



### Completed Interval

FORMATION: NIOBRARA Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 11/02/2011 End Date: Date of First Production this formation: 12/20/2011  
Perforations Top: 2390 Bottom: 2404 No. Holes: 84 Hole size: 42/100

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

"SAFETY MEETING  
50,020# 16/30 DANIELS  
50,020# 12/20 DANIELS  
57.87 TON CO2  
BREAKDOWN = 1113 PSI  
ISIP = 760 PSI/5 MIN =675 PSI  
10 MIN =651 PSI/15 MIN = 640 PSI 548 BBLS"

This formation is commingled with another formation:  Yes  No

Total fluid used in treatment (bbl): 548 Max pressure during treatment (psi): 1113  
Total gas used in treatment (mcf): 994 Fluid density at initial fracture (lbs/gal):  
Type of gas used in treatment: CARBON DIOXIDE Min frac gradient (psi/ft):  
Total acid used in treatment (bbl): Number of staged intervals: 1  
Recycled water used in treatment (bbl): Flowback volume recovered (bbl):  
Fresh water used in treatment (bbl): Disposition method for flowback:  
Total proppant used (lbs): 100040 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: 01/17/2012 Hours: 24 Bbl oil: 0 Mcf Gas: 10 Bbl H2O: 0  
Calculated 24 hour rate: Bbl oil: 0 Mcf Gas: 10 Bbl H2O: 0 GOR:  
Test Method: FLOW Casing PSI: 80 Tubing PSI: Choke Size: 48/64  
Gas Disposition: SOLD Gas Type: DRY Btu Gas: 966 API Gravity Oil: 0  
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: WILLIAM F HAYWORTH  
Title: PRESIDENT Date: 8/10/2012 Email: BHAYWORTH@BLACKRAVENENERGY.COM

### Attachment Check List

Att Doc Num	Name
2233658	FORM 5A SUBMITTED
2233659	OTHER

Total Attach: 2 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

Total: 0 comment(s)