

June 12, 2007

OIL AND GAS DOCKET NO. 08-0251625

APPLICATION OF SANDRIDGE ENERGY, INC. TO CONSOLIDATE THE VARIOUS FIELDS INTO THE PINION (OVERTHRUST) FIELD AND AMEND THE FIELD RULES FOR THE PINION (OVERTHRUST) FIELD, PECOS COUNTY, TEXAS

HEARD BY: Thomas H. Richter, P.E.

DATE OF HEARING: June 1, 2007

APPEARANCES:

Bill Spencer
Cary McGregor
Jeremy McKee

REPRESENTING:

Sandridge Energy, Inc.

EXAMINER'S REPORT AND RECOMMENDATION
STATEMENT OF THE CASE

This is the unprotested application of Sandridge Energy for the Commission to consider consolidating the Algerita (Ouachita Caballos), Bitterweed, Bitterweed, S. (Caballos), Elsinor (Caballos), Ocotillo (Caballos, Pinion (Caballos) Rio Caballos (Caballos), Sabino (Caballos) and Verbina (Tesnus) Fields into the existing Pinion (Overthrust) Field. At the hearing Sandridge proposed that the Abrojo (Multipay) Field be included in the proposed field consolidations.¹ Special field rules for the Pinion (Overthrust) Field were adopted by Order No. 8-81,544 issued effective May 1, 1984, as amended and currently provide for:

1. The entire combined correlative interval from 1,750' to 5,225' as shown on the log of the J. Cleo Thompson, West Ranch Lease Well No. 22-3 (API No. 371-37125), T.C. RR Co./J.T. Brown Survey, A-5219, Pecos County, Texas, is designated as the Pinion (Overthrust) Field.
2. Minimum well spacing of 330'/660' (leaseline/between well);
3. 20 acre density with 10% tolerance and maximum diagonal of 1500'; and
4. An allocation formula based on 95% acreage and 5% deliverability. The allocation formula was suspended in 1995.

Sandridge Energy proposes the field rules be amended as follows:

¹ The Abrojo (Multipay) Field was not noticed for the subject hearing, however, Sandridge is the only operator in the field.

1. The entire combined correlative interval from 4,701' to 11,043' (the base of the top of the unthrust Woodford Shale) as shown on the log of the Riata Energy, Inc., Longfellow 600-3- Lease Well No. 6 (API No. 42-371-37316), Pecos County, Texas, be designated as the Pinion (Overthrust) Field.²
2. Minimum well spacing of 330'/0' (leaseline/between well);³
3. 160 acre density and 10% tolerance for gas wells and 20 acre tolerance for oil wells and a maximum diagonal of 4500' and optional 20 acre density and maximum diagonal of 1500'; and
4. An allocation formula based on 95% deliverability and 5% per well for gas wells and the allocation formula remain suspended. The oil field designation should be classified as salvage for proration purposes.

Subsequent to the hearing, Sandridge requested that the proration unit diagonal requirement and the filing of proration unit plats not be required as acreage and not part of the allocation formula.

The examiner recommends approval of the application.

DISCUSSION OF THE EVIDENCE

The Algerita (Ouachita Caballos), Bitterweed, Bitterweed, S. (Caballos), Elsinor (Caballos), Ocotillo (Caballos), Pinion (Caballos) Rio Caballos (Caballos), Sabino (Caballos), Verbina (Tesnus) and Abrojo (Multipay) Fields were discovered between 1983 and 2005. Field rules range from 320 acres to Statewide Rules to 20 acre density. Currently there are 235 active wells. Cumulative production from the fields: 305 BCF of gas and 246,000 barrels of liquid hydrocarbon. Cumulative production from the fields range from 706 MMCF to 87.6 BCF of gas. The Pinion (Overthrust) Field was created in 1984 by combining the Pinion (Dimple), Pinion (Caballos) and Pinion (Pending Tesnus) Fields (Order No. 8-81,544) and is by far the largest field with over 100 wells.

Consolidation of the subject eleven fields into the Pinion (Overthrust) Field will provide for the recovery of reserves that otherwise would go unrecovered. The geology of the Woodford Shale in this area is exceedingly complex because of the numerous thrust faults and overlays. The same sand section may occur numerous times in the same well. It is proposed that the Elsinor (Caballos), Ocotillo (Caballos), Sabino (Caballos) and Verbina (Tesnus) Fields be consolidated into the Pinion (Overthrust) Field for proration purposes for continuity. The fields are removed from the immediate field area ranging from 6 to 12 miles but have similar complex geology. The entire combined correlative interval from 1,750' to 5,225' as shown on the log of the J. Cleo Thompson, West Ranch Lease Well No. 22-3 (API No. 371-37125), T.C. RR Co./J.T. Brown Survey, A-5219, Pecos County,

² Notice of Hearing proposes the interval from 4,700' to 10,420'. Interval amended at hearing.

³ Notice of Hearing proposes minimum well spacing of 467'/0'.

Texas, should be designated as the Pinion (Overthrust) Field.

One hundred and sixty (160) acre and optional 20 acre density is necessary to provide for the effective and efficient depletion of these multi-layered reservoirs. The reservoirs have been essentially depleted. Reserve/drainage analysis calculates that wells may drain as much as 182 acres (Longfellow Lease Well No. 4010-L (API No. 42-371-36906)) to 26 acres (Allison Lease Well No. 2103 (API No. 42-371-37047)). There were 55 wells that drained an estimated 20 acres and 8 wells that drained at least 160 acres.

Numerous Rule 10 Exceptions for downhole commingling have been previously granted. There has been no adverse effects of water compatibility.

Minimum well spacing of 330'/0' (leaseline/between well) will provide flexibility in utilizing existing wellbores without the need of obtaining numerous Rule 37 exceptions.

A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes. The proposed two-factor allocation formula for oil wells based on 95% deliverability and 5% per well for gas wells will provide for the protection of correlative rights. The allocation formula should remain suspended. The gas field should be classified as Associated-Prorated and not subject to 49(b) allowables. The "oil" field should be classified as "salvage" and well allowable not subject to top allowable or gas limit restrictions.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing.
2. There was no protest at the call of the hearing.
3. The Algerita (Ouachita Caballos), Bitterweed, Bitterweed, S. (Caballos), Elsinor (Caballos), Ocotillo (Caballos), Pinion (Caballos) Rio Caballos (Caballos), Sabino (Caballos), Verbina (Tesus) and Abrojo (Multipay) Fields were discovered between 1983 and 2005.
 - a. Field rules range from 320 acres to Statewide Rules to 20 acre density. Currently there are 235 active wells.
 - b. Cumulative production from the fields: 305 BCF of gas and 246,000 barrels of liquid hydrocarbon.
 - c. The Pinion (Overthrust) Field was created in 1984 by combining the Pinion (Dimple), Pinion (Caballos) and Pinion (Pending Tesnus) Fields (Order No. 8-81,544) and is by far the largest field with over 100 wells.

3. Consolidation of the subject eleven fields into the Pinion (Overthrust) Field will provide for the recovery of reserves that otherwise would go unrecovered.
 - a. The geology of the Woodford Shale in this area is exceedingly complex because of the numerous thrust faults and overlays and the same sand section may occur numerous times in the same well.
 - b. The Elsinor (Caballos), Ocotillo (Caballos), Sabino (Caballos) and Verbina (Tesnus) Fields should be consolidated into the Pinion (Overthrust) Field for proration purposes for continuity though the fields are removed from the immediate field area ranging from 6 to 12 miles, they have similar complex geology.
4. The entire combined correlative interval from 1,750' to 5,225' as shown on the log of the J. Cleo Thompson, West Ranch Lease Well No. 22-3 (API No. 371-37125), T.C. RR Co./J.T. Brown Survey, A-5219, Pecos County, Texas, be designated as the Pinion (Overthrust) Field.
5. One hundred and sixty (160) acre and optional 20 acre density is necessary to provide for the effective and efficient depletion of these multi-layered reservoirs.
 - a. Reserve/drainage analysis calculates that wells may drain as much as 182 acres (Longfellow Lease Well No. 4010-L (API No. 42-371-36906)) to 26 acres (Allison Lease Well No. 2103 (API No. 42-371-37047)).
 - b. There were 55 wells that drained an estimated 20 acres and 8 wells that drained at least 160 acres.
 - c. Acreage is not part of the allocation formula has proration units plats are not necessary.
6. Minimum well spacing of 330'/0' (leaseline/between well) will provide flexibility in utilizing existing wellbores without the need of obtaining numerous Rule 37 exceptions.
7. A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes.
 - a. The proposed two-factor allocation formula for oil wells based on 95% deliverability and 5% per well for gas wells will provide for the protection of correlative rights.
 - b. The allocation formula should remain suspended.
 - c. The gas field should be classified as Associated-Prorated and not subject to 49(b) allowables.
8. The "oil" field should be classified as "salvage" and well allowable not subject to top allowable or gas limit restrictions.

CONCLUSIONS OF LAW

1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Consideration for consolidation of fields and field rules, a determination of the effectiveness of the rules and appropriate actions is a matter within the Commission jurisdiction.
4. Adoption of the proposed consolidation of fields and adoption of the proposed field rules will prevent waste, foster conservation and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the proposed field consolidation and field rules for the Pinion (Overthrust) Field.

Respectfully submitted,

Thomas H. Richter, P.E.
Technical Examiner
Office of General Counsel