



Base of Productive Zone (BPZ)  
 Sec: 23 Twp: 5N Rng: 67W Footage at BPZ: 464 FNL 150 FWL  
 Measured Depth of BPZ: 15897 True Vertical Depth of BPZ: 7041 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)  
 Sec: 23 Twp: 5N Rng: 67W Footage at BHL: 464 FNL 100 FWL  
 FNL/FSL FEL/FWL

**LOCAL GOVERNMENT PERMITTING INFORMATION**

County: WELD Municipality: Greeley

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: 08/17/2023

Comments: 1041WOGLA23-0037 Approved on 8/17/2023

**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.)

Township 5 North - Range 67 West Section 24: SE4

Total Acres in Described Lease: 160 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # \_\_\_\_\_

**SAFETY SETBACK INFORMATION**

Distance from Well to nearest:

Building: 2060 Feet  
 Building Unit: 2207 Feet  
 Public Road: 1863 Feet  
 Above Ground Utility: 2099 Feet  
 Railroad: 5820 Feet  
 Property Line: 313 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	407-3556	2230	Township 5 North, Range 66 West Section 19: All Section 20: W2 Township 5 North, Range 67 West Section 23: All Section 24: 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: 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: 299 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: 15947 FeetTVD at Proposed Total Measured Depth 7041 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: 18 Feet  No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs 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? 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**

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	26	16	A-52A	36.94	0	80	175	80	0
SURF	13+1/2	9+5/8	J-55	36	0	1850	633	1850	0
1ST	8+1/2	5+1/2	P-110	17	0	15947	1884	15947	1000

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

<u>Zone Type</u>	<u>Formation /Hazard</u>	<u>Top M.D.</u>	<u>Top T.V.D.</u>	<u>Bottom M.D.</u>	<u>Bottom T.V.D.</u>	<u>TDS (mg/L)</u>	<u>Data Source</u>	<u>Comment</u>
Confining Layer	Pierre Shale	0	0	544	544			
Groundwater	UPIR/Pawnee Aquifer	544	544	1529	1507	1001-10000	Other	COGCC UPWQ Study
Confining Layer	Pierre Shale	1529	1507	4121	3864			
Hydrocarbon	Parkman	4121	3864	4541	4245			
Confining Layer	Pierre Shale	4541	4245	4778	4460			
Hydrocarbon	Sussex	4778	4460	5054	4711			
Confining Layer	Pierre Shale	5054	4711	5321	4953			
Hydrocarbon	Shannon	5321	4953	5542	5154			
Confining Layer	Pierre Shale	5542	5154	7785	7148			
Subsurface Hazard	Sharon Springs Shale	7785	7148	7845	7185			least competent shales
Hydrocarbon	Niobrara	7845	7185	15947	7041			NIO TARGET

**OPERATOR COMMENTS AND SUBMITTAL**

Comments

PDC Energy shall isolate both the Fox Hills and UPIR/Pawnee Aquifers with surface casing from hydrocarbon bearing zones and exposure to oil-based drilling fluid. PDC Energy also agrees to not expose the UPIR/Pawnee Aquifers to oil-based mud.

Fox Hills is not anticipated to be encountered.

The nearest well in the same formation is located on the same pad, the WINDOM 13N operated by PDC Energy Inc. Measured in 2D.

The distance to another wellbore belonging to an outside operator is the BLUE CHIP #22-2HZ 05-123-51929 operated by KERR MCGEE OIL & GAS ONSHORE LP, status PR. The distance was calculated using the anti-collision summary. 408.t-PDC will notify KMG if the well is within 150' prior to drilling. 408.u is not required, the distance from production zone to production zone is 215'

Wells within 150':

D.L. PHILLIPS #24-22 05-123-18369 (TA) 23' operated by NOBLE ENERGY INC, 408.u consent attached.

D.L. PHILLIPS #24-21 05-123-18368 (TA) 54' operated by NOBLE ENERGY INC, 408.u consent attached.

PHILLIPS #23-41 05-123-19267 (PA) 124' operated by PDC ENERGY INC, no 408.u is required, well has been plugged and abandoned.

This well has a bottom-hole location beyond the unit boundary setback. The bottom of the completed interval will be within the unit boundary setback at 464' FNL and 150' FWL of Section 23. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

This application is in a Comprehensive Area Plan Yes CAP #: 210200012  
Oil and Gas Development Plan Name Cameron 2 OGDP ID#: 485239  
Location ID: 485814

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

Signed: \_\_\_\_\_ Print Name: Kim Bauer

Title: Regulatory Analyst II Date: 7/18/2024 Email: kimberlybauer@chevron.com

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

ECMC Approved: \_\_\_\_\_ Director of ECMC Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

**API NUMBER**  
05

### **CONDITIONS OF APPROVAL, IF ANY LIST**

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.

<b><u>COA Type</u></b>	<b><u>Description</u></b>
0 COA	

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	During and Post stimulation: PDC Energy Inc will comply with the COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated 5/29/12.`
2	Drilling/Completion Operations	If a skid is performed for the subject well, then the only required BOPE tests are for the BOPE connection bonnet seal breaks, as long as a full BOPE test was performed at the beginning of the pad, and as long as all necessary BOPE tests are completed at least every 30 days during the pad operations.`
3	Drilling/Completion Operations	One of the first wells drilled on the pad during the first rig occupation will be logged with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for one of the stratigraphically deepest wells on the pad. 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 will state "Alternative Logging Program - No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which open-hole logs were run.`
4	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, or temporarily abandoned) offset wellbores that have the potential of being within 150' of the proposed well prior to drilling operations.`

Total: 4 comment(s)

### ATTACHMENT LIST

<u>Att Doc Num</u>	<u>Name</u>
403770950	WELL LOCATION PLAT
403784013	SURFACE AGRMT/SURETY
403794921	OffsetWellEvaluations Data
403814520	STIMULATION SETBACK CONSENT
403816243	DEVIATED DRILLING PLAN
403816560	DIRECTIONAL DATA

Total Attach: 6 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	ON HOLD: APD's placed on hold pending information regarding PFZ table inconsistencies, both internal to itself, and when compared to directional data.	07/17/2024

Total: 1 comment(s)