

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:

400602962

Date Received:

12/31/2018

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: Ally Ota  
Phone: (303) 8605800  
Fax:  
Email: alexandria.ota@pdce.com

5. API Number 05-123-36601-00  
6. County: WELD  
7. Well Name: Dillard  
Well Number: 20T-401  
8. Location: QtrQtr: SESE Section: 20 Township: 7N Range: 64W 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: 9889 Bottom: 11184 No. Holes: Hole size:

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

Completed Depths: 9,889-10,484, 11,021-11,184

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: CODELL		Status: COMMINGLED		Treatment Type: _____	
Treatment Date: _____		End Date: _____		Date of First Production this formation: _____	
Perforations	Top: 7569	Bottom: 11650	No. Holes: _____	Hole size: _____	

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

Completed Depths: 7,569-7,587, 7,641-7,785, 8,856-9,889, 10,730-11,021, 11,469-11,650

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: <input type="checkbox"/>

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: 7587	Bottom: 11469	No. Holes: _____	Hole size: _____	

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

Completed Depths: 7,587-7,641, 7,785-8,856, 10,484-10,730, 11,290-11,469

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: <input type="checkbox"/>

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		Status: COMMINGLED		Treatment Type: _____	
Treatment Date: _____		End Date: _____		Date of First Production this formation: _____	
Perforations	Top: 11184	Bottom: 11290	No. Holes: _____	Hole size: _____	
Provide a brief summary of the formation treatment:			Open Hole: <input checked="" type="checkbox"/>		
Completed Depths: 11,184'-11,290'					
This formation is commingled with another formation:			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: <input type="checkbox"/>			
Reason why green completion not utilized: _____					
<b>Fracture stimulations must be reported on FracFocus.org</b>					
<b><u>Test Information:</u></b>					
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: <div style="border: 1px solid black; height: 20px; width: 100%;"></div>					
Date formation Abandoned: _____	Squeeze: <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, number of sacks cmt _____			
** Bridge Plug Depth: _____	** Sacks cement on top: _____	** Wireline and Cement Job Summary must be attached.			

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

Treatment Date: 12/15/2013 End Date: 12/16/2013 Date of First Production this formation: 12/31/2013  
Perforations Top: 7569 Bottom: 11650 No. Holes: Hole size:

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

16 Stage Sliding Sleeve  
Total Fluid: 59,560 bbls  
Gel Fluid: 48,074 bbls  
Slickwater Fluid: 11,486 bbls  
Total Silica Proppant: 3,683,720 lbs  
Method for determining flowback: measuring flowback tank volumes

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

Total fluid used in treatment (bbl): 59560 Max pressure during treatment (psi): 3238

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): 0.88

Total acid used in treatment (bbl): Number of staged intervals: 16

Recycled water used in treatment (bbl): Flowback volume recovered (bbl): 4780

Fresh water used in treatment (bbl): 59560 Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 3683720 Rule 805 green completion techniques were utilized: ☒

Reason why green completion not utilized:

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

#### Test Information:

Date: 01/23/2014 Hours: 24 Bbl oil: 200 Mcf Gas: 179 Bbl H2O: 111

Calculated 24 hour rate: Bbl oil: 200 Mcf Gas: 179 Bbl H2O: 111 GOR: 895

Test Method: Flowing Casing PSI: 984 Tubing PSI: 648 Choke Size: 16/64

Gas Disposition: SOLD Gas Type: WET Btu Gas: 1376 API Gravity Oil: 43

Tubing Size: 2 + 3/8 Tubing Setting Depth: 7256 Tbg setting date: 12/29/2013 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: Ally Ota

Title: Regulatory Tech Date: 12/31/2018 Email: alexandria.ota@pdce.com

#### Attachment Check List

**Att Doc Num** **Name**

400602962 FORM 5A SUBMITTED

Total Attach: 1 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Ready to approve. Operator addressed previous issues: Form 5 formation tops have been corrected. Codell is 7,569', Carlile is 9,889'	02/13/2019
Permit	Wait for form 5 tops correction. Note from Operator: faulting caused wellbore to cross multiple formations out of stratigraphic order.	01/02/2019
Permit	Returned to draft for AOC settlement.	09/15/2016

Total: 3 comment(s)