

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



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Document Number: 401822493

Date Received:

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 4. Contact Name: Ally Ota  
 2. Name of Operator: PDC ENERGY INC Phone: (303) 860-5800  
 3. Address: 1775 SHERMAN STREET - STE 3000 Fax: (303) 831-3988  
 City: DENVER State: CO Zip: 80203 Email: Alexandria.Ota@pdce.com

5. API Number 05-123-43659-00 6. County: WELD  
 7. Well Name: Ward Well Number: Q-20-19HC  
 8. Location: QtrQtr: SESE Section: 20 Township: 6N Range: 66W Meridian: 6  
 9. Field Name: WATTENBERG Field Code: 90750

Completed Interval

FORMATION: CARLILE Status: COMMINGLED Treatment Type: \_\_\_\_\_

Treatment Date: \_\_\_\_\_ End Date: \_\_\_\_\_ Date of First Production this formation: \_\_\_\_\_

Perforations Top: 7880 Bottom: 17804 No. Holes: 1800 Hole size: 42/100

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

Completed Depths: 7,880'-8,514', 10,689-12,754', 12,767'-14,488', 15,541'-16,024', 16,628'-16,966', 17,436'-17,804'

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: CARLILE-CODELL-FORT HAYS Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 08/30/2018 End Date: 09/21/2018 Date of First Production this formation: 10/23/2018

Perforations Top: 7880 Bottom: 17957 No. Holes: 1800 Hole size: 42/100

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

50 Stage Plug and Perf  
Total Fluid: 192,012 bbls  
Gel Fluid: 137,068 bbls  
Slickwater Fluid: 53,736 bbls  
15% HCl Acid: 1,208 bbls  
Total Proppant: 9,669,000 lbs  
Silica Proppant: 9,669,000 lbs

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 192012 Max pressure during treatment (psi): 5087

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): 0.90

Total acid used in treatment (bbl): 1208 Number of staged intervals: 50

Recycled water used in treatment (bbl): \_\_\_\_\_ Flowback volume recovered (bbl): 9380

Fresh water used in treatment (bbl): 190804 Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 9669000 Rule 805 green completion techniques were utilized:

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

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

**Test Information:**

Date: 10/25/2018 Hours: 24 Bbl oil: 233 Mcf Gas: 368 Bbl H2O: 182

Calculated 24 hour rate: Bbl oil: 233 Mcf Gas: 368 Bbl H2O: 182 GOR: 1579

Test Method: Flowing Casing PSI: 2253 Tubing PSI: 1540 Choke Size: 16/64

Gas Disposition: SOLD Gas Type: WET Btu Gas: 1240 API Gravity Oil: 20

Tubing Size: 2 + 3/8 Tubing Setting Depth: 7314 Tbg setting date: 10/17/2018 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: CODELL Status: COMMINGLED Treatment Type: \_\_\_\_\_

Treatment Date: \_\_\_\_\_ End Date: \_\_\_\_\_ Date of First Production this formation: \_\_\_\_\_

Perforations Top: 8514 Bottom: 17957 No. Holes: 1800 Hole size: 42/100

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

Completed Depths: 8,514'-10,689', 12,754'-12,767', 14,501'-15,541', 16,024'-16,628', 16,966'-17,436', 17,804'-17,957'

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: FORT HAYS Status: COMMINGLED Treatment Type:

Treatment Date: End Date: Date of First Production this formation:

Perforations Top: 14488 Bottom: 14501 No. Holes: 1800 Hole size: 42/100

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

Completed Depths: 14,488'-14,501'

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.

Comment:

Actual Top of Productive Zone Footage: 1,660' FSL & 586' FEL Sec: 20 Twp: 6N Rng: 66W

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

Signed: Print Name: Cassie Gonzalez

Title: Regulatory Technician Date: Email: Cassie.Gonzalez@pdce.com

Attachment Check List

Table with columns Att Doc Num and Name

Total Attach: 0 Files

General Comments

Table with columns User Group, Comment, Comment Date, Stamp Upon Approval

Total: 0 comment(s)