



FORMATION: FORT HAYS Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 06/30/2018 End Date: 07/14/2018 Date of First Production this formation: 08/07/2018

Perforations Top: 8288 Bottom: 16193 No. Holes: 970 Hole size: 0.42

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

Completed Interval: 8,288' - 8,386'; 11,500' - 11,650'; 11,985' - 12,050'; 13,375' - 13,628'; 15,697' - 15,886'; 16,085' - 16,193'

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-FT HAYS-CODELL Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 06/30/2018 End Date: 07/14/2018 Date of First Production this formation: 08/07/2018

Perforations Top: 8288 Bottom: 17597 No. Holes: 1601 Hole size: 0.42

Provide a brief summary of the formation treatment: \_\_\_\_\_ Open Hole:

40 stages, 6,584,280 lbs 100Mesh white sand, 11,219,860 lbs 30/50 mesh regional sand, 2,152,320 lbs 30/50 white sand, 406,598 bbls Slickwater, 19,800 gal 15% concentration HCL acid.

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 407069 Max pressure during treatment (psi): 8125

Total gas used in treatment (mcf): \_\_\_\_\_ Fluid density at initial fracture (lbs/gal): 8.34

Type of gas used in treatment: \_\_\_\_\_ Min frac gradient (psi/ft): 0.99

Total acid used in treatment (bbl): 471 Number of staged intervals: 40

Recycled water used in treatment (bbl): \_\_\_\_\_ Flowback volume recovered (bbl): 31440

Fresh water used in treatment (bbl): 406598 Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 19956460 Rule 805 green completion techniques were utilized:

Reason why green completion not utilized: PIPELINE

**Fracture stimulations must be reported on FracFocus.org**

**Test Information:**

Date: 08/06/2018 Hours: 24 Bbl oil: 169 Mcf Gas: 112 Bbl H2O: 1090

Calculated 24 hour rate: Bbl oil: 169 Mcf Gas: 112 Bbl H2O: 1090 GOR: 663

Test Method: Flowback Casing PSI: 0 Tubing PSI: 800 Choke Size: 18/64

Gas Disposition: FLARED Gas Type: DRY Btu Gas: 1486 API Gravity Oil: 40

Tubing Size: 2 + 3/8 Tubing Setting Depth: 7824 Tbg setting date: 07/26/2018 Packer Depth: 7811

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: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 06/30/2018 End Date: 07/14/2018 Date of First Production this formation: 08/07/2018

Perforations Top: 13641 Bottom: 13970 No. Holes: 70 Hole size: 0.42

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

Completed Interval: 13,641' - 13,970'

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: Carolyn Nunez

Title: Drilling Eng Tech Date: 5/29/2020 Email: cnunez@enerplus.com

**Attachment List**

Att Doc Num	Name
401746651	FORM 5A SUBMITTED
401746868	WELLBORE DIAGRAM

Total Attach: 2 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected choke size per operator. Pass.	10/29/2020
Permit	Form 7 reporting does not correspond with form 5A. Corrected statuses on zones tab. Corrected GOR, choke incorrect. Contact operator.	10/13/2020
Engineer	returned to DRAFT - there should not be any Jsand indicated in this well or the permitting needs to be updated/approved	03/12/2020
Engineer	Nio perf at 13,992 with a Codell perf starting at 14,007' - seemingly would have to traverse the Ft. Hays which is typically thicker than 15' rt'd to DRAFT for possible correction (Form 5 incomplete) rt'd to DRAFT Tubing setting date is 2017 in some panels Form 7 not back to spud Form 7 shows 31 days PR July 2018 – 5A says treatment started 6/30 and ended 7/17/18 – do not typically see wells produce until after flowback.	04/25/2019
Permit	Referred for enforcement.	04/02/2019

Total: 5 comment(s)