

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



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02/20/2014

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: 57667	4. Contact Name: CLAYTON DOKE
2. Name of Operator: MINERAL RESOURCES, INC.	Phone: (720) 420-5700
3. Address: PO BOX 328	Fax: (720) 420-5800
City: GREELEY State: CO Zip: 80632	Email: cdoke@iptengineers.com

5. API Number 05-123-22953-00	6. County: WELD
7. Well Name: CLARK	Well Number: A1
8. Location: QtrQtr: NENE Section: 20 Township: 5N Range: 65W Meridian: 6	
9. Field Name: WATTENBERG	Field Code: 90750

Completed Interval

FORMATION: <u>CODELL</u>		Status: <u>COMMINGLED</u>		Treatment Type: <u>FRACTURE STIMULATION</u>	
Treatment Date: <u>03/31/2011</u>		End Date: <u>03/31/2011</u>		Date of First Production this formation: <u>12/01/2005</u>	
Perforations	Top: <u>7740</u>	Bottom: <u>7750</u>	No. Holes: <u>40</u>	Hole size: <u>42/100</u>	

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

Re-Perf 7,740'-7,750'. Frac CODL [7740'-7750'] w/ 128,016 gal fluid and 251,820# 20/40 sand (32,197 gal slick wtr, 95,819 gal xlink gel). ISIP=2770 psi (0.83 F.G.). ISDP=3655 psi (0.95 F.G. 885 psi increase), ATP=5301 psi, ATR=50.9 BPM, μ_{ave} =23 cp @ 64°F. MTP=5445 psi, MTR=51.3 BPM.

This formation is commingled with another formation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Total fluid used in treatment (bbl): <u>3048</u>	Max pressure during treatment (psi): <u>5445</u>
Total gas used in treatment (mcf): <u>0</u>	Fluid density at initial fracture (lbs/gal): <u>9.08</u>
Type of gas used in treatment: _____	Min frac gradient (psi/ft): <u>0.83</u>
Total acid used in treatment (bbl): <u>0</u>	Number of staged intervals: <u>1</u>
Recycled water used in treatment (bbl): <u>0</u>	Flowback volume recovered (bbl): <u>828</u>
Fresh water used in treatment (bbl): <u>3048</u>	Disposition method for flowback: <u>DISPOSAL</u>
Total proppant used (lbs): <u>251820</u>	Rule 805 green completion techniques were utilized: <input checked="" type="checkbox"/>

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: <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, number of sacks cmt _____
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** Bridge Plug Depth: _____
 ** Sacks cement on top: _____
 ** Wireline and Cement Job Summary must be attached.

FORMATION: NIOBRARA-CODELL Status: PRODUCING Treatment Type: _____

Treatment Date: _____ End Date: _____ Date of First Production this formation: 04/18/2011

Perforations Top: 7264 Bottom: 7750 No. Holes: 84 Hole size: _____

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

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: 04/18/2011 Hours: 432 Bbl oil: 724 Mcf Gas: 3701 Bbl H2O: 596

Calculated 24 hour rate: Bbl oil: 40 Mcf Gas: 205 Bbl H2O: 10 GOR: 5112

Test Method: Flowing Casing PSI: 1400 Tubing PSI: 1580 Choke Size: 24/64

Gas Disposition: SOLD Gas Type: WET Btu Gas: 1294 API Gravity Oil: 59

Tubing Size: 2 + 3/8 Tubing Setting Depth: 7723 Tbg setting date: 04/29/2011 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 Status: COMMINGLED Treatment Type: FRACTURE STIMULATION

Treatment Date: 03/31/2011 End Date: 03/31/2011 Date of First Production this formation: 04/18/2011

Perforations Top: 7264 Bottom: 7466 No. Holes: 48 Hole size: 42/100

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

Perf. Frac NBRR A [7,264'-7,270'] & NBRR B [7,460'-7,466'] w/ 221,172 gal fluid (126,420 gal SLKW, 94,752 gal XLG) and 306,220# sand (251,000 20/40 & 55,220 40/70). ISIP=3435 psi (0.95 F.G.). ISDP 3795 (FG 1.01, 360 psi increase), 1 min 3762, 4 min 3505, ATP=5303 psi, ATR=57.2 BPM, MTP=5727 psi, MTR=60.8 BPM.

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

Total fluid used in treatment (bbl): 5266 Max pressure during treatment (psi): 5727

Total gas used in treatment (mcf): 0 Fluid density at initial fracture (lbs/gal): 9.53

Type of gas used in treatment: _____ Min frac gradient (psi/ft): 0.95

Total acid used in treatment (bbl): 0 Number of staged intervals: 1

Recycled water used in treatment (bbl): 0 Flowback volume recovered (bbl): 828

Fresh water used in treatment (bbl): 5266 Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 306220 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: _____

Wellbore diagram is attached. All flowback water entries are estimates based upon commingled volumes, and have been allocated equally to each formation.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: CLAYTON DOKE

Title: SENIOR PETROLEUM ENGINEER Date: 2/20/2014 Email: cdoke@iptengineers.com

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400557575	FORM 5A SUBMITTED
400557651	WELLBORE DIAGRAM

Total Attach: 2 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected Niobrara sand total.	3/20/2014 3:55:43 PM

Total: 1 comment(s)