

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:

400609302

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 05-123-36953-00  
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: ☒

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

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: ☐

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: <u>CARLILE-CODELL-FORT HAYS</u>		Status: <u>PRODUCING</u>		Treatment Type: <u>FRACTURE STIMULATION</u>	
Treatment Date: <u>09/07/2013</u>		End Date: <u>09/09/2013</u>		Date of First Production this formation: <u>09/23/2013</u>	
Perforations	Top: <u>7452</u>	Bottom: <u>11379</u>	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): <u>63591</u>	Max pressure during treatment (psi): <u>4066</u>
Total gas used in treatment (mcf): _____	Fluid density at initial fracture (lbs/gal): <u>8.34</u>
Type of gas used in treatment: _____	Min frac gradient (psi/ft): <u>0.95</u>
Total acid used in treatment (bbl): _____	Number of staged intervals: <u>16</u>
Recycled water used in treatment (bbl): _____	Flowback volume recovered (bbl): <u>7563</u>
Fresh water used in treatment (bbl): <u>63591</u>	Disposition method for flowback: <u>DISPOSAL</u>
Total proppant used (lbs): <u>3524570</u>	Rule 805 green completion techniques were utilized: <input checked="" type="checkbox"/>

Reason why green completion not utilized: \_\_\_\_\_

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

**Test Information:**

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

**Attachment Check List**

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

\_\_\_\_\_

Total Attach: 0 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Returned to draft for AOC settlement.	09/15/2016

Total: 1 comment(s)