



April 27, 2009

3455-8200-59240-06

Januar Wirawan, P.Eng.  
Reservoir Engineer  
EnCana Corporation  
150 - 9<sup>th</sup> Avenue SW  
P.O. Box 2850  
Calgary AB T2P 2S5

Dear Mr. Wirawan:

**RE: GOOD ENGINEERING PRACTICE APPROVAL, AMENDMENT #1  
ELLEH - JEAN MARIE "B" & "C" POOLS**

Commission staff have reviewed your application, dated March 17, 2009, requesting an amendment to Good Engineering Practice (GEP) scheme approval for producing gas from the Elleh field – Jean Marie formation.

The amendment area lies between the Elleh – Jean Marie "B" and "C" gas pools which correspond to GEP Approvals 08-06-002 and 07-06-023, respectively. The approval of this amendment has resulted in an amalgamation of these two areas. As a result, the earliest approval (07-06-023) will be amended and the other (08-06-002) will be rescinded. Further drilling between the pools will provide information to determine whether or not a boundary exists between the two pools.

Within the amendment area, there are currently multiple Jean Marie wells per DSU, some of which are also off target, that were placed on production before GEP approval was granted. The Commission would like to remind EnCana that well spacing and target restrictions apply for areas without GEP approval, as per Section 10 of the *Drilling and Production Regulation*.

The Approval 07-06-023 (Amendment #1) is hereby granted under Part 8, Division 6, Section 101 of the *Drilling and Production Regulation*. The specific area of addition is:

94-I-12:       Block B – units 40, 50, 60, 70, 80, 90  
                  Block C – units 31 – 35, 41 – 45, 51 – 55, 61 – 65, 71 – 75, 81 – 85

This approval is intended to allow the drilling of wells without spacing and target consideration for maximization of gas recovery. No objections were received following notice of the application on the OGC website.

.../2

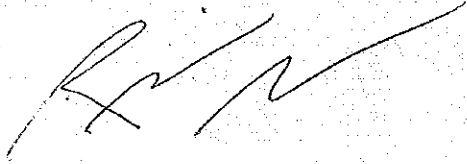


April 27, 2009

3455-8200-59240-06

Should you have any questions, please contact the undersigned at (250) 952-0366 or Kelly Okuszko at (250) 952-0325.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Slocomb', written over a light gray dotted background.

Richard Slocomb, P. Eng.  
Supervisor, Reservoir Engineering  
Resource Conservation

Attachment



APPROVAL 07-06-023 (Amendment #1)

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 EnCana Corporation (EnCana) for producing the Elleh field Jean Marie "B" and "C" gas pools without well spacing and target restrictions.

NOW, THEREFORE, the Commission, pursuant to Part 8, Division 6, section 101 of the *Drilling and Production Regulation*, hereby approves an amendment to the GEP scheme for drilling wells without spacing and target restrictions, as such scheme is described in

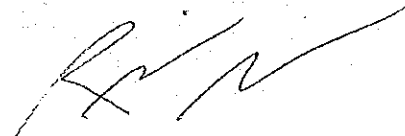
*an Application to the Commission dated March 17, 2009.*

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

1. The area of the scheme shall consist of:

- 94-I-5: Block C – units 80, 90, 98-100  
Block D – units 71-73, 81-83, 91-97  
Block E – units 1-7, 11-19, 21-29, 32-39, 42-49, 52-59, 62-69, 72-79, 82-89, 92-99  
Block F – units 8-10, 18-20, 28-30  
Block K – units 20, 30, 40, 50, 60, 70, 80, 90, 96-100  
Block L – units 2-9, 11-19, 21-29, 31-39, 41-49, 51-59, 61-69, 71-79, 81-89, 91-97
- 94-I-12: Block A – units 20, 30, 40, 50, 60, 70, 80, 90, 100  
Block B – units 11-19, 21-29, 31-39, 40-49, 50-59, 60-69, 70-79, 80-89, 90-99  
Block C – units 6-10, 16-20, 26-30  
Block D – units 1-7, 11-17, 21-27, 31-37, 41-47, 51-55, 61-65, 71-79 and 81-89.  
Block G – units 1-9, 11-19, 21-29  
Block H – units 10, 20, and 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 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

DATED AT the City of Victoria, in the Province of British Columbia, this 27<sup>th</sup> day of April 2009.





OIL AND GAS COMMISSION

January 17, 2008

3455-8200-59240-06

Claudio Virues  
Reservoir Engineer, South Sierra Business Unit  
EnCana Corporation  
150 - 9<sup>th</sup> Avenue SW  
P.O. Box 2850  
Calgary AB T2P 2S5

Dear Mr. Virues:

**RE: GOOD ENGINEERING PRACTICE APPROVAL**  
**ELLEH - JEAN MARIE "B" POOL**

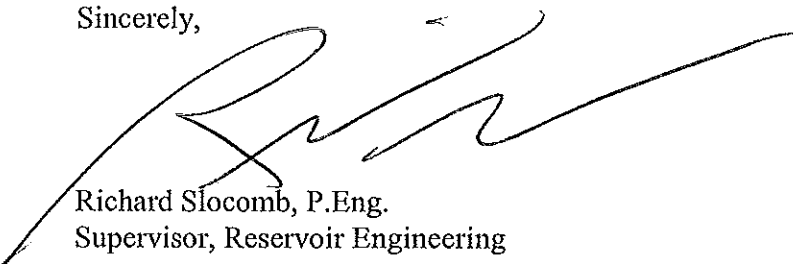
Commission staff have reviewed your application, dated November 7, 2007, for Good Engineering Practice (GEP) scheme approval in the Elleh area.

A major portion of the requested area is mapped by the Commission as an extension of the Gunnell Creek – Jean Marie "A" pool and has been granted as a amendment to that GEP approval (under a separate cover letter). The remaining portion is interpreted as the Elleh field – Jean Marie "B" pool.

Approval 08-06-002 is hereby granted under Part 8, Division 6, Section 101 of the *Drilling and Production Regulation*. No objections were received following posting of a notice of this application on the OGC website. This approval is intended to allow the drilling of wells without spacing and target consideration for maximization of gas recovery.

Should you have any questions, please contact Ron Stefik at (250) 952-0310.

Sincerely,



Richard Slocomb, P.Eng.  
Supervisor, Reservoir Engineering

Attachment

---

**RESOURCE CONSERVATION**

PO Box 9329 Stn Prov Gov't, Victoria BC V8W 9N3 Tel: (250) 952-0302 Fax: (250) 952-0301  
Location: 6<sup>th</sup> Flr 1810 Blanshard St, Victoria BC

Headquarters: #200, 10003 110<sup>th</sup> Ave, Fort St. John BC V1J 6M7 Tel: (250) 261-5729 Fax: (250) 261-5744 [www.ogc.gov.bc.ca](http://www.ogc.gov.bc.ca)





APPROVAL 08-06-002

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 EnCana Corporation (EnCana) for producing the Elleh field Jean Marie "B" gas pool without well spacing and target restrictions.

NOW, THEREFORE, the Commission, pursuant to Part 8, Division 6, section 101 of the *Drilling and Production Regulation*, hereby approves a GEP scheme for drilling wells without spacing and target restrictions, as such scheme is described in

*an Application to the Commission dated November 7, 2007.*

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

1. The area of the scheme shall consist of:

94-I-5: Block C – units 80, 90, 98-100

Block D – units 71-73, 81-83, 91-97

Block E – units 1-7, 11-19, 21-29, 32-39, 42-49, 52-59, 62-69, 72-79, 82-89, 92-99

Block F – units 8-10, 18-20, 28-30

Block K – units 20, 30, 40, 50, 60, 70, 80, 90, 96-100

Block L – units 2-9, 11-19, 21-29, 31-39, 41-49, 51-59, 61-69, 71-79, 81-89, 91-97

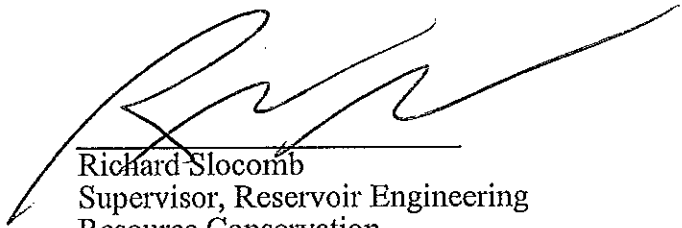
94-I-12: Block C – units 6-10, 16-20, 26-30, 36-40, 46-50, 56-60, 66-70, 76-80, 86-90

Block D – units 1-7, 11-17, 21-27, 31-37, 41-47, 51-55, 61-65, 71-79 and 81-89.

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 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

DATED AT the City of Victoria, in the Province of British Columbia, this 17<sup>th</sup> day of January 2008.





OIL AND GAS COMMISSION

July 19, 2007

3455-8200-59240-06

Claudio Virués  
Reservoir Engineer  
South Sierra Sub Business Unit – East Elleh Area  
Encana Corporation  
150 – 9<sup>th</sup> Avenue SW  
Calgary AB T2P 2S5

Dear Mr. Virués:

**RE: GOOD ENGINEERING PRACTICE APPROVAL**  
**ELLEH – JEAN MARIE “C” POOL**

The Commission has reviewed your application dated April 24, 2007 requesting a Good Engineering Practice (GEP) scheme approval for producing Jean Marie Formation gas from the Elleh field.

Production from the subject pool commenced in April 2006, and there are currently 13 wells on production. Horizontal underbalanced drilling technology has been used to minimize formation damage and maximize production and reserve recovery from the pool. As a result, many of the wellbores extend into off-target locations and adjacent gas spacing units. Horizontal drilling has also resulted in multiple wells producing from single gas spacing units. Please note that normal gas well spacing and target restrictions specified under Section 10 of the *Drilling and Production Regulation* continue to apply, unless a Good Engineering Practice (GEP) is approved under Section 101. In the future an application for GEP should be submitted and approved prior to placing wells on production.

Attached is Approval 07-06-023 granted under Part 8, Division 6, Section 101 of the British Columbia *Drilling and Production Regulation*. This approval is intended to allow operational flexibility and to allow the drilling of additional gas wells without spacing and target considerations for maximization of gas recovery.

Sincerely,

Doug McKenzie  
Director  
Resource Conservation Branch

Attachment

---

**RESOURCE CONSERVATION BRANCH**

PO Box 9329 Stn Prov Gov't, Victoria BC V8W 9N3 Tel: (250) 952-0302 Fax: (250) 952-0301  
Location: 6<sup>th</sup> Flr 1810 Blanshard St, Victoria BC

Headquarters: #200, 10003 110<sup>th</sup> Ave, Fort St. John BC V1J 6M7 Tel: (250) 261-5700 Fax: (250) 261-5728 [www.ogc.gov.bc.ca](http://www.ogc.gov.bc.ca)



APPROVAL 07-06-023

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 EnCana Corporation (EnCana) for producing the Elleh field Jean Marie "C" gas pool without well spacing and target restrictions.

NOW, THEREFORE, the Commission, pursuant to Part 8, Division 6, section 101 of the *Drilling and Production Regulation*, hereby approves an amendment to the GEP scheme for drilling wells without spacing and target restrictions, as such scheme is described in

*an Application to the Commission dated April 24, 2007.*

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

1. The area of the scheme shall consist of:

94-I-12: Block A – units 20, 30, 40, 50, 60, 70, 80, 90, 100

Block B – units 11-19, 21-29, 31-39, 41-49, 51-59, 61-69, 71-79, 81-89, 91-99

Block G – units 1-9, 11-19, 21-29

Block H – units 10, 20, and 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 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.



Doug McKenzie  
Director  
Resource Conservation Branch

DATED AT the City of Victoria, in the Province of British Columbia, this 19<sup>th</sup> day of July 2007.





November 22, 2004

9000-8200-59240-06  
OGC - 04326

Kylan Warriner  
Exploitation Engineer Co-op  
Canadian Natural Resources Limited  
Suite 2500, 855 - 2 Street SW  
Calgary AB T2P 4J8

Elleh (South)?

Dear Mr. Warriner:

**RE: GOOD ENGINEERING PRACTICE APPLICATION  
OTHER AREAS (CNRL BIGFOOT) - JEAN MARIE FORMATION**

The Commission has reviewed your application dated September 22, 2004 requesting Good Engineering Practice (GEP) scheme approval for producing Jean Marie gas from two areas, located in NTS 94-H-13, 94-I-04 and 94-I-05.

The areas of application are outside of present field boundaries (Other Areas). Though on-trend with producing Jean Marie wells, we find that at present there is insufficient information available to support resource mapping within the application areas.

The OGC has granted numerous GEP approvals for Jean Marie development, to allow the flexibility to place wells in optimal drilling locations for maximization of gas recovery. However, as it has now been communicated to the OGC that CNRL does not intend to pursue drilling plans for the upcoming winter drilling season in this area, and the present lack of Jean Marie pool mapping, your application is denied. Application for GEP may be re-submitted should future circumstances warrant.

Should you have any questions, please contact Ron Stefik at (250) 952-0310.

Sincerely,

Craig Gibson, P. Eng.  
Director  
Resource Conservation Branch

Approval Letters to Industry  
GEP, SWD, CONCURRENT PROD,  
PRESSURE MAINTENANCE,  
WATERFLOOD, ETC.

Copy 9

- Wellfile (originals)
- 59240
- Daily
- Resource Revenue
- S. Chicorelli
- R. Stefik
- G. Farr
- R. Slocomb
- D. Krezanoski

**RESOURCE CONSERVATION BRANCH**

PO Box 9329 Stn Prov Gov't, Victoria BC V8W 9N3 Tel: (250) 952-0302 Fax: (250) 952-0301  
Location: 6<sup>th</sup> Flr 1810 Blanshard St, Victoria BC

