OIL AND GAS DOCKET NO. 7C-0265961

THE APPLICATION OF APPROACH OPERATING LLC TO CONSOLIDATE THE HOLT RANCH (CANYON 7600) AND OZONA, N. (ELLENBURGER) FIELDS INTO A NEW FIELD CALLED THE HOLT RANCH (CONSOLIDATED) FIELD AND TO ADOPT FIELD RULES FOR THE HOLT RANCH (CONSOLIDATED) FIELD, CROCKETT COUNTY, TEXAS

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

HEARING DATE: June 18, 2010

APPEARANCES: REPRESENTING:

APPLICANT:

George Neale Approach Operating LLC Rick Johnston

EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

Approach Operating LLC ("Approach") requests to consolidate the Holt Ranch (Canyon 7600), ID No. 42341 250, and Ozona, N. (Ellenburger), ID No. 67997 400, Fields into a new field to be known as the Holt Ranch (Consolidated), ID No. 42341 300, Field.

Approach requests that the new field be classified as associated-prorated and that the following Field Rules be adopted:

- Designation of the field as the entire correlative interval between 7,600 feet and 8,425 feet as shown on the log of the Approach Operating LLC - West Lease, Well No. 2303 (API No. 42-105-40533), Section 23, Block AB, Rebecca Adams Survey, A-1873, Crockett County, Texas;
- 2. 330'-660' well spacing;
- 3. 320 acre units with optional 20 acre density;
- 4. Oil allocation based and on 100% acres, gas allocation based on 50% acres and 50% deliverability and suspension of the gas allocation formula.

Approach also requests that the top oil allowable be set at the 1965 Yardstick Allowable of 353 BOPD for an 160 acre well with a maximum allowable GOR of 4,000 standard cubic feet per barrel.

The examiner did not believe that it was reasonable that an oil well in either field would be capable of draining 320 acres and recommend 160 acre base units for oil wells. The examiner also suggested that the allocation formulas be the same and recommended 50% acres and 50% potential/deliverability. Approach did not consider these recommendations to be adverse.

The application was unprotested and the examiner recommends approval of Approach's request for field consolidation and Field Rules.

DISCUSSION OF THE EVIDENCE

The Holt Ranch (Canyon 7600) Field was discovered in April 1967. There is no designated interval for the field, but production is from a depth of approximately 7,600 feet. The field is classified as associated-100% AOF and there are 14 producing oil wells and 60 producing gas wells carried on the proration schedules. The gas field operates under Field Rules providing for 660'-1,320' well spacing, 160 acre units with 80 acre optional density and allocation based on 100% acreage. The oil field operates under Statewide Rules. Cumulative production from the field through May 2010 is 7.6 BCFG and 494.9 MBO.

The Ozona, N. (Ellenburger) Field was discovered in October 1954. There is no designated interval for the field, but production is from a depth of approximately 8,000 feet. The field is classified as associated-100% AOF and there are 2 producing oil wells and 16 producing gas wells carried on the proration schedules. The field operates under Statewide Rules. Cumulative production from the field through May 2010 is 5.8 BCFG and 313.2 MBO.

Approach is proposing to consolidate the two subject fields into a new field called the Holt Ranch (Consolidated) Field. The field will be classified as associated-prorated, since the proposed consolidated field contains lenticular oil zones and there is no gas cap present. The proposed designated interval for the consolidated field is the entire correlative interval between 7,600 feet and 8,425 feet as shown on the log of the Approach Operating LLC - West Lease, Well No. 2303 (API No. 42-105-40533), Section 23, Block AB, Rebecca Adams Survey, A-1873, Crockett County, Texas. This interval includes all zones between the top of the Canyon 7600 formation and the upper productive portion of the Ellenburger formation.

The two subject fields are geographically intermingled. There are no other fields contained within the proposed correlative interval and both of the reservoirs are continuous across the field area. Both of the formations have a depletion drive as the primary drive mechanism. The oil wells produce below the reservoir bubble point and experience increasing gas oil ratios. As a result, Approach requests that the field allowable GOR be set at 4,000 standard cubic feet per barrel.

Well spacing of 330'-660', 320 acre gas units and 160 acre oil units with optional 20 acre density will provide flexibility in locating wells for future development in the Holt Ranch area. Approach will be actively developing the consolidated interval by drilling infill wells and completing existing wells into the additional reservoir and needs the flexibility to downhole commingle production to increase the economic viability of the wells. To date, there has been one Statewide Rule 10 exception approved by the Commission to commingle production from both of the reservoirs contained within the consolidated interval. Approach stated that producing the reservoirs simultaneously would reduce the abandonment rate for each reservoir and increase the ultimate recovery of hydrocarbons from each of the reservoirs.

Optional 20 acre density is necessary for the efficient and effective depletion of the reservoirs. Approach performed a drainage area analysis on 14 total oil and gas wells with 9 wells producing from the Holt Ranch (Canyon 7600) Field and 5 wells producing from the Ozona, N. (Ellenburger) Field. The calculated ultimate recoveries ranged from 166 MMCF of gas equivalents up to 2.2 BCF of gas equivalents. The calculated drainage areas ranged from 9 acres up to 292 acres and eight of the wells had drainage areas less than 20 acres.

A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes. Therefore, Approach proposed a two-factor allocation formula for oil and gas wells based on 50% acres and 50% potential/deliverability. Approach also requests that the top oil allowable be set at the 1965 Yardstick Allowable of 353 BOPD for a 160 acre well with a maximum allowable GOR of 4,000 standard cubic feet per barrel. In addition, Approach requests that the gas well allocation formula be suspended, as there is a 100% market for all the gas produced from the field.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
- 2. The Holt Ranch (Canyon 7600) Field was discovered in April 1967. There is no designated interval for the field, but production is from a depth of approximately 7,600 feet.
 - a. The field is classified as associated-100% AOF and there are 14 producing oil wells and 60 producing gas wells carried on the proration schedules.
 - b. The gas field operates under Field Rules providing for 660'-1,320' well spacing, 160 acre units with 80 acre optional density and allocation based on 100% acreage.
 - c. The oil field operates under Statewide Rules.

- 3. The Ozona, N. (Ellenburger) Field was discovered in October 1954. There is no designated interval for the field, but production is from a depth of approximately 8,000 feet.
 - a. The field is classified as associated-100% AOF and there are 2 producing oil wells and 16 producing gas wells carried on the proration schedules.
 - b. The field operates under Statewide Rules.
- 4. The Holt Ranch (Canyon 7600) and Ozona, N. (Ellenburger) Fields should be consolidated into the new Holt Ranch (Consolidated) Field and be classified as associated-prorated.
- 5. The designated interval for the consolidated field should be the entire correlative interval between 7,600 feet and 8,425 feet as shown on the log of the Approach Operating LLC West Lease, Well No. 2303 (API No. 42-105-40533), Section 23, Block AB, Rebecca Adams Survey, A-1873, Crockett County, Texas. This interval includes all zones between the top of the Canyon 7600 formation and the upper productive portion of the Ellenburger formation.
- 6. The two subject fields are geographically intermingled. There are no other fields contained within the proposed correlative interval and both of the reservoirs are continuous across the field area.
- 7. Well spacing of 330'-660', 320 acre gas units and 160 acre oil units with optional 20 acre density will provide flexibility in locating wells for future development in the Holt Ranch area.
- 8. Optional 20 acre density is necessary for the efficient and effective depletion of the reservoirs. The calculated drainage areas on 14 wells ranged from 9 acres up to 292 acres and eight of the wells had drainage areas less than 20 acres.
- 9. Approach will be actively developing the consolidated interval by drilling infill wells and completing existing wells into the additional reservoir and needs the flexibility to downhole commingle production to increase the economic viability of the wells. To date, there has been one Statewide Rule 10 exception approved by the Commission to commingle production from both of the reservoirs contained within the consolidated interval.
- 10. The requested top oil allowable based on the 1965 Yardstick Allowable of 353 BOPD for a 160 acre well is appropriate.

- 11. The proposed two-factor allocation formula for oil and gas wells based on 50% acres and 50% potential/deliverability will satisfy State Statutes.
- 12. Classification of the associated gas field as associated-49(b) is not necessary to prevent waste. Associated-prorated status for the gas field is appropriate, since the consolidated field contains lenticular oil zones and there is no gas cap present.
- 13. A permissible gas-oil ratio of 4,000 cubic feet per barrel will not cause waste of oil in the Holt Ranch (Consolidated) Field.
- 14. Suspension of the gas allocation formula in the consolidated field is appropriate since there is a 100% market for any gas produced from the field.

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.
- Consolidation of the two subject fields into the new Holt Ranch (Consolidated) Field and adoption of the proposed Field Rules 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 that the Commission consolidate the two subject fields into the new Holt Ranch (Consolidated) Field and adopt permanent Field Rules for the Holt Ranch (Consolidated) Field, as requested by Approach Operating LLC.

Respectfully submitted,

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