



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0298031

THE APPLICATION OF MEWBOURNE OIL COMPANY FOR PERMANENT GAS WELL CLASSIFICATION FOR TXL 21 LEASE B201MD, TXL 29 LEASE B201AP, TXL 31 LEASE B201CN, TXL 33 LEASE B201PA, AND TXL WEST 11 LEASE B201PA, SANDBAR (BONE SPRINGS) FIELD, LOVING COUNTY, TEXAS

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

REVIEWED BY: Jennifer Cook - Administrative Law Judge

DATE OF HEARING: October 12, 2015

CONFERENCE DATE: June 21, 2016

APPEARANCES: **REPRESENTING:**

APPLICANT:

James Clark, P.E.

Mewbourne Oil Company

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the application of Mewbourne Oil Company (Mewbourne) to reclassify five oil wells as gas wells in the Sandbar (Bone Spring) Field, Loving County, Texas. The field rules for the Sandbar (Bone Springs) Field allow for permanent gas well classification from the date of first production based on a 3,000:1 gas to oil ratio (GOR). In three other cases the Commission has issued Final Orders providing other operators similar reclassification. The application was not protested. The Examiners recommend the oil wells be permanently reclassified as gas wells, effective the date of initial completion.

DISCUSSION OF THE EVIDENCE

On June 12, 2012, the Commission issued a Final Order to Oil & Gas Docket No. 08-0275393, the application of Anadarko Petroleum Corporation to amend field rules and to authorize permanent gas well classification for wells in the Sandbar (Bone Spring) Field. In the matter of Docket No. 08-0275393 Anadarko sought to adopt a means of

permanently classifying wells as gas wells based on a 3000:1 or greater GOR at completion. This approach, justified based on the works of Phillip L. Moses¹ and William D. McCain, Jr.², was adopted at the request of operators in several Eagle Ford Formation and other fields in the state as well as by Anadarko in the Sandbar (Bone Spring) Field.

Reviewing the works of Moses and McCain, the Examiners note the cited references predate the recent development of massive fracture stimulation of horizontal wells in tight shales that generate large volumes of flow-back water (indeed, it would be interesting and helpful to see Moses & McCain's work updated in this regard). Moses does, however, recognize the need for well testing to be conducted once a well has stabilized and before the initial reservoir pressure has decreased. Moses states, "The most important factor in a flow test is stabilization. This includes stable wellhead pressure, stable gas production, and stable liquid production." (Moses, 717). Stability would appear to require recovery of at least some of the introduced stimulation fluids before the original formation fluids can establish a representative production at the wellhead. But, Moses explains, well testing must occur early in the life of the well: "As is the case with oil reservoirs, gas-condensate reservoirs should be sampled early in their life, before significant pressure loss has occurred. Once reservoir pressure has declined below the original dewpoint, it is no longer possible to get samples that represent the original reservoir fluid". (Moses, 718). Thus the Examiners recognize the potentially conflicting time demands that (1) the 3,000:1 GOR criteria for classification applies to wells with a 3,000:1 GOR at *completion* (as has been worded in the various Commission Final Orders on these issues), and not some indefinite time in the future after production has commenced; but (2) a certain additional time after well completion (i.e., stimulation) may be needed for a well to be stabilized to allow for a representative test.

The subject wells were permitted, drilled and completed as oil wells. Mewbourne's expert engineering witness, James Clark, P.E., stated it was unaware of the field rule provisions establishing gas well classification when an initial GOR is 3,000 scf/bbl or greater. Mewbourne now seeks to have these five oil wells reclassified as gas wells under the existing field rules established by the Commission in Docket No. 08-0275393. During and the hearing Mewbourne provided evidence to support these wells achieving a stabilized completion GOR of 3,000:1 or greater. The five wells and their initial production characteristics are described below:

¹ Moses, Phillip L., SPE, Core Laboratories, Inc., "Engineering Applications of Phase Behavior of Crude oil and Condensate Systems", Journal of Petroleum Technology, July 1986, pp 715-723. SPE paper 15835.

² McCain, William D., Jr., The Properties of Petroleum Fluids, Second Edition, PennWell Publishing Company, Tulsa, OK. 1990.

- TXL 29 Lease, Well No. B201AP (API No. 42-301-31914) was completed with a GOR of 6,075 scf/bbl as indicated on the Form W-2 filed on August 19, 2013 (Exhibit No. 4).
- TXL West '11', Well No. B201PA (API No. 42-301-32000) was completed with a GOR of 3,774 scf/bbl as indicated on the Form W-2 filed on August 13, 2014 (Exhibit No. 7).
- TXL 21 Lease, Well No. B201MD (API No. 42-301-32094) was completed with a GOR of 2,349 scf/bbl as indicated on the Form W-2 filed on October 24, 2014 (Exhibit No. 3). However, a graph of daily production and GOR data indicates GOR values at stabilized production rates consistently greater than 3,000:1.
- TXL 31 Lease, Well No. B201CN (API No. 42-301-32227) was completed with a GOR of 2,233 scf/bbl as indicated on the Form W-2 filed on October 10, 2014 (Exhibit No. 5). However, a graph of daily production and GOR data indicates GOR values at stabilized production rates consistently greater than 3,000:1.
- TXL 33 Lease, Well No. B201PA (API No. 42-301-31839) was completed with a GOR of 601 scf/bbl as indicated on the Form W-2 filed on November 13, 2013 (Exhibit No. 7). However, a graph of daily production and GOR data indicates GOR values at stabilized production rates consistently greater than 3,000:1.

In addition, Mewbourne identified three other instances in which operators sought and obtained Commission approval for retroactive gas well classification in the Sandbar (Bone Springs) Field. These cases are identified as:

- Oil and Gas Docket No. 08-0286383(Final Order dated May 6, 2014): The Application of Shell Western E&P to Consider Reclassifying Oil Wells to Gas Wells for Various Leases, Various Wells, Sandbar (Bone Spring) Field, Loving County, Texas.
- Oil and Gas Docket No. 08-0292746 (Final Order dated January 27, 2015): The Application of COG Operating LLC for Permanent Gas Well Classification for Various Leases and Wells, Sandbar (Bone Springs) Field, Loving and Reeves Counties, Texas
- Oil and Gas Docket No. 08-0289901 (Final Order dated February 24, 2015): The Application of RKI Exploration & Production LLC Reclassifying Oil Wells to Gas Wells for Various Wells Sandbar (Bone Spring) Field Loving County, Texas.

The Examiners conclude the present case to be consistent with the precedents set by the three cases listed above, and the subject five wells meet the field rule requirements for permanent gas well classification effective the date of first production.

FINDINGS OF FACT

1. Notice of this application and hearing was provided to all persons entitled to notice at least ten (10) days prior to the date of the hearing.
2. On June 12, 2012 the Commission issued a Final Order to Oil & Gas Docket No. 08-0275393, authorizing the permanent classification as gas wells for all wells completed in the field with a gas-oil ratio (GOR) of 3,000:1 cubic feet per barrel and above, effective the date of initial completion.
3. Mewbourne has demonstrated that the subject five wells were completed with a GOR of 3,000 scf/bbl or greater, based on initial GOR as reported on Form W-2 or based on stabilized production rates early in the life of the wells.

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 § 1.45
3. The subject five wells meet the requirements of Sandbar (Bone Spring) Field Rules to be permanently classified as gas wells, effective the date of first production.

RECOMMENDATION

The Examiners recommend that the Commission enter an order permanently reclassified the five subject wells as gas wells, effective the date of initial completion, as requested by Mewbourne Oil Company.

Respectfully submitted,



Paul Dubois
Technical Examiner



Jennifer Cook
Administrative Law Judge