

FORMATION: CODELL Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 01/02/2013 End Date: 01/02/2013 Date of First Production this formation: 01/12/2013
Perforations Top: 7150 Bottom: 7165 No. Holes: 29 Hole size: 7/20

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

Codell frac Treatment Totals: Total 186,040 lbs 20/40 Ottawa, & 4,000 lbs 20/40 SLC Pumped 1.0 ppa to 4.0 ppa in 1803 bbls of fluid. Total fluid pumped 2845.6 bbls.

This formation is commingled with another formation: Yes No

Total fluid used in treatment (bbl): 2845 Max pressure during treatment (psi): 4291

Total gas used in treatment (mcf): 0 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): 0 Number of staged intervals: 1

Recycled water used in treatment (bbl): 0 Flowback volume recovered (bbl): 1398

Fresh water used in treatment (bbl): 2845 Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 186040 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: FRACTURE STIMULATION

Treatment Date: _____ End Date: _____ Date of First Production this formation: 01/12/2013

Perforations Top: 6840 Bottom: 7165 No. Holes: 68 Hole size: 7/20

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: 01/12/2013 Hours: 24 Bbl oil: 3 Mcf Gas: 67 Bbl H2O: 0

Calculated 24 hour rate: Bbl oil: 3 Mcf Gas: 67 Bbl H2O: 0 GOR: 19632

Test Method: Test Separator Casing PSI: 550 Tubing PSI: 800 Choke Size: 12/64

Gas Disposition: SOLD Gas Type: WET Btu Gas: 1361 API Gravity Oil: 46

Tubing Size: 2 + 3/8 Tubing Setting Depth: 7135 Tbg setting date: 11/17/2012 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: NIOBRARA Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 01/02/2013 End Date: 01/02/2013 Date of First Production this formation: 01/12/2013
Perforations Top: 6840 Bottom: 7054 No. Holes: 39 Hole size: 7/20

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

Niobrara frac Treatment Totals: Total 200,400 lbs 40/70 Ottawa, 4,000 lbs 20/40 SLC Pumped 0.5 ppa to 2.0 ppa in 4218 bbls of fluid. Total fluid pumped 5754.7 bbls.

This formation is commingled with another formation: Yes No

Total fluid used in treatment (bbl): 5754 Max pressure during treatment (psi): 5977

Total gas used in treatment (mcf): 0 Fluid density at initial fracture (lbs/gal): 8.34

Type of gas used in treatment: _____ Min frac gradient (psi/ft): 0.87

Total acid used in treatment (bbl): 0 Number of staged intervals: 1

Recycled water used in treatment (bbl): 0 Flowback volume recovered (bbl): 1398

Fresh water used in treatment (bbl): 5754 Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 200400 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: Callie Fiddes

Title: Regulatory Tech Date: 9/27/2013 Email regulatorypermitting@gwogco.com

Attachment Check List

Att Doc Num	Name
400486883	FORM 5A SUBMITTED

Total Attach: 1 Files

General Comments

User Group	Comment	Comment Date
Permit	Missing narative for details of treatment. Form returned to draft.	10/30/2013 3:15:05 PM

Total: 1 comment(s)