

September 10, 2010

9045-8295/8550-59240-06

Melissa Sandbeck, EIT Reservoir Engineer EOG Resources Canada Inc. 1300, 700 – 9<sup>th</sup> Avenue S.W. Calgary, AB T2P 3V4

Dear Ms. Sandbeck:

RE: GOOD ENGINEERING PRACTICE APPROVAL
HORN RIVER FIELD – MUSKWA-OTTER PARK & EVIE "A" POOLS

Commission staff have reviewed your application, dated February 19, 2010, requesting Good Engineering Practice (GEP) approval for producing gas from a northern portion of the Horn River field (Maxhamish-Tatoo-Gote-Trail area), Horn River shale; including the Muskwa, Otter Park and Evie formations.

The Horn River Basin is an area of intense new activity for shale gas development. Several recent wells have been drilled within the area of application, under Experimental Schemes. Gas recovery from this resource would benefit from the ability to produce horizontal wells in optimal locations, drilling from central pads.

Attached are GEP Approvals 10-06-039 (EOG Project #1) and 10-06-040 (EOG Project #2), hereby granted under Part 8, Division 6, Section 101 of the *Drilling and Production Regulation*. These approvals are intended to allow the drilling and production of gas wells at increased density without regard for normal spacing and target areas for maximization of gas recovery. Project target areas have been adjusted where consent from off-setting tenure holders has been provided, for efficient reserves recovery. No objections were received following notice of application on the OGC website.

Please note that several fractional units, at the BC–Yukon border, have been included in the approval area as they form the complete Other Than Normal Spacing areas for which portions were requested in the application, and extend under the same tenure.

For regulatory purposes, the Commission designates the Middle Devonian aged Muskwa-Otter Park as a single formation, and the Evie shale as a separate zone. Therefore, wells completed within the Muskwa-Otter Park formation are not considered commingled, removing any requirement for application, notification or approval. Completing a wellbore for un-segregated production from both the Muskwa-Otter Park and the Evie will require submission of the form Notification of Commingled Production.

Please note that the following Experimental Scheme approvals are hereby terminated, the areas now included within the subject GEP approvals;

### Approval 06-15-005 EOG SHALE GAS PROJECT

94-O-15 Block E - units 71, 81, 91-93

Block F - units 78-80, 88-90, 96-100

Block K - units 6-10, 18-20, 28-30, 38, 39, 48, 49

Block L - units 1-3, 11-13 and 21-23.

## Approval 07-15-001 EOG SHALE PROJECT #1

94-O-9 Block G - units 14-17 and 24-27.

### Approval 08-15-013 EOG SHALE PROJECT #2

94-O-10 Block B - units 96, 97

Block G - units 6 and 7.

#### Approval 09-15-004 EOG SHALE PROJECT #3

94-O-9 Block B - units 54-57, 64-67, 74-77, 84-87.

#### Approval 09-15-016 EOG SHALE PROJECT #4

94-O-10 Block E - units 31, 41

Block F - units 38-40 and 48-50.

Any well already rig released within the Experimental Schemes will retain the remaining portion of the 3-year confidentiality period, however new wells will <u>not</u> obtain Experimental status. Final Progress Reports, required as a condition of the Experimental Scheme approvals, must be submitted to the Commission within 60 days of this date, regardless of the previous reporting cycle.

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

Sincerely,

Richard Slocomb, P.Eng.

Supervisor, Reservoir Engineering

Resource Conservation

Attachments

#### **APPROVAL 10-06-039**

# THE PROVINCE OF BRITISH COLUMBIA PETROLEUM AND NATURAL GAS ACT DRILLING AND PRODUCTION REGULATION OIL AND GAS COMMISSION

IN THE MATTER of a Good Engineering Practice (GEP) scheme of EOG Resources Canada Inc. (EOG) for producing gas from the Horn River field – Muskwa-Otter Park & Evie "A" regional pools without spacing and target restrictions.

NOW, THEREFORE, the Commission, pursuant to Part 8, Division 6, Section 101 of the *Drilling and Production Regulation*, hereby approves the GEP scheme of EOG as such scheme is described in

an Application from EOG to the Commission dated July 17, 2010, and related submissions.

This scheme is approved, subject to the conditions herein contained and, in particular:

1. The area of the scheme shall consist of:

NTS 94-O-09 Block A Units 40, 50, 58-60, 68-70, 78-80, 88-90, 96-100

Block B Units 12-17, 22-27, 31-37, 41-47, 51-57, 61-67, 71-77, 81-87, 91-97

Block G Units 1-7, 11-17, 21-27

Block H Units 6-10, 16-20 and 26-30.

- 2. The requirements of Section 10 of the *Drilling and Production Regulation* are hereby waived, provided that gas wells within the scheme area are not completed nearer than 250 m to the sides of the approved project area.
- 3. The gas wells within the project area may be produced without individual well allowable restrictions.

4. This approval may be modified or rescinded at a later date if deemed appropriate.

Richard Slocomb

Supervisor, Reservoir Engineering

Resource Conservation
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this / D day of September 2010.

#### APPROVAL 10-06-040

# THE PROVINCE OF BRITISH COLUMBIA PETROLEUM AND NATURAL GAS ACT DRILLING AND PRODUCTION REGULATION OIL AND GAS COMMISSION

IN THE MATTER of a Good Engineering Practice (GEP) scheme of EOG Resources Canada Inc. (EOG) for producing gas from the Horn River field – Muskwa-Otter Park & Evie "A" regional pools without spacing and target restrictions.

NOW, THEREFORE, the Commission, pursuant to Part 8, Division 6, Section 101 of the *Drilling and Production Regulation*, hereby approves the GEP scheme of EOG as such scheme is described in

an Application from EOG to the Commission dated July 17, 2010, and related submissions.

This scheme is approved, subject to the conditions herein contained and, in particular:

1. The area of the scheme shall consist of:

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NTS 94-O-09
    Block E Units 12-20, 22-30, 31-59, 61-69, 71-79, 81-89, 91-100
    Block F Units 36-40, 46-50, 54-60, 64-70, 74-80, 84-90, 94-100
    Block K Units 4-10, 14-19, 24-29
    Block L Units 1-10, 18-20, 28-30
NTS 94-O-10
    Block B Units 96-100
    Block C Units 91-100
    Block D Units 91-95
    Block E Units 1-5, 11-15, 21-25, 31-35, 41-45, 51-55, 61-65, 71-73, 81-83, 91
    Block F Units 1-30, 38-40, 48-50, 58-60, 68-70, 78-80, 88-100
    Block G Units 6-39, 41-49, 51-59, 61-69, 71-79, 81-89, 91-100
    Block H Units 11, 14-21, 24-50, 56-60, 66-70, 76-80, 86-100
    Block I Units 1-30, 40, 50
    Block J Units 1-50, 58-60, 68-70, 76-80, 86-90
    Block K Units 1-39, 41-49, 51-59, 61-69, 71-79, 81-89, 92-99
    Block L Units 1, 11, 21
NTS 94-O-15
    Block C Units 2-9, 14-19, 24-29, 34-39, 44-49, 54-59, 64-69, 74-79, 84-89, 94-99
    Block E Units 71-73, 81-83, 91-93
    Block F Units 4-9, 14-19, 24-29, 34-39, 44-49, 54-59, 64-69, 71-100
    Block K Units 1-60, 64-70, 74-80, 84-90, 94-100
    Block L Units 1-3, 11-13, 21-23, 31-33, 41-43, 51-53, 61-63, 71-73, 81-83, 91-93.
NTS 95-B-02
    Block C Fractional Units 4, 5, 6, 7, 8, 9, 10
    Block D Fractional Units 1, 2 and 3.
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- 2. The requirements of Section 10 of the *Drilling and Production Regulation* are hereby waived, provided that gas wells within the scheme area are not completed nearer than 250 m to the sides of the approved project area, except for;
  - 100 m to the eastern boundary of the approved project area at 38, 48-F/94-O-10.
- 3. The gas wells within the project area may be produced without individual well allowable restrictions.
- 4. This approval may be modified or rescinded at a later date if deemed appropriate.

Richard Slocomb

Supervisor, Reservoir Engineering

Resource Conservation

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this/ day of September 2010.