



Base of Productive Zone (BPZ)

Sec: 26 Twp: 1N Rng: 68W Footage at BPZ: 460 FSL 2060 FWL

Measured Depth of BPZ: 18711 True Vertical Depth of BPZ: 7618 FNL/FSL  FEL/FWL

Bottom Hole Location (BHL)

Sec: 26 Twp: 1N Rng: 68W Footage at BHL: 460 FSL 2060 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?  Yes  No

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: 10/26/2020

Comments: The WOGLA 1041WOGLA20-0018 was approved on October 26, 2020.

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

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

Mineral Owner beneath this Well's Oil and Gas Location:  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):

- 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.)

T1N R67W Sec. 19: Lots 1, 2; E/2W/2, SE/4; Sec. 29: NW/4, S/2; T1N R68W Sec. 3: Lot 2, S/2NW/4, SW/4, SE/4; Sec. 10: NW/4; S/2; Sec. 11: NW/4; S/2; Sec. 13: NW/4; S/2; Sec. 14: NW/4; S/2; Sec. 15: NW/4; S/2; Sec. 23: NW/4; S/2; Sec. 25; NW/4; S/2; Sec. 27: NW/4; S/2; Sec. 35: NW/4; S/2.

Total Acres in Described Lease: 5753 Described Mineral Lease is:  Fee  State  Federal  Indian  
Federal or State Lease # \_\_\_\_\_

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 623 Feet  
Building Unit: 1014 Feet  
Public Road: 592 Feet  
Above Ground Utility: 887 Feet  
Railroad: 4222 Feet  
Property Line: 307 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	407-2533	1920	T1N R68W Sec. 22: E/2; Sec. 23: All; Sec. 26: All; Sec. 27: 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

The OGD P Order No. 407-3397 approved the expansion of the Cosslett pad and approved the COGCC Form 2A.

## DRILLING PROGRAM

Proposed Total Measured Depth: 18711 Feet      TVD at Proposed Total Measured Depth 7618 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: 101 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? \_\_\_\_\_

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
CONDUCTOR	26	16	A53B	42.09	0	100	114	100	0
SURF	13+1/2	9+5/8	J55	36	0	2475	825	2475	0
1ST	8+1/2	5+1/2	P110	17	0	18711	2920	18711	

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	Denver	0	0	154	154	501-1000	Groundwater Atlas	USGS HA-646 (Robson & Romero, 1981)
Groundwater	Laramie	154	154	631	631	501-1000	Groundwater Atlas	USGS HA-646 (Robson & Romero, 1981)
Groundwater	Fox Hills	631	631	803	803	501-1000	Groundwater Atlas	USGS HA-646 (Robson & Romero, 1981)
Confining Layer	Pierre Shale	803	803	1049	1049			
Groundwater	Upper Pierre Aquifer	1049	1049	2013	1985	1001-10000	Electric Log Calculation	Coslett B Unit 1X (05-123-12630)
Confining Layer	Base of Upper Pierre Aq	2013	1985	4823	4363			
Hydrocarbon	Larimer	4823	4363	5311	4771			
Hydrocarbon	Sussex	5311	4771	5998	5346			
Hydrocarbon	Shannon	5998	5346	6228	5539			
Confining Layer	Pierre Shale	6228	5539	8926	7613			
Confining Layer	Sharon Springs	8926	7613	9007	7618			
Hydrocarbon	Niobrara	9007	7618	9007	7618			



## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Drilling/Completion Operations	Alternative Logging Program: One of the first wells drilled on the pad will be logged with openhole 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	Anti-collision: 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

<b>Att Doc Num</b>	<b>Name</b>
403216278	WELL LOCATION PLAT
403216287	DIRECTIONAL DATA
403224181	OffsetWellEvaluations Data
403224218	DEVIATED DRILLING PLAN
403224220	OTHER

Total Attach: 5 Files

### General Comments

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

Total: 0 comment(s)