

**THE APPLICATION OF KINDER MORGAN PRODUCTION CO LLC TO CONSOLIDATE THE KATZ, KATZ (DAY) AND KATZ (5100) FIELDS INTO THE PROPOSED KATZ (STRAWN) FIELD, HASKELL, KING, KNOX AND STONEWALL COUNTIES, TEXAS**

---

**Heard by:** Donna K. Chandler on October 13, 2009

**Appearances:**

Brian Sullivan  
David Smith  
Michael Goode

**Representing:**

Kinder Morgan Production Co LLC

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Kinder Morgan Production Co LLC requests that the Katz, Katz (Day) and Katz (5100) Fields be consolidated into a new field called the Katz (Strawn) Field. Kinder Morgan also requests that the following rules be adopted for the Katz (Strawn) Field:

1. Designation of the field as the correlative interval from 4,963 feet to 5,691 feet as shown on the log of the H. T. Lorentzen "C" Well No. 11;
2. 150'-0' well spacing;
3. 40 units density;
4. Allocation based on 75% acreage and 25% per well.

This application was unopposed and the examiner recommends approval of the requested field consolidation and field rules.

**DISCUSSION OF THE EVIDENCE**

The Katz Field was discovered in 1951 and consists of the 1<sup>st</sup> and 2<sup>nd</sup> Strawn sands. The field operates under rules providing for 40 acre density, 330'-933' well spacing and allocation based on 75% acreage and 25% per well. Cumulative production from the field is 38.6 million BO. There are currently 20 producing wells in the field which produce a total of about 200 BOPD. On the Units operated by Kinder Morgan, there are 10 producing wells which produced 112 BOPD, 38 MCFD and over 7,000 BWPD. The water cut is approximately 98%.

The Katz (Day) Field was discovered in 1983 and consists of a remnant sand below the 2<sup>nd</sup> Strawn sand. This extent of this sand is limited and the Southwest River Unit was approved in this field in 1989. Production responded to a waterflood in this field, but there is only one well producing from the field currently. Cumulative production from the field is 325,000 BO. This field operates under Statewide Rules.

The Katz (5100) Field was discovered in 1951 and consists of the 3<sup>rd</sup> Strawn Sand. This field operates under rules identical to those for the Katz Field. Cumulative production from this field is 21.1 million BO. There are currently 27 producing wells in the field, 22 of which are on Kinder Morgan operated Units. Current production from all wells in the field is about 300 BOPD. Production from Kinder Morgan wells is 216 BOPD, 73 MCFD and almost 20,000 BWPD. Water cut is over 98%.

Waterflooding was initiated in the Katz and Katz (5100) Fields in 1984 and several units were approved in the fields. Kinder Morgan became the operator of the Southwest River Unit, the East River Unit and the C. B. Long Unit in 2006.

Kinder Morgan has had success with CO<sub>2</sub> floods in other fields and plans to initiate a CO<sub>2</sub> injection project in all three of the subject fields. Kinder Morgan is in the process of forming a "Super Unit" which consolidates its three existing Units with some additional acreage in all three fields. Apache Corporation and Gunn Oil Company are the only other operators in the fields. These two operators' leases are north of Kinder Morgan's acreage.

Consolidation of the fields is necessary to efficiently flood the entire Strawn interval simultaneously. It would not be economically feasible to conduct three separate floods. It is expected that the project will cost \$180 million. The mineral ownership in the three overlapping units is the same.

A spacing rule providing for a minimum of 150 feet from lease lines with no minimum between-well spacing requirement is requested in conjunction with the 40 acre density rule. This spacing will allow for optimum use of existing wellbores to perform the proposed CO<sub>2</sub> flood in all sands within the consolidated field. Kinder Morgan will also drill some new wells to fill in the pattern of the flood.

Kinder Morgan requests that the Katz (Strawn) Field be designated as the correlative interval from 4,963 feet to 5,691 feet as shown on the log of the H. T. Lorentzen "C" Well No. 11. This interval includes the entire Strawn formation. Because the consolidated interval for the field includes multiple sands, a two factor allocation formula is required by statute. Kinder Morgan requests that allocation be based on 75% acreage and 25% per well.

#### **FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.

2. The Katz Field was discovered in 1951 and consists of the 1<sup>st</sup> and 2<sup>nd</sup> Strawn sands. Cumulative production from the field is 38.6 million BO. The field operates under rules providing for 40 acre density, 330'-933' well spacing and allocation based on 75% acreage and 25% per well.
3. The Katz (Day) Field was discovered in 1983 and consists of a remnant sand below the 2<sup>nd</sup> Strawn sand. This extent of this sand is limited and production to date is 325,000 BO. This field operates under Statewide Rules.
4. The Katz (5100) Field was discovered in 1951 and consists of the 3<sup>rd</sup> Strawn Sand. This field operates under rules identical to those for the Katz Field. Cumulative production from this field is 21.1 million BO.
5. All three zones have been waterflooded and current production is 98% water.
6. Kinder Morgan plans to initiate a CO<sub>2</sub> flood in all three fields to recover additional reserves. Consolidation of the fields will make the CO<sub>2</sub> flood much more economic.
7. The Katz (Strawn) Field should be designated as the correlative interval from 4,963 feet to 5,691 feet as shown on the log of the H. T. Lorentzen "C" Well No. 11. This interval includes the entire Strawn formation.
8. Because the consolidated interval for the field includes multiple sands, a two factor allocation formula is required by statute. Allocation be based on 75% acreage and 25% deliverability is a reasonable formula which will protect correlative rights.
9. A spacing rule providing for a minimum of 150 feet from lease lines with no minimum between-well spacing requirement is requested in conjunction with the 40 acre density rule. This spacing will allow for optimum use of existing wellbores to flood all sands within the consolidated 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.

3. Consolidation of the Katz, Katz (Day) and Katz (5100) Fields into a new field called the Katz (Strawn) Field and adopting the field rules as proposed by Kinder Morgan is necessary to prevent waste and protect correlative rights.

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the Katz, Katz (Day) and Katz (5100) Fields be consolidated into a new field called the Katz (Strawn) Field. and that field rules requested by Kinder Morgan be adopted for the Katz (Strawn) Field.

Respectfully submitted,

Donna K. Chandler  
Technical Examiner