

FORM  
5ARev  
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



DE ET OE ES

Document Number:

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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: Cassie Gonzalez

2. Name of Operator: PDC ENERGY INC

Phone: (303) 860-5800

3. Address: 1775 SHERMAN STREET - STE 3000

Fax:

City: DENVER State: CO Zip: 80203

Email: Cassie.Gonzalez@pdce.com

5. API Number 05-123-38759-00

6. County: WELD

7. Well Name: Thornton

Well Number: 14K-441

8. Location: QtrQtr: SENW

Section: 14

Township: 7N

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: 11344

Bottom: 11617

No. Holes:

Hole size:

Provide a brief summary of the formation treatment:

Open Hole: ☒

Completed Depths: 11,344'-11,617'

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: 12/22/2014 End Date: 12/22/2014 Date of First Production this formation: 01/07/2015

Perforations Top: 8014 Bottom: 12441 No. Holes: \_\_\_\_\_ Hole size: \_\_\_\_\_

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

20 Stage Sliding Sleeve, Swell Packer set @ 8,014'  
Total Fluid: 78,061 bbls  
Gel Fluid: 62,396 bbls  
Slickwater Fluid: 15,665 bbls  
Total Proppant: 3,880,140 lbs  
Silica Proppant: 3,880,140 lbs  
Method for determining flowback: measuring flowback tank volumes.

This formation is commingled with another formation: ☐ Yes ☒ No

Total fluid used in treatment (bbl): 78061

Max pressure during treatment (psi): 4207

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): 0.97

Total acid used in treatment (bbl): \_\_\_\_\_

Number of staged intervals: 20

Recycled water used in treatment (bbl): \_\_\_\_\_

Flowback volume recovered (bbl): 14452

Fresh water used in treatment (bbl): 78061

Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 3880140

Rule 805 green completion techniques were utilized: ☒

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

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

**Test Information:**

Date: 01/25/2015 Hours: 24 Bbl oil: 289 Mcf Gas: 227 Bbl H2O: 101

Calculated 24 hour rate: Bbl oil: 289 Mcf Gas: 227 Bbl H2O: 101 GOR: 785

Test Method: Flowing Casing PSI: 1054 Tubing PSI: 657 Choke Size: 32/64

Gas Disposition: SOLD Gas Type: WET Btu Gas: 1328 API Gravity Oil: 41

Tubing Size: 2 + 3/8 Tubing Setting Depth: 7553 Tbg setting date: 12/29/2014 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: 8159 Bottom: 12441 No. Holes: \_\_\_\_\_ Hole size: \_\_\_\_\_

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

Completed Depths: 8,159'-8,525' 8,630'-10,887' 10,951'-11,344' 11,617'-12,441'

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: 8014 Bottom: 10951 No. Holes: \_\_\_\_\_ Hole size: \_\_\_\_\_  
Provide a brief summary of the formation treatment: \_\_\_\_\_ Open Hole: ☒

Completed Depths: 8,014'-8,159' 10,887'-10,951'

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:

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**

**Att Doc Num Name**

\_\_\_\_\_

Total Attach: 0 Files

**General Comments**

User Group	Comment	Comment Date
Permit	Returned to draft for AOC settlement.	09/15/2016

Total: 1 comment(s)