



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 09-0283107

THE APPLICATION OF STEPHENS & JOHNSON OPERATING CO. TO CONSIDER A MER ALL ALLOWABLE FOR THE MANGOLD TRACT 23 LEASE, WELL NO. 1, IN THE K-M-A (STRAWN REEF) FIELD, ARCHER COUNTY, TEXAS

HEARD BY: Paul Dubois - Technical Examiner
Laura Miles-Valdez - Legal Examiner

DATE OF HEARING: July 24, 2013

APPEARANCES: **REPRESENTING:**

APPLICANT:

Dale Miller

Stephens & Johnson Operating Co.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Stephens & Johnson Operating Co. (Stephens & Johnson) requests a Maximum Efficient Rate (MER) allowable for its Mangold Tract 23 Lease, Well No. 1 in the K-M-A (Strawn Reef) Field. The hearing was held on July 24, 2013.

On July 25, 2013, the lead examiner sent notice to all parties regarding two issues that arose during the hearing. First, the well in question is located in Archer County, not Wichita County as suggested on the notice. The K-M-A (Strawn Reef) Field is associated with Wichita County in RRC records. There are six wells in the field, four in Wichita County, one in Archer County and one in Wilbarger County. Again, the notice should have clearly reflected that the subject well is in Archer County. Second, the hearing was noticed to 'Consider a MER Allowable'. When the applicant requested the hearing, their understanding was that the well was only producing oil and not gas, as that was their experience with wells in this field. During the hearing the applicant provided evidence of their recent discovery that the well was producing gas at an average rate of 248 MCF/D from June 21, 2013, through July 23, 2013, indicating an increasing trend. The gas-to-oil ratio is approximately 1000:1. As a result, the applicant requested a daily gas limit of 400 MCF/D. This issue was not part of the original notice. All parties subject to the original

notice (which include those who would be noticed for an increased gas oil ratio or daily gas limit hearing) were notified of these issues and provided 10 days to respond to protest or request a new hearing. No responses or requests for hearing were received.

The application was not protested. The examiners recommend approval of the MER allowable and daily gas limit, and cancellation of overproduction as requested by Stephens & Johnson.

DISCUSSION OF EVIDENCE

The Mangold Tract 23 Lease Well No. 1 was completed on February 5, 2013, to a total depth of 4,050 feet. The well is completed in the Goen Lime formation, K-M-A (Strawn Reef) Field and perforated from 3,966 to 3,998 feet. Following fracture stimulation treatment, the well was tested on February 27, 2013, and produced by pumping 78 BOPD, 568 BWPD, and no gas. The oil gravity was 42.0°. Stephens & Johnson operates three other wells in the K-M-A (Strawn Reef) field, none of which produce appreciable amounts of gas. Stephens & Johnson did not expect this well to produce gas.

From February through July of 2013 the production characteristics of the well changed. Oil production increased from about 30 BOPD at initial production, to 78 BOPD at the potential test, to 251 BOPD on July 23, 2013. The average daily production between June 21, 2013, and July 23, 2013 was 241 BOPD. The average daily production for the first ten days of this period was 230 BOPD and for the last ten days was 249 BOPD, indicating a continued increase in average daily production up until the day before the hearing. While the applicant indicated the volumes may not have been recorded on exact 24-hour increments, the data as a whole indicates the oil production has increased for five months and continues to increase. The top allowable for the field is 73 BOPD; the well is overproduced for oil 7,952 bbl through May 2013.

Water production during the same period has declined from 568 BWPD at the potential test to an average of 335 BWPD from June 21 through July 24, 2013. A consistent downward trend in water production is observed for the five months the well has been in production. However, because of the water production the well was not tested at different production rates (specifically, lowering the production rate to the field's current maximum allowable) out of concern that the well would load up with fluids, leading to negative consequences to production and the reservoir.

Stephens & Johnson did not anticipate – and was therefore not looking for – gas production from the well. In preparation for the MER hearing gas production was observed. On June 21, 2013, Stephens & Johnson recorded 190 MCFPD of gas production from the well. The average gas production through July 23, 2013, was 224 MCFPD with a maximum of 248 MCFPD. Like the oil production, the gas production data demonstrate an increasing production trend. The gas to oil ratio (GOR) for the well on

June 21 was 856 SCF/Bbl, and on July 23, 2013, it was 972 SCF/Bbl. While the GOR has increased slightly, it is below 1,000 SCF/Bbl and well below the statewide requirement of 2,000 SCF/Bbl. The maximum gas allowable for the field is 146 MCFPD at a gas to oil ratio of 2,000 MCF/Bbl. Because gas production was not measured before June 21, 2013, there is not currently a production overage of gas reported to the Commission. However, the applicant acknowledges this will not be the case when July production is reported.

Because there is negligible gas production in the area, the nearest gas pipeline is more than seven miles away. Constructing a connection pipeline may be cost prohibitive. The applicant is looking into options for legal use of the gas, including onsite gas liquids recovery.

Stephens & Johnson is requesting a MER allowable of 300 BOPD. This value is consistent with the current production trend. Stephens & Johnson is also requesting a daily gas limit of 400 MCFPD, which is reasonable given the gas production characteristics and GOR of the well. The applicant also requests all overproduction be cancelled.

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.
2. A 10-day letter was sent to the parties on July 25, 2013, notifying them of two issues which arose during the hearing (regarding well location and daily gas limit) and providing an opportunity to protest or request a new hearing.
3. No responses were from the 10-day letter were received. No requests for new hearings were received.
4. The Mangold Tract 23 Lease Well No. 1 was completed in February 2013 in the K-M-A (Strawn Reef) Field in Archer County, Texas.
5. The oil production rate has increased since the well entered production from about 30 BOPD to about 249 BOPD.
6. The water production rate has decreased since the well entered production from about 568 BWPD to 335 BWPD.
7. Gas production was not observed for the first four months of production.
8. On June 21, 2013, the well produced 190 MCFPD of gas, with average daily gas production of 224 MCFPD, indicating an increasing trend.

9. The gas to oil ratio has averaged 930 SCF/Bbl from June 21, 2013, through July 23, 2013, with a slightly increasing trend.

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. A MER allowable of 300 BOPD and daily gas limit of 400 MCFPD for the Mangold Tract 23 Lease, Well No. 1 in the K-M-A (Strawn Reef) Field will not cause waste and will not harm correlative rights.

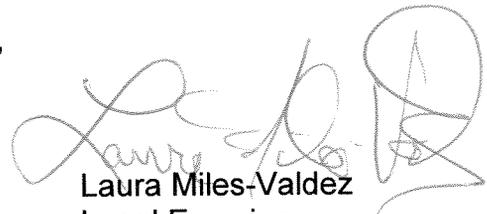
RECOMMENDATION

Based on the above findings and conclusions of law, the examiners recommend approval of the MER allowable of 300 BOPD, daily gas limit of 400 MCFPD, and cancelling oil and gas overproduction for the Mangold Tract 23 Lease, Well No. 1 in the K-M-A (Strawn Reef) Field, Archer County, Texas.

Respectfully submitted,



Paul Dubois
Technical Examiner



Laura Miles-Valdez
Legal Examiner