

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:

403229598

**(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 Federal Well Number: 10NA  
 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: 1410 Feet FSL 1443 Feet FEL

Latitude: 40.004325 Longitude: -104.777842

GPS Data: GPS Quality Value: 1.4 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: 5 Twp: 1S Rng: 66W Footage at TPZ: 2060 FNL 460 FEL  
Measured Depth of TPZ: 9254 True Vertical Depth of TPZ: 7319 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 6 Twp: 1S Rng: 66W Footage at BPZ: 2060 FNL 2502 FEL
Measured Depth of BPZ: 16585 True Vertical Depth of BPZ: 7339 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 6 Twp: 1S Rng: 66W Footage at BHL: 2060 FNL 2502 FEL
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
[X] 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: 79 Described Mineral Lease is: [X] Fee [ ] State [ ] Federal [ ] Indian

Federal or State Lease #

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1315 Feet  
Building Unit: 1469 Feet  
Public Road: 1402 Feet  
Above Ground Utility: 1384 Feet  
Railroad: 5280 Feet  
Property Line: 1194 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.)
NIOBRARA	NBRR	407-2614	906	1S-66W Section 5: All 1S-66W Section 6: E2

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: 150 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: 175 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 PROGRAM

Proposed Total Measured Depth: 16585 Feet

TVD at Proposed Total Measured Depth 7339 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: 780 Feet  No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H<sub>2</sub>S 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? No

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type:  Annular Preventor  Double Ram  Rotating Head  None

Beneficial 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	2486	981	2486	0
1ST	8+1/2	5+1/2	P-110	20	0	16585	2637	16585	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	867	867	1106	1106	1001-10000	DWR	COGCC UPWQ Study
Confining Layer	Pierre Shale	1515	1515	1642	1642			
Groundwater	UPIR/Pawnee Aquifer	1642	1642	2160	2160	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	2160	2160	4385	4385			
Hydrocarbon	Parkman	4385	4385	4585	4585			
Confining Layer	Pierre Shale	4585	4585	4765	4765			
Hydrocarbon	Sussex	4765	4765	4944	4944			
Confining Layer	Pierre Shale	4944	4944	5495	5495			
Hydrocarbon	Shannon	5495	5495	5572	5572			
Confining Layer	Pierre Shale	5572	5572	8774	7180			
Subsurface Hazard	Sharon Springs Shale	8774	7180	8810	7199			
Hydrocarbon	Niobrara	8810	7199	16585	7339			

## OPERATOR COMMENTS AND SUBMITTAL

Comments

This Form 2 is being refiled to update footages, drilling program, and well name. This location has been built.

The distance to the completed portion of the nearest well on the "Spacing and Formations" tab was measured to the Ottesen Federal 09N (05-123-44359). The distance to the nearest wellbore belonging to another operator on the "Drilling Plan" tab was measured to the plugged and abandoned Great Western Sugar 3X (05-001-06690). Both distances were measured via COGCC GIS mapping, 2D plain view.



<b>Att Doc Num</b>	<b>Name</b>
403229633	OffsetWellEvaluations Data
403229644	LEASE MAP
403229645	WELL LOCATION PLAT
403229647	DEVIATED DRILLING PLAN
403229648	DIRECTIONAL DATA

Total Attach: 5 Files

**General Comments**

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

Total: 1 comment(s)

