

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER <u>Unplanned</u>	Refiling <input type="checkbox"/>	Date Received: 10/23/2018
ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input checked="" type="checkbox"/>	

Well Name: Critter Creek Well Number: 15-6401B

Name of Operator: HIGHPOINT OPERATING CORPORATION COGCC Operator Number: 10071

Address: 1099 18TH ST STE 2300

City: DENVER State: CO Zip: 80202

Contact Name: Delores Montoya Phone: (303)312-8145 Fax: ()

Email: dmontoya@hpres.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20040060

WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 15 Twp: 11N Rng: 63W Meridian: 6

Latitude: 40.916242 Longitude: -104.424486

Footage at Surface: <u>400</u> Feet	FNL/FSL	FEL/FWL
<u>400</u> Feet	<u>FSL</u> <u>1100</u> Feet	<u>FWL</u>

Field Name: HEREFORD Field Number: 34200

Ground Elevation: 5242 County: WELD

GPS Data:
Date of Measurement: 03/27/2018 PDOP Reading: 1.3 Instrument Operator's Name: CHAD MEIERS, M.M.

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
<u>300</u> FSL <u>330</u> FWL	<u>240</u> FNL <u>330</u> FWL		
Sec: <u>15</u> Twp: <u>11N</u> Rng: <u>63W</u>	Sec: <u>10</u> Twp: <u>11N</u> Rng: <u>63W</u>		

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.)

Legal Description: T11NR63W, 6th P.M.
 Section: 15 ALL
 Containing 2,720.00 acres more or less

Total Acres in Described Lease: 2720 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: 392 Feet
 Above Ground Utility: 364 Feet
 Railroad: 5280 Feet
 Property Line: 400 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: 882 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 300 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	421-94	1280	Sec 10 & Sec 15: All

DRILLING PROGRAM

Proposed Total Measured Depth: 17814 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? 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 609

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: 454282 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	1549	445	1549	0
1ST	8+3/4	7	23	0	7845	604	7845	1300
1ST LINER	6+1/8	4+1/2	11.6	7801	17814	500	17814	7801

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

- While cementing the 7" intermediate casing string we incurred lost fluid returns. After pumping the required cement and spacer fluid, the well began to return fluid to surface. We attempted several times to shut in the well and allow sufficient time for cement to set. After 9 hours, cement set up and flow discontinued.
- After tripping in the hole with the lateral BHA assembly to drill out float equipment, we encountered a tight spot in the 7" cased hole at 7390' MD.
- We tripped out of the hole and ran a caliper log to depth. The caliper log confirmed collapsed 7" casing at 7386' MD.
- We ran a CBL to depth and identified the estimated TOC at 6564' MD. The Niobrara top is at 7248' MD.
- As a result, we made the decision to openhole sidetrack to avoid the section of collapsed casing.
- The total measured depth of the wellbore which we are abandoning is 7860' MD.
- The 9-5/8" surface casing string is set and cemented at 1549.5' MD
- The 7" intermediate casing string is set at 7845.8' MD. The estimated TOC is at 6564'.
- There is a CIBP set inside the 7" casing string at 6741' MD.
- The 7" casing string will be cut at 1900' MD and removed from the wellbore, leaving behind 8-3/4" open hole between the surface casing shoe at 1549.5' MD and the cut 7" casing string at 1900' MD'
- There will be a 400' cement plug pumped inside the 7" casing string from 1950' to 1900' MD. The plug will continue into the 8-3/4" open hole from 1900' MD to 1550' MD. The estimated volume of cement (+ 20% excess) is 195 cubic ft.
- Cement slurry for plug: Class G, 17 ppg, 0.9912 cu ft./sack
- The Sidetrack KOP is estimated will be at 1550' MD.
- The objective formation for the sidetrack hole is the Niobrara formation, which is the same objective formation as the wellbore being abandoned.
- The PBHL of the sidetrack hole is the same as the wellbore being abandoned.

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 300' FNL and 330' FWL of Section 10. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

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

Location ID: 444163

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

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

Signed: _____ Print Name: Delores Montoya

Title: Sr. Regulatory Analyst Date: 10/23/2018 Email: dmontoya@hpres.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: 10/25/2018

Expiration Date: 10/24/2020

API NUMBER

05 123 47301 01

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>
	Bradenhead tests shall be performed and reported according to the following schedule and Form 17 submitted within 10 days of each test.: 1) All: Within 60 days of rig release, prior to stimulation. 2) Delayed completion: 6 months after rig release, prior to stimulation. 3) All: Within 90 days after first sales, as reported on the Form 5A, Completed Interval Report.
	1) Provide cement coverage to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
	Operator will insure 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.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	HighPoint 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)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401805838	FORM 2 SUBMITTED
401806145	OffsetWellEvaluations Data
401806172	WELLBORE DIAGRAM
401806173	CORRESPONDENCE
401810181	OFFSET WELL EVALUATION

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	Final Approval Comment: First String (7") casing depth of 7845' shown on this form is the existing First String to be left in the 00 wellbore. The actual depth of the new First String casing to be run in the 01 sidetrack wellbore may differ when it is set in the new wellbore.	10/25/2018
Permit	Permitting review complete, passed Final Review.	10/25/2018
Permit	LGD and public comment waived for this application for an unplanned sidetrack with drilling in progress.	10/24/2018
Permit	Passed completeness.	10/24/2018

Total: 4 comment(s)