

THE APPLICATION OF LAREDO PETROLEUM, INC. TO CONSIDER A NEW FIELD DESIGNATION AND TO ADOPT TEMPORARY FIELD RULES FOR THE PROPOSED COTTONWOOD DRAW (GRANITE WASH) FIELD, HARTLEY COUNTY, TEXAS

HEARD BY: Brian K. Fancher, P.G. - Technical Examiner
Michael Crnich - Legal Examiner

DATE OF HEARING: May 18, 2012

APPEARANCES:
APPLICANT:

REPRESENTING:

Mickey Olmstead
Thomas H. Richter

Laredo Petroleum, Inc.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Laredo Petroleum, Inc. ("Laredo") requests a new field designation be approved for its K.R. Stanley 112 Lease, Well No. 1. Further, Laredo proposes that the following Temporary Field Rules be adopted for the new field, subject to review in 18 months:

1. Designation of the Cottonwood Draw (Granite Wash) Field (Field ID No. 21056250) as the correlative interval from 6,150 feet to 6,400 feet, as shown on the log of the Laredo Petroleum, Inc., K. R. Stanley 112 Lease, Well No. 1 (API No. 42-205-30345), Section 112, Block 2, B&B Survey, Hartley County ;
2. 330'-660' well spacing;
3. 40 acre proration units with 20 acre tolerance and a maximum diagonal of 2,100 feet;
4. Allocation based on 100% acreage.

Initially, the subject application was set for hearing on April 13, 2012 . On April 5th, 6th, 9th, and 13th, returned envelopes were received by the Railroad Commission addressed to several parties identified on the service list of the Notice of Hearing dated March 21, 2012. Subsequently, the applicant provided an updated service list with amended addresses for each of the individuals previously mentioned and a new Notice of Hearing was mailed on April 11, 2012 rescheduling the hearing for May 18, 2012. Additionally, the applicant provided notice by publication once a week for four consecutive weeks in the *Dalhart Texan*, a newspaper of general circulation in Hartley

County.

No protest was filed in opposition of the subject application. The examiners recommend approval of the new field designation and adoption of temporary field rules for the Cottonwood Draw (Granite Wash) Field (Field ID No. 21056 250), as proposed by Laredo Petroleum, Inc.

DISCUSSION OF EVIDENCE

In support of its application, Laredo submitted a copy of the Commission Form W-2 filed for its K. R. Stanley 112 Lease, Well No. 1 that indicates the well was completed on December 29, 2011 with perforations in the Canyon Wash formation from 6,194 feet to 6,198 feet. The initial well test performed on January 26, 2012 reports the well produced at a rate of 95 BOPD, 0 MCFGPD, and 189 BWPD.

Laredo submitted a copy of its Commission Form P-7 (New Field Designation and/or Discovery Allowable Application) dated February 13, 2012 for the K.R. Stanley 112 Lease, Well No. 1. Laredo concluded the nearest production to the subject well, also located in the same stratigraphic member, is the Rehm, North (Granite Wash) Field. The aforementioned field is located 7.85 miles south-southwest of the subject well and produces at an interval from 6,130 feet to 6,144 feet below ground surface.

Laredo believes a new field designation should be approved for the K.R. Stanley 112 Lease, Well No. 1 as there is no comparable production within a 2.5 mile radius of the discovery well. In support of its application, Laredo submitted a base map with a 2.5 mile radius circle drawn around its K.R. Stanley 112 Lease, Well No. 1, along with locations of surrounding wells in the area.

The well locations presented on the base map depict three wells have been drilled within a 2.5 mile radial distance from the K.R. Stanley 112 Lease, Well No. 1. Laredo testified that its Finch & Brunson 5 Lease, Well No. 1, located approximately 1.6 miles southwest of the subject well, was drilled to the completion of the subject well. Laredo further testified the Finch & Brunson 5, No. 1 was undergoing well testing at the time of the hearing, but had yet to determine if the well will be completed. Laredo testified the remaining two wells were dry holes and that no well within a 2.5 mile distance has produced hydrocarbons from the same stratigraphic member that the subject well is currently producing.

At the hearing, Laredo submitted a reservoir data sheet for its proposed new field designation. Laredo identified the reservoir comprising its proposed new field has an average porosity of 14%, average water saturation of 57%, average net effective pay of 20 feet, average oil gravity of 39 degrees API, original reservoir pressure of 1,587 psi, based upon a fluid level determination, and produces under a water drive mechanism.

In addition to its requested new field designation, Laredo requested special field rules be adopted on a temporary basis of 18 months for its proposed discovery field. The proposed field rules include a designated correlative interval, 330'-660' well spacing, 40 acre proration units with 20 acre

tolerance and a maximum diagonal of 2,100 feet, and allocation based on 100% acreage.

Laredo requests that the entire correlative interval from 6,150 feet to 6,400 feet, as shown on the log of the Laredo Petroleum, Inc., K. R. Stanley 112 Lease, Well No. 1 (API No. 42-205-30345), Section 112, Block 2, B&B Survey, Hartley County, be designated as the Cottonwood Draw (Granite Wash) Field.

Laredo testified its proposed 330'-660' minimum well spacing is necessary to provide flexibility in locating wells in its proposed new field. Laredo testified it believes that due to the small aerial extent of surrounding Granite Wash reservoirs, incorporated with seismic survey interpretation, the Granite Wash is a structure-based play with a high water drive mechanism. Laredo further testified that in order to be efficient in producing top structure, water drive reservoirs it is necessary to implement 330'-660' well spacing, as it proposed.

In support of its proposed density provision, Laredo submitted volumetric calculations based on data obtained from the subject well, incorporated with a production decline analysis. Laredo concluded the recoverable oil in place is 2,267 BO per acre and the recoverable oil in place per 40 acres is 90,680, based upon 14% porosity, 57% water saturation, 20 feet net pay, formation volume factor of 1.03, and a recoverability factor of 25%.

Laredo testified the subject well has produced 13, 517 BO through April 29, 2012. Further Laredo testified that based upon a current production rate of 55 BOPD, 14% annual decline rate, and remaining recoverable reserves of 113,500 BO, the subject well will drain approximately 56 acres.

Finally, Laredo requested that allocation be based upon 100% acreage. In support of its request, Laredo testified that its proposed allocation for a 40 acre proration unit will provide for the protection of correlative rights and that allocation based on acreage will more fairly represent the recoverable reserves underlying a proration unit.

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. Notice of this hearing was published once a week for four consecutive weeks in the *Dalhart Texan*, a newspaper of general circulation in Hartley County.
3. The Laredo Petroleum, Inc. ("Laredo") K. R. Stanley 112 Lease, Well No. 1 completed on December 29, 2011 with perforations in the Canyon Wash formation from 6,194 feet to 6,198 feet. On initial test, the well produced open flow at a rate of 95 BOPD, 0 MCFGPD, and 189 BWPD
4. The Laredo, K. R. Stanley 112 Lease, Well No. 1 is entitled to a new field designation. There is no comparable production within a 2.5 mile radius of the discovery well.

5. The correlative interval from 6,150 feet to 6,400 feet, as shown on the log of the Laredo Petroleum, Inc., K. R. Stanley 112 Lease, Well No. 1 (API No. 42-205-30345), Section 112, Block 2, B&B Survey, Hartley County, should be designated as the Cottonwood Draw (Granite Wash) Field (Field ID No. 21056 250)
6. Laredo provided a drainage calculation for its K. R. Stanley 112 Lease, Well No. 1. The K. R. Stanley 112 Lease, Well No. 1 is estimated to drain approximately 56 acres
7. Adoption of 330'-660' well spacing is appropriate for wells completed in the subject field at this time.
8. The bottom-hole pressure in the Laredo, K. R. Stanley 112 Lease, Well No. 1 is reported at 1,587 psig.
9. Allocation based upon 100% acreage is a reasonable formula which will protect the correlative rights of mineral owners in the field.

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. Approval of the requested new field designation and adoption of Temporary Field Rules for the Cottonwood Draw (Granite Wash) Field will protect correlative rights and promote the orderly development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the new field designation and adopt Temporary Field Rules, subject to review in 18 months, for the proposed Cottonwood Draw (Granite Wash) Field, as requested by Laredo.

Respectfully submitted,

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Technical Examiner

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