

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:

403221420

(SUBMITTED)

Date Received:

01/23/2023

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: Ottesen 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: regulatory@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: NWSE Sec: 33 Twp: 1N Rng: 66W Meridian: 6

Footage at Surface: 1510 Feet FSL 1668 Feet FEL

Latitude: 40.004600 Longitude: -104.778644

GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 06/30/2016

Ground Elevation: 5076

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: 4 Twp: 1S Rng: 66W Footage at TPZ: 600 FNL 340 FWL
Measured Depth of TPZ: 8784 True Vertical Depth of TPZ: 7704 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 9 Twp: 1S Rng: 66W Footage at BPZ: 600 FSL 340 FWL
Measured Depth of BPZ: 17826 True Vertical Depth of BPZ: 7729 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 9 Twp: 1S Rng: 66W Footage at BHL: 600 FSL 340 FWL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD 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: 09/17/2018

Comments: WOGLA18-0098

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: 34 Described Mineral Lease is: [X] Fee [] State [] Federal [] Indian

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1157 Feet
 Building Unit: 1302 Feet
 Public Road: 1502 Feet
 Above Ground Utility: 1255 Feet
 Railroad: 5280 Feet
 Property Line: 968 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	407-3344	640	1S-66W Section 4: W½W½ 1S-66W Section 5: E½E½ 1S-66W Section 8: E½E½ 1S-66W Section 9 W½W½

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: 600 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: 190 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: 17826 FeetTVD at Proposed Total Measured Depth 7729 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: 1310 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	2400	830	2400	0
1ST	8+1/2	5+1/2	P-110	20	0	17826	3290	17826	2700

 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	Arapahoe	196	196	543	543	1001-10000	DWR	COGCC UPWQ Study
Groundwater	Fox Hills Sandstone	928	928	1186	1186	1001-10000	DWR	COGCC UPWQ Study
Confining Layer	Pierre Shale	1565	1565	1710	1710			
Groundwater	UPIR/Pawnee Aquifer	1710	1710	2020	2020	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	2020	2020	4450	4450			
Hydrocarbon	Parkman	4450	4450	4650	4650			
Confining Layer	Pierre Shale	4650	4650	4970	4970			
Hydrocarbon	Sussex	4970	4970	5000	5000			
Confining Layer	Pierre Shale	5000	5000	5535	5535			
Hydrocarbon	Shannon	5535	5535	5605	5605			
Confining Layer	Pierre Shale	5605	5605	7894	7251			
Subsurface Hazard	Sharon Springs Shale	7894	7251	8250	7277			
Hydrocarbon	Niobrara	7924	7277	8536	7663			
Confining Layer	Fort Hays	8536	7663	8638	7689			
Hydrocarbon	Codell	8638	7277	17826	7729			

OPERATOR COMMENTS AND SUBMITTAL

Comments

Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	ALTERNATIVE PROGRAM: An existing well on the pad (Ottesen LE 06-311HC 05-123-44337) was logged with open-hole resistivity log and 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 and have those logs attached. The Form 5 for a well without open-hole logs shall state "Alternative Logging Program - 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

Att Doc Num	Name
403224297	OffsetWellEvaluations Data
403230322	LEASE MAP
403230325	WELL LOCATION PLAT
403230326	DEVIATED DRILLING PLAN
403230330	DIRECTIONAL DATA

Total Attach: 5 Files

General Comments

User Group	Comment	Comment Date
Permit	Missing operator comment on whether the pad has been built.	12/02/2022

Total: 1 comment(s)