

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:

403008337

Date Received:

05/09/2022

APPLICATION FOR PERMIT TO

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

Amend ☐

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: _____

Refill ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: GIG-EM STATE Well Number: Y9-761
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)228-4000 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: NENW Sec: 16 Twp: 2N Rng: 64W Meridian: 6

Footage at Surface: 595 Feet FNL/FSL 2610 Feet FEL/FWL
FNL FWL

Latitude: 40.144130 Longitude: -104.556670

GPS Data: GPS Quality Value: 1.9 Type of GPS Quality Value: PDOP Date of Measurement: 02/10/2022

Ground Elevation: 4911

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: 9 Twp: 2N Rng: 64W Footage at TPZ: 133 FSL 1901 FWL
Measured Depth of TPZ: 7403 True Vertical Depth of TPZ: 6978 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)Sec: 4 Twp: 2N Rng: 64WFootage at BPZ: 460 FNL 1894 FWLMeasured Depth of BPZ: 17309True Vertical Depth of BPZ: 6897 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 4 Twp: 2N Rng: 64WFootage at BHL: 300 FNL 1894 FWL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATIONCounty: WELDMunicipality: 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: 07/26/2017Comments: WOGLA was approved on 07/26/2017, this location is already built.**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 ☐ IndianMineral 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.)

ALL of Section 16, T2N-R64W, 6th P.M.Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ IndianFederal or State Lease # OG 70/7879-S

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2430 Feet
Building Unit: 3212 Feet
Public Road: 2685 Feet
Above Ground Utility: 499 Feet
Railroad: 5280 Feet
Property Line: 595 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 | 407-2423 | 1440 | N2N2 Sec 16; ALL Sec 9; Lot 1 (79.64), Lot 2 (79.72), S/2N/2, S/2 (a/d/a ALL) of Sec 4, T2N-R64W |

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: 692 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

For spacing, please reference COGCC Order No. 407-2423

DRILLING PROGRAM

Proposed Total Measured Depth: 17469 Feet

TVD at Proposed Total Measured Depth 6896 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: _____ Feet ☒ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is 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? 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 |
|-------------|--------------|----------------|-------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 26 | 16 | A-52A | 36.94 | 0 | 110 | 60 | 110 | 0 |
| SURF | 13+1/2 | 9+5/8 | J-55 | 36 | 0 | 1950 | 665 | 1950 | 0 |
| 1ST | 8+1/2 | 5+1/2 | P-110 | 17 | 0 | 17469 | 2039 | 17469 | |

☐ 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 | Laramie Fox Hills | 0 | 0 | 860 | 860 | 501-1000 | USGS | USGS, Geologic Structure, Hydrology, And Water Quality of the Laramie-Fox Hills Aquifer in the Denver Basin, Colorado (1981); USGS paper 2302 (1989) |
| Confining Layer | Pierre Shale | 860 | 860 | 970 | 970 | | | |
| Groundwater | Upper Pierre Aquifer | 970 | 970 | 1815 | 1815 | 501-1000 | Other | COGCC Project #2141 |
| Confining Layer | Pierre Shale | 1815 | 1815 | 2660 | 2660 | | | |
| Groundwater | Pierre Member A Sand | 2660 | 2660 | 3310 | 3310 | 0-500 | Other | No public domain data |
| Confining Layer | Pierre Shale | 3310 | 3310 | 6880 | 6880 | | | |
| Hydrocarbon | Niobrara | 6880 | 6880 | 7110 | 7110 | | | |
| Hydrocarbon | Codell | 7110 | 7110 | 7125 | 7125 | | | |

OPERATOR COMMENTS AND SUBMITTAL

Comments

There have been no new buildings constructed and no changes to the surrounding land use. The well site has been constructed. The Y16-28 Pad (location ID 451499) was constructed 8/2017 and has active wells on location. Noble is submitting this application for permit to drill, the well count was included on the original form 2A.

There are no off-set operated wells within 1500'.

The nearest well in the same formation is located on the same pad, the GIG-EM STATE Y9-772 operated by Noble Energy LLC. Measured in 3D using an anti collision report.

There is no public domain data for the Groundwater/ Pierre Member A sand. The form will not allow us to submit the form with a blank in this field.

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 460' FNL and 1894' FWL of Section 4. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

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.

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

Oil and Gas Development Plan Name _____ OGDID#: _____

Location ID: 451499


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

Signed: _____ Print Name: Julie Webb

Title: Sr. Regulatory Analyst Date: 5/9/2022 Email: julie.webb@chevron.com

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: 7/8/2022

Expiration Date: 07/07/2025

API NUMBER

05 123 51732 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.

Condition of Approval

| <u>COA Type</u> | <u>Description</u> |
|--------------------------------|---|
| Construction | If conductors are preset, operator shall comply with Rule 406.e. |
| Drilling/Completion Operations | Oil-based drilling fluid is to be used only after all groundwater zones are isolated. |
| Interim Reclamation | Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017). |
| Drilling/Completion Operations | Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed. |
| Drilling/Completion Operations | 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: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance. |
| Drilling/Completion Operations | 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 48 hour spud notice for all subsequent wells drilled on the pad. 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. 3) Oil-based drilling fluid is to be used only after all aquifers are covered. |
| Drilling/Completion Operations | 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. WASTE MANAGEMENT USX Y 3-12 (API NO 123-24797) WASTE MANAGEMENT USX Y 3-4 (API NO 123-24793) WASTE MANAGEMENT USX Y 03-05 (API NO 123-24790) PERKINS 43-5 (API NO 123-22956) |
| 7 COAs | |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|--|
| 1 | 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. Notice shall be given to all offset operators prior to drilling. |
| 2 | Drilling/Completion Operations | Alternative Logging Program: An existing well (HULLABALOO STATE Y21-763 (05-123-45236)) on the pad was logged with open-hole resistivity 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 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. |

Total: 2 comment(s)

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|----------------------------|
| 403008337 | FORM 2 SUBMITTED |
| 403008385 | WELL LOCATION PLAT |
| 403032524 | OffsetWellEvaluations Data |
| 403037471 | DEVIATED DRILLING PLAN |
| 403037481 | DIRECTIONAL DATA |
| 403041180 | SURFACE AGRMT/SURETY |
| 403099598 | OFFSET WELL EVALUATION |

Total Attach: 7 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| OGLA | Technical Review Doc# 2369416 attached to Location File detailing the review of the Location. Form 4 Sundry 403090607 was submitted to supply additional BMPs and attachments. OGLA review complete. | 07/01/2022 |
| Permit | Made the following changes with concurrence from the operator: - Added revised comment regarding beyond unit setbacks to comment section under submit tab. - Changed the response to "Will oil based drilling fluids be used?" question on the Drilling Plan tab from "no" to "yes". OGLA has been notified of distance from well to nearest above ground utility issue on Form 2A. SLB has no concerns with this application. Permit Review Complete | 06/17/2022 |
| Permit | Emailed the SLB to notify them of this pending application. Emailed operator for the following: - Provide revised comment regarding beyond unit setback. (Missing footage calls and section) - Confirm distance from well to nearest above ground utility | 06/15/2022 |
| Engineer | Offset Wells evaluated with this APD. | 05/25/2022 |

Total: 4 comment(s)