proration schedule. the Field has two operators with a total of seven active vertical oil wells. The proration acreage for each well is 5 acres. The Field's target pay zone ranges from 36 to 46 feet thick. As of October 2018, cumulative total oil production from the Field is 118,331 barrels of oil ("BO").

The Lease consists of 323 acres. Smith Production has completed three oil wells on the Lease with oil production from November 2017 to June 2018, resulting in 24,761 BO. The monthly average oil production for the Lease is 3,095 BO. Evidence in the hearing establishes the oil wells from the Lease maintain a constant production volume over time. Production data indicates each well on the Lease produces about 60 BOPD. No casinghead gas production and minimal water production has been observed from the wells. Currently, all three wells on the Lease are on artificial lift.

Presently the top allowable for each of these wells is 21 BOPD and 42 thousand cubic feet per day ("MCF/Day") of casinghead gas. All three wells have consistently been producing oil in excess of the current top allowable with overage as of July 2018 exceeding 12,500 BO. The October 1, 2018, Oil Proration Schedule indicates a statewide rule Net GOR of 2,000 standard cubic feet ("SCF") of casinghead gas per barrel of oil, or 2,000:1 SCF/Barrel, is established for the Field. Production details for each well on the Lease is outlined below:

- Drought 156 Lease Well No. 7 (API No. 42-131-39602) was completed on November 6, 2017, and is 1,618 feet deep (TVD, total vertical depth). The Well is producing from perforations at a depth of 1,062 to 1,090 feet. The initial potential test, dated January 12, 2018, show the initial production rates are 20 BOPD, 0 MCF/Day, and 0 Barrels of Water Per Day ("BWPD"). Oil Gravity API is 19, which suggest the oil is a very viscous hydrocarbons. The maximum production rate for the Drought 156 Lease Well No. 7 was 70.02 BOPD on September 15, 2018, with a daily average production history of 33 BOPD.
- Drought 156 Lease Well No. 8 (API No. 42-131-39603) was completed on November 19, 2017 and is 1,740 feet deep (TVD). The Well is producing from perforations at a depth of 1,070 to 1,096 feet. The initial potential test, dated January 14, 2018, show the initial production rates are 67 BOPD, 0 MCF/Day, and 0 BWPD. Oil Gravity API is 19, a very viscous oil. The maximum production rate for the Drought 156 Lease Well No. 8 was 151.63 BOPD on February 15, 2018, with a daily average production history of 49 BOPD.
- Drought 156 Lease Well No. 9 (API No. 42-131-39604) was completed on November 3, 2017 and is 1,650 feet deep (TVD). The Well is producing from perforations at a depth of 1,059 to 1,074 feet. The initial potential test, dated January 17, 2018, show the initial production rates are 24 BOPD, 0 MCF/Day and 7 BWPD. Oil Gravity API is 19, very viscous oil. The maximum production rate for the Drought 156 Lease Well No. 9 was 115.86 on July 25, 2018, with an average production history of 33 BOPD.

Smith Production documented 12,552 BO overage as of July 2018. A letter dated July 19, 2018, was received from Smith Production requesting a hearing seeking a MER oil allowable of 70 BOPD and also requesting that all accrued overproduction be cancelled.

A Notice of Hearing was issued by the Commission on September 12, 2018, 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. A hearing was held on October 12, 2018.

Within a few days of the request for hearing, the Hearings Division requested a step-rate test be performed on the Lease wells to demonstrate the maximum efficient rate for the subject

wells on the Lease. In response, Smith Production performed fluid level tests on all three wells on two separate occasions: August 22, 2018 and September 20, 2018.

- On August 22, 2018, the fluid level measurements were observed in Well No. 7 at 1054 feet below ground surface ("bgs"); Well No. 8 at 961 feet bgs; Well No. 9 at 1023 feet bgs.
- On September 20, 2018, the fluid level results were exactly the same observed in August 2018, with the exception of Well No. 7, which observed fluids at 992 feet, a change of 62 feet.

Testimony by Mr. Dale Miller, P.E., indicate that pumping is being performed at a rate that is very efficient to allow the viscous petroleum hydrocarbons to flow into the wellbores by reducing back-pressure on this shallow producing, low gravity oil. The fluid level measured on August 22, 2018 and September 20, 2018 were similar or the same values, demonstrating a current efficient recovery rate around 60 to 70 BOPD.

Smith Production supported their MER request of 70 BOPD using well log data (for production interval), oil production logs and graphs, and a demonstration using static fluid levels to indirectly establish the additional potential to produce wells at a higher optimal rate. Smith Production demonstrated that potential energy in the reservoir supported optimal production of oil and gas near the 70 BOPD as requested in the hearing.

Smith Production testified that producing the Lease wells in the Field at the requested MER is necessary to efficiently recover oil reserves and reduce any back-pressure that can harm the reservoir.

The Examiners recommend approval of the requested MER oil allowable of 70 BOPD and cancellation of accumulated overproduction effective the date of this Final Order.

FINDINGS OF FACT

- 1. Notice of this hearing was provided to all parties entitled to notice at least ten (10) days prior to the date of the hearing and no protests were received.
- 2. Smith Production, Inc. seeks a MER allowable of 70 BOPD per well for its Drought 156 (14068) Lease, Well Nos. 7, 8 and 9, Neely, East (700) Field, Duval County, Texas. Smith Production also requests that all of the accumulated overproduction on the Lease be canceled.
- 3. The Field (No. 64816498) was discovered on January 30, 1966. The Field is observed beneath the Lease from 1,059 feet to 1,096 feet. The Field's target pay zone ranges from 36 to 46 feet thick. Based on the October 2018 proration schedule, the cumulative total oil production from the Field is 118,331 BO.
- 4. The Lease consists of 323 acres. Smith Production, Inc. has completed three oil wells on the Lease with oil production from November 2017 to June 2018, resulting in 24,761 BO. The monthly average oil production for the Lease is 3,095 BO.
- 5. Evidence in the hearing establishes the oil wells from the Lease maintain a constant production volume over time. Production data indicates each well on the Lease produces

- about 60 BOPD. No casinghead gas production and minimal water production has been observed from the wells.
- 6. Wells are typically completed and put on artificial lift (i.e., beam pumps) because natural flow is not occurring in the Field.
- 7. Presently the top allowable for each of these wells is 21 BOPD and 42 thousand cubic feet per day ("MCF/Day") of casinghead gas. The Lease has accumulated an overproduced status of 12,553 BO through July of 2018.
- 8. The October 1, 2018, Oil Proration Schedule indicates a statewide rule Net GOR of 2,000 standard cubic feet ("SCF") of casinghead gas per barrel of oil, or 2,000:1 SCF/Barrel, is established for the Field.
- 9. Production details for each well on the Lease is outlined below:
 - a. The maximum production rate for Well No. 7 was 70.02 BOPD on September 15, 2018, with a daily average production history of 33 BOPD.
 - b. The maximum production rate for Well No. 8 was 151.63 BOPD on February 15, 2018, with a daily average production history of 49 BOPD.
 - c. The maximum production rate for the Well No. 9 was 115.86 on July 25, 2018, with an average production history of 33 BOPD.
- 10. A letter dated July 19, 2018, was received from Smith Production requesting a hearing to seek a MER oil allowable of 70 BOPD and also request that the accrued overproduction be cancelled.
- 11. A hearing was held on October 12, 2018.
- 12. Smith Production performed fluid level tests on all three wells on two separate occasions: August 22, 2018 and September 20, 2018. The fluid level tests demonstrate that fluid level is sufficiently pumped off to allow the viscous hydrocarbons to flow into the wellbore.
- 13. Smith Production supported their MER request of 70 BOPD using well log data (establishing well production interval); production logs and graphs; and a demonstration using static fluid levels to indirectly establish the additional potential to produce wells at a higher optimal rate.
- 14. Cancellation of the overage for the Lease will prevent having to shut-in wells and potentially harm the reservoir.
- 15. At the hearing, the applicant agreed on the record that the Final Order in this case is to be final 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. Pursuant to § 2001.144 (a)(4)(A) of the Texas Government Code and the agreement of the applicant, this Final Order is effective and final 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 Smith Production, Inc. for a MER oil allowable of 70 BOPD per well and cancel all over-production for Well Nos. 7, 8 and 9 on the Drought 156 (14068) Lease, Neely, East (700) Field, Duval County, Texas.

Respectfully submitted,

Robert Musick, P.G.

Technical Hearings Examiner

Mull

Lynn Latombe

Administrative Law Judge