

FORM
2

Rev
05/22

State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

403149243

(SUBMITTED)

Date Received:

08/29/2022

APPLICATION FOR PERMIT TO

Drill Deepen Re-enter Recomplete and Operate

Amend

TYPE OF WELL OIL GAS COALBED OTHER: _____

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: Brant Federal Well Number: 18C
 Name of Operator: GREAT WESTERN OPERATING COMPANY LLC COGCC Operator Number: 10110
 Address: 1775 SHERMAN STREET STE 3000
 City: DENVER State: CO Zip: 80203
 Contact Name: Ally Ota Phone: (303)860-5800 Fax: ()
 Email: alexandria.ota@pdce.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance

The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): 20160047

Federal Financial Assurance

In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)

Amount of Federal Financial Assurance \$ _____

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SENE Sec: 11 Twp: 1S Rng: 67W Meridian: 6

Footage at Surface: 2260 Feet FNL 329 Feet FEL

Latitude: 39.980606 Longitude: -104.847916

GPS Data: GPS Quality Value: 1.2 Type of GPS Quality Value: PDOP Date of Measurement: 08/10/2017

Ground Elevation: 4973

Field Name: WATTENBERG Field Number: 90750

Well Plan: is Directional Horizontal (highly deviated) Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 12 Twp: 1S Rng: 67W Footage at TPZ: 990 FSL 460 FWL
Measured Depth of TPZ: 8432 True Vertical Depth of TPZ: 7736 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 8 Twp: 1S Rng: 66W Footage at BPZ: 990 FSL 460 FEL
Measured Depth of BPZ: 23459 True Vertical Depth of BPZ: 7391 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 8 Twp: 1S Rng: 66W Footage at BHL: 990 FSL 460 FEL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: ADAMS Municipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of § 24-65.1-108 C.R.S.? Yes

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I) (A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? [X] Yes [] No

[X] If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The disposition of the application filed with the Relevant Local Government is: Approved Date of Final Disposition: 04/23/2019

Comments: Adams County USR Approved

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION

Surface Owner of the land at this Well's Oil and Gas Location: [X] Fee [] State [] Federal [] Indian

Mineral Owner beneath this Well's Oil and Gas Location: [X] Fee [] State [] Federal [] Indian

Surface Owner Protection Bond (if applicable): Surety ID Number (if applicable):

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- [X] Fee
[] State
[] Federal
[] Indian
[] N/A

LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well.
* If this Well is not subject to a unit, describe the lease that will be produced by the Well.
(Attach a Lease Map or Lease Description or Lease if necessary.)

See attached lease map

Total Acres in Described Lease: 266 Described Mineral Lease is: [X] Fee [] State [] Federal [] Indian

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 545 Feet
 Building Unit: 707 Feet
 Public Road: 202 Feet
 Above Ground Utility: 731 Feet
 Railroad: 5280 Feet
 Property Line: 189 Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit – as defined in 100 Series Rules.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL	407-2246	1923	1S-67W S12: All, 1S-66W S7: All, S8: All

Federal or State Unit Name (if appl): _____

Unit Number: _____

SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 460 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 320 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAMProposed Total Measured Depth: 23459 FeetTVD at Proposed Total Measured Depth 7651 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: 162 Feet No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H₂S Drilling Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? NoWill salt sections be encountered during drilling? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP Equipment Type: Annular Preventor Double Ram Rotating Head NoneBeneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	13+1/2	9+5/8	J-55	36	0	1600	920	1600	0
1ST	8+1/2	5+1/2	P-110	20	0	23459	2035	23459	2000

 Conductor Casing is NOT planned**POTENTIAL FLOW AND CONFINING FORMATIONS**

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Groundwater	Fox Hills Sandstone	706	706	915	915	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	915	915	1102	1102			
Groundwater	UPIR/Pawnee Aquifer	1102	1102	2055	2054	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	2055	2054	4396	4395			
Hydrocarbon	Parkman	4396	4395	4582	4581			
Confining Layer	Pierre Shale	4582	4581	4835	4834			
Hydrocarbon	Sussex	4835	4834	4972	4971			
Confining Layer	Pierre Shale	4972	4971	5301	5300			
Hydrocarbon	Shannon	5301	5300	5487	5486			
Confining Layer	Pierre Shale	5487	5486	7270	7267			
Subsurface Hazard	Sharon Springs Shale	7270	7267	8432	7736			
Hydrocarbon	Niobrara/Codell	8432	7736	23459	7651			Codell

OPERATOR COMMENTS AND SUBMITTAL

Comments

This Form 2 is being refiled to change the TPZ, BPZ, BHL, and well name.

The distance to the completed portion of the nearest well on the "Spacing and Formations" tab was measured to the Brant 19N (05-001-10325). The distance to the nearest wellbore belonging to another operator on the "Drilling Plan" tab was measured to the plugged and abandoned Mattive & Sons Inc 1 (05-001-07020). Both distances were measured via the anti-collision report attached in the deviated drilling plan.

This application is in a Comprehensive Area Plan _____ CAP #: _____
 Oil and Gas Development Plan Name _____ OGDID ID#: _____
 Location ID: 460107
 I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.
 Signed: _____ Print Name: Ally Ota
 Title: Regulatory Analyst Date: 8/29/2022 Email: alexandria.ota@pdce.com

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ Director of COGCC _____ Date: _____
 Expiration Date: _____

API NUMBER
05 001 10329 00

Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

<u>COA Type</u>	<u>Description</u>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	OPEN HOLE LOGGING EXCEPTION: One of the first wells drilled on the pad will be logged with cased-hole neutron log with gamma ray log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run in that well and have those logs attached. The Form 5 for each well shall state "Open Hole Logging Exception - No open-hole logs were run" and shall clearly identify the type of log and the well (by API #) in which open-hole logs were run.
2	Drilling/Completion Operations	Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling.

Total: 2 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403149284	OffsetWellEvaluations Data
403149300	LEASE MAP

403149301	WELL LOCATION PLAT
403149303	DEVIATED DRILLING PLAN
403149304	DIRECTIONAL DATA

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)



Public Comments

No public comments were received on this application during the comment period.

