

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



Table with columns DE, ET, OE, ES

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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: [X] Yes [] No

Total fluid used in treatment (bbl):
Total gas used in treatment (mcf):
Type of gas used in treatment:
Total acid used in treatment (bbl):
Recycled water used in treatment (bbl):
Fresh water used in treatment (bbl):
Total proppant used (lbs):
Max pressure during treatment (psi):
Fluid density at initial fracture (lbs/gal):
Min frac gradient (psi/ft):
Number of staged intervals:
Flowback volume recovered (bbl):
Disposition method for flowback:
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

Table with 2 columns: Att Doc Num, Name. Row 1: 401568859, FORM 5A SUBMITTED

Total Attach: 1 Files

General Comments

Table with 3 columns: User Group, Comment, Comment Date. Row 1: Stamp Upon Approval

Total: 0 comment(s)