

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:

400863712

Date Received:

01/13/2020

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: Cassie Gonzalez

Phone: (303) 860-5800

Fax:

Email: Cassie.Gonzalez@pdce.com

5. API Number 05-123-39747-00

7. Well Name: Churchill

8. Location: QtrQtr: NENW Section: 28 Township: 5N Range: 64W Meridian: 6

9. Field Name: WATTENBERG Field Code: 90750

6. County: WELD

Well Number: 28M-443

Completed Interval

FORMATION: CODELL-FORT HAYS		Status: PRODUCING		Treatment Type: FRACTURE STIMULATION	
Treatment Date: 06/14/2015		End Date: 06/15/2015		Date of First Production this formation: 07/02/2015	
Perforations	Top: 7436	Bottom: 13369	No. Holes:	Hole size:	

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

13 Stage Sliding Sleeve, Swell Packer set at 7,436'  
 Total Fluid: 44,684 bbls  
     Gel Fluid: 40,049 bbls  
     Slickwater Fluid: 4,635 bbls  
 Total Proppant: 1,596,660 lbs  
     Silica Proppant: 1,596,660 lbs  
 Method for determining flowback: measuring flowback tank volumes.

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

Total fluid used in treatment (bbl): 44684	Max pressure during treatment (psi): 4013
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): 0.98
Total acid used in treatment (bbl): _____	Number of staged intervals: 13
Recycled water used in treatment (bbl): _____	Flowback volume recovered (bbl): 3873
Fresh water used in treatment (bbl): 44684	Disposition method for flowback: DISPOSAL
Total proppant used (lbs): 1596660	Rule 805 green completion techniques were utilized: <input checked="" type="checkbox"/>

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

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

**Test Information:**

Date: 07/22/2015	Hours: 24	Bbl oil: 323	Mcf Gas: 786	Bbl H2O: 89
Calculated 24 hour rate:	Bbl oil: 323	Mcf Gas: 786	Bbl H2O: 89	GOR: 2433
Test Method: Flowing	Casing PSI: 2130	Tubing PSI: 1440	Choke Size: 16/64	
Gas Disposition: SOLD	Gas Type: WET	Btu Gas: 1237	API Gravity Oil: 52	
Tubing Size: 2 + 3/8	Tubing Setting Depth: 6910	Tbg setting date: 07/01/2015	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: 7544 Bottom: 13369 No. Holes: \_\_\_\_\_ Hole size: \_\_\_\_\_

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

Completed Depths: 7,544'-7,585' 7,665'-8,874' 9,401'-12,607' 13,009'-13,369'

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: 7436 Bottom: 13009 No. Holes: \_\_\_\_\_ Hole size: \_\_\_\_\_  
Provide a brief summary of the formation treatment: \_\_\_\_\_ Open Hole: ☒

Completed Depths: 7,436'-7,544' 7,585'-7,665' 8,874'-9,401' 12,607'-13,009'

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: 1/13/2020 Email: Cassie.Gonzalez@pdce.com

**Attachment Check List**

**Att Doc Num Name**

400863712 FORM 5A SUBMITTED

Total Attach: 1 Files

**General Comments**

**User Group Comment Comment Date**

Permit Permit review complete. 02/09/2020

Permit Return to draft for AOC settlement. 09/15/2016

Total: 2 comment(s)