

FORM 5A

Rev 06/12

State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



Table with columns DE, ET, OE, ES

Document Number: 400600394

Date Received: 02/14/2017

COMPLETED INTERVAL REPORT

The completed interval Report, Form 5A, shall be submitted within thirty (30) days of completing a formation (successful or not), when a formation is temporarily abandoned or permanently abandoned, for a recompletion, reperforation or restimulation, or when a formation is commingled. Fill out a section for each formation. Attach as many pages as required to fully describe the work. List in order of completion.

1. OGCC Operator Number: 69175
2. Name of Operator: PDC ENERGY INC
3. Address: 1775 SHERMAN STREET - STE 3000
City: DENVER State: CO Zip: 80203
4. Contact Name: Jenifer Hakkarinen
Phone: (303) 8605800
Fax: (303) 8605838
Email: Jenifer.Hakkarinen@pdce.com

5. API Number 05-123-21919-00
6. County: WELD
7. Well Name: COCKROFT
Well Number: 44-11
8. Location: QtrQtr: SESE Section: 11 Township: 6N Range: 64W Meridian: 6
9. Field Name: WATTENBERG Field Code: 90750

Completed Interval

FORMATION: CODELL Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 02/07/2013 End Date: 02/07/2013 Date of First Production this formation:

Perforations Top: 6872 Bottom: 6882 No. Holes: Hole size:

Provide a brief summary of the formation treatment: Open Hole: [X]

Frac Codell 6,872' to 6,882' with 2,589 bbls of Vistar 20# gel with 217,400# of white 20/40 sand, 8,000# of Super LC 20/40.

This formation is commingled with another formation: [X] Yes [ ] No

Total fluid used in treatment (bbl): 2847 Max pressure during treatment (psi): 5159

Total gas used in treatment (mcf): Fluid density at initial fracture (lbs/gal): 3.31

Type of gas used in treatment: Min frac gradient (psi/ft): 0.94

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

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

Fresh water used in treatment (bbl): 2847 Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 225860 Rule 805 green completion techniques were utilized: [X]

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: 2 + 3/8 Tubing Setting Depth: 6858 Tbg setting date: 02/27/2013 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: NIOBRARA-CODELL Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: \_\_\_\_\_ End Date: \_\_\_\_\_ Date of First Production this formation: 03/04/2013

Perforations Top: 6590 Bottom: 6882 No. Holes: \_\_\_\_\_ Hole size: \_\_\_\_\_

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): 703

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

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: 04/02/2013 Hours: 24 Bbl oil: 16 Mcf Gas: 96 Bbl H2O: 2

Calculated 24 hour rate: Bbl oil: 16 Mcf Gas: 96 Bbl H2O: 2 GOR: 6000

Test Method: FLOWING Casing PSI: 352 Tubing PSI: 109 Choke Size: 20/64

Gas Disposition: SOLD Gas Type: WET Btu Gas: 1354 API Gravity Oil: 49

Tubing Size: 2 + 3/8 Tubing Setting Depth: 6858 Tbg setting date: 02/27/2013 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: NIOBRARA Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 02/07/2013 End Date: 02/08/2013 Date of First Production this formation:

Perforations Top: 6590 Bottom: 6714 No. Holes: Hole size:

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

Baker Hughes Pumping Services. Niobrara re-complete was planned and executed with 3,898 bbl of Vistar 18 with 222,514 lbs of 20/40 white sand and 14,084 lbs of 20/40 super lc resin coated sand. Average pressure - 5,659 psig. Ave rate - 21.5 bpm.

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 3898 Max pressure during treatment (psi): 6847

Total gas used in treatment (mcf): Fluid density at initial fracture (lbs/gal): 2.54

Type of gas used in treatment: Min frac gradient (psi/ft): 0.97

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

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

Fresh water used in treatment (bbl): 3898 Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 236598 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: 2 + 3/8 Tubing Setting Depth: 6858 Tbg setting date: 02/27/2013 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.

Comment:

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: Print Name: Jenifer Hakkarinen

Title: Regulatory Tech Date: 2/14/2017 Email: Jenifer.Hakkarinen@pdce.com

Attachment Check List

Table with 2 columns: Att Doc Num, Name. Row 1: 400600394, FORM 5A SUBMITTED

Total Attach: 1 Files

General Comments

Table with 3 columns: User Group, Comment, Comment Date. Row 1: Permit, Returned to draft for AOC., 11/28/2016

Total: 1 comment(s)