

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:

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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

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 05-123-45259-00

7. Well Name: Thistle Down

8. Location: QtrQtr: NESW Section: 31 Township: 5N Range: 64W Meridian: 6

9. Field Name: WATTENBERG Field Code: 90750

6. County: WELD

Well Number: 31H-332

## Completed Interval

FORMATION: NIOBRARA Status: PRODUCING Treatment Type: FRACTURE STIMULATION  
Treatment Date: 07/06/2019 End Date: 07/14/2019 Date of First Production this formation: 08/19/2019  
Perforations Top: 7309 Bottom: 12943 No. Holes: 1116 Hole size: 42/100  
Provide a brief summary of the formation treatment: Open Hole: ☐

32 Stage Plug and Perf  
Total Fluid: 109,595 bbls  
Gel Fluid: 71,773 bbls  
Slickwater Fluid: 36,986 bbls  
15% HCl Acid: 836 bbls  
Total Proppant: 6,017,040 lbs  
Silica Proppant: 6,017,040 lbs  
Method for determining flowback: measuring flowback tank volumes.

This formation is commingled with another formation: ☐ Yes ☒ No  
Total fluid used in treatment (bbl): 109595 Max pressure during treatment (psi): 4613  
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): 0.99  
Total acid used in treatment (bbl): 836 Number of staged intervals: 32  
Recycled water used in treatment (bbl): Flowback volume recovered (bbl): 3447  
Fresh water used in treatment (bbl): 108759 Disposition method for flowback: DISPOSAL  
Total proppant used (lbs): 6017040 Rule 805 green completion techniques were utilized: ☒  
Reason why green completion not utilized:

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

### Test Information:

Date: 08/23/2019 Hours: 24 Bbl oil: 312 Mcf Gas: 1226 Bbl H2O: 182  
Calculated 24 hour rate: Bbl oil: 312 Mcf Gas: 1226 Bbl H2O: 182 GOR: 3929  
Test Method: Flowing Casing PSI: 2697 Tubing PSI: 1794 Choke Size: 16/64  
Gas Disposition: SOLD Gas Type: WET Btu Gas: 1302 API Gravity Oil: 53  
Tubing Size: 2 + 3/8 Tubing Setting Depth: 7202 Tbg setting date: 07/30/2019 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:

EP footages calculated by Lat 40: 760' FSL & 457' FWL Sec: 31 Twp: 5N Rng: 64W

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

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)