

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO**

IN THE MATTER OF THE APPLICATION OF
NOBLE ENERGY, INC. – OPERATOR NO.
100322 – FOR AN ORDER TO DENY EIGHT (8)
OF VERDAD RESOURCES, LLC’S FORM 2
APPLICATIONS FOR PERMIT TO DRILL FOR
THE HP FARMS 02N-64W-04-1H WELL
(DOCUMENT NUMBER 401208875), HP
FARMS 02N-64W-04-2H WELL (DOCUMENT
NUMBER 401209991), HP FARMS 02N-64W-04-
3H WELL (DOCUMENT NUMBER 401210033),
HP FARMS 02N-64W-04-4H WELL
(DOCUMENT NUMBER 401210053), HP
FARMS 02N-64W-04-5H WELL (DOCUMENT
NUMBER 401210074), HP FARMS 02N-64W-04-
6H WELL (DOCUMENT NUMBER 401210095),
HP FARMS 02N-64W-04-7H WELL
(DOCUMENT NUMBER 401210141) AND HP
FARMS 02N-64W-04-8H WELL (DOCUMENT
NUMBER 401210120) WITH THE SURFACE
HOLE LOCATION IN SECTION 4, TOWNSHIP 2
NORTH, RANGE 64 WEST AND THE BOTTOM
HOLE LOCATION IN SECTION 9, TOWNSHIP 2
NORTH, RANGE 64 WEST, 6TH P.M.,
WATTENBERG FIELD, WELD COUNTY,
COLORADO PURSUANT TO RULE 503.b.(10)
AND THE COLORADO OIL AND GAS
CONSERVATION ACT

CAUSE NO. 1

DOCKET NO.

TYPE:GENERAL ADMINISTRATIVE

APPLICATION

COMES NOW Noble Energy, Inc. (Operator No. 100322) (“Noble” or “Applicant”), by its attorneys, Jost Energy Law, P.C., and makes this application to the Oil and Gas Conservation Commission of the State of Colorado (“Commission”) pursuant to Commission Rule 503.b.(10) for an order to deny Verdad Resources, LLC’s (“Verdad”) eight (8) Applications for Permit to Drill, Form 2, filed with the Commission on May 8, 2017 for the HP Farms 02N-64W-04-1H Well (Document Number 401208875), HP Farms 02N-64W-04-2H Well (Document Number 401209991), HP Farms 02N-64W-04-3H Well (Document Number 401210033), HP Farms 02N-64W-04-4H Well (Document Number 401210053), HP Farms 02N-64W-04-5H Well (Document Number 401210074), HP Farms 02N-64W-04-6H Well (Document Number 401210095), HP Farms 02N-64W-04-7H Well (Document Number 401210141) and HP Farms 02N-64W-04-8H Well (Document Number 401210120) (collectively, the “HP Farm Wells” or “HP Farms APD’s”) with the surface hole location in Section 4, Township 2 North, Range 64 West and the

bottom hole locations in Section 9, Township 2 North, Range 64 West, 6TH P.M., Wattenberg Field, Weld County, Colorado. In support thereof, Applicant states and alleges as follows:

A. Factual and Procedural Background

1. Applicant is a corporation duly authorized to conduct business in the State of Colorado, and is a registered operator in good standing with the Commission.

2. Applicant owns substantial leasehold interests or holds the right to drill and/or operate on the following lands (hereafter "Subject Lands"):

Township 2 North, Range 64 West, 6th P.M.
Section 4: All
Section 9: All

1,280 acres, more or less, Weld County, Colorado.

3. On May 7, 2017, Verdad filed Docket No. 170700414 with the Commission for an order to establish an approximate 480-acre drilling and spacing unit ("Application") for the following lands ("Verdad Application Lands"):

Township 2 North, Range 64 West, 6th P.M.
Section 4: SW/4
Section 9: W/2

Weld County, Colorado, containing approximately 480 acres ("DSU"). See *Verdad's Application on COGCC website, paragraph 2.*

4. The Application requests an order approving up to eight (8) new horizontal wells in the proposed approximate 480-acre drilling and spacing unit for development of oil, gas, and associated hydrocarbons from the Codell and Niobrara formations, Wattenberg Field. See *Verdad's Application, paragraph 8.*

5. On or about May 8, 2017, Verdad filed eight (8) Applications for Permit to Drill for each of the eight (8) wells requested in its Application. *Please see Exhibit 1 attached hereto and incorporated herein for Verdad's Application for Permit to Drill information for eight (8) HP Farms wells: HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, and HP Farms 02N-64W-04-8H.*

6. On May 23, 2017, as amended on June 14, 2017, Noble filed an application in Docket No. 170700429 for an order to establish an approximate 1,440-acre drilling and spacing unit ("Noble's Application") for the following lands ("Noble Application Lands"):

Township 2 North, Range 64 West, 6th P.M.

Section 4: All
Section 9: All
Section 16: N½N½

Weld County, Colorado, containing approximately 1,440 acres. See *Noble's Application on COGCC website in Docket No. 170700429, paragraph 2.*

7. Noble's Application requests an order approving up to eleven (11) new horizontal wells in the proposed approximate 1,440-acre drilling and spacing and unit for development of oil, gas, and associated hydrocarbons from the Codell and Niobrara formations, Wattenberg Field, for the Noble Application Lands. See *Noble's Application, paragraph 11*. Noble's Application confirms that there will be no more than three (3) well pads in the unit, or adjacent thereto, unless an exception is granted by the Director. See *Noble Application, Paragraph 9*.

8. On or about June 9, 2017, Noble filed eleven (11) Applications for Permits to Drill for certain of the wells requested in Noble's Application. *Please see Exhibit 2 attached hereto and incorporated herein for five (5) Applications for Permit to Drill the Rubicon State Y16-738, Rubicon State Y16-744, Rubicon State Y16-718, Rubicon State Y16-725, and Rubicon State Y16-731 wells (Six (6) more Rubicon Applications for Permit to Drill are filed with the COGCC but are not publically available on the website – Rubicon State Y16-751, Rubicon State Y16-757, Rubicon State Y16-763, Rubicon State Y16-770, Rubicon State Y16-776 and Rubicon State Y16-783).*

9. Noble owns approximately 87.42% of the leasehold interest in the Noble Application Lands, which encompass 100% of the lands in the Verdad Application. See *Noble's Application, paragraph 2*. Verdad owns approximately 5.56% of the leasehold interest in the Application Lands subject to Verdad's Application.

10. Noble's overall development plan for the Noble Application Lands, which encompass 100% of the Verdad Application Lands, provides for efficient and economic development, prevents increased surface impact, prevents dual operatorship issues, serves to prevent waste and to protect correlative rights in accordance with the Colorado Oil and Gas Conservation Act, C.R.S. 34-60-101, *et seq.*

11. Verdad's development plan proposed in Docket No. 170700414, which includes the eight (8) HP Farms APD's, will cause waste, will affect Noble's correlative rights and will not result in efficient and economic development of the hydrocarbon resource as required by the Oil and Gas Conservation Act, C.R.S. 34-60-101, *et seq.* for the Verdad Application Lands.

12. Noble has been pursuing substantial development plans to drill, complete and operate up to eleven (11) horizontal wells for the development and operation of the Codell and Niobrara Formations on the Subject Lands.

a. Noble's surface locations for the development of the Codell and Niobrara Formations in the Noble Application will be consolidated multi-well pads located in Section 16: N½N½, where the surface is owned by the Colorado State Land Board and Noble holds the necessary approvals from the Colorado State Land Board for each of the three locations. Further, Noble will utilize the multi-well surface locations for the development of hydrocarbons underlying the remainder of Section 16, Section 21, and Section 28, Township 2 North, Range 64 West. *Please see Exhibit 3 attached hereto and incorporated herein for ten (10) Applications for Permit to Drill for Hullabaloo State Y21-736, Hullabaloo State Y21-763, Hullabaloo State Y21-746, Hullabaloo State Y21-769, Hullabaloo State Y21-775, Hullabaloo State Y21-781, Hullabaloo State Y21-787, Hullabaloo State Y21-726, Hullabaloo State Y21-716, Hullabaloo State Y21-756.* Noble's purpose of consolidating wellpads is to ensure that there is minimal surface impact as it develops its majority leasehold in the area.

b. In collaboration with the Colorado State Land Board, the surface owner of the three (3) Oil and Gas Locations, Noble plans to utilize three (3) wellpads and one (1) production facility for the development of the Noble Application Lands, all within close proximity to a main gathering right-of-way. Noble's proposed gathering system intends to gather both Oil and Gas produced from the wells within the DSU, thus removing truck traffic from the roads in Weld County reducing impact to the local community. *See Exhibit 4, Noble's Proposed DSU with Noble's Planned Horizontal Wells, attached hereto and incorporated by reference herein; see Exhibit 5, Noble's Pad Map, attached hereto and incorporated by reference herein; see Exhibit 6, Noble's Aerial Map of the DSU, attached hereto and incorporated by reference herein.*

c. Noble's operational plan for the DSU is to use two (2) drill rigs to drill all of Noble's horizontal wells in the DSU from West to East in order. This will allow Noble to complete the drilling process for all of the horizontal wells within the DSU in a short period of time. Noble will use two (2) completions crews to complete the hydraulic fracturing process on the horizontal wells within the DSU soon after. By completing the horizontal wells in the DSU in a West to East fashion, pressure in the Codell and Niobrara Formations from the hydraulic fracturing process will prevent the risk of hydraulic fracturing into another horizontal well and will maintain the long-term productive life of the horizontal wells.

d. Noble has the eleven (11) horizontal wells on the drilling schedule for third quarter 2018.

13. The Commission's approval of the HP Farms APD's for Verdad's proposed 480-acre proposed drilling and spacing unit in which Noble owns 83.33% of the leasehold in the Application Lands (approximately 83.33% of the proposed unit) will result in hydrocarbon and economic waste, increased surface impacts, inefficient and uneconomic development of the Application Lands and adjacent hydrocarbons, and will harm Noble's correlative rights.

14. Noble has very specific development plans for the Verdad Application Lands that cover the locations of the HP Farms APDs, as evidenced by Noble's own application for a 1,440 acre drilling and spacing unit in Docket No. 170700429 and the filing of eleven (11) Applications for Permit to Drill on such Application Lands. Noble has been working with the Colorado State Land Board, as well as its mineral interest owners, for the development of the Application Lands for a period of time, including Verdad. Noble's engineering and geological data present better configurations that would lead to more resources being developed and more predictable drainage in the Application Lands. Noble maintains that its development plan for a larger drilling and spacing unit, with more wells of longer lateral length, will serve to ensure that the mandates of the Oil and Gas Conservation Act, as set forth above, are carried out as Noble's development of the Application Lands occurs.

15. Should Verdad's APD's be approved, "Waste" as defined by the Act will result, inefficient and uneconomic development will result, and Noble's correlative rights will be harmed as the majority leasehold interest owner in the proposed unit. Noble maintains and will provide support for the fact that the HP Farms APD's should be developed utilizing longer lateral wells to ensure that the development and operation of the hydrocarbons is efficient, and also to ensure that its correlative rights are protected from harm such inefficient and uneconomic development. Noble has its own plans to develop its leasehold interests that stem from substantial investments in determining the geology of the area and developing engineering plans to access the resource. These determinations inform Noble that HP Farms APD's do not present the best configuration for efficient and thorough drainage that will make the best use of the common source of supply.

16. Noble did not receive notification of the HP Farms APD's under the applicable Commission Rules.

17. As of the date of this filing, the eight (8) HP Farms APD's are currently "in process" with the Commission.

B. Approval of Verdad's HP Farms APD's Will Adversely Affect and Aggrieve Noble

18. Noble submits this Application to the Commission pursuant to the Oil and Gas Conservation Act, C.R.S. 34-60-101, *et seq.* and Commission Rule 503.b.(10) which provides:

"(10) For purposes of seeking relief or a ruling from the Commission on any other matter not described in (1) through (9) above, only persons who can demonstrate that they are directly and adversely affected or aggrieved by the conduct of oil and gas operations or an order of the Commission and that their interest is entitled to legal protection under the Act may be an applicant." See *COGCC Rule 503.b.(10)*.

19. As a 83.33% leasehold interest Owner in the Verdad Application Lands covering the HP Farms APD's, holder of a Surface Use Agreement within the corresponding proposed DSU, and Applicant in Docket No. 170700429, Noble has an interest that is entitled to legal protection under the Colorado Oil and Gas Conservation Act. See COGCC 100 Series Rules, *Definition of Owner*, and COGCC Rule 503.b.(10).

20. Noble is a proper Applicant under Rule 503.b(10).

21. Based on the facts set forth in Paragraphs 1 through 18 above, any approval of any of the eight (8) HP Farms APD's will adversely affect and aggrieve Noble, as well as the mineral interest owners of Noble's leasehold. Noble, and its mineral interest owners, will be substantially affected and aggrieved by the approval of the HP Farms APD's due to the immediate loss of approximately six (6) of Noble's planned horizontal wells and overall affect on Noble's collaborative development plan for the drilling and spacing unit proposed in Noble's Application.

C. Approval of Verdad's HP Farms APD's Will Cause Waste in Violation of the Colorado Oil and Gas Conservation Act

22. C.R.S. 34-60-107 provides specifically that "[t]he waste of oil and gas in the state of Colorado is prohibited by this article. See C.R.S. 34-60-107.

23. C.R.S. 34-60-103(11), (12) and (13) define waste as follows:

(11) "Waste", as applied to gas, includes the escape, blowing, or releasing, directly or indirectly into the open air, of gas from wells productive of gas only, or gas in an excessive or unreasonable amount from wells producing oil, or both oil and gas; and the production of gas in quantities or in such manner as unreasonably reduces reservoir pressure or unreasonably diminishes the quantity of oil or gas that ultimately may be produced; excepting gas that is reasonably necessary in the drilling, completing, testing, and in furnishing power for the production of wells.

(12) "Waste", as applied to oil, includes underground waste; inefficient, excessive, or improper use or dissipation of reservoir energy, including gas energy and water drive; surface waste; open-pit storage; and waste incident to the production of oil in excess of the producer's aboveground storage facilities and lease and contractual requirements, but excluding storage, other than open-pit storage, reasonably necessary for building up or maintaining crude stocks and products thereof for consumption, use, and sale.

(13) "Waste", in addition to the meanings as set forth in subsections (11) and (12) of this section, means:

(a) *Physical waste, as that term is generally understood in the oil and gas industry;*

(b) *The locating, spacing, drilling, equipping, operating, or producing of any oil or gas well or wells in a manner which causes or tends to cause reduction in quantity of oil or gas ultimately recoverable from a pool under prudent and proper operations or which causes or tends to cause unnecessary or excessive surface loss or destruction of oil or gas;*

(c) Abuse of the correlative rights of any owner in a pool due to nonuniform, disproportionate, unratable, or excessive withdrawals of oil or gas therefrom, causing reasonably avoidable drainage between tracts of land or resulting in one or more producers or owners in such pool producing more than his equitable share of the oil or gas from such pool.

C.R.S. 34-60-103(11), (12) and (13)(emphasis added).

24. C.R.S. 34-60-117(a) provides that the "authority to prevent waste and protect correlative rights of all owners in every field or pool, and when necessary shall limit the production of oil and gas in any field or pool in the exercise of this authority." C.R.S. § 34-60-117(a).

25. If approval of the HP Farms APD's, and the subsequent drilling of such APD's, is granted by the Commission, then such allowance will be in direct violation of the Colorado Oil and Gas Conservation Act C.R.S. 34-60-107 and 34-60-117(a).

26. The approval of the HP Farms APD's and subsequent drilling of the HP Farms wells will cause significant physical waste and waste of hydrocarbon resources in violation of the Colorado Oil and Gas Conservation Act.

27. The bottomhole locations of the HP Farms wells within the proposed DSU will materially impede and interfere with the horizontal wellbore orientation, development and operation of Noble's planned horizontal wellbores from Noble's surface location in Section 16 of the Noble Application Lands.

28. Upon information and belief, Noble maintains that approval of the HP Farms APD's will create waste through inter-well hydraulic fracture interference. Noble has seen the effects of turning a group of wells on (first set) and subsequently drilling and completing parallel wells (second set). The second set of wells interfered with and significantly affected the first set of wells, causing irreparable damage to the productive life of 6 of the wells leaving approximately a significant amount of barrels of oil equivalent in the ground. This waste can be avoided if the Commission denies Verdad's HP Farms APD's and allows Noble to proceed with the collaborative development and operational

plan set forth in Paragraph 12 above to drill and complete all wells in the DSU at consecutive order.

29. Noble maintains that any approval of the HP Farms APD's also violates Noble's interests and directly and adversely affects Noble, and is also in violation of C.R.S. 34-60-107.

C. Approval of Verdad's HP Farms APD's Violate Noble's Correlative Rights in Violation of the Colorado Oil and Gas Conservation Act

30. Noble further maintains that the issuance of any of HP Farms APD's violates Noble's correlative rights as to its interests and ability to produce hydrocarbons from the Noble's proposed drilling and spacing unit in Docket No. 170700429.

31. C.R.S. § 34-60-103(4) defines "correlative rights" to mean "that each owner and producer in a common pool or source of supply of oil and gas shall have an equal opportunity to obtain and produce his just and equitable share of the oil and gas underlying such pool or source of supply."

32. Noble, as an 87.36% percent leasehold interest owner in the Noble Application Lands in Docket No. 170700429, has the right to drill and produce from the Subject Lands and proposed drilling and spacing unit. Noble has its own long-term and collaborative development plan to develop and operate its leasehold interests in the Codell and Niobrara Formations on the Noble Application Lands and has made substantial investments in determining the geology of the area and developing engineering plans to access and efficiently and economically develop the hydrocarbons. *See Paragraphs 1 through 15 above.*

33. Any approval of the HP Farms APD's will violate Noble's correlative rights.

D. Approval of Verdad's HP Farms APD's Will Result in Dual Operatorship

34. C.R.S. 34-60-116(2) mandates efficient and economic development of a drilling and spacing unit and the underlying hydrocarbon resource.

35. Any approval of the HP Farms APD's will violate C.R.S. 34-60-116(2) as the Commission will effectively allow dual operatorship of the Noble Application Lands which will cause both physical and hydrocarbon waste and inefficient development of the hydrocarbon resource in violation of the Colorado Oil and Gas Conservation Act.

36. Dual operatorship will also lead to increased truck traffic, impact to surface and other local land use impacts from the dual operations and well as unnecessary confusion to interest owners as to production payments and allocation of proceeds.

37. Based on Paragraphs 1 through 36, the Commission should not approve the HP Farms APD's as any approval will result in an immediate, known violation of the

Oil and Gas Conservation Act and such approval would cause waste, harm correlative rights and allow Verdad to proceed with inefficient and uneconomic development of the hydrocarbon pool underlying the Noble Application Lands and drilling and spacing unit.

38. Applicant certifies that copies of this Application will be served on Verdad within seven (7) days of the date hereof, as required by Rule 503.e.

39. Noble respectfully requests that, in order to prevent waste, to protect correlative rights, to prevent an express violation of the Colorado Oil and Gas Conservation Act and to Noble's collaborative development plan for the Noble Application Lands and corresponding drilling and spacing unit in Docket No. 170700429, this Commission issue an order denying Verdad's eight (8) HP Farms APD's.

WHEREFORE, Applicant respectfully requests that this matter be set for hearing in September 2017, that notice be given as required by law, and that upon such hearing, the Commission enter its order to:

- A. Deny Verdad's Application for Permit to Drill, Form 2, for the HP Farms 02N-64W-04-1H Well (Document Number 401208875), HP Farms 02N-64W-04-2H Well (Document Number 401209991), HP Farms 02N-64W-04-3H Well (Document Number 401210033), HP Farms 02N-64W-04-4H Well (Document Number 401210053), HP Farms 02N-64W-04-5H Well (Document Number 401210074), HP Farms 02N-64W-04-6H Well (Document Number 401210095), HP Farms 02N-64W-04-7H Well (Document Number 401210141) and HP Farms 02N-64W-04-8H Well (Document Number 401210120); and
- B. For such other findings and orders as the Commission may deem proper or advisable in this matter.

Dated: July 11th, 2017.

Respectfully submitted:

Noble Energy, Inc.

By:




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Kelsey Wasylenky
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ATTN: Ryan Antonio
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Denver, CO 80202

VERIFICATION

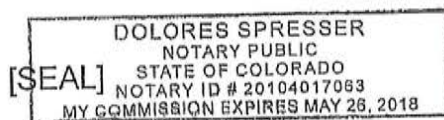
STATE OF COLORADO)
) ss.
CITY AND COUNTY OF DENVER)

Ryan D. Antonio, of lawful age, being first duly sworn upon oath, deposes and says that he is a Land Manager for Noble Energy, Inc., and that he has read the foregoing Application and that the matters therein contained are true to the best of his knowledge, information and belief.


Ryan D. Antonio
Attorney-In-Fact
Noble Energy, Inc.

Subscribed and sworn to before me this 10th day of July, 2017.

Witness my hand and official seal.



My commission expires: May 26, 2018


Notary Public

FORM
2
Rev
08/16

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:
401208875

APPLICATION FOR PERMIT TO:

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

Date Received:

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

05/08/2017

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: HP Farms

Well Number: 02N-64W-04-1H

Name of Operator: VERDAD RESOURCES LLC

COGCC Operator Number: 10651

Address: 5950 CEDAR SPRINGS ROAD

City: DALLAS

State: TX

Zip: 75235

Contact Name: Kenny Trueax

Phone: (720)651-8409

Fax: ()

Email: Regulatory@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170009

WELL LOCATION INFORMATION

QtrQtr: NWSW Sec: 4 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.166702 Longitude: -104.561343

Footage at Surface: 2375 Feet FNL/FSL FSL 1260 Feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4894

County: WELD

GPS Data:

Date of Measurement: 02/02/2017 PDOP Reading: 1.5 Instrument Operator's Name: Alan Hnizdo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL
2180 FSL 480 FWL 460 FSL 480 FWL
Sec: 4 Twp: 2N Rng: 64W Sec: 9 Twp: 2N Rng: 64W

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: Yes

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.)

SW/4 of Sec 4, 2N 64W

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: 5280 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 2442 Feet
Railroad: 5280 Feet
Property Line: 254 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, and Designated Outside Activity Area - 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: _____

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: 840 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

DSU configuration: T2N-R64W: Sec. 4: SW/4; Sec. 9: W/2; 480 acres

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODLL	CODL			

DRILLING PROGRAM

Proposed Total Measured Depth: 14103 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: 1140 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?

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	24	16	65	0	80	70	80	0
SURF	13+1/2	9+5/8	30	0	1700	462	1700	0
1ST	8+1/2	5+1/2	20	0	14103	1818	14103	0

☐ 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

Well is proposed as part of an 8 well pad including the HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, HP Farms 02N-64W-04-8H.

Nearest existing non-op well is the Perkins #43-5 which is 1134' as measured from COGCC GIS.

Surface Use Agreement has waivers for Rules 305, 306, 318A.a & 318A.c. See SUA attached.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Kenny Trueax

Title: Regulatory Manager Date: 5/8/2017 Email: Regulatory@verdadoil.com

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No	BMP/COA Type	Description
1	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
2	General Housekeeping	When conditions exist that roads are excessively muddy, additional fill material will be added in order to dehydrate the environment and reduce the amount of material that is transported from the wells roads and location to off-site areas.
3	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Spill Prevention and Control Countermeasure (SPCC) plans are in place to address any possible spill associated with Oil and Gas operations.
4	Material Handling and Spill Prevention	Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required.
5	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
6	Noise mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
7	Odor mitigation	Hydrocarbon odors from production facilities are minimized and eliminated by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors. All tanks are sealed with best available industry thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.
8	Drilling/Completion Operations	Operator will use a closed loop system for drilling and fluid management. No pits will be dug.
9	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
10	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling.
11	Drilling/Completion Operations	Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012.
12	Drilling/Completion Operations	Rule 604.c.1: 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.
13	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
14	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.

Total: 14 comment(s)

Applicable Policies and Notices to Operators

Policy

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401208875	FORM 2 SUBMITTED
401213025	WELL LOCATION PLAT
401213845	DIRECTIONAL DATA
401213891	DEVIATED DRILLING PLAN
401215258	OFFSET WELL EVALUATION
401271446	EXCEPTION LOC REQUEST
401289842	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Passed Completeness.	05/31/2017
Permit	Returned to draft per operator's request.	05/09/2017

Total: 2 comment(s)

Public Comments

No public comments were received on this application during the comment period.

FORM
2
Rev
08/16

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:
401209991

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____
ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Refilling ☐
Sidetrack ☐

Date Received:
05/08/2017

Well Name: HP Farms Well Number: 02N-64W-04-2H
Name of Operator: VERDAD RESOURCES LLC COGCC Operator Number: 10651
Address: 5950 CEDAR SPRINGS ROAD
City: DALLAS State: TX Zip: 75235
Contact Name: Kenny Trueax Phone: (720)651-8409 Fax: ()
Email: Regulatory@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170009

WELL LOCATION INFORMATION

QtrQtr: NWSW Sec: 4 Twp: 2N Rng: 64W Meridian: 6
Latitude: 40.166701 Longitude: -104.561272

Footage at Surface: 2375 Feet FNL/FSL FSL 1280 Feet FEL/FWL FEL
Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4894 County: WELD

GPS Data:
Date of Measurement: 02/08/2017 PDOP Reading: 1.5 Instrument Operator's Name: Alan Hnizdo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL
2180 FSL 690 FWL 460 FSL 690 FWL
Sec: 4 Twp: 2N Rng: 64W Sec: 9 Twp: 2N Rng: 64W

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: Yes

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.)

SW/4 of Sec 4, T2N-R64W

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: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 2442 Feet

Railroad: 5280 Feet

Property Line: 255 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, and Designated Outside Activity Area - 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: _____

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: 210 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

DSU configuration: T2N-R64W: Sec. 4: SW/4; Sec. 9: W/2; 480 acres

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			

DRILLING PROGRAM

Proposed Total Measured Depth: 13974 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: 1120 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?

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	24	16	65	0	80	70	80	0
SURF	13+1/2	9+5/8	36	0	1700	462	1700	0
1ST	8+1/2	5+1/2	20	0	13974	1804	13974	0

☐ 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

Well is proposed as part of an 8 well pad including the HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, HP Farms 02N-64W-04-8H.

Nearest existing non-op well is the HSR Gutttersen #5-4 which is 1120' as measured from COGCC GIS. This well is AL and not subject to pre-frac notification.

Surface Use Agreement has waivers for Rules 305, 306, 318A.a & 318A.c. See SUA attached.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____

Print Name: Kenny Trueax

Title: Regulatory Manager

Date: 5/8/2017

Email: Regulatory@verdadoil.com

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

COGCC Approved: _____

Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No BMP/COA Type

Description

1	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
2	General Housekeeping	When conditions exist that roads are excessively muddy, additional fill material will be added in order to dehydrate the environment and reduce the amount of material that is transported from the wells roads and location to off-site areas.

3	Material Handling and Spill Prevention	Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required.
4	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Spill Prevention and Control Countermeasure (SPCC) plans are in place to address any possible spill associated with Oil and Gas operations.
5	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
6	Noise mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
7	Odor mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
8	Drilling/Completion Operations	Operator will use a closed loop system for drilling and fluid management. No pits will be dug.
9	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' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling.
10	Drilling/Completion Operations	Rule 604.c.1: 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.
11	Drilling/Completion Operations	Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012.
12	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
13	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
14	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.

Total: 14 comment(s)

Applicable Policies and Notices to Operators

Policy

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401209991	FORM 2 SUBMITTED
401214005	DIRECTIONAL DATA
401214007	WELL LOCATION PLAT
401214009	DEVIATED DRILLING PLAN
401215341	OFFSET WELL EVALUATION
401271615	EXCEPTION LOC REQUEST
401289845	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Returned to draft per operator's request.	05/22/2017
Permit	Returned to draft per operator's request.	05/09/2017

Total: 2 comment(s)

Public Comments

No public comments were received on this application during the comment period.

FORM
2
Rev
08/16

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:
401210033

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____
ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Refiling ☐
Sidetrack ☐

Date Received:
05/08/2017

Well Name: HP Farms Well Number: 02N-64W-04-3H
Name of Operator: VERDAD RESOURCES LLC COGCC Operator Number: 10651
Address: 5950 CEDAR SPRINGS ROAD
City: DALLAS State: TX Zip: 75235
Contact Name: Kenny Trueax Phone: (720)651-8409 Fax: ()
Email: Regulatory@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170009

WELL LOCATION INFORMATION

QtrQtr: NWSW Sec: 4 Twp: 2N Rng: 64W Meridian: 6
Latitude: 40.166701 Longitude: -104.561200

Footage at Surface: 2375 Feet FNL/FSL FSL 1300 Feet FEL/FWL FWL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4894 County: WELD

GPS Data:
Date of Measurement: 02/02/2017 PDOP Reading: 1.7 Instrument Operator's Name: Alan Hnizdo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FSL 900 FWL 460 FSL 900 FWL
2180 FSL 900 FWL 460 FSL 900 FWL
Sec: 4 Twp: 2N Rng: 64W Sec: 9 Twp: 2N Rng: 64W

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: Yes

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.)

SW/4 Sec. 4, 2N 64W

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: 5280 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 2442 Feet
Railroad: 5280 Feet
Property Line: 255 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, and Designated Outside Activity Area - 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: _____

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: 210 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

DSU configuration: T2N-R64W; Sec. 4: SW/4; Sec. 9: W/2; 480 acres

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			

DRILLING PROGRAM

Proposed Total Measured Depth: 13961 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: 1036 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?

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	24	16	65	0	80	70	80	0
SURF	13+1/2	9+5/8	36	0	1700	462	1700	0
1ST	.8+1/2	5+1/2	20	0	13961	1802	13961	0

☐ 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

Well is proposed as part of an 8 well pad including the HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, HP Farms 02N-64W-04-8H.

Surface Use Agreement has waivers for Rules 305, 306, 318A.a & 318A.c. See SUA attached.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Kenny Trueax

Title: Regulatory Manager Date: 5/8/2017 Email: Regulatory@verdadoil.com

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

COGCC Approved: _____ Director of COGCC Date: _____
Expiration Date: _____

API NUMBER

05

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

Best Management Practices

No	BMP/COA Type	Description
1	Planning	Well is planned on a proposed multi-well pad.
2	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
3	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling, and operations associated with CDPHE permits. BMPs for stormwater will be implemented around the perimeter of the pad prior to or during construction and will vary according to the location. These BMPs will remain in place and maintained throughout operations until final reclamation.
4	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Spill Prevention and Control Countermeasure (SPCC) plans are in place to address any possible spill associated with Oil and Gas operations.
5	Material Handling and Spill Prevention	Cuttings Disposal: During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Verdad's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.
6	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
7	Noise mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
8	Drilling/Completion Operations	Operator will use a closed loop system for drilling and fluid management. No pits will be dug.
9	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling.
10	Drilling/Completion Operations	Rule 604.c.1: 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.
11	Drilling/Completion Operations	Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012.
12	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
13	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
14	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.

Applicable Policies and Notices to Operators

Policy

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401210033	FORM 2 SUBMITTED
401214012	WELL LOCATION PLAT
401214013	DEVIATED DRILLING PLAN
401214016	DIRECTIONAL DATA
401215347	OFFSET WELL EVALUATION
401273025	EXCEPTION LOC REQUEST
401289848	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Changed PDOP reading on Well Location Tab per operator. Passed Completeness.	05/30/2017
Permit	Returned to draft for: -Well type on Well Location Tab should be horizontal.	05/22/2017
Permit	Returned to draft per operator's request.	05/09/2017

Total: 3 comment(s)

Public Comments

No public comments were received on this application during the comment period.

FORM
2
Rev
08/16

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:

401210053

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Date Received:

05/08/2017

Well Name: HP Farms

Well Number: 02N-64W-04-4H

Name of Operator: VERDAD RESOURCES LLC

COGCC Operator Number: 10651

Address: 5950 CEDAR SPRINGS ROAD

City: DALLAS

State: TX

Zip: 75235

Contact Name: Kenny Trueax

Phone: (720)651-8409

Fax: ()

Email: Regulatory@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20172009

WELL LOCATION INFORMATION

QtrQtr: NWSW Sec: 4 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.166701

Longitude: -104.561129

Footage at Surface: 2375 Feet FNL/FSL FSL 1320 Feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4893

County: WELD

GPS Data:

Date of Measurement: 02/02/2017 PDOP Reading: 1.5 Instrument Operator's Name: Alan Hnizdo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FSL 1110 FWL 460 FSL 1110 FWL
2180 FSL 1110 FWL 460 FSL 1110 FWL
Sec: 4 Twp: 2N Rng: 64W Sec: 9 Twp: 2N Rng: 64W

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: Yes

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.)

SW/4 Sec. 4, 2N 64W

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: 5280 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 2442 Feet
Railroad: 5280 Feet
Property Line: 255 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, and Designated Outside Activity Area - 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: _____

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: 210 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

DSU configuration: T2N-R64W: Sec. 4: SW/4; Sec. 9: W/2; 480 acres

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			

DRILLING PROGRAM

Proposed Total Measured Depth: 13963 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: 984 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?

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	24	18	65	0	80	40	80	0
SURF	13+1/2	9+5/8	36	0	1700	462	1700	0
1ST	8+1/2	5+1/2	20	0	13963	1803	13963	0

☐ 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

Well is proposed as part of an 8 well pad including the HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, HP Farms 02N-64W-04-8H.

Nearest existing non-op well is the HSR-GUTTERSEN #6-4 which is 1112' as measured from the COGCC site. This well is AL and not subject to pre-frac notification requirements.

Surface Use Agreement has waivers for Rules 305, 306, 318A.a & 318A.c. See SUA attached.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____

Print Name: Kenny Trueax

Title: Regulatory Manager

Date: 5/8/2017

Email: ktrueax@verdadoil.com

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

COGCC Approved: _____

Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

Best Management Practices

No BMP/COA Type

Description

1	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
2	General Housekeeping	Mud control: when conditions exist that roads are excessively muddy, additional fill material will be added in order to dehydrate the environment and reduce the amount of material that is transported from the wells roads and location to off-site areas.

3	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required. Spill prevention Control Countermeasure (SPCC) will be in place to address any possible spill associated with oil and gas operations.
4	Material Handling and Spill Prevention	During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Operator's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.
5	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
6	Noise mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
7	Odor mitigation	Hydrocarbon odors from production facilities are minimized and eliminated by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors. All tanks will be sealed with thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.
8	Drilling/Completion Operations	Operator will use a closed loop system for drilling and fluid management. No pits will be dug.
9	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling.
10	Drilling/Completion Operations	Rule 604.c.1: 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.
11	Drilling/Completion Operations	Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012.
12	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
13	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
14	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.

Total: 14 comment(s)

Applicable Policies and Notices to Operators

Policy

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401210053	FORM 2 SUBMITTED
401214018	WELL LOCATION PLAT
401214019	DEVIATED DRILLING PLAN
401214020	DIRECTIONAL DATA
401215349	OFFSET WELL EVALUATION
401273074	EXCEPTION LOC REQUEST
401289867	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Passed Completeness.	05/30/2017
Permit	Returned to draft per operator's request.	05/22/2017
Permit	Returned to draft per operator's request.	05/09/2017

Total: 3 comment(s)

Public Comments

No public comments were received on this application during the comment period.

FORM

2

Rev
08/16

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:

401210074

APPLICATION FOR PERMIT TO:

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

Date Received:

05/08/2017

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

Well Name: HP Farms

Well Number: 02N-64W-04-5H

Name of Operator: VERDAD RESOURCES LLC

COGCC Operator Number: 10651

Address: 5950 CEDAR SPRINGS ROAD

City: DALLAS

State: TX

Zip: 75235

Contact Name: Kenny Trueax

Phone: (720)651-8409

Fax: ()

Email: Regulatory@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20172009

WELL LOCATION INFORMATION

QtrQtr: NESW Sec: 4 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.166701

Longitude: -104.561057

Footage at Surface: 2375 Feet FNL/FSL FSL 1340 Feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4893

County: WELD

GPS Data:

Date of Measurement: 02/02/2017 PDOP Reading: 1.5 Instrument Operator's Name: Alan Hnizdo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.
 Footage at Top of Prod Zone: FNL/FSL FSL 1320 FWL 460 FSL 1320 FWL
 Sec: 4 Twp: 2N Rng: 64W Sec: 9 Twp: 2N Rng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe 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: Yes

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.)

SW/4 Sec. 4, 2N 64W

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: 5280 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 2442 Feet
Railroad: 5280 Feet
Property Line: 255 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, and Designated Outside Activity Area - 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: _____

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: 840 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 0 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

DSU configuration = 480 acres consisting of: T2N-R64W: Sec. 4: SW/4; Sec. 9: W/2

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL			

DRILLING PROGRAM

Proposed Total Measured Depth: 14060 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: 1105 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?

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	24	16	65	0	80	70	80	0
SURF	13+1/2	9+5/8	36	0	1700	462	1700	0
1ST	8+1/2	5+1/2	20	0	14060	1813	14060	0

☐ 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

Well is part of the 8 well pad consisting of the proposed HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, HP Farms 02N-64W-04-8H.

Nearest existing non-op well is the HSR-GUTTERSEN #6-4 which is 1105' as measured from the COGCC site. This well is AL and not subject to pre-frac notification.

Surface Use Agreement has waivers for Rules 305, 306, 318A.a & 318A.c. See SUA attached.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Kenny Trueax

Title: Regulatory Manager Date: 5/8/2017 Email: Regulatory@verdadoil.com

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

Best Management Practices

No BMP/COA Type

Description

1	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
2	General Housekeeping	Mud control: when conditions exist that roads are excessively muddy, additional fill material will be added in order to dehydrate the environment and reduce the amount of material that is transported from the wells roads and location to off-site areas.

3	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required. Spill prevention Control Countermeasure (SPCC) will be in place to address any possible spill associated with oil and gas operations.
4	Material Handling and Spill Prevention	During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Operator's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.
5	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
6	Noise mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
7	Odor mitigation	Hydrocarbon odors from production facilities are minimized and eliminated by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors. All tanks will be sealed with thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.
8	Drilling/Completion Operations	Operator will use a closed loop system for drilling and fluid management. No pits will be dug.
9	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling.
10	Drilling/Completion Operations	Rule 604.c.1: 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.
11	Drilling/Completion Operations	Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012.
12	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
13	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
14	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.

Total: 14 comment(s)

Applicable Policies and Notices to Operators

Policy

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401210074	FORM 2 SUBMITTED
401214023	DIRECTIONAL DATA
401214024	WELL LOCATION PLAT
401214025	DEVIATED DRILLING PLAN
401215359	OFFSET WELL EVALUATION
401273068	EXCEPTION LOC REQUEST
401289871	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Passed Completeness.	05/30/2017
Permit	Returned to draft per operator's request.	05/22/2017
Permit	Returned to draft per operator's request.	05/09/2017

Total: 3 comment(s)

Public Comments

No public comments were received on this application during the comment period.

FORM
2
Rev
08/16

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:
401210095

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

Date Received:
05/08/2017

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: HP Farms

Well Number: 02N-64W-04-6H

Name of Operator: VERDAD RESOURCES LLC

COGCC Operator Number: 10651

Address: 5950 CEDAR SPRINGS ROAD

City: DALLAS

State: TX

Zip: 75235

Contact Name: Kenny Trueax

Phone: (720)651-8409

Fax: ()

Email: ktrueax@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170009

WELL LOCATION INFORMATION

QtrQtr: NWSW Sec: 4 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.166701

Longitude: -104.560986

Footage at Surface: 2375 Feet FNL/FSL FSL 1360 Feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4893

County: WELD

GPS Data:

Date of Measurement: 02/02/2017 PDOP Reading: 1.5 Instrument Operator's Name: Alan Hnizdo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL
2180 FSL 1530 FWL 460 FSL 1530 FWL
Sec: 4 Twp: 2N Rng: 64W Sec: 9 Twp: 2N Rng: 64W

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: Yes

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.)

SW/4 Sec. 4 2N 64W

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: Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 2441 Feet

Railroad: 5280 Feet

Property Line: 255 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, and Designated Outside Activity Area - 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: _____

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: 210 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

DSU configuration = 480 acres consisting of: T2N-R64W: Sec. 4: SW/4; Sec. 9: W/2

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NI0BRARA	NBRR			

DRILLING PROGRAM

Proposed Total Measured Depth: 13953 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 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? _____

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	24	16	65	0	80	70	80	0
SURF	13+1/2	9+5/8	36	0	1700	462	1700	0
1ST	8+1/2	5+1/2	20	0	13953	1802	13953	0

☐ 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

Well is proposed as part of an 8 well pad including the HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, HP Farms 02N-64W-04-8H.

Nearest existing non-op well is the HSR-GUTTERSEN #6-4 which is 1073' as measured from the COGCC site. This well is AL and not subject to pre-frac notification.

Surface Use Agreement has waivers for Rules 305, 306, 318A.a & 318A.c. See SUA attached.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Kenny Trueax

Title: Regulatory Manager Date: 5/8/2017 Email: ktrueax@verdadoil.com

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

COGCC Approved: _____

Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

Best Management Practices

No BMP/COA Type

Description

1	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
2	General Housekeeping	Mud control: when conditions exist that roads are excessively muddy, additional fill material will be added in order to dehydrate the environment and reduce the amount of material that is transported from the wells roads and location to off-site areas.

3	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required. Spill prevention Control Countermeasure (SPCC) will be in place to address any possible spill associated with oil and gas operations.
4	Material Handling and Spill Prevention	During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Operator's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.
5	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
6	Noise mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
7	Odor mitigation	Hydrocarbon odors from production facilities are minimized and eliminated by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors. All tanks will be sealed with thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.
8	Drilling/Completion Operations	Operator will use a closed loop system for drilling and fluid management. No pits will be dug.
9	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling.
10	Drilling/Completion Operations	Rule 604.c.1: 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.
11	Drilling/Completion Operations	Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012.
12	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
13	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
14	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.

Total: 14 comment(s)

Applicable Policies and Notices to Operators

Policy

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401210095	FORM 2 SUBMITTED
401214231	DEVIATED DRILLING PLAN
401214235	DIRECTIONAL DATA
401214243	WELL LOCATION PLAT
401215362	OFFSET WELL EVALUATION
401273100	EXCEPTION LOC REQUEST
401289861	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	-Changed typo in Surety ID number per operator. -Per operator, added check to "no offset wells within 1500'" on Offset Wells Evaluation Tab. Passed Completeness.	05/31/2017
Permit	Returned to draft for: -Footage at top of production zone does not match plat. -Well type on Well Location Tab should be horizontal.	05/22/2017
Permit	Returned to draft per operator's request.	05/09/2017

Total: 3 comment(s)

Public Comments

No public comments were received on this application during the comment period.

FORM
2
Rev
08/16

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:

401210141

Date Received:

05/08/2017

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Refilling ☐

Sidetrack ☐

Well Name: HP Farms

Well Number: 02N-64W-04-7H

Name of Operator: VERDAD RESOURCES LLC

COGCC Operator Number: 10651

Address: 5950 CEDAR SPRINGS ROAD

City: DALLAS

State: TX

Zip: 75235

Contact Name: Kenny Trueax

Phone: (720)394-0933

Fax: ()

Email: ktrueax@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20172009

WELL LOCATION INFORMATION

QtrQtr: NWSW Sec: 4 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.166701

Longitude: -104.560914

Footage at Surface: 2375 Feet

FNL/FSL

FSL

1380

Feet

FEL/FWL

FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4892

County: WELD

GPS Data:

Date of Measurement: 02/02/2017 PDOP Reading: 1.5 Instrument Operator's Name: Alan Hnizdo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL

FEL/FWL

Bottom Hole: FNL/FSL

FEL/FWL

2180

FSL

1740

FWL

460

FSL

1740

FWL

Sec: 4

Twp: 2N

Rng: 64W

Sec: 9

Twp: 2N

Rng: 64W

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: Yes

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.)

SW/4 Sec, 4 2N 64W

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: 5280 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 2441 Feet
Railroad: 5280 Feet
Property Line: 255 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, and Designated Outside Activity Area - 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: _____

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: 210 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

DSU configuration: T2N-R64W: Sec. 4: SW/4; Sec. 9: W/2; 480 acres

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NI0BRARA	NBRR			

DRILLING PROGRAM

Proposed Total Measured Depth: 13963 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: 1065 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?

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	24	16	65	0	80	70	80	0
SURF	13+1/2	9+5/8	36	0	1700	462	1700	0
1ST	8+1/2	5+1/2	20	0	13963	1803	13963	0

☐ 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

Well is proposed as part of an 8 well pad including the HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, HP Farms 02N-64W-04-8H.

Surface Use Agreement has waivers for Rules 305, 306, 318A.a & 318A.c. See SUA attached.

Nearest existing non-op well is the HSR-GUTTERSEN #6-4 which is 1065' as measured from the COGCC site. This well is AL and not subject to pre-frac notification.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Kenny Trueax

Title: Regulatory Manager Date: 5/8/2017 Email: ktrueax@verdadoil.com

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

Best Management Practices

No	BMP/COA Type	Description
1	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
2	General Housekeeping	Mud control: when conditions exist that roads are excessively muddy, additional fill material will be added in order to dehydrate the environment and reduce the amount of material that is transported from the wells roads and location to off-site areas.

3	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required. Spill prevention Control Countermeasure (SPCC) will be in place to address any possible spill associated with oil and gas operations.
4	Material Handling and Spill Prevention	During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Operator's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.
5	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
6	Noise mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
7	Odor mitigation	Hydrocarbon odors from production facilities are minimized and eliminated by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors. All tanks will be sealed with thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.
8	Drilling/Completion Operations	Operator will use a closed loop system for drilling and fluid management. No pits will be dug.
9	Drilling/Completion Operations	Rule 604.c.1: 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.
10	Drilling/Completion Operations	Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012.
11	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
12	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
13	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site
14	Underground Injection Control	Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling.

Total: 14 comment(s)

Applicable Policies and Notices to Operators

Policy

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401210141	FORM 2 SUBMITTED
401214247	DIRECTIONAL DATA
401214250	WELL LOCATION PLAT
401214253	DEVIATED DRILLING PLAN
401215375	OFFSET WELL EVALUATION
401273283	EXCEPTION LOC REQUEST
401289902	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Passed Completeness.	05/30/2017
Permit	Returned to draft for: - The Zone Type on the Well name & Contact Info Tab says "multiple" but only one objective formation is listed.	05/22/2017
Permit	Returned to draft per operator's request.	05/09/2017

Total: 3 comment(s)

Public Comments

No public comments were received on this application during the comment period.

FORM
2
Rev
08/16

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:
401210120

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

Date Received:
05/08/2017

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: HP Farms Well Number: 02N-64W-04-8H
Name of Operator: VERDAD RESOURCES LLC COGCC Operator Number: 10651
Address: 5950 CEDAR SPRINGS ROAD
City: DALLAS State: TX Zip: 75235
Contact Name: Kenny Trueax Phone: (720)394-0933 Fax: ()
Email: Regulatory@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170009

WELL LOCATION INFORMATION

QtrQtr: NWSW Sec: 4 Twp: 2N Rng: 64W Meridian: 6
Latitude: 40.166701 Longitude: -104.560842

Footage at Surface: 2375 Feet FNL/FSL FSL 1400 Feet FEL/FWL FWL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 4892 County: WELD

GPS Data:
Date of Measurement: 02/02/2017 PDOP Reading: 1.5 Instrument Operator's Name: Alan Hnizdo

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL
2180 FSL 1950 FWL 460 FSL 1950 FWL
Sec: 4 Twp: 2N Rng: 64W Sec: 9 Twp: 2N Rng: 64W

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: Yes

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.)

SW/4 Sec. 4 2N 64W

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: 5280 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 2441 Feet
Railroad: 5280 Feet
Property Line: 255 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, and Designated Outside Activity Area - 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: _____

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: 210 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

DSU configuration: T2N-R64W; Sec. 4: SW/4; Sec. 9: W/2; 480 acres

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			

DRILLING PROGRAM

Proposed Total Measured Depth: 13976 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: 1082 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?

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	24	16	65	0	80	70	80	0
SURF	13+1/2	9+5/8	36	0	1700	462	1700	0
1ST	8+1/2	5+1/2	20	0	13976	1804	13976	0

☐ 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

Well is proposed as part of an 8 well pad including the HP Farms 02N-64W-04-1H, HP Farms 02N-64W-04-2H, HP Farms 02N-64W-04-3H, HP Farms 02N-64W-04-4H, HP Farms 02N-64W-04-5H, HP Farms 02N-64W-04-6H, HP Farms 02N-64W-04-7H, HP Farms 02N-64W-04-8H.

Surface Use Agreement has waivers for Rules 305, 306, 318A.a & 318A.c. See SUA attached.

Nearest existing non-op well is the HSR-GUTTERSEN #6-4 which is 1082' as measured from the COGCC site. This well is AL and not subject to pre-frac notification.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Kenny Trueax

Title: Regulatory Manager Date: 5/8/2017 Email: ktrueax@verdadoil.com

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

COGCC Approved: _____ Director of COGCC Date: _____
Expiration Date: _____

API NUMBER

05

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

Best Management Practices

No BMP/COA Type

Description

1	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
2	General Housekeeping	Mud control: when conditions exist that roads are excessively muddy, additional fill material will be added in order to dehydrate the environment and reduce the amount of material that is transported from the wells roads and location to off-site areas.

3	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required. Spill prevention Control Countermeasure (SPCC) will be in place to address any possible spill associated with oil and gas operations.
4	Material Handling and Spill Prevention	During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Operator's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.
5	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
6	Noise mitigation	Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.
7	Odor mitigation	Hydrocarbon odors from production facilities are minimized and eliminated by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors. All tanks will be sealed with thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.
8	Drilling/Completion Operations	Operator will use a closed loop system for drilling and fluid management. No pits will be dug.
9	Drilling/Completion Operations	Operator will perform anti-collision evaluation of all active (producing, shut-in, of temporarily abandoned) offset wellbores that have the potential of being within 150' feet of the proposed well prior to drilling operations. Notice shall be given to all offset operators prior to drilling.
10	Drilling/Completion Operations	Rule 604.c.1: 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.
11	Drilling/Completion Operations	Operator will comply with COGCC policy on bradenhead monitoring during Hydraulic Fracturing Treatment in the Greater Wattenberg Area per policy dated May 29, 2012.
12	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
13	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
14	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.

Total: 14 comment(s)

Applicable Policies and Notices to Operators

Policy

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401210120	FORM 2 SUBMITTED
401214257	DIRECTIONAL DATA
401214258	WELL LOCATION PLAT
401214287	DEVIATED DRILLING PLAN
401215366	OFFSET WELL EVALUATION
401273264	EXCEPTION LOC REQUEST
401289885	SURFACE AGRMT/SURETY

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	-Changed surety ID number typo per operator. Passed Completeness.	05/31/2017
Permit	Returned to draft for: -Missing distance from completed portion of the wellbore to nearest lease line of described lease. -Well type on Well Location Tab should be horizontal.	05/22/2017
Permit	Returned to draft per operator's request.	05/09/2017

Total: 3 comment(s)

Public Comments

No public comments were received on this application during the comment period.

Exhibit 2

FORM

2

Rev
08/16

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:

401256315

(SUBMITTED)

Date Received:

06/09/2017

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Rubicon State

Well Number: Y16-738

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 1625 BROADWAY STE 2200

City: DENVER

State: CO

Zip: 80202

Contact Name: Susan Miller

Phone: (303)228-4246

Fax: ()

Email: susan.miller@nbleenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.144110

Longitude: -104.550570

Footage at Surface: 595 Feet FNL 1003 Feet FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4944

County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 2.2 Instrument Operator's Name: Andy Maggiore

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: 650 FNL 1830 FEL 465 FNL 1830 FEL
Sec: 16 Twp: 2N Rng: 64W Sec: 4 Twp: 2N Rng: 64W

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: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640

Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1101 Feet
Building Unit: 1641 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 986 Feet
Above Ground Utility: 976 Feet
Railroad: 5280 Feet
Property Line: 595 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, and Designated Outside Activity Area - 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: _____

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: 428 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 465 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Proposed Drilling and Spacing Unit configuration, Docket No. 170700429, scheduled for July-2017 Hearing, consists of: Township 2 North, Range 64 West, 6th P.M., Section 4: All, Section 9: All, Section 16: N/2N/2.

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		1440	

DRILLING PROGRAM

Proposed Total Measured Depth: 18145 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 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	18145	2382		

☐ 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

Y16-27 PAD, 8-well pad consists of: Hullabaloo State Y21-746 Ref, doc no. 401253917, Hullabaloo State Y21-736, doc no. 401255566, Hullabaloo State Y21-726, doc no. 401255603, Hullabaloo State Y21-716, doc no. 401246151, Rubicon State Y16-738, doc no. 401256315, Rubicon State Y16-731, doc no. 401256940, Rubicon State Y16-725, doc no. 401256957, Rubicon State Y16-718, doc no. 401257012.
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 Aquifer to oil based mud.
Nearest well in same formation within DSU = proposed pad well, Rubicon State Y16-731, Noble, 428'. Measurement of distance to nearest well is from the attached Anticollision Report.
Nearest well belonging to another Operator = None within 1500'.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____

Print Name: Susan Miller

Title: Regulatory Analyst

Date: 6/9/2017

Email: Regulatorynotification@nblener.com

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

COGCC Approved: _____

Director of COGCC

Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No	BMP/COA Type	Description
1	Planning	When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
2	General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
3	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.
4	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
5	Drilling/Completion Operations	BOPE Testing for Drilling 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.

Total: 5 comment(s)

Attachment Check List

Att Doc Num	Name
401256315	FORM 2 SUBMITTED
401282047	OffsetWellEvaluations Data
401282054	DIRECTIONAL DATA
401282057	DEVIATED DRILLING PLAN
401282058	WELL LOCATION PLAT
401282064	SURFACE AGRMT/SURETY
401292692	EXCEPTION LOC REQUEST
401316403	SURFACE AGRMT/SURETY

Total Attach: 8 Files

General Comments

Comment Date

User Group

Comment

Stamp Upon
Approval

Total: 0 comment(s)

SUBMITTED

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401257887

(SUBMITTED)

Date Received:

06/09/2017

APPLICATION FOR PERMIT TO:

☒ Drill☐ Deepen☐ Re-enter☐ Recomplete and OperateTYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER ☐Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: Rubicon State

Well Number: Y16-744

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 1625 BROADWAY STE 2200

City: DENVER State: CO Zip: 80202

Contact Name: Susan Miller

Phone: (303)228-4246 Fax: ()

Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NWNE Sec: 16 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.144130

Longitude: -104.556380

Footage at Surface: 595 Feet

FNL/FSL

FNL

2626

Feet

FEL/FWL

FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4914

County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 1.6 Instrument Operator's Name: Andy Maggiore

If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL

FEL/FWL

Bottom Hole: FNL/FSL

FEL/FWL

650

FNL

2255

FEL

465

FNL

2255

FEL

Sec: 16

Twp: 2N

Rng: 64W

Sec: 4

Twp: 2N

Rng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640

Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2357 Feet
Building Unit: 3140 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 2609 Feet
Above Ground Utility: 2538 Feet
Railroad: 5280 Feet
Property Line: 595 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, and Designated Outside Activity Area - 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: _____

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: 408 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 465 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Proposed Drilling and Spacing Unit configuration, Docket No. 170700429, scheduled for July-2017 Hearing, consists of: Township 2 North, Range 64 West, 6th P.M., Section 4: All, Section 9: All, Section 16: N/2N/2.

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		1440	

DRILLING PROGRAM

Proposed Total Measured Depth: 18100 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 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	18100	2375		

☐ 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

Y16-28 MULTI, 6-well pad consists of: Hullabaloo State Y21-763 Ref, doc no. 401257533, Hullabaloo State Y21-756, doc no. 401257833, Rubicon State Y16-763, doc no. 401257839, Rubicon State Y16-757, doc no. 401257872, Rubicon State Y16-751, doc no. 401257883, Rubicon State Y16-744, doc no. 401257887.
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 Aquifer to oil based mud.
Nearest well in same formation within DSU = proposed pad well, Rubicon State Y16-751, Noble, 408'. Measurement of distance to the nearest well is from the attached Anticollision Report.
Nearest well belonging to another Operator = None within 1500'.
Please see Page 5, Section 6 of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes

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

Signed: _____

Print Name: Susan Miller

Title: Regulatory Analyst

Date: 6/9/2017

Email: Regulatorynotification@nblener

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

COGCC Approved: _____

Director of COGCC

Date: _____

Expiration Date: _____

API NUMBER

05

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

Best Management Practices

No BMP/COA Type	Description
1 Planning	When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
2 General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
3 Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.
4 Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
5 Drilling/Completion Operations	BOPE Testing for Drilling 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.

Total: 5 comment(s)

Attachment Check List

Att Doc Num	Name
401257887	FORM 2 SUBMITTED
401284849	OffsetWellEvaluations Data
401284883	DEVIATED DRILLING PLAN
401284884	WELL LOCATION PLAT
401284885	DIRECTIONAL DATA
401284888	SURFACE AGRMT/SURETY
401291865	EXCEPTION LOC REQUEST
401316413	SURFACE AGRMT/SURETY

Total Attach: 8 Files

General Comments

Comment Date

User Group

Comment

Stamp Upon
Approval

Total: 0 comment(s)

SUBMITTED

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401257012

(SUBMITTED)

Date Received:

06/09/2017

APPLICATION FOR PERMIT TO:

☒ Drill☐ Deepen☐ Re-enter☐ Recomplete and OperateTYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: Rubicon StateWell Number: Y16-718Name of Operator: NOBLE ENERGY INCCOGCC Operator Number: 100322Address: 1625 BROADWAY STE 2200City: DENVER State: CO Zip: 80202Contact Name: Susan MillerPhone: (303)228-4246 Fax: ()Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 2N Rng: 64W Meridian: 6Latitude: 40.144100Longitude: -104.550170Footage at Surface: 595 Feet

FNL/FSL

FNL

890

Feet

FEL/FWL

FEL

Field Name: WATTENBERGField Number: 90750Ground Elevation: 4946County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 2.2 Instrument Operator's Name: Andy MaggioreIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL

FEL/FWL

Bottom Hole: FNL/FSL

FEL/FWL

450

FNL

550

FEL

465

FNL

550

FEL

Sec: 16Twp: 2NRng: 64WSec: 4Twp: 2NRng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640

Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1052 Feet
Building Unit: 1546 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 874 Feet
Above Ground Utility: 863 Feet
Railroad: 5280 Feet
Property Line: 595 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, and Designated Outside Activity Area - 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: _____

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: 458 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 465 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Proposed Drilling and Spacing Unit configuration, Docket No. 170700429, scheduled for July-2017 Hearing, consists of: Township 2 North, Range 64 West, 6th P.M., Section 4: All, Section 9: All, Section 16: N/2N/2.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL		1440	

DRILLING PROGRAM

Proposed Total Measured Depth: 18015 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 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	18015	2365		

☐ 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

Y16-27 PAD, 8-well pad consists of: Hullabaloo State Y21-746 Ref, doc no. 401253917, Hullabaloo State Y21-736, doc no. 401255566, Hullabaloo State Y21-726, doc no. 401255603, Hullabaloo State Y21-716, doc no. 401246151, Rubicon State Y16-738, doc no. 401256315, Rubicon State Y16-731, doc no. 401256940, Rubicon State Y16-725, doc no. 401256957, Rubicon State Y16-718, doc no. 401257012.
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 Aquifer to oil based mud.
Nearest well in same formation within DSU = proposed pad well, Rubicon State Y16-725, Noble, 458'. The measurement of distance to nearest well is from the attached Anticollision Report.
Nearest well belonging to another Operator = None within 1500'.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/9/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

--	--

Best Management Practices

No	BMP/COA Type	Description
1	Planning	When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
2	General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
3	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.
4	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
5	Drilling/Completion Operations	BOPE Testing for Drilling 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.

Total: 5 comment(s)

Attachment Check List

Att Doc Num	Name
401257012	FORM 2 SUBMITTED
401282173	OffsetWellEvaluations Data
401282175	DIRECTIONAL DATA
401282177	DEVIATED DRILLING PLAN
401282178	WELL LOCATION PLAT
401282193	SURFACE AGRMT/SURETY
401292772	EXCEPTION LOC REQUEST
401316382	SURFACE AGRMT/SURETY

Total Attach: 8 Files

General Comments

User Group

Comment

Comment Date

Stamp Upon
Approval

Total: 0 comment(s)

SUBMITTED

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401256957

(SUBMITTED)

Date Received:

06/09/2017

APPLICATION FOR PERMIT TO:

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

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

Well Name: Rubicon State

Well Number: Y16-725

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 1625 BROADWAY STE 2200

City: DENVER

State: CO

Zip: 80202

Contact Name: Susan Miller

Phone: (303)228-4246

Fax: ()

Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.144100

Longitude: -104.550300

Footage at Surface: 595

Feet

FNL/FSL

FNL

928

Feet

FEL/FWL

FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4946

County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 2.2 Instrument Operator's Name: Andy Maggiore

 If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

 Footage at Top of Prod Zone: FNL/FSL 450 FNL 980 FEL 465 FNL 980 FEL
 Sec: 16 Twp: 2N Rng: 64W Sec: 4 Twp: 2N Rng: 64W

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: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640

Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1067 Feet
Building Unit: 1578 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 911 Feet
Above Ground Utility: 901 Feet
Railroad: 5280 Feet
Property Line: 595 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, and Designated Outside Activity Area - 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: _____

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: 434 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 465 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Proposed Drilling and Spacing Unit configuration, Docket No. 170700429, scheduled for July-2017 Hearing, consists of: Township 2 North, Range 64 West, 6th P.M., Section 4: All, Section 9: All, Section 16: N/2N/2.

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		1440	

DRILLING PROGRAM

Proposed Total Measured Depth: 17865 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 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17865	2339		

☐ 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

Y16-27 PAD, 8-well pad consists of: Hullabaloo State Y21-746 Ref, doc no. 401253917, Hullabaloo State Y21-736, doc no. 401255566, Hullabaloo State Y21-726, doc no. 401255603, Hullabaloo State Y21-716, doc no. 401246151, Rubicon State Y16-738, doc no. 401256315, Rubicon State Y16-731, doc no. 401256940, Rubicon State Y16-725, doc no. 401256957, Rubicon State Y16-718, doc no. 401257012.
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 Aquifer to oil based mud.
Nearest well in same formation within DSU = proposed pad well, Rubicon State Y16-731, Noble, 434'. Measurement of distance to nearest well is from the attached Anticollision Report.
Nearest well belonging to another Operator = None within 1500'.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____

Print Name: Susan Miller

Title: Regulatory Analyst

Date: 6/9/2017

Email: Regulatorynotification@nblener

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

COGCC Approved: _____

Director of COGCC

Date: _____

Expiration Date: _____

API NUMBER

05

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

--	--

Best Management Practices

No	BMP/COA Type	Description
1	Planning	When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
2	General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
3	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.
4	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
5	Drilling/Completion Operations	BOPE Testing for Drilling 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.

Total: 5 comment(s)

Attachment Check List

Att Doc Num	Name
401256957	FORM 2 SUBMITTED
401282127	OffsetWellEvaluations Data
401282129	DIRECTIONAL DATA
401282132	DEVIATED DRILLING PLAN
401282133	WELL LOCATION PLAT
401282139	SURFACE AGRMT/SURETY
401292715	EXCEPTION LOC REQUEST
401316385	SURFACE AGRMT/SURETY

Total Attach: 8 Files

General Comments

Comment Date

User Group Comment

Stamp Upon
Approval

Total: 0 comment(s)

SUBMITTED

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401256940

(SUBMITTED)

Date Received:

06/09/2017

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refiling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: Rubicon StateWell Number: Y16-731Name of Operator: NOBLE ENERGY INCCOGCC Operator Number: 100322Address: 1625 BROADWAY STE 2200City: DENVERState: COZip: 80202Contact Name: Susan MillerPhone: (303)228-4246Fax: ()Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 2N Rng: 64W Meridian: 6Latitude: 40.144110Longitude: -104.550440Footage at Surface: 595 Feet

FNL/FSL

FNL

965

Feet

FEL/FWL

FEL

Field Name: WATTENBERGField Number: 90750Ground Elevation: 4945County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 1.6 Instrument Operator's Name: Andy MaggioroIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL

450

FNL

1405

FEL

465

FNL

1405

FEL

Sec: 16Twp: 2NRng: 64WSec: 4Twp: 2NRng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640

Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1083 Feet
Building Unit: 1609 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 949 Feet
Above Ground Utility: 938 Feet
Railroad: 5280 Feet
Property Line: 595 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, and Designated Outside Activity Area - 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: _____

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: 428 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 465 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Proposed Drilling and Spacing Unit configuration, Docket No. 170700429, scheduled for July-2017 Hearing, consists of: Township 2 North, Range 64 West, 6th P.M., Section 4: All, Section 9: All, Section 16: N/2N/2.

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		1440	

DRILLING PROGRAM

Proposed Total Measured Depth: 17925 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 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17925	2350		

☐ 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 Y16-27 PAD, 8-well pad consists of: Hullabaloo State Y21-746 Ref, doc no. 401253917, Hullabaloo State Y21-736, doc no. 401255566, Hullabaloo State Y21-726, doc no. 401255603, Hullabaloo State Y21-716, doc no. 401246151, Rubicon State Y16-738, doc no. 401256315, Rubicon State Y16-731, doc no. 401256940, Rubicon State Y16-725, doc no. 401256957, Rubicon State Y16-718, doc no. 401257012.
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 Aquifer to oil based mud.
Nearest well in same formation within DSU = proposed pad well, Rubicon State Y16-738, Noble, 428'. Measurement of distance to nearest well is from attached Anticollision Report.
Nearest well belonging to another Operator = None within 1500'.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/9/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____
Expiration Date: _____

API NUMBER

05

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

--	--

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
2	General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
3	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.
4	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
5	Drilling/Completion Operations	BOPE Testing for Drilling 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.

Total: 5 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401256940	FORM 2 SUBMITTED
401282087	OffsetWellEvaluations Data
401282093	DIRECTIONAL DATA
401282094	DEVIATED DRILLING PLAN
401282095	WELL LOCATION PLAT
401282099	SURFACE AGRMT/SURETY
401292699	EXCEPTION LOC REQUEST
401316396	SURFACE AGRMT/SURETY

Total Attach: 8 Files

General Comments

User Group

Comment

Comment Date

		Stamp Upon Approval
--	--	---------------------

Total: 0 comment(s)

SUBMITTED

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401255566

(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

☒ Drill☐ Deepen☐ Re-enter☐ Recomplete and OperateTYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: Hullabaloo StateWell Number: Y21-736Name of Operator: NOBLE ENERGY INCCOGCC Operator Number: 100322Address: 1625 BROADWAY STE 2200City: DENVERState: COZip: 80202Contact Name: Susan MillerPhone: (303)228-4246Fax: ()Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 2N Rng: 64W Meridian: 6Latitude: 40.144520Longitude: -104.550440Footage at Surface: 445 Feet

FNL/FSL

FNL

967 Feet

FEL/FWL

FEL

Field Name: WATTENBERGField Number: 90750Ground Elevation: 4945County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 2.2 Instrument Operator's Name: Andy MaggioreIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL

FEL/FWL

Bottom Hole: FNL/FSL

FEL/FWL

750

FNL

1735

FEL

100

FSL

1735

FEL

Sec: 16Twp: 2NRng: 64WSec: 21Twp: 2NRng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 953 Feet
Building Unit: 1696 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 950 Feet
Above Ground Utility: 938 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 176 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 750 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: E/2 Section 16, E/2 Section 21, N/2NE/4 Section 28, T2N, R64W.

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		720	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17129 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: 300 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17129	2236		

☐ 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 Y16-27 PAD, 8-well pad consists of: Hullabaloo State Y21-746 Ref, doc no. 401253917, Hullabaloo State Y21-736, doc no. 401255566, Hullabaloo State Y21-726, doc no. 401255603, Hullabaloo State Y21-716, doc no. 401246151, Rubicon State Y16-738, doc no. 401256315, Rubicon State Y16-731, doc no. 401256940, Rubicon State Y16-725, doc no. 401256957, Rubicon State Y16-718, doc no. 401257012.
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 Aquifer to oil based mud.
Nearest well in same formation = Gerkin 33-21, API No. 05-123-23388, Noble, 176'. The measurement of distance to nearest well is from the attached Anticollision Report.
Nearest well belonging to another Operator = Stonebraker 28U-234, API No. 05-123-36279, PDC Energy, 300'. The measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes

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

Signed: _____ Print Name: Susan Miller
Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____
Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No BMP/COA Type	Description
1 Planning	<p>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 bottomhole 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.</p> <p>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. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2 Planning	<p>When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>
3 General Housekeeping	<p>General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p>
4 Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.</p>
5 Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.</p>
6 Drilling/Completion Operations	<p>BOPE Testing for Drilling 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.</p>

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401255566	FORM 2 SUBMITTED
401281943	OffsetWellEvaluations Data
401281948	DIRECTIONAL DATA
401281949	DEVIATED DRILLING PLAN
401281951	WELL LOCATION PLAT
401281952	PROPOSED SPACING UNIT
401281958	SURFACE AGRMT/SURETY
401292006	EXCEPTION LOC REQUEST
401315836	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM
2

Rev
08/16

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:

401257533

(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

☒ Drill

☐ Deepen

☐ Re-enter

☐ Recomplete and Operate

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Hullabaloo State

Well Number: Y21-763

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 1625 BROADWAY STE 2200

City: DENVER

State: CO

Zip: 80202

Contact Name: Susan Miller

Phone: (303)228-4246

Fax: ()

Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENW Sec: 16 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.144540

Longitude: -104.556780

Footage at Surface: 445 Feet

FNL/FSL

FNL

2580

Feet

FEL/FWL

FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4912

County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 1.5 Instrument Operator's Name: Andy Maggiore

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL

FEL/FWL

Bottom Hole: FNL/FSL

FEL/FWL

550

FNL

1830

FWL

100

FSL

1810

FWL

Sec: 16

Twp: 2N

Rng: 64W

Sec: 21

Twp: 2N

Rng: 64W

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: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2407 Feet
Building Unit: 3294 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 2722 Feet
Above Ground Utility: 2727 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 300 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 498 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: E/2W/2 Section 16, E/2W/2 Section 21, NE/4NW/4 Section 28, T2N-R64W.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL		360	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17536 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: 300 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17536	2300		

☐ 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 Y16-28 MULTI, 6-well pad consists of: Hullabaloo State Y21-763 Ref, doc no. 401257533, Hullabaloo State Y21-756, doc no. 401257833, Rubicon State Y16-763, doc no. 401257839, Rubicon State Y16-757, doc no. 401257872, Rubicon State Y16-751, doc no. 401257883, Rubicon State Y16-744, doc no. 401257887.
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 Aquifer to oil based mud.
Nearest well in same formation and Nearest well belonging to another Operator = Stonebraker 28U-234, API No. 05-123 -36279, PDC Energy, 300'. The measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6 of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No BMP/COA Type	Description
1 Planning	<p>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 bottomhole 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.</p> <p>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. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2 Planning	<p>When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>
3 General Housekeeping	<p>General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p>
4 Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.</p>
5 Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.</p>
6 Drilling/Completion Operations	<p>BOPE Testing for Drilling 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.</p>

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401257533	FORM 2 SUBMITTED
401283256	OffsetWellEvaluations Data
401283376	DEVIATED DRILLING PLAN
401283377	WELL LOCATION PLAT
401283379	PROPOSED SPACING UNIT
401283385	SURFACE AGRMT/SURETY
401291765	EXCEPTION LOC REQUEST
401315803	DIRECTIONAL DATA
401315808	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401253917

(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: Hullabaloo StateWell Number: Y21-746Name of Operator: NOBLE ENERGY INCCOGCC Operator Number: 100322Address: 1625 BROADWAY STE 2200City: DENVERState: COZip: 80202Contact Name: Susan MillerPhone: (303)228-4246Fax: ()Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 2N Rng: 64W Meridian: 6Latitude: 40.144520Longitude: -104.550580Footage at Surface: 445 Feet

FNL/FSL

FNL

1005

FEL/FWL

FEL

Field Name: WATTENBERGField Number: 90750Ground Elevation: 4944County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 1.6 Instrument Operator's Name: Andy MaggioreIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL

905

FNL

2395

FEL

100

FSL

2395

FEL

Sec: 16Twp: 2NRng: 64WSec: 21Twp: 2NRng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 973 Feet
Building Unit: 1726 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 987 Feet
Above Ground Utility: 976 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 300 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 905 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: E/2W/2, W/2E/2 Section 16, E/2W/2, W/2E/2 Section 21, NE/4NW/4, NW/4NE/4 Section 28, Township 2 North, Range 64 West.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBR		720	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17204 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: 300 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17204	2253		

☐ 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 Y16-27 PAD, 8-well pad consists of: Hullabaloo State Y21-746 Ref, doc no. 401253917, Hullabaloo State Y21-736, doc no. 401255566, Hullabaloo State Y21-726, doc no. 401255603, Hullabaloo State Y21-716, doc no. 401246151, Rubicon State Y16-738, doc no. 401256315, Rubicon State Y16-731, doc no. 401256940, Rubicon State Y16-725, doc no. 401256957, Rubicon State Y16-718, doc no. 401257012.
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 Aquifer to oil based mud.
Nearest well in same formation and Nearest well belonging to another Operator = Stonebraker 28U-234, API 05-123-36279, PDC Energy, 300'. Measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No BMP/COA Type	Description
1 Planning	<p>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 bottomhole 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.</p> <p>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. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2 Planning	<p>When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>
3 General Housekeeping	<p>General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p>
4 Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.</p>
5 Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.</p>
6 Drilling/Completion Operations	<p>BOPE Testing for Drilling 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.</p>

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401253917	FORM 2 SUBMITTED
401281854	OffsetWellEvaluations Data
401281856	PROPOSED SPACING UNIT
401281863	SURFACE AGRMT/SURETY
401281871	DEVIATED DRILLING PLAN
401281872	WELL LOCATION PLAT
401281879	DIRECTIONAL DATA
401291984	EXCEPTION LOC REQUEST
401316076	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401258482

(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

☒ Drill☐ Deepen☐ Re-enter☐ Recomplete and OperateTYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: Hullabaloo StateWell Number: Y21-769Name of Operator: NOBLE ENERGY INCCOGCC Operator Number: 100322Address: 1625 BROADWAY STE 2200City: DENVERState: COZip: 80202Contact Name: Susan MillerPhone: (303)228-4246Fax: ()Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 16 Twp: 2N Rng: 64W Meridian: 6Latitude: 40.144560Longitude: -104.562600Footage at Surface: 445 Feet FNL 955 Feet FWLField Name: WATTENBERGField Number: 90750Ground Elevation: 4893County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 2.0 Instrument Operator's Name: Andy MaggioreIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL

550	FNL	1395	FWL	100	FSL	1395	FWL
Sec: <u>16</u>	Twp: <u>2N</u>	Rng: <u>64W</u>	Sec: <u>21</u>	Twp: <u>2N</u>	Rng: <u>64W</u>		

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 3322 Feet
Building Unit: 3369 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 4348 Feet
Above Ground Utility: 3341 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 300 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 550 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: W/2 Section 16, W/2 Section 21, N/2NW/4 Section 28, Township 2 North, Range 64 West.

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		720	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17344 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: 300 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17344	2267		

☐ 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 Y16-29 Pad, 7 well pad consists of: Hullabaloo State Y21-787 Ref, doc no. 401258035, Hullabaloo State Y21-781, doc no. 401258059, Hullabaloo State Y21-775, doc no. 401258415, Hullabaloo State Y21-769, doc no. 401258482, Rubicon State Y16-783, doc no. 401258498, Rubicon State Y16-776, doc no. 401258512, Rubicon State Y16-770, doc no. 401258541.
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 Aquifer to oil based mud.
Nearest well in same formation and Nearest well belonging to another Operator = Stonebraker 28U-234, API No. 05-123-36279, PDC Energy, 300'. Measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6 of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC _____ Date: _____
Expiration Date: _____

API NUMBER

05

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

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
2	General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
3	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.
4	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
5	Drilling/Completion Operations	BOPE Testing for Drilling 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.

Total: 5 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401258482	FORM 2 SUBMITTED
401285877	OffsetWellEvaluations Data
401285883	DEVIATED DRILLING PLAN
401285888	WELL LOCATION PLAT
401285889	EXCEPTION LOC REQUEST
401285894	DIRECTIONAL DATA
401285896	PROPOSED SPACING UNIT
401285899	SURFACE AGRMT/SURETY
401316069	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

User Group **Comment**

Comment Date

		Stamp Upon Approval
--	--	---------------------

Total: 0 comment(s)

SUBMITTED

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401258415

(SUBMITTED)

APPLICATION FOR PERMIT TO:

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

Date Received:

06/07/2017

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER ☐Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: Hullabaloo StateWell Number: Y21-775Name of Operator: NOBLE ENERGY INCCOGCC Operator Number: 100322Address: 1625 BROADWAY STE 2200City: DENVERState: COZip: 80202Contact Name: Susan MillerPhone: (303)228-4246Fax: ()Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 16 Twp: 2N Rng: 64W Meridian: 6Latitude: 40.144560Longitude: -104.562730Footage at Surface: 445 Feet FNL/FSL 917 Feet FEL/FWLField Name: WATTENBERGField Number: 90750Ground Elevation: 4894County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 1.4 Instrument Operator's Name: Andy MaggioreIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**
 Footage at Top of Prod Zone: FNL/FSL 550 FNL 990 FEL/FWL 100 FSL 980 FWL 64W
 Sec: 16 Twp: 2N Rng: 64W Sec: 21 Twp: 2N Rng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____

Surface Surety ID: _____

DRILLING PROGRAM

Proposed Total Measured Depth: 17216 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: 300 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17216	2245		

☐ 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 Y16-29 Pad, 7 well pad consists of: Hullabaloo State Y21-787 Ref, doc no. 401258035, Hullabaloo State Y21-781, doc no. 401258059, Hullabaloo State Y21-775, doc no. 401258415, Hullabaloo State Y21-769, doc no. 401258482, Rubicon State Y16-783, doc no. 401258498, Rubicon State Y16-776, doc no. 401258512, Rubicon State Y16-770, doc no. 401258541.

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 Aquifer to oil based mud.

Nearest well in same formation = State Y16-05D, API No. 05-123-21170, Noble, 274'. Measurement of distance to nearest well from the attached Anticollision Report.

Nearest well belonging to another Operator = Stonebraker 28U-234, API No. 05-123-36279, PDC Energy, 300'. Measurement of distance to nearest well calculated using COGIS data.

Please see Page 5, Section 6 of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No BMP/COA Type	Description
1 Planning	<p>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 bottomhole 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.</p> <p>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. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2 Planning	<p>When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>
3 General Housekeeping	<p>General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p>
4 Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.</p>
5 Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.</p>
6 Drilling/Completion Operations	<p>BOPE Testing for Drilling 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.</p>

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401258415	FORM 2 SUBMITTED
401285833	OffsetWellEvaluations Data
401285835	DEVIATED DRILLING PLAN
401285836	WELL LOCATION PLAT
401285838	DIRECTIONAL DATA
401285841	EXCEPTION LOC REQUEST
401285842	PROPOSED SPACING UNIT
401285848	SURFACE AGRMT/SURETY
401315978	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM
2
Rev
08/16

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:

401258059
(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Hullabaloo State

Well Number: Y21-781

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 1625 BROADWAY STE 2200

City: DENVER

State: CO

Zip: 80202

Contact Name: Susan Miller

Phone: (303)228-4246

Fax: ()

Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 16 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.144560

Longitude: -104.562860

Footage at Surface: 445 Feet FNL/FSL 880 Feet FEL/FWL FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4894

County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 2.0 Instrument Operator's Name: Andy Maggiore

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL 550 FNL 575 FWL 100 FSL 565 FWL FWL

Sec: 16 Twp: 2N Rng: 64W Sec: 21 Twp: 2N Rng: 64W

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: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 3298 Feet
Building Unit: 3344 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 4423 Feet
Above Ground Utility: 3323 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 133 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 550 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: W/2W/2 Section 16, W/2W/2 Section 21, NW/4NW/4 Section 28, Township 2 North, Range 64 West.

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		360	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17328 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: 300 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17328	2264		

☐ 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 Y16-29 Pad, 7 well pad consists of: Hullabaloo State Y21-787 Ref, doc no. 401258035, Hullabaloo State Y21-781, doc no. 401258059, Hullabaloo State Y21-775, doc no. 401258415, Hullabaloo State Y21-769, doc no. 401258482, Rubicon State Y16-783, doc no. 401258498, Rubicon State Y16-776, doc no. 401258512, Rubicon State Y16-770, doc no. 401258541.
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 Aquifer to oil based mud.
Nearest well in same formation = State Y16-5D, API No. 05-123-21170, Noble, 133'. Noble is the operator of this well, therefore a signed consent is not required. Measurement of distance to nearest well from the attached Anticollision Report.
Nearest well belonging to another Operator = Stonebraker 28U-234, API No. 05-123-36279, PDC Energy, 300'.
Measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6 of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No BMP/COA Type	Description
1 Planning	<p>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 bottomhole 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.</p> <p>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. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2 Planning	<p>When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>
3 General Housekeeping	<p>General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p>
4 Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.</p>
5 Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.</p>
6 Drilling/Completion Operations	<p>BOPE Testing for Drilling 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.</p>

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401258059	FORM 2 SUBMITTED
401285300	OffsetWellEvaluations Data
401285310	DEVIATED DRILLING PLAN
401285312	WELL LOCATION PLAT
401285314	DIRECTIONAL DATA
401285317	PROPOSED SPACING UNIT
401285325	SURFACE AGRMT/SURETY
401285776	EXCEPTION LOC REQUEST
401315959	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401258035

(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refiling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: Hullabaloo StateWell Number: Y21-787Name of Operator: NOBLE ENERGY INCCOGCC Operator Number: 100322Address: 1625 BROADWAY STE 2200City: DENVERState: COZip: 80202Contact Name: Susan MillerPhone: (303)228-4246Fax: ()Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NWNW Sec: 16 Twp: 2N Rng: 64W Meridian: 6Latitude: 40.144570Longitude: -104.563000
 Footage at Surface: 445 Feet FNL/FSL 842 Feet FEL/FWL
FNL FWL
Field Name: WATTENBERGField Number: 90750Ground Elevation: 4893County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 1.5 Instrument Operator's Name: Andy MaggioreIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL550FNL150FWL100FSL150FWLSec: 16Twp: 2NRng: 64WSec: 21Twp: 2NRng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 3286 Feet
Building Unit: 3332 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 4461 Feet
Above Ground Utility: 3314 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 384 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 550 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: W/2W/2 Section 16, E/2E/2 Section 17, E/2E/2 Section 20, W/2W/2 Section 21, NW/4NW/4 Section 28, NE/4NE/4 Section 29, Township 2 North, Range 64 West.

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		720	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17336 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: 384 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17336	2266		

☐ 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 Y16-29 PAD, 7 well pad consists of: Hullabaloo State Y21-787 Ref, doc no. 401258035, Hullabaloo State Y21-781, doc no. 401258059, Hullabaloo State Y21-775, doc no. 401258415, Hullabaloo State Y21-769, doc no. 401258482, Rubicon State Y16-783, doc no. 401258498, Rubicon State Y16-776, doc no. 401258512, Rubicon State Y16-770, doc no. 401258541.
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 Aquifer to oil based mud.
Nearest well in same formation and nearest well belonging to another Operator = Dale 4K-20H-O264, API No. 05-123-39733, Crestone Peak Resources, 384'. Measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No BMP/COA Type	Description
1 Planning	When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.
2 General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
3 Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.
4 Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
5 Drilling/Completion Operations	BOPE Testing for Drilling 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.

Total: 5 comment(s)

Attachment Check List

Att Doc Num	Name
401258035	FORM 2 SUBMITTED
401285066	OffsetWellEvaluations Data
401285137	DEVIATED DRILLING PLAN
401285142	WELL LOCATION PLAT
401285144	DIRECTIONAL DATA
401285182	PROPOSED SPACING UNIT
401285186	SURFACE AGRMT/SURETY
401285801	EXCEPTION LOC REQUEST
401315932	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

User Group

Comment

Comment Date

Stamp Upon
Approval

Total: 0 comment(s)

SUBMITTED

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM

2

Rev
08/16

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:

401255603

(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐Well Name: Hullabaloo StateWell Number: Y21-726Name of Operator: NOBLE ENERGY INCCOGCC Operator Number: 100322Address: 1625 BROADWAY STE 2200City: DENVERState: COZip: 80202Contact Name: Susan MillerPhone: (303)228-4246Fax: ()Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 2N Rng: 64W Meridian: 6Latitude: 40.144520Longitude: -104.550310Footage at Surface: 445 Feet FNL/FSL FNL 930 Feet FEL/FWL FELField Name: WATTENBERGField Number: 90750Ground Elevation: 4945County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 1.6 Instrument Operator's Name: Andy MaggioreIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL
550 FNL 1075 FEL 100 FSL 1075 FEL
 Sec: 16 Twp: 2N Rng: 64W Sec: 21 Twp: 2N Rng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☐ Fee ☒ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 934 Feet
Building Unit: 1666 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 912 Feet
Above Ground Utility: 901 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 211 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 550 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: E/2 Section 16, E/2 Section 21, N/2NE/4 Section 28, T2N-R64W.

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		720	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17326 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: 300 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17326	2264		

☐ 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 Y16-27 PAD, 8-well pad consists of: Hullabaloo State Y21-746 Ref, doc no. 401253917, Hullabaloo State Y21-736, doc no. 401255566, Hullabaloo State Y21-726, doc no. 401255603, Hullabaloo State Y21-716, doc no. 401246151, Rubicon State Y16-738, doc no. 401256315, Rubicon State Y16-731, doc no. 401256940, Rubicon State Y16-725, doc no. 401256957, Rubicon State Y16-718, doc no. 401257012.
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 Aquifer to oil based mud.
Nearest well in same formation = McIntosh 44-21, API No. 05-123-23340, Noble, 211'. The measurement of distance to nearest well is from the attached Anticollision Report.
Nearest well belonging to another Operator = Stonebaker 28U-234, API No. 05-123-36279, PDC Energy, 300'. The measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>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 bottomhole 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.</p> <p>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. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2	Planning	<p>When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>
3	General Housekeeping	<p>General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p>
4	Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.</p>
5	Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.</p>
6	Drilling/Completion Operations	<p>BOPE Testing for Drilling 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.</p>

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401255603	FORM 2 SUBMITTED
401281975	OffsetWellEvaluations Data
401281985	DIRECTIONAL DATA
401281986	DEVIATED DRILLING PLAN
401281987	WELL LOCATION PLAT
401281988	PROPOSED SPACING UNIT
401281993	SURFACE AGRMT/SURETY
401292021	EXCEPTION LOC REQUEST
401315915	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM
2
Rev
08/16

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:

401246151
(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refiling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Hullabaloo State

Well Number: Y21-716

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 1625 BROADWAY STE 2200

City: DENVER

State: CO

Zip: 80202

Contact Name: Susan Miller

Phone: (303)228-4246

Fax: ()

Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENE Sec: 16 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.144520

Longitude: -104.550180

Footage at Surface: 445 Feet FNL 892 Feet FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4946

County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 2.2 Instrument Operator's Name: Andy Maggiore

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL

550 FNL 415 FEL 100 FSL 415 FEL
Sec: 16 Twp: 2N Rng: 64W Sec: 21 Twp: 2N Rng: 64W

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: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 917 Feet
Building Unit: 1636 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 875 Feet
Above Ground Utility: 863 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 272 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 550 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: W/2W/2 Section 15, E/2E/2 Section 16, E/2E/2 Section 21, W/2W/2 Section 22, NW/4NW/4 Section 27, NE/4NE/4 Section 28, T2N-R64W.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL		720	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17436 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: 382 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17436	2282		

☐ 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

Y16-27 PAD, 8-well pad consists of: Hullabaloo State Y21-746 Ref, doc no. 401253917, Hullabaloo State Y21-736, doc no. 401255566, Hullabaloo State Y21-726, doc no. 401255603, Hullabaloo State Y21-716, doc no. 401246151, Rubicon State Y16-738, doc no. 401256315, Rubicon State Y16-731, doc no. 401256940, Rubicon State Y16-725, doc no. 401256957, Rubicon State Y16-718, doc no. 401257012.
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 Aquifer to oil based mud.
Nearest well in same formation = McIntosh 42-21, API No. 05-123-22437, Noble, 272'. The measurement of distance to nearest well is from attached Anticollision Report.
Nearest well belonging to another Operator = Stonebraker 28U-234, API No. 05-123-36279, PDC Energy, 382'. The measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6., Consents and Waivers of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window and COGCC Rule 318A.c. to locate any well greater than fifty (50) feet from an existing well

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>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 bottomhole 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.</p> <p>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. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2	Planning	<p>When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>
3	General Housekeeping	<p>General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p>
4	Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.</p>
5	Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.</p>
6	Drilling/Completion Operations	<p>BOPE Testing for Drilling 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.</p>

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401246151	FORM 2 SUBMITTED
401282009	OffsetWellEvaluations Data
401282010	DIRECTIONAL DATA
401282011	DEVIATED DRILLING PLAN
401282013	WELL LOCATION PLAT
401282015	PROPOSED SPACING UNIT
401282030	SURFACE AGRMT/SURETY
401292691	EXCEPTION LOC REQUEST
401315828	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

SUBMITTED

FORM
2
Rev
08/16

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:

401257833

(SUBMITTED)

Date Received:

06/07/2017

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Hullabaloo State

Well Number: Y21-756

Name of Operator: NOBLE ENERGY INC

COGCC Operator Number: 100322

Address: 1625 BROADWAY STE 2200

City: DENVER

State: CO

Zip: 80202

Contact Name: Susan Miller

Phone: (303)228-4246

Fax: ()

Email: susan.miller@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009

WELL LOCATION INFORMATION

QtrQtr: NENW Sec: 16 Twp: 2N Rng: 64W Meridian: 6

Latitude: 40.144540

Longitude: -104.556650

Footage at Surface: 445 Feet

FNL/FSL

FNL

2617 Feet

FEL/FWL

FWL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4912

County: WELD

GPS Data:

Date of Measurement: 09/13/2016 PDOP Reading: 2.1 Instrument Operator's Name: Andy Magglore

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL

FEL/FWL

Bottom Hole: FNL/FSL

FEL/FWL

715 FNL

2275 FWL

100 FSL

2225 FWL

Sec: 16

Twp: 2N

Rng: 64W

Sec: 21

Twp: 2N

Rng: 64W

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: Yes

The right to construct the Oil and Gas Location is granted by: oil and gas lease

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.)

Section 16, T2N-R64W: All.

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 70/7879-S

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2372 Feet
Building Unit: 3258 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 2685 Feet
Above Ground Utility: 2702 Feet
Railroad: 5280 Feet
Property Line: 445 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, and Designated Outside Activity Area - 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: _____

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: 300 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 715 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

Spacing Unit Configuration: E/2W/2, W/2E/2 Section 16, E/2W/2, W/2E/2 Section 21, NE/4NW/4, NW/4NE/4 Section 28, Township 2 North, Range 64 West.

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		720	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 17146 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: 300 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:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: 2614238

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	1950	691	1950	0
1ST	8+1/2	5+1/2	20	0	17146	2237		

☐ 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 Y16-28 Multi, 6-well pad consists of: Hullabaloo State Y21-763 Ref, doc no. 401257533, Hullabaloo State Y21-756, doc no. 401257833, Rubicon State Y16-763, doc no. 401257839, Rubicon State Y16-757, doc no. 401257872, Rubicon State Y16-751, doc no. 401257883, Rubicon State Y16-744, doc no. 401257887.
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 Aquifer to oil based mud.
Nearest well in same formation and Nearest well belonging to another Operator = Stonebraker 28U-234, API No. 05-123 -36279, PDC Energy, 300'. Measurement of distance to nearest well calculated using COGIS data.
Please see Page 5, Section 6 of the attached Surface Use Agreement for exception location waiver language to COGCC Rule 318A.a. to locate any well outside of the GWA window.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susan Miller

Title: Regulatory Analyst Date: 6/7/2017 Email: Regulatorynotification@nblener

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

COGCC Approved: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05

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

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Best Management Practices

No BMP/COA Type	Description
1 Planning	<p>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 bottomhole 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.</p> <p>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. The Colorado Oil and Gas Conservation Commission has established this Policy regarding Bradenhead monitoring during Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC Rule 207.a. Policy. This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.</p>
2 Planning	<p>When Running an Open Hole Log on the Pad: One of the first wells drilled on the pad will be logged with open hole Resistivity Log and 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 clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open hole logs were run.</p>
3 General Housekeeping	<p>General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur, prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.</p>
4 Storm Water/Erosion Control	<p>Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) and General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location and will remain in place until the pad reaches final reclamation.</p>
5 Material Handling and Spill Prevention	<p>Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.</p>
6 Drilling/Completion Operations	<p>BOPE Testing for Drilling 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.</p>

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401257833	FORM 2 SUBMITTED
401283758	OffsetWellEvaluations Data
401283765	DEVIATED DRILLING PLAN
401283767	WELL LOCATION PLAT
401283770	DIRECTIONAL DATA
401283774	PROPOSED SPACING UNIT
401283839	SURFACE AGRMT/SURETY
401291794	EXCEPTION LOC REQUEST
401315824	SURFACE AGRMT/SURETY

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

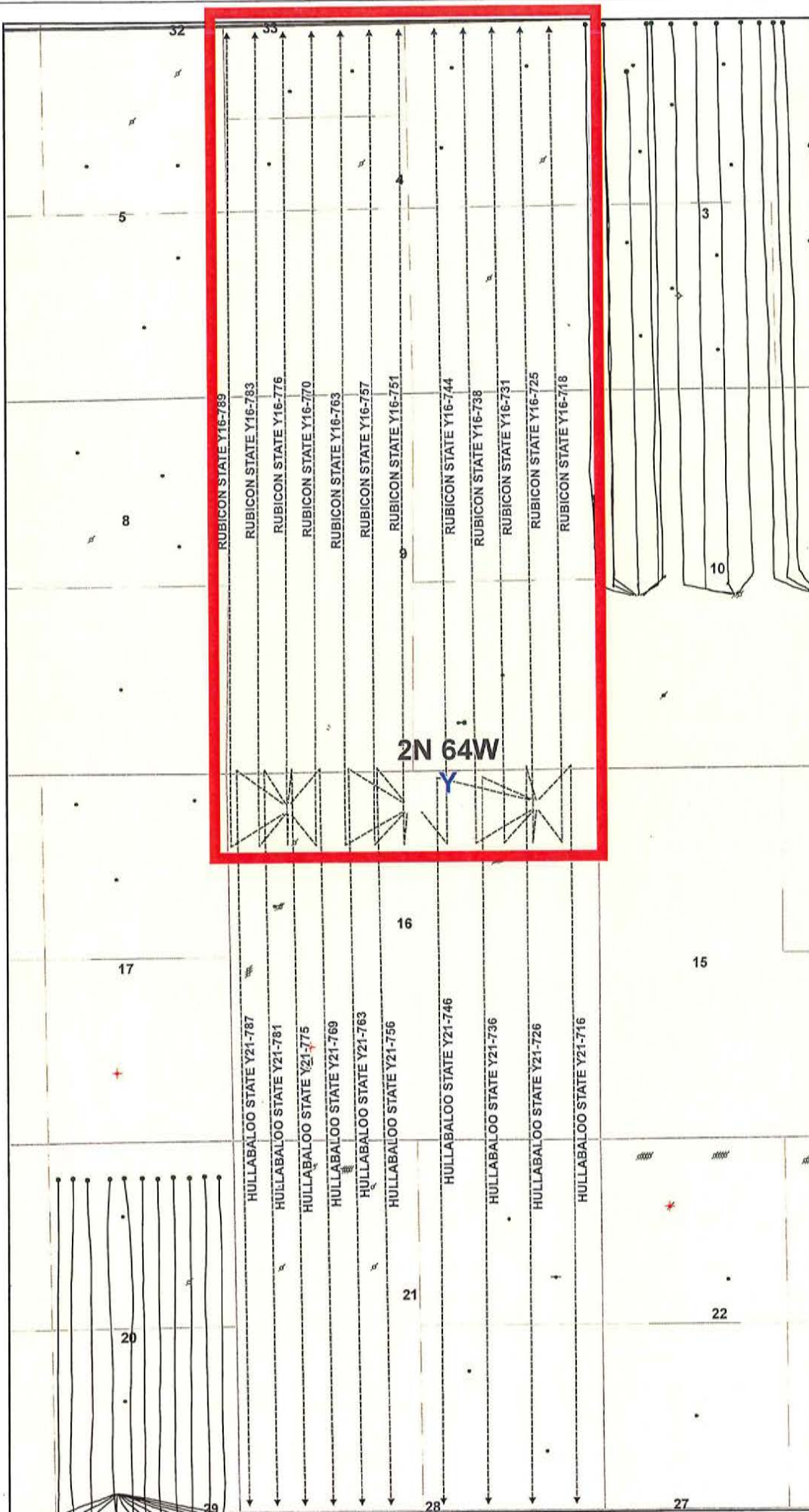
SUBMITTED

Exhibit 4

DEVELOPMENT PLAN WELLBORES

- Proposed
 COGCC WELL STATUS
 Adandoned Location
 Dry and Abandoned
 Plugged and Abandoned
 Producing
 Shut In
 Producing

NOBLE LEASES
 Fee



noble energy

0 880 1,760 2,640
ft



1:11,000

NAD 1983 UTM Zone 13

Author: L. Gromadzki

Date: 3/2/2017

Exhibit 5

TOWNSHIP: 2 NORTH, RANGE 64 WEST, 6TH P.M.
SECTION 16: N/2N/2
WELD COUNTY, COLORADO

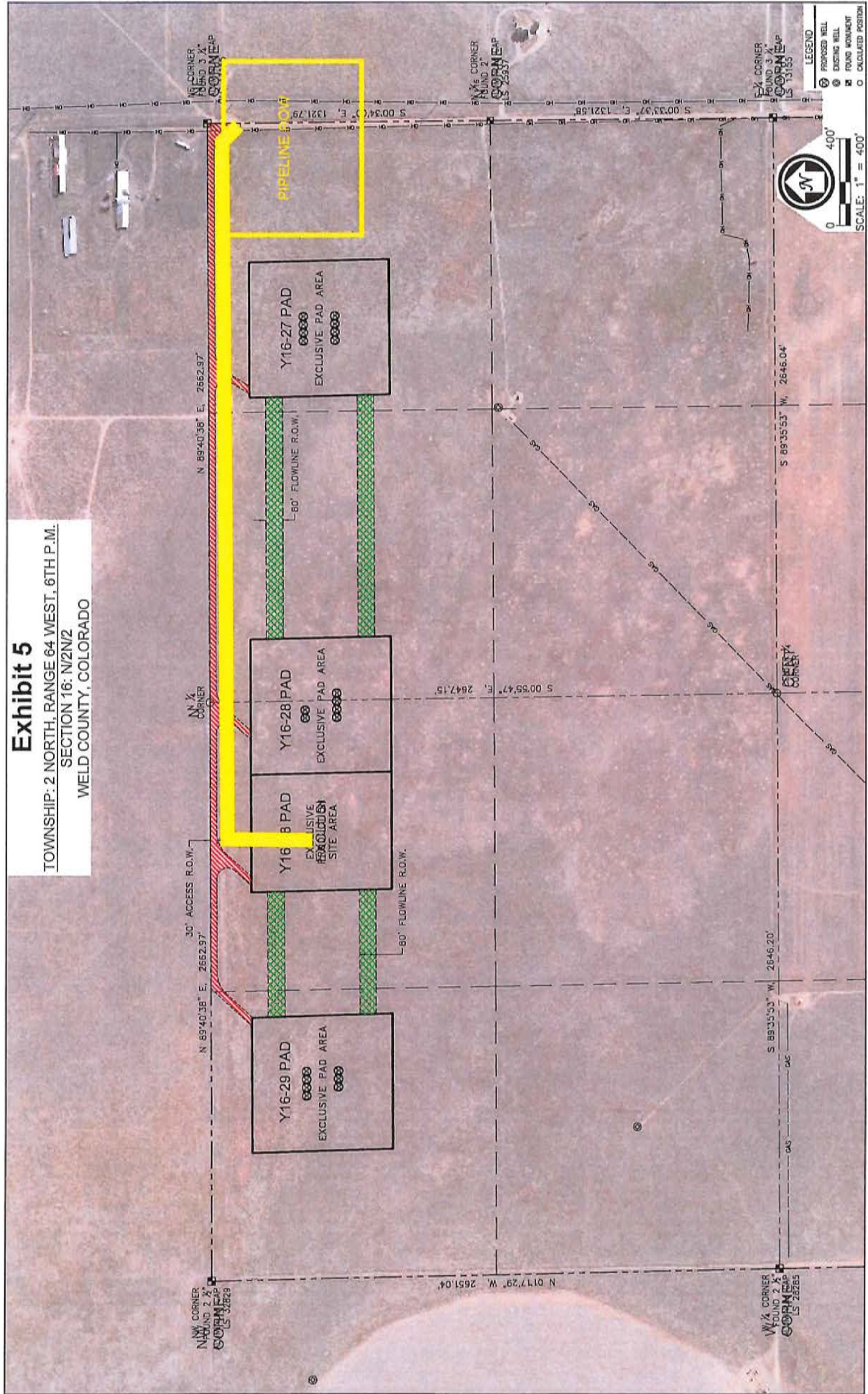


Exhibit 6



Red boxes indicate surface locations

IN THE MATTER OF THE APPLICATION OF NOBLE ENERGY, INC. – OPERATOR NO. 100322 – FOR AN ORDER TO DENY EIGHT (8) OF VERDAD RESOURCES, LLC'S FORM 2 APPLICATIONS FOR PERMIT TO DRILL FOR THE HP FARMS 02N-64W-04-1H WELL (DOCUMENT NUMBER 401208875), HP FARMS 02N-64W-04-2H WELL (DOCUMENT NUMBER 401209991), HP FARMS 02N-64W-04-3H WELL (DOCUMENT NUMBER 401210033), HP FARMS 02N-64W-04-4H WELL (DOCUMENT NUMBER 401210053), HP FARMS 02N-64W-04-5H WELL (DOCUMENT NUMBER 401210074), HP FARMS 02N-64W-04-6H WELL (DOCUMENT NUMBER 401210095), HP FARMS 02N-64W-04-7H WELL (DOCUMENT NUMBER 401210141) AND HP FARMS 02N-64W-04-8H WELL (DOCUMENT NUMBER 401210120) WITH THE SURFACE HOLE LOCATION IN SECTION 4, TOWNSHIP 2 NORTH, RANGE 64 WEST AND THE BOTTOM HOLE LOCATION IN SECTION 9, TOWNSHIP 2 NORTH, RANGE 64 WEST, 6TH P.M., WATTENBERG FIELD, WELD COUNTY, COLORADO PURSUANT TO RULE 503.b.(10) AND THE COLORADO OIL AND GAS CONSERVATION ACT

TYPE: GENERAL ADMINISTRATIVE

STATE OF COLORADO)
)ss.
CITY AND COUNTY OF DENVER)

I, Jamie L. Jost, of lawful age, and being first duly sworn upon my oath, state and declare that I am the attorney for Noble Energy, Inc., and that on or before the 14th day of July 2017, I caused a copy of the Application to be deposited in the United States Mail, postage prepaid, addressed to the parties listed on Exhibit A to this Affidavit.

Jamie L. Jost

Subscribed and sworn to before me this 17th day of July 2017.

Witness my hand and official seal.

[SEAL]

My commission expires: May 6, 2020

Notary Public

Kylie Chupp

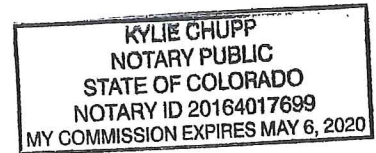


Exhibit A to Affidavit of Mailing

Verdad Resources LLC
ATTN: Kenny Trueax
5950 Cedar Springs Road
Dallas, Texas 75235

Verdad Resources LLC
ATTN: Kenny Trueax
1401 17th Street, Suite 925
Denver, Colorado 80202