

OIL AND GAS DOCKET NO. 08-0265003

THE APPLICATION OF SANDRIDGE EXPL. AND PROD., LLC TO CONSOLIDATE THE FULLERTON (WICHITA ALBANY) AND FULLERTON (WOLFCAMP) FIELDS INTO THE FULLERTON FIELD AND TO RENUMBER AND AMEND FIELD RULE NOS. 1, 2 AND 3 FOR THE FULLERTON FIELD, ANDREWS COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

DATE OF HEARING: April 28, 2010

APPEARANCES:

REPRESENTING:

APPLICANT:

Bill Spencer
Cary McGregor

Sandridge Expl. and Prod., LLC

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Sandridge Expl. and Prod., LLC ("Sandridge") requests to consolidate the Fullerton (Wichita Albany), ID No. 33230 700, and the Fullerton (Wolfcamp), ID No. 33230 800, Fields into the Fullerton, ID No. 33230 001, Field. Although the original notice of hearing also included the consolidation of the Devonian through the Ellenbuger formations, at the hearing, Sandridge withdrew the request in order to prevent a protest from Whiting Oil & Gas Corporation.

Field Rules for the Fullerton Field were originally adopted by Final Order No. 8-28,449, effective December 21, 1953, as amended. The Field Rule Nos. 1, 2 and 3 that are currently in effect for the field are summarized as follows:

1. 330'-660' well spacing;
2. Oil string cementing requirements;
3. 40 acre oil units with optional 20 acre density;

Sandridge requests that Field Rule Nos. 1, 2 and 3 be renumbered and amended as follows:

1. Designation of the field as the correlative interval from 5,676 feet to 8,500

feet;

2. 330'-0' well spacing;
3. 40 acre oil units with optional 10 acre density;

This application was unopposed and the examiner recommends approval of the field consolidation and renumbering and amending Field Rule Nos. 1, 2 and 3 for the Fullerton Field, as requested by Sandridge.

DISCUSSION OF THE EVIDENCE

The Fullerton Field was discovered in December 1941 at an average depth of 7,300 feet. There are currently 548 producing wells carried on the proration schedule and Exxon Mobil Corporation operates the majority of the wells in the field. The field operates under rules providing for 330'-660' well spacing, 40 acres oil units with optional 20 acre density and allocation based on 100% acres. Cumulative production from the field through March 2010 is approximately 328.6 MMBO and 140.7 BCFG.

The Fullerton (Wichita Albany) Field was discovered in July 1948 at an average depth of 7,900 feet. There are currently only 4 shut-in wells and 1 injection well carried on the proration schedule and Sandridge operates the four shut-in wells in the field. The field operates under Statewide Rules and has allocation based on 100% acres. Cumulative production from the field through March 2010 is 570.7 MBO and 427.4 MMCFG.

The Fullerton (Wolfcamp) Field was discovered in April 1947 at an average depth of 8,100 feet. There are currently 7 producing wells carried on the proration schedule and Sandridge does not operate any wells in the field. The field operates under Statewide Rules and has allocation based on 100% acres. Cumulative production from the field through March 2010 is 371.6 MBO and 258.1 MMCFG.

Sandridge is proposing to consolidate the Wichita Albany and Wolfcamp fields into the Fullerton Field. The proposed designated interval for the consolidated field is the entire correlative interval between 5,676 feet and 8,500 feet as shown on the log of the Pan American Petroleum Corporation - University Consolidated XII Lease, Well No. 22 (API No. 42-003-04253). This interval includes all zones between the top of the Glorita and the top of the Devonian formations.

The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval. All of the reservoirs are continuous across the field area and contain fractured dolomites that are deposited over a Northwest-Southeast trending anticline. The producing zones are heterogeneous lenticular deposits that have an average porosity of 9%, an average water saturation of 37% and a cumulative average net

pay thickness of 60 feet. The primary drive mechanism is a solution gas drive and the fields are in the later stages of primary depletion.

Sandridge estimated a recovery factor of 12% and performed a drainage area calculation for 4 wells located on two different leases. On the wells studied, the net pay ranged from 35 feet up to 83 feet and the estimated ultimate recoveries ranged from 24,000 BO up to 70,000 BO. The calculated drainage areas ranged from 9 acres up to 44 acres. Two wells had a drainage area of approximately 10 acres and the average drainage area was 22 acres.

The proposed consolidated field is almost developed down to 20 acres per well and Sandridge plans to further develop the field down to a density of 10 acres. Based on the drainage calculations submitted by Sandridge, additional wells are needed to effectively drain the reservoirs. Minimum well spacing of 330 foot lease line spacing with no minimum distance between wells and 40 acre proration units with optional 10 acre density will provide flexibility in locating wells for future development in the area. Sandridge submitted a table showing that there were 29 fields in Districts 8 and 8A that already had field rules providing for 10 acre units or optional 10 acre density.

Sandridge will be actively developing the consolidated interval by drilling infill wells and completing existing wells into additional zones and needs the flexibility to downhole commingle production to increase the economic viability of the wells. To date, there have been 58 Statewide Rule 10 exceptions approved by the Commission to commingle production from six unique combinations of Fullerton fields. No scaling tendencies have yet been identified by Sandridge on the commingled wells.

Sandridge stated that producing all of the reservoirs simultaneously would reduce the abandonment rate for each zone and increase the ultimate recovery of hydrocarbons from all of the reservoirs. Assuming an economic limit of 2 BOPD, and a 7.5% exponential decline rate for each of the three reservoirs, Sandridge calculated the incremental reserves to be recovered from each infill well to be 19,200 BO and 23,000 MCFG.

Since the Fullerton Field Clearfork formation occurs at 7,300 feet, Sandridge requested that the top oil allowable remain at the 1965 Yardstick Allowable of 121 BOPD for a 40 acre well.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. The Fullerton Field was discovered in December 1941 at an average depth of 7,300 feet.
 - a. There are currently 548 producing wells carried on the proration schedule and Exxon Mobil Corporation operates the majority of the wells in the field.
 - b. The field operates under rules providing for 330'-660' well spacing, 40 acres oil units with optional 20 acre density and allocation based on 100% acres.
3. The Fullerton (Wichita Albany) Field was discovered in July 1948 at an average depth of 7,900 feet.
 - a. There are currently only 4 shut-in wells and 1 injection well carried on the proration schedule and Sandridge operates the four shut-in wells in the field.
 - b. The field operates under Statewide Rules and has allocation based on 100% acres.
4. The Fullerton (Wolfcamp) Field was discovered in April 1947 at an average depth of 8,100 feet.
 - a. There are currently 7 producing wells carried on the proration schedule and Sandridge does not operate any wells in the field.
 - b. The field operates under Statewide Rules and has allocation based on 100% acres.

5. The Fullerton (Wichita Albany) and Fullerton (Wolfcamp) Fields should be consolidated into the Fullerton Field.
6. The designated interval for the consolidated field should be the entire correlative interval between 5,676 feet and 8,500 feet as shown on the log of the Pan American Petroleum Corporation - University Consolidated XII Lease, Well No. 22 (API No. 42-003-04253). This interval includes all zones between the top of the Glorita and the top of the Devonian formations.
7. The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval. All of the reservoirs are continuous across the field area and contain fractured dolomites that are deposited over a Northwest-Southeast trending anticline.
8. Sandridge will be actively developing the consolidated interval by drilling infill wells and completing existing wells into additional zones and needs the flexibility to downhole commingle production to increase the economic viability of the wells. To date, there have been 58 Statewide Rule 10 exceptions approved by the Commission to commingle production from six unique combinations of Fullerton fields.
9. Assuming an economic limit of 2 BOPD, and a 7.5% exponential decline rate for each of the three reservoirs, Sandridge calculated the incremental reserves to be recovered from each infill well to be 19,200 BO and 23,000 MCFG.
10. Minimum well spacing of 330 foot lease line spacing with no minimum distance between wells and 40 acre proration units with optional 10 acre density will provide flexibility in locating wells for future development in the area.
11. There are 29 fields in Districts 8 and 8A that already have field rules providing for 10 acre units or optional 10 acre density.
12. Since the Fullerton Field Clearfork formation occurs at 7,300 feet, the requested top oil allowable based on the 1965 Yardstick Allowable of 121 BOPD for a 40 acre well is appropriate.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.

2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
3. Consolidating the Fullerton (Wichita Albany) and Fullerton (Wolfcamp) Fields into the Fullerton Field and renumbering and amending Field Rule Nos. 1, 2 and 3 for the Fullerton Field will prevent waste, protect correlative rights, satisfy statutory requirements and promote development of the field.

EXAMINER'S RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends the consolidation of the Fullerton (Wichita Albany) and Fullerton (Wolfcamp) Fields into the Fullerton Field. It is further recommended that Field Rule Nos. 1, 2 and 3 for the Fullerton Field be renumbered and amended, as requested by Sandridge.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Hearings Examiner