

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:

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: ☒

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: <input checked="" type="checkbox"/>		
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:			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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					
<u>Test Information:</u>					
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: <div style="border: 1px solid black; height: 20px; width: 100%;"></div>					
Date formation Abandoned: _____	Squeeze: <input type="checkbox"/> Yes <input type="checkbox"/> 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)