



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

**OIL AND GAS DOCKET NO. 7C-0293717**

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**THE APPLICATION OF BOAZ ENERGY II, LLC TO CONSOLIDATE THE CAMAR (CANYON), CAMAR (STRAWN-OIL), CAMAR (STRAWN-UPPER), FORT MCKAVITT (STRAWN) FIELDS INTO THE FORT MCKAVITT (LIME 4150) FIELD, AND TO ADOPT FIELD RULES FOR THE FORT MCKAVITT (LIME 4150) FIELD, SCHLEICHER COUNTY, TEXAS**

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**HEARD BY:** Paul Dubois – Technical Examiner  
Cecile Hanna– Hearings Examiner

**HEARING DATE:** December 4, 2014

**CONFERENCE DATE:** March 10, 2015

**APPEARANCES:**

Mickey Olmstead  
Casey Morton

**REPRESENTING:**

Boaz Energy II, LLC

**EXAMINERS' REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Boaz Energy II, LLC (Boaz) seeks to consolidate the Camar (Canyon), Camar (Strawn-Oil), Camar (Strawn-Upper), Fort McKavitt (Strawn) and Fort McKavitt (Lime 4150) Fields into the Fort McKavitt (Lime 4150) Field and to adopt field rules for the Fort McKavitt (Lime 4150) Field. These fields are being consolidated and field rules adopted as a preparatory measure prior to unitization of the consolidated field for secondary recovery operations. The companion unitization case was heard on the same day (Oil & Gas Docket No. 7C-0293719). The application was not protested. The Examiners recommend the fields be consolidated and field rules adopted as requested by Boaz.

**DISCUSSION OF EVIDENCE**

Boaz asserts that consolidation of the five subject fields and adoption of special field rules are necessary for the positive production outcome of the proposed unitization of the field. Boaz seeks to adopt a correlative interval, 330-foot lease line spacing, zero between

well spacing, 40-acre standard proration units, 20-acre optional units, and all wells classified as oil wells with salvage classification. A summary of the current status of the five fields is listed below:

Field	Discovery	Depth	No. of Wells	Cumulative Production (BO)	Current Rules
Fort McKavitt (Lime 4150)	May 3, 1974	4,144	45	384,254	Statewide
Camar (Canyon)	November 2, 1982	4,025	1	790	Statewide
Camar (Strawn-Oil)	April 11, 1959	4,324	5	3,839,908	330/990, 40 acre
Camar (Strawn-Upper)	July 13, 1965	4,105	2	409,591	330/990, 40 acre
Fort McKavitt (Strawn)	September 24, 1982	4,335	3	37,550	Statewide

Three of the wells are gas wells, the remainder are oil wells. The fields have produced more than 4.6 MMBO. The top allowable in each of the fields is 93 BOPD; no wells in any of the fields are capable of achieving this allowable. Most wells in the field produce less than 5 BOPD, and the total daily production is 68 BOPD. The original reservoir pressure was approximately 1,500 psi, and the current reservoir pressure is approximately 70 psi. Boaz seeks to classify the field with a salvage allowable per Statewide Rule 48 "Capacity Allowables."

Boaz seeks to designate a correlative interval for the field as the stratigraphic equivalent of the interval from 3,882 feet to 4,319 feet, as seen on the dual induction log for the McGregor 3 No. 1 Well (API No. 42-413-32267) in Block 8, Section 3 of the TWNG RR Co. Survey, A-640, Schleicher County, Texas. This interval represents the entirety of the proposed unitized interval and runs from the top of the Strawn Group to the top of the Strawn Lime.

The reservoir properties include an average porosity of 16 percent, average permeability of 45 millidarcies, and an initial water saturation of 35 percent. The average net effective oil pay thickness is 10 feet. Boaz estimates the developed area of the fields to be about 2,280 acres and the potential undeveloped area to be 3,800 acres. The fields are in the late primary stages of production. Boaz calculates the average drainage area for wells in the proposed consolidated field to be 19 acres, and the median drainage area to be about 15 acres. 20 acre optional units will allow Boaz to fully develop the remaining primary reserves in the field. The elimination of between well spacing requirements will provide Boaz flexibility in siting future wells for water flood injection and production.

Classifying all wells in the consolidate field as oil wells will provide administrative benefits to Boaz with regard to well testing and reporting. The proposed waterflood is expected to decrease the gas to oil ratio in the field, possibly to the degree that the three existing gas wells become reclassified as oil wells per Commission rules.

**FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. The five subject fields were discovered from 1959 to 1982.
  - a. There are currently 53 oil wells and 3 gas wells in the fields.
  - b. The fields have produced more than 4.6 MMBO.
  - c. The fields currently produce 68 BOPD.
3. The proposed consolidated field has an average porosity of 16 percent, an average permeability of 45 millidarcies, an initial water saturation of 35 percent, and an average net effective oil pay thickness of 10 feet.
4. The correlative interval from 3,882 feet to 4,319 feet, as seen on the dual induction log for the McGregor 3 No. 1 Well (API No. 42-413-32267), represents the all strata from the top of the Strawn Group to the top of the Strawn Lime.
5. The initial reservoir pressure of 1,500 psi has declined to about 70 psi.
6. The average drainage radius of 50 wells analyzed is 19 acres, and the median drainage area is 15 acres.
7. 20-acre optional units will allow Boaz to fully develop the field.
8. The standard lease line spacing for a 20-acre unit is 330 feet.
9. Elimination of the between well spacing requirement will provide Boaz with added flexibility to locate water flood injection and producing wells.
10. Classifying all wells in the consolidated field as oil wells will provide administrative benefits to Boaz with regard to well testing and reporting.

**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. Consolidation of the Camar (Canyon), Camar (Strawn-Oil), Camar (Strawn-Upper), Fort McKavitt (Strawn) and Fort McKavitt (Lime 4150) Fields and adopting the field rules as proposed by Boaz is necessary to prevent waste and protect correlative rights.

**RECOMMENDATION**

Based on the above findings and conclusions, the Examiners recommend that the Camar (Canyon), Camar (Strawn-Oil), Camar (Strawn-Upper), Fort McKavitt (Strawn) and Fort McKavitt (Lime 4150) Fields be consolidated and that the Field Rules for the Fort McKavitt (Lime 4150) Field be adopted as requested by Boaz Energy II, LLC.

Respectfully submitted,



Paul Dubois  
Technical Examiner



Cecile Hanna  
Hearings Examiner