

**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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402156641

Date Received:
08/27/2019

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: <u>69175</u>	4. Contact Name: <u>Cassie Gonzalez</u>
2. Name of Operator: <u>PDC ENERGY INC</u>	Phone: <u>(303) 860-5800</u>
3. Address: <u>1775 SHERMAN STREET - STE 3000</u>	Fax: _____
City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80203</u>	Email: <u>Cassie.Gonzalez@pdce.com</u>

5. API Number <u>05-123-45455-00</u>	6. County: <u>WELD</u>
7. Well Name: <u>Thistle Down</u>	Well Number: <u>31i-212</u>
8. Location: QtrQtr: <u>NESW</u> Section: <u>31</u> Township: <u>5N</u> Range: <u>64W</u> Meridian: <u>6</u>	
9. Field Name: <u>WATTENBERG</u> Field Code: <u>90750</u>	

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: 7306 Bottom: 12354 No. Holes: 1008 Hole size: 42/100

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

29 Stage Plug and Perf
Total Fluid: 91,536 bbls
Gel Fluid: 51,689 bbls
Slickwater Fluid: 39,129 bbls
15% HCl Acid: 718 bbls
Total Proppant: 5,563,281 lbs
Silica Proppant: 5,563,281 lbs
Method for determining flowback: measuring flowback tank volumes.

This formation is commingled with another formation: Yes No

Total fluid used in treatment (bbl): 91536 Max pressure during treatment (psi): 4092
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): 0.96
Total acid used in treatment (bbl): 718 Number of staged intervals: 29
Recycled water used in treatment (bbl): Flowback volume recovered (bbl): 5556
Fresh water used in treatment (bbl): 90818 Disposition method for flowback: DISPOSAL
Total proppant used (lbs): 5563281 Rule 805 green completion techniques were utilized:

Reason why green completion not utilized:

Fracture stimulations must be reported on FracFocus.org

Test Information:

Date: 08/22/2019 Hours: 24 Bbl oil: 289 Mcf Gas: 1210 Bbl H2O: 188
Calculated 24 hour rate: Bbl oil: 289 Mcf Gas: 1210 Bbl H2O: 188 GOR: 4187
Test Method: Flowing Casing PSI: 2719 Tubing PSI: 1930 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: 7204 Tbg setting date: 08/15/2019 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:
Actual Top of Productive Zone Footage: 433' FSL & 462' 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: 8/27/2019 Email: Cassie.Gonzalez@pdce.com

Attachment Check List

Att Doc Num	Name
402156641	FORM 5A SUBMITTED

Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Passed Completion review.	09/13/2019

Total: 1 comment(s)