

**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 _____ ZONE TYPE       SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONES <input checked="" type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Refiling <input type="checkbox"/> Sidetrack <input type="checkbox"/>
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Date Received:  
05/31/2017

Well Name: MARY JANE      Well Number: 11-5

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: NESW      Sec: 5      Twp: 7S      Rng: 54W      Meridian: 6

Latitude: 39.467010      Longitude: -103.467630

Footage at Surface: 1791 Feet      FNL/FSL FSL 1542 Feet      FEL/FWL FWL

Field Name: BROKEN SPEAR      Field Number: 7567

Ground Elevation: 5356      County: LINCOLN

GPS Data:  
Date of Measurement: 02/10/2017    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.)

All Sec 5 T7S R54W 6th PM

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: 1542 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 4150 Feet

Building Unit: 4150 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 3406 Feet

Above Ground Utility: 3425 Feet

Railroad: 5280 Feet

Property Line: 1542 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: 1240 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.)
MISSISSIPPIAN	MSSP			
PENNSYLVANIAN	PENN			

## 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: 870 Feet  No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? No

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S 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 when dry

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	420	275	420	0
1ST	7+7/8	5+1/2	17	300	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 Mary Jane 11-5 will produce into the Mary Jane 8-5 Battery  
Existing wellbore within 1,500' is 05-073-06169 which was PA'd on 1-15-1985.

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: Joyce Henkin

Title: Production Tech Date: 5/31/2017 Email: joycehenkin@nighthawkenergy.

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: 8/20/2017

Expiration Date: 08/19/2019

**API NUMBER**  
05 073 06724 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

	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 30 days of first production, as reported on Form 5A.
	1) Provide 48 hour notice prior to spud via electronic Form 42. 2) Set at least 420' of surface casing. 3) If production casing is set provide cement coverage to at least 200' above the shallowest completed interval or Spergen, 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 across any DST w/ show, 40 sks cement 50' 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

### No BMP/COA Type

### Description

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 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.
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Total: 1 comment(s)

## Applicable Policies and Notices to Operators

Policy
Notice Concerning Operating Requirements for Wildlife Protection. <a href="http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf">http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf</a>

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
901607	OTHER
401227323	FORM 2 SUBMITTED
401295870	WELL LOCATION PLAT
401296382	TOPO MAP
401307666	SURFACE AGRMT/SURETY

Total Attach: 5 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	08/14/2017
Permit	Per phone conversation with operator, 8/1/2017, 8/14/2017: 1) Corrected lease description to "All Section 5." 2) Corrected cultural setbacks to match related Form 2A. 3) Corrected distance to nearest permitted wellbore. 4) Corrected oil based drilling fluids dropdown. 5) Deleted unnecessary attachments.	08/01/2017
Permit	1) Confirm lease information. 2) Confirm cultural setbacks with related Form 2A. 3) Confirm distance to nearest permitted wellbore. 4) Confirm oil based drilling fluids dropdown. 5) Clean up attachments list.	07/24/2017
Engineer	Offset Einspahr #1, 073-06037, 5349 gs /5358 kb, IEL base of aquifer 360'.	07/18/2017
LGD	County Permit # 1707	06/26/2017
Permit	Passed Completeness.	06/23/2017
Permit	Returned to draft for: -Form 2A should be added to Related Forms Tab. -On Submit Tab, "Is this application being submitted with an Oil and Gas Location Assessment application?" should be "yes". -SUA redacted information is still visible.	06/13/2017
Permit	Returned to draft for: -On the Surface & Minerals Tab the "is the mineral owner." should be marked. -Form 2A should be added to Related Forms Tab. -SUA redacted information is still visible. -Field Name appears to be incorrect.	06/07/2017

Total: 8 comment(s)