

RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 01-0283749

THE APPLICATION OF EF ENERGY LLC FOR CANCELLATION OF OVERPRODUCTION FOR THE SHEFFIELD RANCH A LEASE, WELL NO. 1H, WEINERT (BUDA) FIELD, WILSON COUNTY, TEXAS

HEARD BY: Paul Dubois - Technical Examiner

Laura Miles-Valdez - Legal Examiner

DATE OF HEARING:

August 27, 2013

APPEARANCES:

REPRESENTING:

APPLICANT:

Sandra Buch Robert Dreyling EF Energy LLC

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the application of EF Energy LLC to cancel the overproduction of its Sheffield Ranch A Lease (Lease No. 16325) Well No. 1H, in the Weinert (Buda) Field, Wilson County, Texas.

After the hearing, EF Energy LLC made the examiners aware of two operators in the field who were not on the proration schedule when the hearing notice was originally given. These two operators were given notice and the opportunity to participate in the matter. No protests were received. The examiners recommend that the overproduction be cancelled as requested.

DISCUSSION OF EVIDENCE

The Sheffield Ranch A Lease Well No. 1H has a peculiar history resulting in delays with field placement, filing completion reports, allowable assignment and overproduction. The well was completed on September 2, 2011. Originally permitted for horizontal completion in the Eagleville (Eagle Ford-1) Field, indications during drilling suggested the

well was no longer within the Eagle Ford formation. A 326-foot interval was perforated at the toe of the well and acidized for treatment. The well was not fracture stimulated. On September 9, 2011, an initial potential test produced 592 BO, 220 MCFG, no water, and a gas-to-oil ratio (GOR) of 371 SCF/B.

A sample of the oil was analyzed for comparison to produced oil from nearby wells completed in the Austin Chalk, Eagle Ford and Buda formations. The analysis indicated oil from the Sheffield 1H was most similar to oil from other Buda wells. EF Energy later concluded that the last few hundred feet of an approximately 5,000 foot long lateral had penetrated into the underlying Buda formation, probably by crossing a fault in which the Buda formation was up-thrown relative to the Eagle Ford. Because the Eagle Ford formation typically produces large quantities of water, EF Energy decided not to complete the well in the Eagleville (Eagle Ford-1) Field. On February 28, 2012, EF Energy amended the drilling permit to place the well in the Weinert (Buda) Field. The Weinert (Buda) Field has a well density requirement of 40 acres. Assignable acreage can be adjusted for horizontal wells.

Following permit aproval, an amended completion report was filed on March 12, 2012. The completion report was approved by Commission Staff on February 27, 2013 with a zero allowable pending operator submittal of a corrected as-drilled/proration plat. An allowable of 182 BO/D was set on or about April 18, 2013. This allowable was based on the limited drainhole length of 335 feet (the perforated interval was within the Buda formation only), and a corresponding assignable acreage of 60 acres per field rules. Given the well's initial potential test of 592 BO/D and production since September 2011, EF Energy was notified of overproduction on June 27, 2013.

Production data provided by EF Energy indicated that the well flowed for about five months with increasing choke sizes. Increasing the choke size from 18/64^{ths} to 20/64^{ths} and 28/64^{ths} resulted in increasing oil production but no significant change in the GOR, which generally remained between 300 to 400 SCF/B and indicated that the reservoir energy was not harmed by increased oil production. In February 2012, the well was placed on an electric submersible pump. In December 2012, a rod pump was installed in the well.

The well produced 3,028 BO in July 2013, for a daily average of 98 BO/D. Water production is negligible, and gas production has always been within the daily gas limit. The well exceeded its monthly oil allowable for most months from September 2011 until August 2012, accruing a cumulative overproduction of 32,174 BO. Since then, however, the overage has consistently been reduced; as of August 1, 2013, the overproduction was about 14,061 BO. The well is experiencing normal decline now, and it is producing within its oil allowable of 182 BO/D.

Since the hearing, EF Energy has made mechanical changes to the well by lowering the rod pump into the bend of the wellbore. As a result of this change, the average production increased to 121 BOPD and 327 MCFGPD for an average GOR of 2,771 CF/BBL. EF Energy believes the increased GOR is the result of production from a

secondary gas cap. The increased GOR is still within the field rule requirements, and no revised requests were made by EF Energy.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all operators in the Weinert (Buda) Field at least ten days prior to the date of hearing.
- 2. The application was not protested.
- 3. The Sheffield Ranch A Lease Well No. 1H was completed on September 2, 2011.
- 4. The well was originally permitted for horizontal completion in the Eagleville (Eagle Ford-1) Field.
- 5. A 326-foot interval was perforated at the toe of the well and acidized for treatment.
- 6. The well was not fracture stimulated.
- 7. On September 9, 2011, an initial potential test produced 592 BO, 220 MCFG, no water, and a gas-to-oil ratio (GOR) of 371 SCF/B.
- 8. A sample of the oil was analyzed and found to be similar to oil from other Buda wells.
- 9. The well was placed in the Weinert (Buda) Field and an allowable of 182 BO/D was set
- 10. Increasing the choke size from 18/64^{ths} to 20/64^{ths} and 28/64^{ths} resulted in increasing oil production but no significant change in the GOR
- 11. In February 2012, the well was placed on an electric submersible pump, and in December 2012 a rod pump was installed in the well.
- 12. The well is declining, having produced 3,028 BO in July 2013, for a daily average of 98 BO/D.
- 13. After moving the rod pump deeper in the well, the average production increased to 121 BOPD and 327 MCFGPD for an average GOR of 2,771 CF/BBL, still within the field rule requirements.
- 13. The well exceeded its monthly oil allowable for most months from September

2011 until August 2012, accruing a cumulative overproduction of 32,174 BO.

- 14. As of August 1, 2013, the overproduction was about 14,061 BO.
- 15. The well is experiencing normal decline now, and it is producing within its oil allowable of 182 BO/D.

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. Cancellation of the overproduction for the subject well in the Weinert (Buda) Field will not harm correlative rights and will not cause waste.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission cancel the overproduction for the subject well in the Weinert (Buda) Field, as requested by EF Energy LLC.

Respectfully submitted,

Paul Dubois

Technical Examiner

Laura Miles-Valdez

Legal Examiner