

November 8, 2011

9045-7710-59240-15

V. Michele Taylor
Engineering Technologist
Community and Regulatory Affairs Group
Quicksilver Resources Canada Inc.
2000, 125 – 9th Avenue S.W.
CALGARY, AB T2G 0P8

Dear Ms. Taylor:

RE:

INNOVATIVE TECHNOLOGY SPECIAL PROJECT, AMENDMENT #2
OTHER THAN NORMAL SPACING ORDER, AMENDMENT #2
HORN RIVER AREA – EXSHAW FORMATION

The Commission has reviewed your application dated October 31, 2011, requesting amendment to an Innovative Technology approval in the Fortune area of the Horn River Basin, to test the shale gas potential of the Exshaw formation.

Initial approval and amendment addressed the intention to produce oil from the Exshaw formation. Well production, commencing in August 2011, has been natural gas with no oil. A change to gas spacing areas contacted and primary product of gas is required.

The following orders are attached;

- 1) Order 10-15-002 (Amendment #2) designating the application of innovative technology within a portion of the regional Horn River area Exshaw formation as a Special Project under section 75(1)(b) of the *Oil and Gas Activities Act*, and
- 2) Order 10-15-002-OTN (Amendment #2) approving Other Than Normal Spacing under section 65.1 of the *Petroleum and Natural Gas Act* for the subject formation and area.

This amended approval allows continued evaluation of this unproven unconventional gas resource and refinement of drilling and completion methods in a confidential manner. Please note that as per section 17(1)(f)(i) of the *Oil and Gas Activities Act General Regulation*, the expiry of confidentiality shall be 3 years after the date of the order designating the special project, in this case July 8, 2013. Operation of the project will be subject to periodic review and the Commission may modify the Orders, if deemed appropriate.

Should you have any questions, please contact Ron Stefik at (250) 419-4430.

Sincerely,

Paul Jeakins Commissioner

Attachments

IN THE MATTER of an application from Quicksilver Resources Canada Inc. to the Commission dated October 31, 2011 for the application of Innovative Technology.

ORDER 10-15-002 (Amendment #2)

 Under Section 75(1)(b) of the Oil and Gas Activities Act, the Horn River – Exshaw formation is designated as a special project for the recovery of gas using innovative technology within the following area;

94-O-15: Block A - Units 18, 19, 28, 29, 38-40, 48-50 Block B - Units 31 and 41.

- 2. Gas wells within the project area may be produced without individual well allowable restrictions.
- 3. The Permit Holder must submit a progress report to the Commission annually. The progress report is due within 60 days after the end of each period and must contain:
 - a) the daily average rate of gas, condensate and water produced during each month for each producing well, and for the project as a whole,
 - b) the monthly cumulative gas, condensate and water production from each producing well, and for the project as a whole,
 - c) details of any workover or fracture treatment program done on any of the wells with results of the workovers or fracture treatment,
 - d) an evaluation of bottom hole pressures and any other data collected,
 - e) representative sample analysis of produced gas, condensate and water,
 - f) a discussion of the overall performance of the project,
- 4. Quicksilver shall complete operations as set out in the proposed program described in the application to the Commission.

Paul Jeakins Commissioner

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this \mathcal{E}^{r} day of November 2011.

IN THE MATTER of an application from Quicksilver Resources Canada Inc. to the Commission dated October 31, 2011 for Other Than Normal Spacing.

ORDER 10-15-002-OTN (Amendment #2)

1 Under Section 65.1(2) of the *Petroleum and Natural Gas Act*, Other Than Normal Spacing is approved within the Horn River/Fortune area Exshaw formation within the following area;

94-O-15: Block A - Units 18, 19, 28, 29, 38-40, 48-50 Block B - Units 31 and 41.

- 2 Under section 65.1(3) of the *Petroleum and Natural Gas Act*, I specify the following:
 - a) the target area for a gas well completed within the project area is not nearer than 100 m to the sides of the Other Than Normal Spacing area,
 - a gas well completed outside the specified target area may be subject to an off-target production penalty,
 - gas wells drilled within the specified project area are not subject to spacing requirements.

Ron Stefik

Sr Technical Advisor, Reservoir Engineering Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this & the day of November 2011.