

THE APPLICATION OF SAMSON LONE STAR, LLC TO ADOPT FIELD RULES FOR THE WEST PARK (GRANITE WASH) FIELD, HEMPHILL AND WHEELER COUNTIES, TEXAS

Heard by: Donna K. Chandler on September 5, 2008

Appearances:

Representing:

Glenn Johnson
Jim Clark

Samson Lone Star, LLC

Sandy Buch

Devon Energy Production Co., L.P.

Bill Spencer

Chesapeake Operating, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Samson Lone Star, LLC requests that the following rules be adopted for the West Park (Granite Wash) Field:

1. Designation of the field as the correlative interval from 11,400 feet to 14,750 feet as shown on the log of the Zybach No. 1;
2. 467'-660' well spacing for horizontal and vertical wells, with special language for "take points" in horizontal wells;
3. Statewide 40 acre drilling units with special provisions for Rule 38 exceptions after notice;
4. Special provisions for stacked lateral wells;
5. Allocation based on 95% deliverability/potential and 5% per well with AOF status.

The application was unopposed and the examiner recommends that the field rules for the West Park (Granite Wash) Field be adopted as proposed by Samson Lone Star.

DISCUSSION OF EVIDENCE

The West Park (Granite Wash) Field was discovered in August 1994 and is an associated gas field with 35 gas wells on the current proration schedule. The field operates under Statewide Rules and the allocation formula is currently suspended. Cumulative production from the field is approximately 12 BCF of gas and 221,000 BC. In 2004, there were only two wells producing from the field and production was marginal. Current production from the field is approximately 800 MMCF per month.

Operators are currently developing the field with horizontal wellbores. Samson requests that a field rule be adopted which includes language relevant to measurement of distances to lease lines for horizontal drainhole wells. Samson's proposed rule specifies that, for purposes of lease line and between-well spacing, the nearest "take point" in a horizontal well be used. This take-point could be a perforation, if a horizontal well is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased well. Similar rules have been adopted in other tight reservoirs, including the Barnett Shale, some Cotton Valley fields and other Granite Wash Fields.

The proposed rule would allow operators to drill horizontal wells with penetration points, as defined by Rule 86, at distances closer than 467 feet to a lease line, as long as no take-point is closer than 467 feet to any lease line. Horizontal drainhole length on a lease is then maximized, resulting in additional recovery of gas.

The evidence indicates that an effective lateral gain length of 387 feet could be obtained by moving the penetration point closer to the lease line. Samson calculated an average gas recovery of 700 MCF per lateral foot of drainhole for Granite Wash reservoirs. Therefore, the 387 feet of lateral gain length will result in the recovery of an additional 270 MMCF per horizontal drainhole. For purposes of assignment of additional acreage pursuant to Rule 86, it is proposed that the distance between the first and last take-point in a horizontal well be used.

It is also requested that spacing rules for the field be adopted to accommodate the drilling of stacked horizontal lateral wells. The gross thickness of the Granite Wash in this area is approximately 3,000 feet. Samson believes that as many as five separate laterals may be necessary to effectively develop the reservoir with horizontal wells. Similar stacked lateral rules have already been adopted in the Mendota, NW. (Granite Wash) Field and in the Newark, East (Barnett Shale) Field. The rule would allow stacked horizontal laterals within the Granite Wash correlative interval that are drilled from different wellbores to be considered a single well for regulatory purposes. It is proposed that a stacked lateral be defined to be multiple horizontal drainholes which are drilled (1) from different surface locations on the same lease unit no more than 250 feet from each other at the surface and (2) no more than 300 feet from each other in a horizontal plane within the correlative

interval.

Both the Hemphill (Granite Wash) and Mendota, NW (Granite Wash) Fields operate under rules which include special provisions allowing the administrative approval of Rule 38 exceptions after notice to all designated operators, lessees of record for tracts that have no designated operator, and all owners of unleased mineral interests within 660 feet of a vertical well or any point on a horizontal well within the correlative interval. In no written protest is received after 21 days of Commission issued notice of an application, or if waivers are received, the application will be approved administratively without the filing of evidence to support the exception. If a written protest is received, the application will be set for hearing.

Samson requests that the field be designated as the correlative interval between 11,400 feet and 14,750 feet as shown on the log of the Zybach No. 1. This proposed interval contains numerous productive sands which are not in communication. A two factor allocation formula is therefore required by statute. Samson requests that the allocation formula be based on 95% deliverability and 5% per well.

Samson believes that the subject field is likely to be classified as an associated field in the future, similar to other nearby Granite Wash fields including the Mendota, NW (Granite Wash) Field. Should this occur, Samson requests that the field be classified as associated-prorated and that gas wells not be limited pursuant to Rule 49(b). The Mendota, NW (Granite Wash) Field has over 200 gas wells and 18 oil wells and is classified as associated-prorated, with AOF status.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The West Park (Granite Wash) Field is a non-associated field which operates under Statewide Rules and AOF status. It is likely that the field will become an associated field as development continues.
3. The West Park (Granite Wash) Field was discovered in 1994 and there are 35 wells carried on the proration schedule. The field is actively being developed with horizontal drainhole wells.
4. A spacing rule which utilizes "take-points" in a horizontal well for determination of distances to lease lines will prevent waste and will not harm correlative rights.
 - a. The Granite Wash is a tight formation and is not commercially productive unless fracture-stimulated.

- b. A take-point in a horizontal well in this field may be a perforation, if a horizontal well is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased portion of the wellbore.
 - c. Adoption of the proposed rule would allow operators to drill horizontal wells with penetration points, as defined by Rule 86, at distances closer than 467 feet to a lease line, as long as no take-point is closer than 467 feet to any lease line.
 - d. Adoption of the proposed rule will allow the horizontal drainhole length on a lease to be maximized.
 - e. Allowing the penetration point closer to the lease line, an effective lateral gain length of 387 feet can be obtained, which will result in the recovery of an additional 270 MMCF per horizontal drainhole.
- 6. The proposed notice provision for administrative approval of Rule 38 exceptions for this field will simplify procedures necessary to develop areas which require denser development.
 - 7. The proposed minimum lease line spacing of 467 feet and minimum spacing of 660 feet between wells will provide flexibility in developing the field.
 - 8. The West Park (Granite Wash) Field should be designated as the correlative interval between 11,400 feet and 14,750 feet as shown on the log of the Zybach No. 1.
 - 9. The proposed correlative interval contains numerous productive sands which are not in communication. Allocation based on 95% deliverability and 5% per well will satisfy statutory requirements.
 - 10. The proposed "stacked lateral" rule for the West Park (Granite Wash) Field will allow stacked horizontal laterals within the Granite Wash correlative interval that are drilled from different wellbores to be considered a single well for regulatory purposes.
 - 11. For purposes of assignment of additional acreage pursuant to Rule 86, the distance between the first and last take-point in a horizontal well should be used.

CONCLUSIONS OF LAW

- 1. Proper notice of this hearing was issued.

2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
3. Adopting the field rules for the West Park (Granite Wash) Field is necessary to prevent waste, protect correlative rights and promote development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission adopt the field rules for the West Park (Granite Wash) Field as proposed by Samson Lone Star.

Respectfully submitted,

Donna K. Chandler
Technical Examiner