



FORMATION: CODELL Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 12/13/2012 End Date: 12/14/2012 Date of First Production this formation: 01/24/2013  
Perforations Top: 7204 Bottom: 7218 No. Holes: 42 Hole size: 0.42

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

Set CFP @ 7263'. 12-13-12  
Frac'd the Codell with 251,220# sand with 79,170 gals SLF. 12-14-12

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 1885 Max pressure during treatment (psi): 5282

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): 0.85

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

Recycled water used in treatment (bbl): 1885 Flowback volume recovered (bbl): 367

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

Total proppant used (lbs): 251220 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: 01/24/2013

Perforations Top: 6972 Bottom: 7698 No. Holes: 140 Hole size: 0.42

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

Set CBP @ 6900'. 01-08-13  
Drilled up CBP, CFP's to commingle the JSND-NBRR-CDL. 01-09-13

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: 01/29/2013 Hours: 24 Bbl oil: 17 Mcf Gas: 103 Bbl H2O: 63  
Calculated 24 hour rate: Bbl oil: 17 Mcf Gas: 103 Bbl H2O: 63 GOR: 6059  
Test Method: FLOWING Casing PSI: 1180 Tubing PSI: 326 Choke Size: 20/64  
Gas Disposition: SOLD Gas Type: DRY Btu Gas: 1139 API Gravity Oil: 38  
Tubing Size: 2 + 3/8 Tubing Setting Depth: 7632 Tbg setting date: 01/09/2013 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: 12/13/2012 End Date: 12/12/2012 Date of First Production this formation: 01/24/2013  
Perforations Top: 7662 Bottom: 7698 No. Holes: 50 Hole size: 0.42

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

Frac'd the J Sand with 251,060# 20/40 sand with 119,574 gals SLF. 12-13-12

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 2847 Max pressure during treatment (psi): 3278

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): 0.70

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

Recycled water used in treatment (bbl): 2847 Flowback volume recovered (bbl): 367

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

Total proppant used (lbs): 251060 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: NIORARA-CODELL Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 12/13/2012 End Date: 12/14/2012 Date of First Production this formation: 01/24/2013

Perforations Top: 6972 Bottom: 7218 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](http://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: 12/13/2012 End Date: 12/14/2012 Date of First Production this formation: 01/24/2013  
Perforations Top: 6972 Bottom: 6984 No. Holes: 48 Hole size: 0.42

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

Set CFP @ 7050'. 12-14-12  
Frac'd the Niobrara with 250380# 20/40 sand with 90,762 gals SLF. 12-14-12

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 2161 Max pressure during treatment (psi): 5246

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): 0.96

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

Recycled water used in treatment (bbl): 2161 Flowback volume recovered (bbl): 367

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

Total proppant used (lbs): 250380 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: 5/12/2013 Email sheilla.reedhigh@Encana.com

**Attachment Check List**

Att Doc Num	Name
400416874	FORM 5A SUBMITTED
400416875	WELLBORE DIAGRAM

Total Attach: 2 Files

**General Comments**

User Group	Comment	Comment Date
Permit	Frac fluid amounts did not match. Recalculated total fluid based on gallons in the summary box per operator. Ready to pass.	5/15/2013 10:27:54 AM

Total: 1 comment(s)