

September 12, 2013

5170-4900-59240-06

Cindy Chomiak
Development Technologist
Cutbank Ridge Business Unit
EnCana Corporation
500 Centre Street SE
P.O. Box 2850
CALGARY, AB T2P 2S5

Dear Ms. Chomiak:

**RE: GOOD ENGINEERING PRACTICE SPECIAL PROJECT, AMENDMENT #4
OTHER THAN NORMAL SPACING ORDER
KELLY FIELD – DOIG “A” GAS POOL**

The Commission has reviewed your application dated May 15, 2013, requesting amendment of a Good Engineering Practice approval for the Kelly field – Doig “A” pool.

The application is intended to extend development beyond the existing approval area, as seismic mapping has identified potential Doig resource in adjacent lands. Due to the complex nature of the geology in the Doig formation, additional wells will be required to capture incremental reserves and maximize recovery from the pool. Increased well density is the most efficient and economical method of reserves recovery.

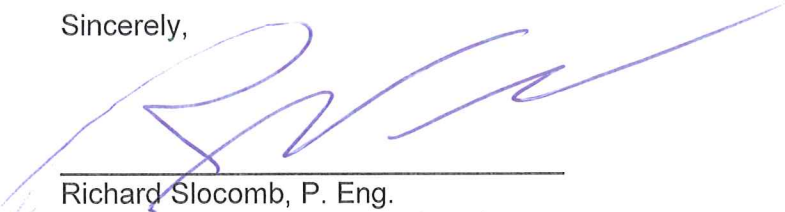
The following orders are attached;

- 1) Order 07-06-010 (Amendment #4) designating Good Engineering Practice, within a portion of the Kelly Field Doig ‘A’ formation as a Special Project under section 75 of the *Oil and Gas Activities Act*, and
- 2) Order 07-06-010-OTN (Amendment #4) approving Other Than Normal Spacing under section 65.1 of the *Petroleum and Natural Gas Act* for the subject formation and area.

As a Good Engineering Practice special project the operator is expected to locate, complete and operate wells in a manner to optimize resource recovery while minimizing surface impacts. No objections were received following notice of application on the OGC website.

Should you have any questions, please contact Michelle Gaucher at (250) 419-4482 or Ron Stefik at (250) 419-4430.

Sincerely,



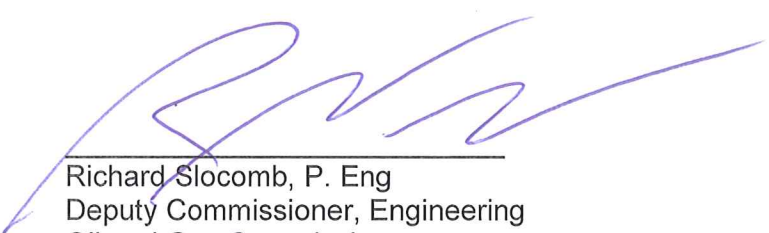
Richard Slocomb, P. Eng.
Deputy Commissioner, Engineering
Oil and Gas Commission

Attachments

RATIONAL FOR ORDER

Order 07-06-010 (Amendment #4) has been made considering:

- **Reservoir characteristics** – The Kelly – Doig “A” pool was originally mapped as several individual pools, amalgamated by the OGC based on seismic data. This Triassic pool is a complex compartmentalized reservoir with multiple sand & dolomitic facies. This has been confirmed by both reservoir pressure data (2012 testing ranged from 10,000 kPa to 23,000 kPa in producing wells) and variability in individual well performances, from high rate/recovery to sub-economic wells.
 - **Conservation of the resource** – Efficient development of this pool is dependent on operator ability to locate wells without regard to normal well spacing and target area restrictions. Horizontal wells, located on 3-D seismic control, will access thickest pay portion of this pool to achieve maximum recovery..
 - **Current status** – A GEP approval was originally granted March 16, 2007 under pre-OGAA Section 101 of the Drilling and Production Regulation. Three previous amendments added gas spacings to the original GEP area.
 - **Need for Special Project** – Special Project recognizes that an operator, in a specific area, is utilizing best available practices to achieve gas recovery while minimizing surface impacts (in this case by directional horizontal drilling). Special Project approval enables an Other Than Normal Spacing Order, removing well spacing and target area restrictions and establishing a project target area 250m from the project boundary. The Commission is satisfied that there is a need for this project.
 - **P&NG rights** – Based on tenure information the Commission is satisfied that EnCana has appropriate rights in the subject formation in the project area.
 - **Enabling legislation** – Approval of **Good Engineering Practice** as a **special project under section 75** of the Oil and Gas Activities Act is a continuity of the refined GEP application and approval process. As per section 75(2a) designation may be made with or without conditions.
- Other Than Normal Spacing Order** under section 65.1 of the Petroleum and Natural Gas Act is the regulatory instrument to modify spacing and target areas within, and at the boundary of, a special project designated under section 75 of OGAA.
- **Objections** – There were no objections filed with the Commission regarding this project.



Richard Slocomb, P. Eng
Deputy Commissioner, Engineering
Oil and Gas Commission

September 12, 2013

IN THE MATTER of an application from EnCana Corporation to the Commission dated May 15, 2013 for a Good Engineering Practice project amendment.

ORDER 07-06-010 (Amendment #4)

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

NTS 93-P-1 Block F Units 91-99

Block G Units 54-57, 64-67, 72-79, 82-89, 92-100

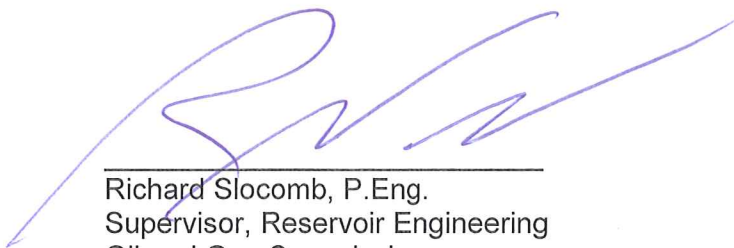
Block J Units 2-10, 12-20, 22-30, 32-40, 42-50, 52-60, 62-70, 74-80, 84-90, 98-100

Block K Units 1-9, 11-19, 21-29, 31-39, 41-49, 51-95

Block L Units 51, 61, 71, 81

93-P-8 Block B Units 8-10

Block C Units 1-5, 12, 13, 22 and 23.



Richard Slocomb, P.Eng.
Supervisor, Reservoir Engineering
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 12 day of September 2013.

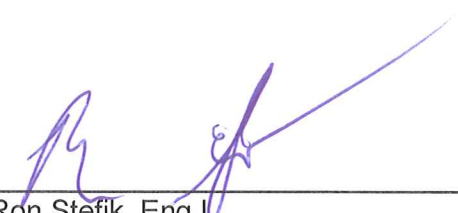
IN THE MATTER of an application from EnCana Corporation to the Commission dated May 15, 2013 for Other Than Normal Spacing Amendment.

ORDER 07-06-010-OTN (Amendment #4)

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

NTS 93-P-1 Block F Units 91-99
Block G Units 54-57, 64-67, 72-79, 82-89, 92-100
Block J Units 2-10, 12-20, 22-30, 32-40, 42-50, 52-60, 62-70, 74-80, 84-90, 98-100
Block K Units 1-9, 11-19, 21-29, 31-39, 41-49, 51-95
Block L Units 51, 61, 71, 81
93-P-8 Block B Units 8-10
Block C Units 1-5, 12, 13, 22 and 23.

- 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 250 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, Eng. L.
Supervisor, Reservoir Engineering
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 12th day of September 2013.