

FORM  
5ARev  
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:

401568859

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: 10531 4. Contact Name: Scott Ghan  
 2. Name of Operator: VANGUARD OPERATING LLC Phone: (970) 876-1959  
 3. Address: 5847 SAN FELIPE #3000 Fax: \_\_\_\_\_  
 City: HOUSTON State: TX Zip: 77057 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: ILES Status: COMMINGLED Treatment Type: FRACTURE STIMULATIONTreatment Date: 01/31/2018 End Date: 02/14/2018 Date of First Production this formation: 03/06/2018Perforations Top: 7468 Bottom: 7587 No. Holes: 27 Hole size: 0.37

Provide a brief summary of the formation treatment:

Open Hole: ☐ILES 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-ILES 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: 7587 No. Holes: 360 Hole size: 0.37

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

Williams Fork- Iles 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

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.

FORMATION: WILLIAMS FORK 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: 7431 No. Holes: 333 Hole size: 0.37

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

Williams Fork is commingled with lles

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.

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: Email jwebb@progressivepcs.net

## Attachment Check List

Att Doc Num Name

Total Attach: 0 Files

## General Comments

User Group Comment Comment Date

Stamp Upon Approval

Total: 0 comment(s)