



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL & GAS DOCKET NO. 02-0319210

APPLICATION OF CAPITAL STAR OIL & GAS, INC. (130426) TO CONSIDER A NET GAS OIL RATIO FOR THE W. AINSWORTH OIL (11590) UNIT LEASE, WELL NO. 1, WORD (WILCOX, LOWER) FIELD, LAVACA COUNTY, TEXAS

HEARD BY: Ashley Correll, Technical Examiner
Kristi M. Reeve, Administrative Law Judge

HEARING DATE: July 11, 2019

CONFERENCE DATE: September 11, 2019

APPEARANCES:

APPLICANT:
Dale E. Miller, Graduate Engineer

REPRESENTING:
Capital Star Oil & Gas, Inc.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Capital Star Oil & Gas, Inc. (130426) ("Capital Star") seeks a net gas-oil ratio ("GOR") with a daily casinghead gas limit of 2,200 thousand cubic feet per day ("Mcf/d") and the cancellation of overproduction for the W. Ainsworth Oil Unit ("Lease"), Well No. 1 ("Well"), in the Word (Wilcox, Lower) Field ("Field"), Lavaca County, Texas. The July 2019 proration schedule reflects that the Field is an oil and gas field, with four wells reported on the Oil Proration Schedule and eight wells on the Gas Proration Schedule.

The oil production from the Well is limited to 250 barrels of oil per day ("bpd") and the standard GOR of 2,000 cubic feet per barrel for a well assigned 80 acres, per the adopted special field rules and the 1965 allowable yardstick. The Well is assigned 120 acres, as allowed with the tolerance provision for the last well on the Lease, and a current top oil allowable of 375 bpd and gas limit of 750 Mcf/d. Capital Star conducted a step-rate production test, which demonstrated that flowing the Well at approximately 2,200 Mcf/d resulted in the most stabilized and efficient production flow rate. Based on the evidence in the record, the Technical Examiner and Administrative Law Judge (collectively,

"Examiners") conclude that for the Well, a daily casinghead gas limit of 2,200 Mcfd and the cancellation of accrued overproduction will prevent waste and protect correlative rights. The Examiners recommend Capital Star's application be approved.

DISCUSSION OF THE EVIDENCE

The Field (Field No. 98766284) was discovered on July 21, 1977. Capital Star completed their vertically drilled W. Ainsworth Oil Unit (11590) Lease, Well No. 1 on July 27, 2018. The Well has a top allowable of 250 bpd and standard GOR of 2,000 cubic feet per barrel for a well assigned 80 acres, per adopted special field rules and the 1965 allowable yardstick. The Well is assigned 120 acres, which is allowed with the tolerance provision for the last well on the Lease. The assignment of 120 acres to the Well provides for the current top oil allowable of 375 bpd and gas limit of 750 Mcfd.

In the Field, if the GOR of a well is in excess of 2,000 standard cubic feet per standard barrel of oil, the well will receive a penalized oil allowable. A penalized oil allowable of 74 bpd is currently being assigned to the Well, due to the current W-10 test for the Well dated February 27, 2019, which established a GOR of 10,097 cubic feet per barrel. Since the W-10 test, the GOR for the Well has increased due to this being a solution-gas drive reservoir. The Well appears to have gone through the bubble point for the reservoir and free gas is being produced.

Capital Star performed a step-rate production test on the Well from May 8, 2019 through June 4, 2019 at various choke sizes ranging from 9/64" to 17/64". The Well demonstrated that when it was pinched back, the oil production rate decreased, the GOR increased, the flowing tubing pressure initially increased and then began to decrease, indicating that the Well began to load. The testing data demonstrates that the proposed rate is more efficient and will conserve reservoir energy and increase ultimate recovery to produce the Well at the higher rate.

The Lease was overproduced by 46,216 barrels and 285,708 thousand cubic feet (Mcf) through the end of May 2019 and has likely accrued additional overage in the interim time period between then, the actual hearing date, and when this case is presented at Conference. The cancellation of the accrued oil and casinghead gas overage on the Well will prevent the Well from being shut-in.

The reported oil overage for the Well is due to the assignment of a penalized oil allowable. The Well never produced over the top oil allowable to 375 bpd, and only approached the top allowable rate once in August 2018. The Well was assigned a penalized allowable of 74 bpd, which resulted in the Well accruing oil overproduction. Once the daily gas limit of 2,200 Mcfd is granted, the top oil allowable of 375 bpd will be assigned, and the Well will no longer accrue oil overage.

The Well will be placed on gas lift, once the Well's flowing pressure is not sufficient to lift the fluids out of the wellbore. When the Well is placed on gas lift, it is likely that the

rates will once again increase. Therefore, granting the proposed daily gas limit of 2,200 Mcfd will allow the Well to be produced efficiently and will prevent waste and protect correlative rights.

FINDINGS OF FACT

1. Capital Star seeks an increased Net GOR with a daily casinghead gas limit of 2,200 Mcfd and the cancellation of overproduction for the W. Ainsworth Oil Unit, Well No. 1, in the Word (Wilcox, Lower) Field (Field No. 98766284), Lavaca County, Texas.
2. Capital Star submitted its request for hearing to consider establishing a Net GOR with a daily casinghead gas limit of 2,200 Mcfd on March 27, 2019.
3. On June 3, 2019 the Hearings Division of the Commission sent a Notice of Hearing ("Notice") to Applicant and all offsetting operators in the field setting a hearing date of July 11, 2019. Consequently, the parties received more than 10 days' notice. The Notice contains (1) a statement of the time, place, and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved; and (4) a short and plain statement of the matters asserted. The hearing was held on July 11, 2019 as noticed. Applicant appeared and participated at the hearing. No one appeared in protest.
4. A penalized oil allowable of 74 bpd is currently being assigned to the Well due to the current W-10 test dated February 27, 2019, which established a GOR of 10,097 cubic feet per barrel.
5. Capital Star performed a step-rate production test on the Well from May 8, 2019 through June 4, 2019, which demonstrated that the proposed rate of 2,200 Mcfd is more efficient and will conserve reservoir energy and increase ultimate recovery.
6. The Lease was overproduced by 46,216 barrels and 285,708 Mcf through the end of May 2019.
7. The cancellation of the accrued oil and casinghead gas overage on the Well will prevent Capital Star from shutting-in the Well.
8. A daily casinghead gas limit of 2,200 Mcfd and the cancellation of accrued overproduction will prevent waste and protect correlative rights.
9. At the hearing, Capital Star 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.

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 §§1.42 and 1.45.
3. A daily casinghead gas limit of 2,200 Mcfd and cancellation of oil and casinghead gas overproduction on the Lease will prevent waste and protect correlative rights.
4. Pursuant to §2001.144(a)(4)(A), of the Texas Government code, and the agreement of the applicant, the Final Order in this docket is effective when a Master Order relating to the Final Order is signed.

EXAMINERS' RECOMMENDATION

The Examiner's recommend the application of Capital Star Operating, LLC, for a daily casinghead gas limit of 2,200 Mcfd for the W. Ainsworth Oil Unit, Well No. 1, Word (Wilcox, Lower) Field, Lavaca County, and the cancellation of all oil and casinghead gas overproduction for the Well, be granted.

Respectfully submitted,



Ashley Correll
Technical Examiner



Kristi M. Reeve
Administrative Law Judge