

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



DE ET OE ES

Document Number:

402034341

Date Received:

09/18/2019

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: 10110
2. Name of Operator: GREAT WESTERN OPERATING COMPANY LLC
3. Address: 1001 17TH STREET #2000
City: DENVER State: CO Zip: 80202
4. Contact Name: Renee Kendrick
Phone: (720) 595-2114
Fax:
Email: rkendrick@gwogco.com

5. API Number 05-001-10254-00
6. County: ADAMS
7. Well Name: Schaefer LD
Well Number: 13-032HC
8. Location: QtrQtr: SWSE Section: 24 Township: 1S Range: 67W Meridian: 6
9. Field Name: WATTENBERG Field Code: 90750

Completed Interval

FORMATION: CARLILE Status: COMMINGLED Treatment Type:
Treatment Date: End Date: Date of First Production this formation: 04/19/2019
Perforations Top: 8378 Bottom: 17930 No. Holes: 1440 Hole size: 19/50

Provide a brief summary of the formation treatment:

Open Hole: ☐

8378-8494;8778-8854;15690-17930

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: CODELL Status: COMMINGLED Treatment Type: _____

Treatment Date: _____ End Date: _____ Date of First Production this formation: 04/19/2019

Perforations Top: 8495 Bottom: 15653 No. Holes: 1440 Hole size: _____

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

8495-8730;8888-10179;10252-12692;13326-13853;13890-14055;14652-15653

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: FORT HAYS		Status: COMMINGLED		Treatment Type: _____	
Treatment Date: _____		End Date: _____		Date of First Production this formation: 04/19/2019	
Perforations	Top: 10215	Bottom: 14616	No. Holes: 1440	Hole size: 19/50	
Provide a brief summary of the formation treatment:			Open Hole: <input type="checkbox"/>		
10215-10216;12728-13295;14087-14175;14526-14616					
This formation is commingled with another formation:			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: <input type="checkbox"/>		
Reason why green completion not utilized: _____					
Fracture stimulations must be reported on FracFocus.org					
<u>Test Information:</u>					
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: <div style="border: 1px solid black; height: 20px; width: 100%;"></div>					
Date formation Abandoned: _____	Squeeze: <input type="checkbox"/> Yes <input type="checkbox"/> 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: _____	
Treatment Date: _____		End Date: _____		Date of First Production this formation: 04/19/2019	
Perforations	Top: 14215	Bottom: 14486	No. Holes: 1440	Hole size: 19/50	
Provide a brief summary of the formation treatment:			Open Hole: <input type="checkbox"/>		
This formation is commingled with another formation:			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: <input type="checkbox"/>		
Reason why green completion not utilized: _____					
Fracture stimulations must be reported on FracFocus.org					
<u>Test Information:</u>					
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: <div style="border: 1px solid black; height: 20px; width: 100%;"></div>					
Date formation Abandoned: _____	Squeeze: <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, number of sacks cmt _____			
** Bridge Plug Depth: _____	** Sacks cement on top: _____	** Wireline and Cement Job Summary must be attached.			

FORMATION: NIOBRARA-FORT HAYS-CODELL-CARLILE Status: PRODUCING Treatment Type: FRACTURE STIMULATION

Treatment Date: 03/18/2019 End Date: 04/03/2019 Date of First Production this formation: 04/19/2019
Perforations Top: 8378 Bottom: 17930 No. Holes: 1440 Hole size: 19/50

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

541,913# 100 Mesh Sand; 8,907,448# 20/40 Sand; 165,101 bbls gelled fluid; Flowback determined from well test separator.

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

Total fluid used in treatment (bbl): 165101

Max pressure during treatment (psi): 4835

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): 0.88

Total acid used in treatment (bbl):

Number of staged intervals: 48

Recycled water used in treatment (bbl):

Flowback volume recovered (bbl): 14741

Fresh water used in treatment (bbl): 165101

Disposition method for flowback: DISPOSAL

Total proppant used (lbs): 9449361

Rule 805 green completion techniques were utilized: ☒

Reason why green completion not utilized:

Fracture stimulations must be reported on FracFocus.org

Test Information:

Date: 04/21/2019 Hours: 24 Bbl oil: 682 Mcf Gas: 669 Bbl H2O: 8806
Calculated 24 hour rate: Bbl oil: 682 Mcf Gas: 669 Bbl H2O: 8806 GOR: 981
Test Method: Flowing Casing PSI: 3000 Tubing PSI: 1900 Choke Size: 16/64
Gas Disposition: SOLD Gas Type: WET Btu Gas: 1341 API Gravity Oil: 42
Tubing Size: 2 + 3/8 Tubing Setting Depth: 7986 Tbg setting date: 04/14/2019 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:

The bottom of the completed interval is at 525' FNL, and 2242' FEL of Section 13. During stimulation the wellbore was isolated by a composite bridge plug set at 17948'. The toe sleeve is @ 17,985', with zonal isolation below this point provided by cement from 17,985-18,218' behind pipe and 18,208- 18,218' inside the production casing, see cement job summary. Great Western certifies that none of the wellbore beyond the unit boundary setback was completed.

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

Signed: Print Name: Renee Kendrick

Title: Sr Regulatory Analyst Date: 9/18/2019 Email rkendrick@gwogco.com

Attachment Check List

Att Doc Num	Name
402034341	FORM 5A SUBMITTED
402151382	CEMENT JOB SUMMARY

Total Attach: 2 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	•Permitting review complete and passed task.	10/22/2019
Engineer	•Engineering review complete	10/18/2019
Permit	Returned to Draft: Operator Comments do not satisfy the requirements of the COA.	09/12/2019
Permit	Returned to Draft: •Per the COA on the form 2 (Doc#401742272), Operator Comments do not satisfy all of the following requirements. (1) report the footages from the section lines of the bottom of the completed interval, (2) describe how the wellbore beyond the unit boundary setback is physically isolated, and (3) certify that none of the wellbore beyond the setback was completed.	07/15/2019

Total: 4 comment(s)