

February 9, 2012

9022-4997-59240-06

Louise Sidorenko, P.Eng. Sr. Exploitation Engineer Progress Energy Ltd. 1200, 205–5<sup>th</sup> Avenue S.W. Calgary AB T2P 2V7

Dear Ms. Sidorenko:

RE: GOOD ENGINEERING PRACTICE SPECIAL PROJECT
OTHER THAN NORMAL SPACING ORDER
NORTHERN MONTNEY FIELD – DOIG PHOSPHATE-MONTNEY "A" POOL

The Commission has reviewed your application dated December 28, 2011, requesting a Good Engineering Practice approval for the Altares field - Montney formation.

The Commission has mapped this area within the regional Northern Montney field – Doig Phosphate-Montney "A" pool. For regulatory purposes, the Commission designates the entire Doig Phosphate-Montney sequence as a single formation, removing commingling as an issue.

The following Orders are attached;

- 1) Order 12-06-002 designating Good Engineering Practice, within a portion of the regional Northern Montney field Doig Phosphate-Montney "A" pool as a Special Project under section 75 of the Oil and Gas Activities Act, and
- 2) Order 12-06-002-OTN approving Other Than Normal Spacing under section 65.1 of the *Petroleum and Natural Gas Act* for the subject pool and area.

As a Good Engineering Practice special project, the applicant intends to locate, complete and operate wells in a manner to optimize resource recovery while minimizing surface impacts.

Should you have any questions, please contact Ron Stefik at (250) 419-4430 or Kelly Okuszko at (250) 419-4433.

Sincerely,

Paul Jeakins

Commissioner & CEO
Oil and Gas Commission

Attachments

IN THE MATTER of an application from Progress Energy Ltd. to the Oil and Gas Commission dated December 28, 2011 for a Good Engineering Practice project.

## **ORDER 12-06-002**

1 Under Section 75(1)(a) of the *Oil and Gas Activities Act*, the Northern Montney field – Doig Phosphate-Montney "A" pool is designated as a special project for the enhanced recovery of natural gas utilizing Good Engineering Practice within the following area;

NTS 94-B-8 Block F – Units 71, 81, 91
Block G – Units 18, 19, 28, 29, 38, 39, 48, 49, 52, 53, 58, 59, 62, 63, 68, 69, 72-75, 78-80, 82-85, 88-90, 92-100
Block J – Units 2-10, 12, 13, 16-20, 22, 23, 26-30, 34-37, 44-47
Block K – Units 1, 11-15, 21-25, 32-35 and 42-45.

Paul Jeakins

Commissioner & CEO
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this Province of February 2012

IN THE MATTER of an application from Progress Energy Ltd. to the Oil and Gas Commission dated December 28, 2011 for Other Than Normal Spacing.

## ORDER 12-06-002-OTN

1 Under Section 65.1(2) of the *Petroleum and Natural Gas Act*, Other Than Normal Spacing is approved within the Northern Montney field – Doig Phosphate-Montney "A" pool within the following area;

NTS 94-B-8 Block F — Units 71, 81, 91

Block G — Units 18, 19, 28, 29, 38, 39, 48, 49, 52, 53, 58, 59, 62, 63, 68, 69, 72-75, 78-80, 82-85, 88-90, 92-100

Block J — Units 2-10, 12, 13, 16-20, 22, 23, 26-30, 34-37, 44-47

Block K — Units 1, 11-15, 21-25, 32-35 and 42-45.

- 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 150 m to the sides of the Other Than Normal Spacing area,
  - b) a gas well completed outside the specified target area may be subject to an off-target production penalty,
  - c) gas wells drilled within the specified project area are not subject to spacing requirements.

Ron Stefik, AScT ( Sr Technical Advisor Reservoir Engineering Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this had a of February 2012.

## RATIONALE FOR ORDER

Order 12-06-002 has been made considering:

- Reservoir characteristics The gas charged Triassic Doig Phosphate-Montney formation is prospective for exploitation over a large regional area. For regulatory purposes, all sequences within this thick but low reservoir quality siltstone are identified as a single zone. Progress estimates a significant gas-in-place of 350 bcf per gas spacing unit. A typical horizontal well is expected to recover 5 Bcf of reserves.
- ➤ Enhanced Recovery Development of this unconventional resource is dependent on operator ability to locate wells without regard to normal well spacing and target area restrictions. Horizontal wells (3900 mMD) drilled from multi-well pads will receive 8 staged 200T slickwater fracture stimulations. Well and microseismic data indicate a limited effective drainage radius per well, necessitating a high drilling density (6-10 wells/pad) to contact all available rock mass. In 2012, Progress plans to drill two horizontal wells within the project area.
- Need for Special Project Special Project recognizes that an operator is utilizing best available practices to achieve gas recovery while minimizing surface impacts. Special Project approval enables an Other Than Normal Spacing Order, removing well spacing and target area restrictions to avoid stranded reserves. The Commission is satisfied that there is a need for this project.
- ▶ **P&NG rights** Based on tenure information, the Commission is satisfied that Progress has the appropriate rights in the subject pool and project area.
- Objections –There were no objections filed with the Commission regarding this project.

Paul Jeakins

Commissioner & CEO
Oil and Gas Commission

February 7, 2012