



FORMATION: CODELL Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 06/07/2012 End Date: 08/07/2012 Date of First Production this formation: 08/16/2012

Perforations Top: 7834 Bottom: 7848 No. Holes: 42 Hole size: 0.42

Provide a brief summary of the formation treatment: \_\_\_\_\_ Open Hole:

Set CFP @ 7900'. 07-21-12  
 Frac'd the Codell 7834' – 7848', (42 holes) w/ 92,652 gal 22 # PermStim Hybrid cross linked gel containing 249,860 # 30/50 sand. 07-22-12

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 2856 Max pressure during treatment (psi): 5157

Total gas used in treatment (mcf): \_\_\_\_\_ Fluid density at initial fracture (lbs/gal): 8.34

Type of gas used in treatment: \_\_\_\_\_ Min frac gradient (psi/ft): 0.74

Total acid used in treatment (bbl): \_\_\_\_\_ Number of staged intervals: 1

Recycled water used in treatment (bbl): 2856 Flowback volume recovered (bbl): \_\_\_\_\_

Fresh water used in treatment (bbl): \_\_\_\_\_ Disposition method for flowback: RECYCLE

Total proppant used (lbs): 249860 Rule 805 green completion techniques were utilized:

Reason why green completion not utilized: \_\_\_\_\_

**Fracture stimulations must be reported on FracFocus.org**

**Test Information:**

Date: \_\_\_\_\_ Hours: \_\_\_\_\_ Bbl oil: \_\_\_\_\_ Mcf Gas: \_\_\_\_\_ Bbl H2O: \_\_\_\_\_

Calculated 24 hour rate: Bbl oil: \_\_\_\_\_ Mcf Gas: \_\_\_\_\_ Bbl H2O: \_\_\_\_\_ GOR: \_\_\_\_\_

Test Method: \_\_\_\_\_ Casing PSI: \_\_\_\_\_ Tubing PSI: \_\_\_\_\_ Choke Size: \_\_\_\_\_

Gas Disposition: \_\_\_\_\_ Gas Type: \_\_\_\_\_ Btu Gas: \_\_\_\_\_ API Gravity Oil: \_\_\_\_\_

Tubing Size: \_\_\_\_\_ Tubing Setting Depth: \_\_\_\_\_ Tbg setting date: \_\_\_\_\_ Packer Depth: \_\_\_\_\_

Reason for Non-Production: \_\_\_\_\_

Date formation Abandoned: \_\_\_\_\_ Squeeze:  Yes  No If yes, number of sacks cmt \_\_\_\_\_

\*\* Bridge Plug Depth: \_\_\_\_\_ \*\* Sacks cement on top: \_\_\_\_\_ \*\* Wireline and Cement Job Summary must be attached.

FORMATION: J-NIOBRARA-CODELL Status: COMMINGLED Treatment Type: \_\_\_\_\_

Treatment Date: \_\_\_\_\_ End Date: \_\_\_\_\_ Date of First Production this formation: 08/16/2012

Perforations Top: 7616 Bottom: 8250 No. Holes: 40 Hole size: 0.42

Provide a brief summary of the formation treatment: \_\_\_\_\_ Open Hole:

Set CBP @ 7570'. 08-05-12  
Drilled out CBP @ 7570', CFP@ 7700', 7900' to commingle the JSND-NBRR-CDL. 08-07-12

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): \_\_\_\_\_ Max pressure during treatment (psi): \_\_\_\_\_

Total gas used in treatment (mcf): \_\_\_\_\_ Fluid density at initial fracture (lbs/gal): \_\_\_\_\_

Type of gas used in treatment: \_\_\_\_\_ Min frac gradient (psi/ft): \_\_\_\_\_

Total acid used in treatment (bbl): \_\_\_\_\_ Number of staged intervals: \_\_\_\_\_

Recycled water used in treatment (bbl): \_\_\_\_\_ Flowback volume recovered (bbl): \_\_\_\_\_

Fresh water used in treatment (bbl): \_\_\_\_\_ Disposition method for flowback: \_\_\_\_\_

Total proppant used (lbs): \_\_\_\_\_ Rule 805 green completion techniques were utilized:

Reason why green completion not utilized: \_\_\_\_\_

**Fracture stimulations must be reported on FracFocus.org**

**Test Information:**

Date: 08/18/2012 Hours: 24 Bbl oil: 53 Mcf Gas: 257 Bbl H2O: 40

Calculated 24 hour rate: Bbl oil: 53 Mcf Gas: 257 Bbl H2O: 40 GOR: 4849

Test Method: FLOWING Casing PSI: 2111 Tubing PSI: 1758 Choke Size: 12/64

Gas Disposition: SOLD Gas Type: DRY Btu Gas: 1257 API Gravity Oil: 50

Tubing Size: 2 + 3/8 Tubing Setting Depth: 8221 Tbg setting date: 08/07/2012 Packer Depth: \_\_\_\_\_

Reason for Non-Production: \_\_\_\_\_

Date formation Abandoned: \_\_\_\_\_ Squeeze:  Yes  No If yes, number of sacks cmt \_\_\_\_\_

\*\* Bridge Plug Depth: \_\_\_\_\_ \*\* Sacks cement on top: \_\_\_\_\_ \*\* Wireline and Cement Job Summary must be attached.

FORMATION: J SAND Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 06/07/2012 End Date: 08/07/2012 Date of First Production this formation: 08/16/2012  
Perforations Top: 8250 Bottom: 8270 No. Holes: 40 Hole size: 0.42

Provide a brief summary of the formation treatment: Open Hole:

Frac'd the J-Sand 8250'-8270', (40 holes) w/ 72,583 gal PermStim 40 cross linked gel containing 245,260 # 20/40 Sand. 06-22-12

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 3876 Max pressure during treatment (psi): 6825

Total gas used in treatment (mcf): Fluid density at initial fracture (lbs/gal): 8.34

Type of gas used in treatment: Min frac gradient (psi/ft): 0.56

Total acid used in treatment (bbl): Number of staged intervals: 1

Recycled water used in treatment (bbl): 3876 Flowback volume recovered (bbl):

Fresh water used in treatment (bbl): Disposition method for flowback: RECYCLE

Total proppant used (lbs): 245260 Rule 805 green completion techniques were utilized:

Reason why green completion not utilized:

**Fracture stimulations must be reported on FracFocus.org**

**Test Information:**

Date: Hours: Bbl oil: Mcf Gas: Bbl H2O:

Calculated 24 hour rate: Bbl oil: Mcf Gas: Bbl H2O: GOR:

Test Method: Casing PSI: Tubing PSI: Choke Size:

Gas Disposition: Gas Type: Btu Gas: API Gravity Oil:

Tubing Size: Tubing Setting Depth: Tbg setting date: Packer Depth:

Reason for Non-Production:

Date formation Abandoned: Squeeze:  Yes  No If yes, number of sacks cmt

\*\* Bridge Plug Depth: \*\* Sacks cement on top: \*\* Wireline and Cement Job Summary must be attached.

FORMATION: NIOBRARA-CODELL Status: PRODUCING Treatment Type: \_\_\_\_\_

Treatment Date: \_\_\_\_\_ End Date: \_\_\_\_\_ Date of First Production this formation: 08/16/2012

Perforations Top: 7616 Bottom: 7848 No. Holes: 90 Hole size: 0.42

Provide a brief summary of the formation treatment: \_\_\_\_\_ Open Hole:

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): \_\_\_\_\_ Max pressure during treatment (psi): \_\_\_\_\_

Total gas used in treatment (mcf): \_\_\_\_\_ Fluid density at initial fracture (lbs/gal): \_\_\_\_\_

Type of gas used in treatment: \_\_\_\_\_ Min frac gradient (psi/ft): \_\_\_\_\_

Total acid used in treatment (bbl): \_\_\_\_\_ Number of staged intervals: \_\_\_\_\_

Recycled water used in treatment (bbl): \_\_\_\_\_ Flowback volume recovered (bbl): \_\_\_\_\_

Fresh water used in treatment (bbl): \_\_\_\_\_ Disposition method for flowback: \_\_\_\_\_

Total proppant used (lbs): \_\_\_\_\_ Rule 805 green completion techniques were utilized:

Reason why green completion not utilized: \_\_\_\_\_

**Fracture stimulations must be reported on FracFocus.org**

**Test Information:**

Date: \_\_\_\_\_ Hours: \_\_\_\_\_ Bbl oil: \_\_\_\_\_ Mcf Gas: \_\_\_\_\_ Bbl H2O: \_\_\_\_\_

Calculated 24 hour rate: \_\_\_\_\_ Bbl oil: \_\_\_\_\_ Mcf Gas: \_\_\_\_\_ Bbl H2O: \_\_\_\_\_ GOR: \_\_\_\_\_

Test Method: \_\_\_\_\_ Casing PSI: \_\_\_\_\_ Tubing PSI: \_\_\_\_\_ Choke Size: \_\_\_\_\_

Gas Disposition: \_\_\_\_\_ Gas Type: \_\_\_\_\_ Btu Gas: \_\_\_\_\_ API Gravity Oil: \_\_\_\_\_

Tubing Size: \_\_\_\_\_ Tubing Setting Depth: \_\_\_\_\_ Tbg setting date: \_\_\_\_\_ Packer Depth: \_\_\_\_\_

Reason for Non-Production: \_\_\_\_\_

Date formation Abandoned: \_\_\_\_\_ Squeeze:  Yes  No If yes, number of sacks cmt \_\_\_\_\_

\*\* Bridge Plug Depth: \_\_\_\_\_ \*\* Sacks cement on top: \_\_\_\_\_ \*\* Wireline and Cement Job Summary must be attached.

FORMATION: NIOBRARA Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 06/07/2012 End Date: 08/07/2012 Date of First Production this formation: 08/16/2012  
Perforations Top: 7607 Bottom: 7619 No. Holes: 48 Hole size: 0.42

Provide a brief summary of the formation treatment: Open Hole:

Set CFP @ 7700'. 07-22-12  
Frac'd the Niobrara 7607' - 7619' (48 holes), w/ 103,152 gals 18 # PermStim Hybrid cross linked gel containing 250,000# 30/50 sand. 07-22-12

This formation is commingled with another formation:  Yes  No  
Total fluid used in treatment (bbl): 3379 Max pressure during treatment (psi): 5756  
Total gas used in treatment (mcf): Fluid density at initial fracture (lbs/gal): 8.34  
Type of gas used in treatment: Min frac gradient (psi/ft): 0.76  
Total acid used in treatment (bbl): Number of staged intervals: 1  
Recycled water used in treatment (bbl): 3379 Flowback volume recovered (bbl):  
Fresh water used in treatment (bbl): Disposition method for flowback: RECYCLE  
Total proppant used (lbs): 250000 Rule 805 green completion techniques were utilized:   
Reason why green completion not utilized:

**Fracture stimulations must be reported on FracFocus.org**

**Test Information:**

Date: Hours: Bbl oil: Mcf Gas: Bbl H2O:  
Calculated 24 hour rate: Bbl oil: Mcf Gas: Bbl H2O: GOR:  
Test Method: Casing PSI: Tubing PSI: Choke Size:  
Gas Disposition: Gas Type: Btu Gas: API Gravity Oil:  
Tubing Size: Tubing Setting Depth: Tbg setting date: Packer Depth:

Reason for Non-Production:

Date formation Abandoned: Squeeze:  Yes  No If yes, number of sacks cmt

\*\* Bridge Plug Depth: \*\* Sacks cement on top: \*\* Wireline and Cement Job Summary must be attached.

Comment:

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.  
Signed: Print Name: Sheilla Reed-High  
Title: Drilling and Compl. Tech. Date: Email sheilla.reedhigh@Encana.com

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