

## 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:

402872722

Date Received:

01/20/2023

## 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: Bishop

Well Number: A18-724

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 2001 16TH STREET SUITE 900

City: DENVER State: CO Zip: 80202

Contact Name: Mosiah Montoya

Phone: (303)249 2425

Fax: ( )

Email: denverregulatory@chevron.onmicrosoft.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): 20030009

## 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: NENE Sec: 7 Twp: 6N Rng: 64W Meridian: 6

 Footage at Surface: 859 Feet FNL/FSL 499 Feet FEL/FWL  
 FNL FEL

Latitude: 40.505383 Longitude: -104.585473

GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP

Date of Measurement: 06/03/2019

Ground Elevation: 4741

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: 7 Twp: 6N Rng: 64W Footage at TPZ: 200 FNL 911 FEL  
 Measured Depth of TPZ: 7454 True Vertical Depth of TPZ: 6861 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**

Sec: 18 Twp: 6N Rng: 64W Footage at BPZ: 200 FSL 948 FEL   
Measured Depth of BPZ: 17628 True Vertical Depth of BPZ: 6861 FNL/FSL FEL/FWL

**Bottom Hole Location (BHL)**

Sec: 18 Twp: 6N Rng: 64W Footage at BHL: 200 FSL 948 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? ☒ 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: 01/08/2020

Comments: CDP WOGLA 1041WOGLA19-0042 filed 12/10/2019, recorded 1/8/2020. A site-specific WOGLA will be filed prior to commencement of operations.

**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.)

E/2NE/4, Section 7, T6N-R64W, 6th P.M.

Total Acres in Described Lease: 72

Described Mineral Lease is: ☒ Fee

☐ State

☐ Federal

☐ Indian

Federal or State Lease #

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 553 Feet

Building Unit: 746 Feet

Public Road: 488 Feet

Above Ground Utility: 471 Feet

Railroad: 5280 Feet

Property Line: 442 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	407-3384	1223	T6N-R64W, 6th P.M., Sec. 7: Lots 1 (65.62), 2 (65.50), E/2W/2, E/2 (a/d/a ALL), Sec. 18: Lots 1 (65.64), 2 (66.04), E/2W/2, E/2 (a/d/a 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: 200 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: 561 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 and Spacing Unit configuration: T6N-R64W, 6th P.M., Sec. 7: Lots 1 (65.62), 2 (65.50), E/2W/2, E/2 (a/d/a ALL), Sec. 18: Lots 1 (65.64), 2 (66.04), E/2W/2, E/2 (a/d/a ALL). See the Approved Spacing Order No. 407-3384.

## DRILLING PROGRAM

Proposed Total Measured Depth: 17628 Feet TVD at Proposed Total Measured Depth 6861 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: 14 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**

<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	640	1850	0
1ST	8+1/2	5+1/2	P-110	17	0	17628	2023	17628	

☐ 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>
Groundwater	Surface Alluvium	0	0	205	205	1001-10000	Groundwater Sample	COGCC Environmental Sample Site #753271
Groundwater	Laramie Fox Hills	205	205	360	360	1001-10000	Groundwater Sample	COGCC Environmental Sample Site #752419, 752281
Confining Layer	Pierre Shale	360	360	420	420			
Groundwater	Upper Pierre Aquifer	420	420	1600	1600	1001-10000	Other	COGCC Project #2141, Figure 5
Confining Layer	Pierre Shale	1600	1600	3600	3530			
Hydrocarbon	Parkman	3600	3530	4200	4070			
Confining Layer	Pierre Shale	4200	4070	4300	4120			
Hydrocarbon	Sussex	4300	4120	4700	4590			
Confining Layer	Pierre Shale	4700	4590	5100	4900			
Hydrocarbon	Shannon	5100	4900	5200	5065			
Confining Layer	Pierre Shale	5200	5065	6200	5970			
Hydrocarbon	Tepee Buttes	6200	5970	6800	6540			
Confining Layer	Pierre Shale	6800	6540	7050	6720			
Hydrocarbon	Niobrara	7050	6720	17628	6861			Potential Flow Formation Table: The TVD of the deepest hydrocarbon zone is the bottom of the well and not the bottom of the formation. The formation is not planned to be exited.

**OPERATOR COMMENTS AND SUBMITTAL**

Comments Noble Energy shall isolate both the Fox Hills and Upper Pierre Aquifers with surface casing from hydrocarbon bearing zones and exposure to oil-based drilling fluid. Noble Energy also agrees to not expose the Upper Pierre Aquifers to oil-based mud.

The nearest well in unit per 2-D calculation is the Bishop A18-715 @ 561'.

The nearest outside operated well per anti-collision is the Dyer 42-7 (API: 05-123-13959) PA Status @ 14'. Well is PA Status; no 408.u is required.

Wells also within 150':

Dyer 41-7 (API: 05-123-20669) SI Status @ 111'. Producing zones are >150' apart; no 408.u is required.

Carlson 41-18 (API: 05-123-21670) PA Status @ 107'. Well is PA Status; no 408.u is required.

Foose PC A18-65HN (API: 05-123-35047) PR Status @ 93'. Well is Noble operated; no 408.u is required.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_

Oil and Gas Development Plan Name WR OGDP 1 OGDP ID#: 481728

Location ID: 483510

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

Signed: \_\_\_\_\_ Print Name: Ann Feldman

Title: Regulatory Manager

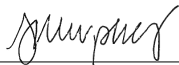
Date: 1/20/2023

Email: regulatory@ascentgeomatics.c

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

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: 3/13/2023

Expiration Date: 03/24/2030

**API NUMBER**

05 123 52073 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>
Drilling/Completion Operations	<p>Per COGCC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test:</p> <ol style="list-style-type: none"> <li>1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation.</li> <li>2) If a delayed completion, a second test is required between 6-9 months, or if there is pressure above 200 psi, after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation.</li> <li>3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.</li> </ol>
Drilling/Completion Operations	<ol style="list-style-type: none"> <li>1) Submit Form 42 electronically to COGCC 2 business days prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 2 business days spud notice for all subsequent wells drilled on the pad.</li> <li>2) Comply with Rule 408.j and provide cement coverage from the end of production casing to a minimum of 500' above Niobrara. Verify coverage with cement bond log.</li> <li>3) Oil-based drilling fluid is to be used only after all aquifers are covered.</li> </ol>
Drilling/Completion Operations	<p>Operator acknowledges the proximity of the following non-operated listed wells: Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>NC Farms 10-32 (API NO 123-34785)  NC Farms 15-32 (API NO 123-34789)  Kreps 1 (API NO 123-12736)  Dyer 41-7 (API NO 123-20669)  Dyer 13-5 (API NO 123-21187)  Kreps Trust 44-6 (API NO 123-21722)  Kreps Trust 34-6 (API NO 123-21723)  Pfenning 43-31 (API NO 123-22378)  Uyemiura 33-31 (API NO 123-22441)  Francis 11-8 (API NO 123-22517)  Pfenning 44-31 (API NO 123-22574)  Kreps 33-6 (API NO 123-22597)  Kreps 43-6 (API NO 123-22600)  Kreps 31-6 (API NO 123-22628)  Kreps 32-6 (API NO 123-22629)  Francis 21-8 (API NO 123-27380)</p>
Drilling/Completion Operations	<p>Operator acknowledges the proximity of the listed wells: Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>Erickson 5-43 (API NO 123-18513)  Cecil 32-34 (API NO 123-23809)  Bay 43-1 (API NO 123-23394)</p>
4 COAs	

## 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 during the first rig occupation 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 will state "Open-Hole Logging Exception - 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.
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	Anti-collision: Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument and compared against the proposed well path with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottom hole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as constructed gyro survey will be submitted to COGCC with the Form 5.

Total: 3 comment(s)

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402872722	FORM 2 SUBMITTED
403216760	OPEN HOLE LOGGING EXCEPTION
403295416	DEVIATED DRILLING PLAN
403295418	WELL LOCATION PLAT
403295419	DIRECTIONAL DATA
403295643	OffsetWellEvaluations Data
403344867	OFFSET WELL EVALUATION

Total Attach: 7 Files



### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	03/13/2023
Permit	Made the following changes with concurrence from the operator: - Revised Lat/Long under drilling tab to match information provided on Well Location Plat. - Revised Order No. & comment under Spacing tab from 407-2958 to 407-3384 (amended). - Revised BPZ & BHL easting to match information provided on attached Well Location Plat Map.  Permit Review Complete	03/08/2023
Permit	Emailed operator for the following: - Confirm revising Lat/Long under drilling tab to match information provided on Well Location Plat. - Confirm revising Order No. & comment under Spacing tab from 407-2958 to 407-3384 (amended). - Confirm BPZ & BHL easting to match information provided on attached Well Location Plat Map. - Confirm acreage is correct for lease description under Surface & Minerals tab.	03/06/2023
Engineer	Offset Wells Evaluated.	01/27/2023
OGLA	The Commission approved OGDG #481728 on September 28, 2022 for the Oil and Gas Location related to this Form 2. OGLA task passed.	01/23/2023

Total: 5 comment(s)