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: 402874378

Date Received: 02/01/2023

APPLICATION FOR PERMIT TO

[X] **Drill** [ ] Deepen [ ] Re-enter [ ] Recomplete and Operate

Amend [ ] Refile [ ] Sidetrack [ ]

TYPE OF WELL OIL [X] GAS [ ] COALBED [ ] OTHER:

ZONE TYPE SINGLE ZONE [X] MULTIPLE ZONES [ ] COMMINGLE ZONES [ ]

Well Name: Gabel Well Number: A10-625

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

[X] 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: NWSE Sec: 12 Twp: 6N Rng: 64W Meridian: 6

Footage at Surface: 2312 Feet FSL (FNL/FSL) 2210 Feet FEL (FEL/FWL)

Latitude: 40.499922 Longitude: -104.496750

GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 08/14/2019

Ground Elevation: 4716

Field Name: WATTENBERG Field Number: 90750

Well Plan: is [ ] Directional [X] 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: 12 Twp: 6N Rng: 64W Footage at TPZ: 981 FSL (FNL/FSL) 2445 FWL (FEL/FWL)

Measured Depth of TPZ: 7371 True Vertical Depth of TPZ: 6812

Base of Productive Zone (BPZ)

Sec: 10 Twp: 6N Rng: 64W Footage at BPZ: 1013 FSL 2435 FEL
FNL/FSL FEL/FWL

Measured Depth of BPZ: 17523 True Vertical Depth of BPZ: 6812

Bottom Hole Location (BHL)

Sec: 10 Twp: 6N Rng: 64W Footage at BHL: 1013 FSL 2435 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? [X] Yes [ ] No

[X] 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: [X] Fee [ ] State [ ] Federal [ ] Indian

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

- [X] 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.)

T6N-R64W, 6th P.M., Section 11: E/2 and E/2W/2

Total Acres in Described Lease: 480 Described Mineral Lease is: [X] Fee [ ] State [ ] Federal [ ] Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 935 Feet
Building Unit: 1004 Feet
Public Road: 2186 Feet
Above Ground Utility: 1053 Feet
Railroad: 5280 Feet
Property Line: 322 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	407-3389	1600	T6N-R64W, 6th P.M., Section 10: E/2; Section 11: All; Section 12: W/2; Section 13: N/2NW/4; Section 14: N/2N/2; Section 15: N/2NE/4

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: 660 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

See Approved Spacing Order 407-3389.

DRILLING PROGRAM

Proposed Total Measured Depth: 17523 Feet TVD at Proposed Total Measured Depth 6812 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: 75 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H_2S 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?

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	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	17523	2029	17523	

☐ 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	290	290	501-1000	Groundwater Sample	COGCC Environmental Sample Site #754128, 704790, & 754475
Confining Layer	Pierre Shale	290	290	500	500			
Groundwater	Upper Pierre Aquifer	500	500	1500	1500	1001-10000	Other	COGCC Project #2141, Figure 5
Confining Layer	Pierre Shale	1500	1500	3500	3500			
Hydrocarbon	Parkman	3500	3500	4000	3950			
Confining Layer	Pierre Shale	4000	3950	4400	4280			
Hydrocarbon	Sussex	4400	4280	4600	4520			
Confining Layer	Pierre Shale	4600	4520	5000	4880			
Hydrocarbon	Shannon	5000	4880	5200	5075			
Confining Layer	Pierre Shale	5200	5075	6100	5900			
Hydrocarbon	Tepee Buttes	6100	5900	6650	6460			
Confining Layer	Pierre Shale	6650	6460	6800	6580			
Hydrocarbon	Niobrara	6800	6580	17523	6812			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 Gabel A10-615 @ 660'.
The nearest outside operated well per anti-collision is the Adams 41-10H (API:05-123-33464) PR Status @ 75'. 408.u consent is attached.

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

Oil and Gas Development Plan Name: WR OGDP 2 OGDP ID#: 481735

Location ID: 483560

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: 2/1/2023 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: 4/10/2023

Expiration Date: 03/24/2030

API NUMBER
05 123 52126 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.

COA Type	Description
Drilling/Completion Operations	Operator will log two (2) wells (1 well east-west orientation and 1 well west-east orientation) during the first rig occupation with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for the two stratigraphically deepest wells on each side of the pad.
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, a second test is required between 6-9 months, of 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. 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 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. 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. Cockroft 44-11 (API NO 123-21919) Schrant 23-12 (API NO 123-22290) Schrant 24-12 (API NO 123-22291) Cockroft 34-11 (API NO 123-22342) Cockroft 43-11 (API NO 123-22343) Wolfrum 42-10 (API NO 123-22570) Cockroft 33-11 (API NO 123-22627)
Drilling/Completion Operations	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. Cockroft 11-23 (API NO 123-17673) Ray-Glo 1 (API NO 123-12985) Cockroft 11-13 (API NO 123-23037) Mckenney 14-12 (API NO 123-23763)
5 COAs	

Best Management Practices

No	BMP/COA Type	Description
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

Att Doc Num	Name
402874378	FORM 2 SUBMITTED
403215151	STIMULATION SETBACK CONSENT
403291945	OffsetWellEvaluations Data
403291950	OPEN HOLE LOGGING EXCEPTION
403307348	DIRECTIONAL DATA
403307353	DEVIATED DRILLING PLAN
403307354	WELL LOCATION PLAT
403369485	OFFSET WELL EVALUATION

Total Attach: 8 Files

General Comments

User Group	Comment	Comment Date
Permit	Final Review Completed.	04/07/2023
Permit	Permit Review Complete	04/05/2023
Permit	IN PROCESS: Operator provided requested information Made the following changes with concurrence from the operator: - Revised Spacing Order No from 407-2972 to 407-3389 Emailed operator for the following: - Confirm adding logging COA.	04/03/2023

Permit	ON HOLD: These applications have been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing the form 2's listed ON HOLD until additional information is received from the applicant. If the information is not received by June 12, 2023 these applications will be withdrawn. 402874304 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A12-641 402874307 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A12-622 402874309 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A12-613 402874312 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A13-685 402874315 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A13-677 402874321 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A10-645 402874371 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A10-635 402874378 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A10-625 402874379 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A10-615 402874381 2 IN PROCESS 2 02/01/2023 100322 NOBLE ENERGY INC WELD 12 6N 64W Gabel A15-685 In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing this written request for all additional information necessary for the COGCC to respond to this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application. In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for review. ALL APD's 1) Open Hole Logging Exception request letter does not reference adequate logs (Guidance is attached). Provide revised Open Hole Logging Exception request letter with acceptable referenced logs. If acceptable, I will attach the revised letter to all APD's, with permission from Noble. For the Gabel (A10-645, A10-635, A10-625, A10-615, A15-685) 1) These APD's reference Order No. 407-2972. However, the 407-2972 order was amended by Order No. 407-3389. I would like to revise the referenced APD's to Order No. 407-3389. Does Noble concur?	03/20/2023
Engineer	Offset Wells Evaluated.	02/07/2023
OGLA	The Commission approved OGDP #481735 on October 7, 2022 for the Oil and Gas Location related to this Form 2. OGLA task passed.	02/01/2023

Total: 6 comment(s)