

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 _____ | Refiling <input type="checkbox"/> |
| ZONE TYPE | SINGLE ZONE <input type="checkbox"/> | MULTIPLE ZONES <input checked="" type="checkbox"/> | COMMINGLE ZONES <input type="checkbox"/> | | Sidetrack <input type="checkbox"/> |

Date Received:
03/23/2017

Well Name: MARY JANE Well Number: 13-5

Name of Operator: NIGHTHAWK PRODUCTION LLC COGCC Operator Number: 10399

Address: 1805 SHEA CENTER DR #290

City: HIGHLANDS RANCH State: CO Zip: 80129

Contact Name: Joyce Henkin Phone: (303)407-9609 Fax: (303)407-8790

Email: joycehenkin@nighthawkenergy.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20120011

WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 5 Twp: 7S Rng: 54W Meridian: 6

Latitude: 39.464760 Longitude: -103.470930

Footage at Surface: 982 Feet FNL/FSL 658 Feet FEL/FWL

Field Name: BROKEN SPEAR Field Number: 7567

Ground Elevation: 5353 County: LINCOLN

GPS Data:
Date of Measurement: 01/31/2017 PDOP Reading: 2.8 Instrument Operator's Name: Elijah Frane

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 _____

Sec: _____ Twp: _____ Rng: _____ Sec: _____ Twp: _____ Rng: _____

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.)

T7S R54W Sec 5

Total Acres in Described Lease: 638 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: 658 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5125 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 4220 Feet

Above Ground Utility: 4220 Feet

Railroad: 5280 Feet

Property Line: 658 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: 2860 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary _____ 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.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| ATOKA | ATOK | | | |
| CHEROKEE | CHRK | | | |
| LANSING-KANSAS CITY | LGKC | | | |
| MARMATON | MRTN | | | |
| MISSISSIPPIAN-SPERGEN | MS-SP | | | |
| WOLFCAMP | WFCMP | | | |

DRILLING PROGRAM

Proposed Total Measured Depth: 8800 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: 877 Feet No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? No

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: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Drilling pit

Other Disposal Description:

Backfill

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 |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| SURF | 12+1/4 | 8+5/8 | 24 | 0 | 430 | 290 | 430 | 0 |
| 1ST | 7+7/8 | 5+1/2 | 17 | 0 | 8800 | 602 | 8800 | 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 _____

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

Location ID: _____

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: Joyce Henkin

Title: Production Tech Date: 3/23/2017 Email: joycehenkin@nighthawkenery.

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: 5/15/2017

Expiration Date: 05/14/2019

API NUMBER

05 073 06722 00

Conditions Of Approval

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

COA Type

Description

- 1) Provide 48 hour notice prior to spud via electronic Form 42.
- 2) Set at least 430' of surface casing for aquifer protection. Cement to surface.
- 3) If production casing is set provide cement coverage to at least 200' above the shallowest completed interval or Lansing, whichever is shallower and across Cheyenne/Dakota interval (5200' to 4600' min). Run and submit CBL to verify cemented intervals.
- 4) If well is a dry hole set plugs at the following depths: 40 sks cement +/- 50' above the Spergen, 40 sks cement +/- 50' above the Lansing, 40 sks cement across any DST w/ show, 40 sks cement 100' below Cheyenne (5200'), 40 sks cement 50' above top of Dakota (4600'), 50 sks cement from 50' below surface casing shoe up into surface casing, 15 sks cement in top of surface casing, cut 4 ft below GL, weld on plate, 5 sks cement each in rat hole and mouse hole.

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|--|
| 1 | Drilling/Completion Operations | Open-hole Resistivity Log with Gamma Ray Log will be run from TD into the surface casing. A Cement Bond Log with Gamma-Ray will be run on production casing, or on intermediate casing if a production liner is run. The Form 5, Completion Report, will list all logs run and have those logs attached. |

Total: 1 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> |
|--------------------|----------------------|
| 401219842 | FORM 2 SUBMITTED |
| 401223695 | WELL LOCATION PLAT |
| 401253767 | SURFACE AGRMT/SURETY |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit | Final Review Completed. | 05/12/2017 |
| Permit | Per operator: 1) Corrected reported latitude. Wellhead location now plots correctly. 2) Unchecked "surface owner is committed to an O&G lease." 3) Corrected distance to nearest building, public road, and above ground utility. 4) Corrected distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation to 2860'. 5) Removed distance from completed portion of wellbore to nearest unit boundary, as no unit exists. 6) Removed spacing & formations comments. 7) Corrected distance to nearest plugged well (877' due N to 073-06169). 8) Revised Rule 317.p BMP. | 05/12/2017 |
| Permit | Confirm lease checkboxes. Confirm distance to nearest well permitted/completed in same formation. Distance to nearest well belonging to another operator is incorrect. | 05/11/2017 |
| Permit | Per Operator request, changed Drilling Fluids disposal to "OFFSITE Reuse/Recycle." Changed Other Description to "Backfill." | 05/11/2017 |
| Engineer | Aquifer depth: Offset log 073-06037 (5349 gs sp/res change at 360'), 073-06582 (5313 gs gamma change at 324'). Increased surface casing to 430' and cement sx proportionately. | 04/21/2017 |
| LGD | County Permit #1704 | 04/20/2017 |
| Permit | Passed Completeness | 04/13/2017 |
| Permit | Returned to Draft: -SUA contains monetary compensation | 04/07/2017 |
| Permit | changed 1st sting casing depth per operator request | 03/29/2017 |
| Permit | Returned to Draft: Need Well Plat and SUA, location pictures and drawing can be deleted from this form | 03/29/2017 |

Total: 10 comment(s)