

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



DE	ET	OE	ES
----	----	----	----

Document Number:

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: 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 05-123-45455-00

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: 31i-212

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)