APPLICATION OF SANDRIDGE EXPL & PROD LLC TO AMEND THE FIELD RULES FOR THE PINON (OVERTHRUST) FIELD, PECOS COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E. on November 4, 2011

Appearances: Representing:

Bill Spencer Cary McGregor SandRidge Expl & Prod LLC

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the unprotested application of Sandridge Expl & Prod LLC to amend the field rules last amended in Order No. 08-0251625, effective July 17, 2007 for the Pinon (Overthrust) Field that currently provide for the following:

- 1. The entire combined correlative interval from 4,701' to 11,043' (the base of the top of the unthrusted 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. Minimum well spacing of 330'/0' (leaseline/between well);
- 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 is classified as salvage for proration purposes.

Sandridge Expl & Prod LLC proposes that Field Rule No. 2 be amended to add take point provisions, off lease penetration, a horizontal box rule and Field Rule No. 5 be added to add a stacked lateral rule.

The examiner recommends that field rules for the Pinon (Overthrust) Field be amended as proposed by Sandridge Expl & Prod LLC.

DISCUSSION OF THE EVIDENCE

The Pinon (Overthrust) Field was discovered in 1984 at subsurface depth of approximately 4,839'. Special field rules were first adopted in 2000 and last amended in July 2007. The field is designated as an associated field with approximately 750 vertical gas wells and 5 vertical oil wells in the field. SandRidge is the only operator in the field. The field has produced 738.1 BCF of gas and 555.9 MBO.

Sandridge is amending the existing field rules in the Pinon (Overthrust) Field to adopt horizontal rules to allow efficient and orderly development of the Pinon (Overthrust) Field with horizontal wells. The proposed horizontal rules are similar to horizontal rules found in other fields being developed with horizontal wells.

Sandridge requests several standard horizontal well provisions commonly adopted when horizontal well development is anticipated. The provisions include take point language with no perf zones to allow flexible drilling of the laterals and off-lease penetration to allow the additional recovery of reserves by allowing the lateral to be horizontal at a legal lease line location. An additional stage frac will be placed on each lateral if off lease penetration is allowed.

The gross thickness of the Overthrust interval in this field is over 6,350 feet. The interval has several potential zones that may support horizontal drilling. The Tensus Sandstone, the Dimple Limestone produce from the tight matrix. The Caballos Novaculite is a tight formation that produces from fractures within the formation created near the edges of the fault zones. The three pay zones are thrusted and folded over where the same formation can be seen multiple time in the same wellbore. Sandridge plans on drilling horizontal wells targeting the First Caballos and the Lower Caballos. Amending the rule as proposed will allow stacked lateral drainholes to be simultaneously drilled from the same surface location. The terrain in the area is rocky and hilly with ravines between well pads. Leveling multiple well pads is costly as it requires extensive earth moving work. The stacked lateral rules will allow multiple horizontal laterals be drilled from a single well pad. The stacked lateral rules also require that each point of a stacked lateral horizontal drainhole be no more than 300 feet in a horizontal direction from any point along any other horizontal drainhole of the same stacked lateral well.

Sandridge proposes a 33 foot "box rule" for horizontal drainhole wells that would allow drainholes to deviate 33 feet from either side of their permitted track without the necessity of obtaining a Statewide Rule 37 exception.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators of wells in the Pinon (Overthrust) Field at least ten days prior to the date of hearing.

- 2. The Pinon (Overthrust) Field was discovered in 1984 at subsurface depth of approximately 4,839'. Special field rules were first adopted in 2000 and last amended in July 2007.
- 3. Sandridge is the only operator in the field. The field is designated as an associated field with approximately 750 vertical gas wells and 5 vertical oil wells in the field. The field has produced 738.1 BCF of gas and 555.9 MBO.
- 4. The Pinon (Overthrust) Field is an associated gas field. Rules governing the wells provide for 330'-0' well spacing, 160/optional 20 acre density and 95% deliverability and 5% per well allocation. The allocation formula is suspended. The oil field designation is classified as salvage for proration purposes.
- 5. The Tensus Sandstone, the Dimple Limestone and the Caballos Novaculite are thrusted and folded over where the same formation can be seen multiple time in the same wellbore. Sandridge plans on drilling horizontal wells targeting the First Caballos and the Lower Caballos.
- 6. Given that the gross thickness of the Overthrust interval in this field is almost 6,350 feet, multiple stacked laterals may be required to fully develop the reservoir.
- 7. The proposed 33 foot "box rule" is necessary to allow operators reasonable minor deviations from the wellbore track that has been permitted.
- 8. Field rules that provide for take point language, stacked laterals and a "box rule" for horizontal wells will provide consistency with other fields under going horizontal drilling.
- 9. Allowing off-lease penetration will allow the recovery of additional reserves that would otherwise be left in the ground.

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. Amending field rules as proposed by Sandridge Expl & Prod LLC is necessary to prevent waste and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that field rules be amended for the Pinon (Overthrust) Field to add take points, allow off lease penetration, add stacked lateral language and a 33 foot "box" rule.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Hearings Examiner