THE APPLICATION OF HUNT OIL COMPANY TO CONSOLIDATE VARIOUS STRAWN FIELDS AND TO ADOPT FIELD RULES FOR THE PROPOSED ANNE TANDY (STRAWN) FIELD, KING COUNTY, TEXAS

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

Randall Collins - Legal Examiner

DATE OF HEARING: September 6, 2012

APPEARANCES: REPRESENTING:

APPLICANT:

Brian R. Sullivan Lloyd E. Hoelscher James Travis Michael H. Carter Hunt Oil Company

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Hunt Oil Company ("Hunt") requests that various Strawn Fields be consolidated into a new field to be known as the Anne Tandy (Strawn) Field (ID No. 03025 400). The fields proposed for consolidation are as follows:

FIELD NAME	FIELD NUMBER
Anne Tandy (Strawn 5400) Anne Tandy, NW. (Strawn 5400) Anne Tandy (Strawn, Lo.) Anne Tandy, S. (Strawn Lo.) Big -B- (Strawn, Lo) Big -N- (Strawn 5250) Big -N- (Twin Peaks) Big -S- (Strawn)	03025 600 03026 600 03025 500 03027 500 07732 500 08002 333 08002 750 08016 500
Big -S- (Strawn Reef) Big -S- (Strawn 5400) FIELD NAME	08016 550 08016 600 FIELD NUMBER
Big -S-, E. (Strawn 5400)	08016 604

Big -S-, North (Strawn 5400)	08017 600
Burnett -A- (Strawn 5080)	13676 600
GG (Strawn 5400)	33453 750
GG (Twin Peaks)	33453 800
GG, East (Strawn 5400)	33454 500
Twin Peaks (Strawn 5400)	92060 600
Twin Peaks (Strawn, Up)	92060 500
YA (Twin Peaks)	99160 400
YA (Twin Peaks, South)	99160 500
YA (Twin Peaks, East)	99160 450

Hunt also requests that the following Field Rules be adopted for the consolidated field:

- 1. Designated interval from 5,106 feet to 5,700 feet as shown on the log of the Hunt Oil Company S. B. Burnett Lease, Well No. Y 18A (API No. 42-269-30253);
- 2. 150'-0' well spacing;
- 3. 80 acre oil units with optional 40 acre density;
- 4. Allocation based on 75% acres and 25% per well with a 1965 Yardstick Allowable of 171 barrels of oil per day.

Hunt also requests that proration unit plats not be required for individual wells, but that Form P-15 be filed to designate the number of acres to be assigned to each well.

The application was unprotested and the examiners recommend approval of the field consolidation and Field Rules, as requested by Hunt.

DISCUSSION OF THE EVIDENCE

The subject Strawn Fields were discovered beginning in March 1970. There are 68 producing oil wells and 46 injection wells carried on the proration schedules. Most of the fields operate under Field Rules that provide for 660'-1,320' well spacing and 80 acre oil units. The remaining fields operate under Statewide Rules. Hunt operates all but one well in the fields. The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval. Many of the wells have produced from several different fields. Cumulative production from the fields through July 2012 is 78.6 MMBO and 8.8 BCFG.

Hunt proposes that the correlative interval from 5,106 feet to 5,700 feet as shown on the log of the Hunt Oil Company - S. B. Burnett Lease, Well No. Y 18A (API No. 42-269-30253), Section 11, Block X, R. M. Thompson Survey, A-649, King County, Texas, be considered a single field known as the Anne Tandy (Strawn) Field. This interval includes

the entire Strawn formation. Waterflooding was initiated in the most of the fields in 1990 and several units were approved in the fields. The Strawn sands that are being waterflooded are in the late stage of secondary recovery. The reservoir and fluid properties in all the sands are similar.

Hunt plans to initiate a CO_2 injection project in all of the subject fields similar to the CO_2 flood in the nearby Katz (Strawn) Field that is located to the southeast. Consolidation of the fields is necessary to efficiently flood the entire Strawn interval simultaneously. It would not be economically feasible to conduct separate CO_2 floods in each field. The mineral ownership in the proposed project area is the same. To date, the Commission has already approved 21 exceptions to Statewide Rule 10 to allow downhole commingling in the various Strawn fields.

Hunt is proposing the same spacing and density rules that exist in the nearby Katz (Strawn) Field. Hunt requests 150'-0' well spacing and 80 acre oil units with optional 40 acre density. This spacing will allow for optimum use of existing wellbores to perform the proposed CO_2 flood in all sands within the consolidated field. Hunt plans to drill some new wells to fill in the pattern of the CO_2 flood. Hunt estimates that the production in the project area can be increased from 300 BOPD up to 1,800 BOPD.

Because the consolidated interval for the field includes multiple sands, a two factor allocation formula is required by statute. Hunt requests that allocation be based on 75% acres and 25% per well. Hunt also requests that proration unit plats not be required for individual wells, but that Form P-15 be filed to designate the number of acres to be assigned to each well.

FINDINGS OF FACT

- 1. Notice of this hearing was sent to all persons legally entitled to notice at least ten days prior to the date of hearing.
- 2. The subject Strawn Fields were discovered beginning in March 1970.
 - a. There are 68 producing oil wells and 46 injection wells carried on the proration schedules.
 - b. Most of the fields operate under Field Rules that provide for 660'-1,320' well spacing and 80 acre oil units. The remaining fields operate under Statewide Rules.
 - c. Hunt Oil Company ("Hunt") operates all but one well in the fields.
 - d. The fields are geographically intermingled and there are no other fields contained within the proposed correlative interval. Many of the wells have produced from several different fields.

- 3. The Anne Tandy (Strawn) Field should be designated as the correlative interval from 5,106 feet to 5,700 feet as shown on the log of the Hunt Oil Company S. B. Burnett Lease, Well No. Y 18A (API No. 42-269-30253), Section 11, Block X, R. M. Thompson Survey, A-649, King County, Texas.
 - a. The interval includes the entire Strawn formation.
 - b. The Strawn sands that are being waterflooded are in the late stage of secondary recovery.
 - c. The reservoir and fluid properties in all the sands are similar.
- 4. Hunt plans to initiate a CO₂ injection project in all of the subject fields similar to the CO₂ flood in the nearby Katz (Strawn) Field that is located to the southeast.
 - a. Consolidation of the fields is necessary to efficiently flood the entire Strawn interval simultaneously.
 - b. It would not be economically feasible to conduct separate CO₂ floods in each field.
 - c. The mineral ownership in the proposed project area is the same.
 - d. To date, the Commission has already approved 21 exceptions to Statewide Rule 10 to allow downhole commingling in various Strawn fields.
- 5. Hunt is proposing the same spacing and density rules that exist in the nearby Katz (Strawn) Field.
 - a. Hunt requests 150'-0' well spacing and 80 acre oil units with optional 40 acre density.
 - b. This spacing will allow for optimum use of existing wellbores to perform the proposed CO₂ flood in all sands within the consolidated field.
 - c. Hunt plans to drill some new wells to fill in the pattern of the CO₂ flood.
 - d. Hunt estimates that the production in the project area can be increased from 300 BOPD up to 1,800 BOPD.

- 6. Allocation based on 75% acres and 25% per well and a top allowable based on the 1965 Yardstick Allowable of 171 barrels of oil per day is a reasonable formula which will protect correlative rights and meet statutory requirements.
- 7. The filing of Form P-15 to designate the number of acres to be assigned to each well for proration purposes with no proration unit plats will eliminate unnecessary paperwork.

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 subject Strawn Fields is necessary to prevent waste and protect correlative rights.
- 4. Adopting the proposed Field Rules for the Anne Tandy (Strawn) Field will prevent waste, protect correlative rights and promote development of the field.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the field consolidation and adopt Field Rules for the Anne Tandy (Strawn) Field, as requested by Hunt Oil Company.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner

Randall Collins Legal Examiner