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RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0283972

THE APPLICATION OF SAGA PETROLEUM, L.L.C. OF COLORADO TO AMEND FIELD RULES FOR THE SHIPLEY (QUEEN SAND) FIELD, WARD COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E., Technical Examiner
Terry Johnson, Hearings Examiner

Hearing Date: September 11, 2013

Appearances:

Representing:

Flip Whitworth
David Dennard
Geoff Hawkins

Saga Petroleum, LLC of Colorado

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the unopposed application of Saga Petroleum, LLC of Colorado (Saga Petroleum) to amend the field rules first adopted in Special Order No. 8-14,525, issued effective April 25, 1949, as amended, for the Shipley (Queen Sand) Field that currently provide for the following:

1. 330'-660' well spacing;
2. 20 acre oil units, 1,500 maximum diagonal;
3. Allocation based on 25% per well, 75% acreage, 55 BOPD MER allowable;

Saga Petroleum requests that field rules be amended as follows:

1. The entire correlative interval from 2,284 feet to 3,200 feet as shown on the Gamma ray and Neutron log of the Lee Brothers Sloan SA Lease, Well No.

- 18;
2. 330'-0' well spacing,;
 3. 10 acre units, no maximum diagonal, no individual proration plats;
 4. Allocation based on 75% acreage and 25% per well, 55 BOPD MER allowable. (No change)
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This application was unprotested and the examiners recommend that the field rules for the Shipley (Queen Sand) Field be amended as requested.

DISCUSSION OF EVIDENCE

The Shipley (Queen Sand) Field was discovered in 1928 at a depth of approximately 3,075 feet. Cumulative production from the field is approximately 31 million BO. As of August 2013, there are approximately 38 active oil wells, 6 injection wells and numerous shut-in wells in the field which in total produce about 200 BOPD.

Saga Petroleum is redeveloping the Shipley Queen Sand Unit by drilling additional infill wells on a 5-spot pattern with a 10 acre density. The new drilling and density pattern should rejuvenate hydrocarbon recovery from the Unit that was first initiated in 1958. To date the Shipley Queen Sand Unit has 16.8 million BO. Saga Petroleum estimates the field could produce another 10 million BO.

The Shipley (Queen Sand) Field produces from the Queen Sand formation, identified as the entire correlative interval between 2,284 feet to 3,200 feet as shown on the Gamma ray and Neutron log of the Lee Brothers Sloan SA Lease, Well No. 18.

Saga Petroleum believes current wells drilled with current density rules are not adequately draining existing reserves. The high initial potential for newly drilled oil wells demonstrate the need for smaller units. Four new wells drilled on the Shipley Queen Sand Unit near plugged and nearly depleted oil wells had high initial potentials between 17 and 72 BOPD. Saga Petroleum believes the near virgin potential of the new wells indicates the reservoir is heterogeneous and the new wells are draining new reserves not being drained by existing wells. The Ward, South Field, an analogous field to the Shipley (Queen Sand) field, has 10 acre units with optional 5 acre density. The Ward South Field produces from the Queen Sand and has been developed with reduced density 330'/330' well spacing since 1980. Production data shows that the oil production rate of decline was slowed and oil production increased as new wells were drilled on a 5 acre density.

Saga Petroleum requests 330'-0' well spacing for the Shipley (Queen Sand) Field so that it can place new wells in optimum locations between numerous existing wells to establish a 5-spot injection pattern without the need for Rule 37 exceptions. Currently oil

wells are allowed to produce up to 55 BO/D per well. Saga Petroleum wishes to maintain the current status and to allow new wells drilled on a 10 acre density to retain the 55 BOPD allowable. Saga Petroleum request allocation formula remain unchanged at 75% acreage, 25% per well.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. Special field rules for the Shipley (Queen Sand) Field provide for 330'-660' well spacing, 20 acre oil units and allocation based on 25% per well, 75% acreage, 55 BOPD MER allowable.
3. The Shipley (Queen Sand) Field was discovered in 1928 and cumulative production from the field is approximately 31 million BO. A waterflood was initiated in 1958 on a 20 acre density pattern.
4. Current production from the 38 active oil wells, is about 200 BOPD.
5. The Shipley (Queen Sand) Field currently does not have a designated interval.
6. The Shipley (Queen Sand) Field should be designated as the entire correlative interval between 2,284 feet to 3,200 feet as shown on the Gamma ray and Neutron log of the Lee Brothers Sloan SA Lease, Well No. 18.
7. Wells in the field have drainage areas which are less than 20 acres. Development with 10 acre units is necessary to maximize recovery from the field.
 - a. Infill drilling results indicate existing wells are leaving reserves behind.
 - b. Four new wells drilled on the Shipley Queen Sand Unit near plugged and nearly depleted oil wells had high initial potentials between 17 and 72 BOPD.
 - c. The near virgin potential of the new wells indicates the reservoir is heterogeneous and the new wells are draining new reserves not being drained by existing wells on 20 acre density.
 - d. The Ward, South Field produces from the Queen Sand and is being developed with 10 and 5 acre density and is recovering additional

reserves.

8. Production data for the Ward, South Field shows that the oil production rate of decline was slowed and oil production increased as new wells were drilled on a 5 acre density.

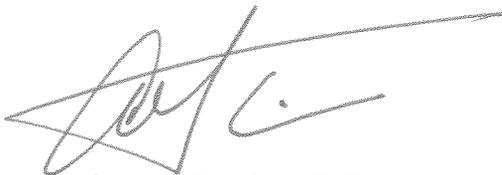
9. The proposed 330'-0' well spacing will accommodate development on optional 10 acre units and placing new wells between numerous existing wells to establish a 5-spot injection pattern.
10. Saga Petroleum requests that oil wells are allowed to continue to produce up to 55 BO/D per well and the allocation formula remain unchanged at 25% per well, 75% acreage to retain the oil allowable on wells drilled on 10 acre units, preventing waste.

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. Amending field rules for the Shipley (Queen Sand) Field is necessary to prevent waste and protect correlative rights.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiners recommend that field rules for the Shipley (Queen Sand) Field be amended to provide for a designated interval, 330'-0' well spacing, 10 acre units, and retain the 55 BO MER allowable.



Andres J. Trevino, P.E.
Technical Examiner

Respectfully submitted,



Terry Johnson
Legal Examiner