

FORM
5A

Rev
06/12

State of Colorado
Oil and Gas Conservation Commission

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Document Number:

401568859

Date Received:

03/21/2018

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: 10531
2. Name of Operator: VANGUARD OPERATING LLC
3. Address: 5847 SAN FELIPE #3000
City: HOUSTON State: TX Zip: 77057
4. Contact Name: Scott Ghan
Phone: (970) 876-1959
Fax:
Email: sghan@vnrenergy.com

5. API Number 05-045-23532-00
6. County: GARFIELD
7. Well Name: Federal GGU
Well Number: 24B-28-691
8. Location: QtrQtr: SWSW Section: 28 Township: 6S Range: 91W Meridian: 6
9. Field Name: MAMM CREEK Field Code: 52500

Completed Interval

FORMATION: ROLLINS Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 01/31/2018 End Date: 02/14/2018 Date of First Production this formation: 03/06/2018

Perforations Top: 7468 Bottom: 7587 No. Holes: 27 Hole size: 0.37

Provide a brief summary of the formation treatment:

Open Hole: ☐

Rollins formation is commingled with Williams Fork.

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: 2 + 3/8 Tubing Setting Depth: 6587 Tbg setting date: 03/06/2018 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: WILLIAMS FORK - CAMEO Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 01/31/2018 End Date: 02/14/2018 Date of First Production this formation: 03/06/2018

Perforations Top: 5070 Bottom: 7431 No. Holes: 333 Hole size: 0.37

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

Williams Fork is commingled with Rollins

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: 2 + 3/8 Tubing Setting Depth: 6587 Tbg setting date: 03/06/2018 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: WILLIAMS FK-ROLLINS-CAMEO Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 01/31/2018 End Date: 02/14/2018 Date of First Production this formation: 03/06/2018

Perforations Top: 5070 Bottom: 7587 No. Holes: 360 Hole size: 0.37

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

Williams Fork- Rollins frac'd with 49,914 bbls slurry, 69,785 bbls recycled water, 850,000 lbs 40/70 Sand and 149,750 lbs Resin

This formation is commingled with another formation: ☐ Yes ☒ No

Total fluid used in treatment (bbl): 119699 Max pressure during treatment (psi): 3300

Total gas used in treatment (mcf): 0 Fluid density at initial fracture (lbs/gal): 8.92

Type of gas used in treatment: Min frac gradient (psi/ft): 0.80

Total acid used in treatment (bbl): 0 Number of staged intervals: 8

Recycled water used in treatment (bbl): 69785 Flowback volume recovered (bbl): 15186

Fresh water used in treatment (bbl): 49914 Disposition method for flowback: RECYCLE

Total proppant used (lbs): 999750 Rule 805 green completion techniques were utilized: ☒

Reason why green completion not utilized:

Fracture stimulations must be reported on FracFocus.org

Test Information:

Date: 03/16/2018 Hours: 24 Bbl oil: 24 Mcf Gas: 830 Bbl H2O: 1297

Calculated 24 hour rate: Bbl oil: 24 Mcf Gas: 830 Bbl H2O: 1297 GOR: 34583

Test Method: Flowing Casing PSI: 358 Tubing PSI: 1152 Choke Size: 38/64

Gas Disposition: SOLD Gas Type: WET Btu Gas: 1196 API Gravity Oil: 52

Tubing Size: 2 + 3/8 Tubing Setting Depth: 6587 Tbg setting date: 03/06/2018 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: Julie Webb

Title: Sr. Regulatory Analyst Date: 3/21/2018 Email: jwebb@progressivepcs.net

Attachment Check List

Att Doc Num Name

401568859 FORM 5A SUBMITTED

Total Attach: 1 Files

General Comments

User Group Comment

Comment Date

Stamp Upon Approval

Total: 0 comment(s)