

FORM

2

Rev
02/20

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:

402405998

APPLICATION FOR PERMIT TO:

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

Date Received:

08/19/2020

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: Roth

Well Number: A32-779

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 1001 NOBLE ENERGY WAY

City: HOUSTON State: TX Zip: 77070

Contact Name: Craig Richardson

Phone: (303)228-4232

Fax: ()

Email: Denverregulatory@nbleenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 30 Twp: 6N Rng: 64W Meridian: 6

Latitude: 40.461550

Longitude: -104.584660

Footage at Surface: 972 Feet FNL/FSL FNL 270 Feet FEL/FWL FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4698

County: WELD

GPS Data: GPS Quality Value: 1.2 Type of GPS Quality Value: PDOP Date of Measurement: 01/30/2020

Instrument Operator's Name: Duncan Hotchkiss

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.
 Footage at Top of Prod Zone: FNL/FSL FNL 460 FNL 683 FNL 460 FSL 711 FNL 460 FSL 711 FNL 460 FSL 711
 Sec: 29 Twp: 6N Rng: 64W Sec: 32 Twp: 6N Rng: 64W

LOCAL GOVERNMENT INFORMATION

County: WELD

Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition below.

☒ Yes ☐ NoIf 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 local government siting permit type is: 1041 WOGLA

The local government siting permit was filed on: 03/11/2020

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

1041WOGLA20-0021 approved 4/30/2020.

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Surface Owner is: ☐ is the mineral owner beneath the location.

(check all that apply) ☐ is committed to an Oil and Gas Lease.

☐ has signed the Oil and Gas Lease.

☐ is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

T6N-R64W, 6th P.M., Sec 32: NW/4

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

Federal or State Lease # _____

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

| | |
|-----------------------------------|------------------|
| Building: | <u>842</u> Feet |
| Building Unit: | <u>842</u> Feet |
| High Occupancy Building Unit: | <u>5280</u> Feet |
| Designated Outside Activity Area: | <u>5280</u> Feet |
| Public Road: | <u>257</u> Feet |
| Above Ground Utility: | <u>243</u> Feet |
| Railroad: | <u>5280</u> Feet |
| Property Line: | <u>270</u> Feet |
| School Facility: | <u>5280</u> Feet |
| School Property Line: | <u>5280</u> Feet |
| Child Care Center: | <u>5280</u> Feet |

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- 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, High Occupancy Building Unit, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☒ Buffer Zone
☐ Exception Zone
☐ Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 03/02/2020

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 616 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

Drilling and Spacing Unit configuration: T6N-R64W, 6th P.M., Sec 28: W2, W2E2; Sec 29: All; Sec 32: All; Sec 33: W2, W2E2

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: _____

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 | 407-2909 | 2240 | S28,W2,W2E2, S29All |
|----------|------|----------|------|---------------------|

DRILLING PROGRAM

Proposed Total Measured Depth: 17234 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: 25 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 Operations Plan)

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

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

| Casing Type | Size of Hole | Size of Casing | Wt/Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Btm | Cmt Top |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 26 | 16 | 42 | 0 | 80 | 6 | 80 | 0 |
| SURF | 13+3/4 | 9+5/8 | 36 | 0 | 1850 | 658 | 1850 | 0 |
| 1ST | 8+1/2 | 5+1/2 | 17 | 0 | 17234 | 1905 | 17234 | 2500 |

☐ Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☒ Rule 318A.a. Exception Location (GWA Windows).
- ☒ Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

☐ Rule 318.c. Exception Location from Rule or Spacing Order Number _____

☐ Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments Noble respectfully submits this application for a permit to drill, which is a part of a six well pad producing to pad A19-11 Tank.

The Roth A32-770 [Doc#: 402405986], permitted by Noble Energy, is the nearest well in the same formation, the distance was measured in 2D.

The nearest wellbore belonging to another operator was measured to the Ehrlich 14-32 [API #: 123-19318], operated by PDC Energy Inc. The distance was measured in 3D (from anti-collision report). The well status is currently PA. 317.s not required. Additional wells within 150' are the Ehrlich 13-32 [API 123-20768, PA], the Uhrich 13-29 [API 123-19355, PA], and the Andy 29-1 [API 123-13684, PA]. All wells are operated by PDC Energy Inc. Distances were calculated in 3D, 317.s not required.

The Exception Location and Twinning Waiver language is included in the attached SUA, (Page 4, Section 5).

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

This application is in a Comprehensive Drilling Plan No CDP #: _____

Location ID: 477361

Is this application being submitted with an Oil and Gas Location Assessment application? No

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: 8/19/2020 Email: julie.webb@nblenergy.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: 11/13/2020

Expiration Date: 11/12/2022

API NUMBER

05 123 51328 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"> 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 | <ol style="list-style-type: none"> 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 317.j and provide cement coverage from the end of production casing to a minimum of 200' 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 | <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>Blehm 30-1 (API NO 123-13685)Uhrich 33-30 (API NO 123-14679)</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>Uhrich 1 (API NO 123-12152)Roth A 30-7 (API NO 123-17294)</p> |
| Drilling/Completion Operations | <p>This Permit to Drill is approved subject to all the BMPs and COAs on the most recently approved Form 2A and any subsequently approved Form 4 for the Oil and Gas Location (Location ID # 477361). The most recently approved Form 2A and any subsequent Form 4s containing applicable COAs for this location shall be posted on site during construction, drilling, and completions operations.</p> |

Best Management Practices

| No | BMP/COA Type | Description |
|-----------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Planning | Upon initial rig-up and at least once every thirty (30) days during drilling operations thereafter, pressure testing of the casing string and each component of the blowout prevention equipment including flange connections shall be performed to seventy percent (70%) of working pressure or seventy percent (70%) of the internal yield of casing, whichever is less. Pressure testing shall be conducted and the documented results shall be retained by the operator for inspection by the Director for a period of one (1) year. Activation of the pipe rams for function testing shall be conducted on a daily basis when practicable. |
| 2 | Planning | Adequate blowout prevention equipment shall be used on all well servicing operations. Backup stabbing valves shall be required on well servicing operations during reverse circulation. Valves shall be pressure tested before each well servicing operation using both low-pressure air and high-pressure fluid. |
| 3 | Planning | Closed chamber drill stem tests shall be allowed. All other drill stem tests shall require approval by the Director. |
| 4 | Drilling/Completion Operations | Bradenhead Monitoring Operator will comply with the "COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area", dated May 29, 2012. |
| 5 | Drilling/Completion Operations | Alternative Logging Program: One of the first wells drilled on the pad will be logged with an open-hole resistivity log and gamma-ray, from the kick-off point into the surface casing. All wells on the pad will have a cement bond log (CBL) 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 clearly 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. |
| 6 | Drilling/Completion Operations | Blowout prevention equipment for drilling operations in a Designated Setback Location shall consist of (at a minimum): - Rig with Kelly. Double ram with blind ram and pipe ram; annular preventer or a rotating head. - Rig without Kelly. Double ram with blind ram and pipe ram. Mineral Management certification or Director approved training for blowout prevention shall be required for at least one (1) person at the well site during drilling operations. |
| 7 | Final Reclamation | 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: 7 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment List

| Att Doc Num | Name |
|--------------------|------------------------|
| 402405998 | FORM 2 SUBMITTED |
| 402407143 | DIRECTIONAL DATA |
| 402407175 | DEVIATED DRILLING PLAN |
| 402407177 | WELL LOCATION PLAT |

| | |
|-----------|-----------------------------|
| 402427443 | STIMULATION SETBACK CONSENT |
| 402427444 | SURFACE AGRMT/SURETY |
| 402432101 | OffsetWellEvaluations Data |
| 402458718 | EXCEPTION LOC REQUEST |
| 402532650 | OFFSET WELL EVALUATION |

Total Attach: 9 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Permit | Final Review Completed. | 11/12/2020 |
| Permit | Permitting review complete. | 11/12/2020 |
| Permit | COGCC conducted the technical review for the related Oil and Gas Location Assessment permit, Form 2A document #402354497 under the statutory authority provided through SB 19-181, including the Objective Criteria. The Director approved the Form 2A on 7/24/2020, establishing Location ID #477361 subject to conditions included in the permit. The well proposed by this related Form 2 was contemplated during COGCC's review of the Form 2A. The Objective Criteria Review Memo (Doc# 2479397) can be found in the document file for this Location. | 11/12/2020 |
| Engineer | Offset Wells Evaluated | 09/23/2020 |
| Permit | Surface Use Agreement has waivers for Rule 318A.a & 318A.c. See page 4, Section 5.A.6 | 09/16/2020 |
| Permit | Passed Completeness. | 09/16/2020 |

Total: 6 comment(s)