

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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| DE | ET | OE | ES |
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Document Number:

402284361

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: Valerie Danson

Phone: (970) 506-9272

Fax:

Email: valerie.danson@pdce.com

5. API Number 05-123-20106-00

7. Well Name: SEELE

8. Location: QtrQtr: NWNE Section: 31 Township: 4N Range: 67W Meridian: 6

9. Field Name: WATTENBERG Field Code: 90750

6. County: WELD

Well Number: 31-31

Completed Interval

| | | | | | |
|---|---|--|------------------------|---|--|
| FORMATION: CODELL | | Status: COMMINGLED | | Treatment Type: FRACTURE STIMULATION | |
| Treatment Date: 12/29/2011 | | End Date: 12/29/2011 | | Date of First Production this formation: 03/07/2012 | |
| Perforations Top: 7353 | | Bottom: 7366 | | No. Holes: 48 Hole size: 41/100 | |
| Provide a brief summary of the formation treatment: | | | | Open Hole: <input type="checkbox"/> | |
| Codell ReFrac: MIRU HES. Well took 40 bbls to load. (Break 2627 psi @ 4.9 BPM) Pumped 119 bbls of FE-1A pad, 596 bbls of 26# pHaser pad, 189 bbls of 1.0 ppg 20/40 slurry with 26# pHaser, 524 bbls of 2.0 ppg 20/40 slurry with 26# pHaser, 928 bbls of 3.0 ppg 20/40 slurry with 26# pHaser, 280 bbls of 4.0 ppg 20/40 slurry with 26# pHaser, 78 bbls of 4.0 ppg 20/40 SBXL slurry with 26# pHaser, Flush to top Codell perf (117.3) bbl. Shutdown (ISDP 3745 psi) (FG .94) Fluid contained the following chemicals: .6 gpt CL-23, .5 gpt BA-20, 1.5 gpt GasPerm 1100, .25 gpt Cla-web, 3.0 - 5.0 gpt Vicon NF, 0.25 - .75 gpt CAT 3, 6.0 gpt LG-6 1.0 gpt Losurf-100, FE-1A @ 20 gpt (218000 lbs Preferred Rock 20/40) (8000 lbs SBXL 20/40). RD HES. MTP = 3809 psi, ATP = 3289 psi, AIR = 18.5 bpm. Pressure response was slightly positive for entire treatment. | | | | | |
| 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: NIOBRARA-CODELL Status: SHUT IN Treatment Type: _____

Treatment Date: _____ End Date: _____ Date of First Production this formation: 03/07/2012

Perforations Top: 7059 Bottom: 7366 No. Holes: 76 Hole size: 42/100

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

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: NIOBRARA Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 12/29/2011 End Date: 12/29/2011 Date of First Production this formation: 12/30/2011

Perforations Top: 7059 Bottom: 7145 No. Holes: 28 Hole size: 42/100

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

"Niobrara Hybrid: RIH with PSI wireline using High pressure control unit and grease head. Set RMOR Cast Iron Flowthru 10k frac plug @ 7240' with a Baker #10. Dual fire 3 1/8" slick gun and EXT charges (22.7 gram, .42 entry hole, 35.1" penetration, 120 degree phasing). Niobrara "B" Bench @ 7137'-7145' (3 SPF) Niobrara "A" Bench @ 7059' - 7061' (2 SPF) (28 New holes). POOH and RDMO PSI Wireline.

MIRU HES. Well was loaded @ open. (Break 3255 psi @ 9.8 BPM) Pumped 119 bbl active pad, Pumped 1448 bbls of Slickwater pad, 145 bbls of 20# pHaser pad, 167 bbls of 1.0 ppg 20/40 slurry with 20# pHaser, 786 bbls of 2.0 ppg 20/40 slurry with 20# pHaser, 697 bbls of 3.0 ppg 20/40 slurry with 20# pHaser, 368 bbls of 4.0 ppg 20/40 slurry with 20# pHaser, 88 bbls of 4.0 ppg SB Excel 20/40 slurry with 20# pHaser. Flushed well to top of "B" bench (113.8 bbls) Shutdown (ISDP - 3532 psi) (FG .93). Fluid contained the following chemicals: .6 gpt CL-23, 1.0 gpt BA-20, 2.0 gpt GasPerm 1100, 1.25 gpt Clayfix III, 0.5 - 3.0 gpt Vicon NF, 0.15 - .75 gpt CAT 3, 2.0 gpt FR-66, 22 ppt WG-18 1.0 gpt Losurf-100 (238660 lbs 20/40 Preferred Rock) (12000 20/40 SB Excel. RD HES. MTP = 5058 psi, ATP = 4647 psi, AIR = 57.8 bpm. Went to 4 ppg early due to being short on water, left 7000 lbs of preferred rock on sand bin. Pressure response was negative for entire treatment."

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:

This form is being submitted to correct NB/Codell re-frac re-complete as well as update production records, prior to P&A. Permitting request.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Valerie Danson

Title: Reg Tech Date: _____ Email: valerie.danson@pdce.com

Attachment Check List

Att Doc Num

Name

402284379

OPERATIONS SUMMARY

Total Attach: 1 Files

General Comments

User Group

Comment

Comment Date

Permit

Returned to draft. According to the formation tops, this formations should be NB, FT Hays, Codell and Carlile. It was only permitted as NB-Codell.

01/21/2020

Total: 1 comment(s)