

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:

400754246

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: Ally Ota
Phone: (303) 860-5800
Fax: (303) 831-3988
Email: Alexandria.Ota@pdce.com

5. API Number 05-123-37350-00
6. County: WELD
7. Well Name: Sorin Natural Resources
Well Number: 2M-423
8. Location: QtrQtr: NWNE Section: 2 Township: 4N Range: 66W 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: 10209 Bottom: 10362 No. Holes: _____ Hole size: _____

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

Completed Depths: 10,209'-10,362'

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>12/06/2014</u>		End Date: <u>12/07/2014</u>		Date of First Production this formation: <u>01/24/2015</u>	
Perforations Top: <u>7714</u>		Bottom: <u>11748</u>		No. Holes: _____ Hole size: _____	
Provide a brief summary of the formation treatment:				Open Hole: <input checked="" type="checkbox"/>	
18 Stage Sliding Sleeve, Swell Packer set @ 7,714' Total Fluid: 92,575 bbls Gel Fluid: 74,689 bbls Slickwater Fluid: 17,886 bbls Total Proppant: 4,536,923 lbs Silica Proppant: 4,536,923 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>92575</u>		Max pressure during treatment (psi): <u>4722</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>18</u>			
Recycled water used in treatment (bbl): _____		Flowback volume recovered (bbl): <u>1078</u>			
Fresh water used in treatment (bbl): <u>92575</u>		Disposition method for flowback: <u>DISPOSAL</u>			
Total proppant used (lbs): <u>4536923</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>02/02/2015</u>	Hours: <u>24</u>	Bbl oil: <u>107</u>	Mcf Gas: <u>1598</u>	Bbl H2O: <u>33</u>	
Calculated 24 hour rate:	Bbl oil: <u>107</u>	Mcf Gas: <u>1598</u>	Bbl H2O: <u>33</u>	GOR: <u>14934</u>	
Test Method: <u>Flowing</u>	Casing PSI: <u>1751</u>	Tubing PSI: <u>1563</u>	Choke Size: <u>20/64</u>		
Gas Disposition: <u>SOLD</u>	Gas Type: <u>WET</u>	Btu Gas: <u>1235</u>	API Gravity Oil: <u>65</u>		
Tubing Size: <u>2 + 3/8</u>	Tubing Setting Depth: <u>7219</u>	Tbg setting date: <u>12/16/2014</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: 8627	Bottom: 11748	No. Holes: _____	Hole size: _____	
Provide a brief summary of the formation treatment:			Open Hole: <input checked="" type="checkbox"/>		
Completed Depths: 8,627'-10,209' 10,362'-10,458' 10,976'-11,748'					
This formation is commingled with another formation:			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: <input type="checkbox"/>			
Reason why green completion not utilized: _____					
Fracture stimulations must be reported on FracFocus.org					
<u>Test Information:</u>					
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: <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: FORT HAYS Status: COMMINGLED Treatment Type: _____
 Treatment Date: _____ End Date: _____ Date of First Production this formation: _____
 Perforations Top: 7714 Bottom: 10976 No. Holes: _____ Hole size: _____
 Provide a brief summary of the formation treatment: _____ Open Hole: ☒

Completed Depths: 7,714'-8,627' 10,458'-10,976'

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

User Group	Comment	Comment Date
Permit	Returned to Draft for: - Ft Hayes AND combined formation panels list top as "7714", but the Ft Hays panel lists "Completed Depths: 7,298'-8,627".	06/03/2019
Permit	Returned to draft for AOC settlement.	09/15/2016

Total: 2 comment(s)