

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



Table with columns DE, ET, OE, ES

Document Number: 400609302

Date Received: 07/31/2019

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 05-123-36953-00
6. County: WELD
7. Well Name: Waste Management
Well Number: 2L-441
8. Location: QtrQtr: SWSW Section: 2 Township: 2N 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: 9243 Bottom: 9469 No. Holes: Hole size:

Provide a brief summary of the formation treatment: Open Hole: [X]

Completed Depths: 9,243'-9,469'

This formation is commingled with another formation: [X] Yes [] No

Total fluid used in treatment (bbl):
Total gas used in treatment (mcf):
Type of gas used in treatment:
Total acid used in treatment (bbl):
Recycled water used in treatment (bbl):
Fresh water used in treatment (bbl):
Total proppant used (lbs):
Max pressure during treatment (psi):
Fluid density at initial fracture (lbs/gal):
Min frac gradient (psi/ft):
Number of staged intervals:
Flowback volume recovered (bbl):
Disposition method for flowback:
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: CARLILE-CODELL-FORT HAYS Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 09/07/2013 End Date: 09/09/2013 Date of First Production this formation: 09/23/2013

Perforations Top: 7452 Bottom: 11379 No. Holes: _____ Hole size: _____

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

16 Stage Sliding Sleeve, Swell Packer set at 7,452'
Total Fluid: 63,591 bbls
Gel Fluid: 47,334 bbls
Slickwater Fluid: 16,257 bbls
Total Proppant: 3,524,570 lbs
Silica Proppant: 3,524,570 lbs
Method for determining flowback: measuring flowback tank volumes.

This formation is commingled with another formation: Yes No

Total fluid used in treatment (bbl): 63591 Max pressure during treatment (psi): 4066
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): 0.95
Total acid used in treatment (bbl): _____ Number of staged intervals: 16
Recycled water used in treatment (bbl): _____ Flowback volume recovered (bbl): 7563
Fresh water used in treatment (bbl): 63591 Disposition method for flowback: DISPOSAL
Total proppant used (lbs): 3524570 Rule 805 green completion techniques were utilized:
Reason why green completion not utilized: _____

Fracture stimulations must be reported on FracFocus.org

Test Information:

Date: 10/22/2013 Hours: 24 Bbl oil: 262 Mcf Gas: 352 Bbl H2O: 89
Calculated 24 hour rate: Bbl oil: 262 Mcf Gas: 352 Bbl H2O: 89 GOR: 1344
Test Method: Flowing Casing PSI: 1821 Tubing PSI: 681 Choke Size: 20/64
Gas Disposition: SOLD Gas Type: WET Btu Gas: 1262 API Gravity Oil: 47
Tubing Size: 2 + 3/8 Tubing Setting Depth: 7158 Tbg setting date: 09/19/2013 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.

FORMATION: CODELL Status: COMMINGLED Treatment Type: _____

Treatment Date: _____ End Date: _____ Date of First Production this formation: _____

Perforations Top: 8061 Bottom: 11379 No. Holes: _____ Hole size: _____

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

Completed Depths: 8,061'-9,243' 9,643'-10,262' 10,886'-11,379'

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: 7452 Bottom: 10886 No. Holes: _____ Hole size: _____
 Provide a brief summary of the formation treatment: _____ Open Hole:

Completed depths: 7,452'-8,061' 9,469'-9,643' 10,262'-10,886'

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: 7/31/2019 Email: Cassie.Gonzalez@pdce.com

Attachment Check List

Att Doc Num	Name
400609302	FORM 5A SUBMITTED

Total Attach: 1 Files

General Comments

User Group	Comment	Comment Date
Permit	Ready to approve.	08/12/2019
Permit	Returned to draft for AOC settlement.	09/15/2016

Total: 2 comment(s)