

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:

401485170

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:

12/13/2017

TYPE OF WELL OIL GAS COALBED OTHER _____

Refilling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: Grinde Well Number: 01-64-05 1609B
Name of Operator: HIGHPOINT OPERATING CORPORATION COGCC Operator Number: 10071
Address: 1099 18TH ST STE 2300
City: DENVER State: CO Zip: 80202
Contact Name: Matt Barber Phone: (303)312-8188 Fax: (303)291-0420
Email: mbarber@billbarrettcorp.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20040060

WELL LOCATION INFORMATION

QtrQtr: SWNW Sec: 5 Twp: 1N Rng: 64W Meridian: 6

Latitude: 40.083150 Longitude: -104.583190

Footage at Surface: 1665 Feet ^{FNL/FSL} FNL 330 Feet ^{FEL/FWL} FWL

Field Name: WATTENBERG Field Number: 90750

Ground Elevation: 5025 County: WELD

GPS Data:

Date of Measurement: 11/02/2017 PDOP Reading: 1.2 Instrument Operator's Name: Robert Daley

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

Footage at Top of Prod Zone: ^{FNL/FSL} 955 ^{FEL/FWL} FNL 460 ^{FEL/FWL} FWL Bottom Hole: ^{FNL/FSL} 955 ^{FEL/FWL} FNL 400 ^{FEL/FWL} FEL
Sec: 5 Twp: 1N Rng: 64W Sec: 4 Twp: 1N 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.)

T1N - R64W
SEC 5: W/2
320 acres

Please see attached lease map

Total Acres in Described Lease: 320 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: 691 Feet
Building Unit: 652 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 317 Feet
Above Ground Utility: 302 Feet
Railroad: 5280 Feet
Property Line: 330 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: 11/13/2017

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: 477 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

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	407-2097	1280	Sec. 4 & 5: ALL

DRILLING PROGRAM

Proposed Total Measured Depth: 17032 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: 944 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? No

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: Land application

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 448950 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
SURF	13+1/2	9+5/8	36	0	1500	730	1500	0
1ST	8+3/4	7	26	0	7333	740	7333	
1ST LINER	6+1/8	4+1/2	11.6	6600	17032	694	17032	6600

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

This well has a bottom-hole location beyond the unit boundary setback. The bottom of the completed interval will be within the unit boundary setback at 955' FNL and 460' FEL of Section 4. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

The surface owner has waived Rule 318A.a & Rule 318A.c within the Surface Use Agreement.

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: Matt Barber

Title: Sr. Permit Analyst Date: 12/13/2017 Email: mbarber@billbarrettcorp.com

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

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

COGCC Approved:  _____ Director of COGCC Date: 2/13/2019

Expiration Date: 02/12/2021

API NUMBER

05 123 49715 00

Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

<u>COA Type</u>	<u>Description</u>
	Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed.
	Prior to drilling operations, Operator will perform a risk analysis of the potential for subsurface collision with existing offset wells within close proximity of the proposed well, taking into consideration the possibility of well path drift for both the existing and proposed wells. Where inclination, MWD or gyro surveys of the offset wells are available, or can be reasonably obtained by the operator, such surveys shall be incorporated in the risk analysis, taking into account survey instrument margin of error. For the proposed well, upon conclusion of drilling operations, an as-constructed final directional survey will be submitted to the COGCC with the Form 5.
	Operator acknowledges the proximity of the listed well. Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 05-123-07702, STEINWALD 29
	Bradenhead tests shall be performed according to the following schedule and the Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release and prior to stimulation and 2) If a delayed completion, 6 months after rig release and prior to stimulation. 3) Within 30 days after first production, as reported on Form 5A. If a bradenhead test reports a surface casing pressure greater than 200 psig stimulation is not allowed until the Engineering Supervisor has been consulted. 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j. and provide cement coverage from end of 7-inch casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	BBC will adhere to the COGCC Policy for Bradenhead Monitoring effective 5/29/12.
2	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.

Total: 2 comment(s)

Applicable Policies and Notices to Operators

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

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

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401485170	FORM 2 SUBMITTED
401485200	DIRECTIONAL DATA
401485202	DEVIATED DRILLING PLAN
401485204	WELL LOCATION PLAT
401485325	WASTE MANAGEMENT PLAN
401485381	OffsetWellEvaluations Data
401485384	LEASE MAP
401492273	SURFACE AGRMT/SURETY
401492586	EXCEPTION LOC REQUEST
401939310	OFFSET WELL EVALUATION

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Permitting review complete, passed Final Review.	02/04/2019
Permit	Corrected Elevation to 5025' to reflect Well Location Plat. Corrected operator comment for drilling beyond setback to standard language. Deleted Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government. APD not in Urban Mitigation Area.	01/30/2019
Engineer	Corrected distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells, in accordance with email from operator. Operator indicated oil-based drilling fluid will not be used. Updated surface casing setting depth per email from operator.	01/28/2019
Engineer	emailed operator- There is a water well within one mile that is 1,020' deep, additionally, DWR's aquifer determination tool lists the depth of the Laramie-Fox Hills at 1,065'. The proposed surface casing is too shallow and does not provide aquifer isolation and protection as required.	05/23/2018
Engineer	Emailed operator- Please review distance from the proposed wellbores (document numbers 401485097, 401485170, 401485276, 401485206 and 401485297) to the nearest existing or proposed wellbore belonging to another operator, including plugged wells. It was indicated on the forms that there is not another well belonging to another operator within 1500' but based on a quick view of COGCC's map that is incorrect. There are several other wells that enter within 1500' of the proposed wells. If you have anti-collision reports that supposed the other wells being over 1500' away from the proposed well please send me those reports.	05/17/2018
Permit	Status Pending - contacted operator for the following corrections: - revise comment on Submit tab for BHL beyond the unit setback; COGCC will provide guidance. - revise comment for exception location waiver in SUA; add page 3, section 8.	05/14/2018
Permit	Passed Completeness.	12/29/2017
Permit	Returned to draft for: - right to construct listed as "Surface Use Agreement", but missing Surface Use Agreement attachment - attachment "DRILLING PLAN" should be renamed to "DEVIATED DRILLING PLAN"	12/20/2017

Total: 8 comment(s)