

**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"/>	Date Received: 10/15/2014
ZONE TYPE    SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONES <input checked="" type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	

Well Name: KEYSTONE      Well Number: 3-7

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: KYLA HOWL      Phone: (505)635.5669      Fax: ( )

Email: kylahowl@nighthawkenergy.com

**RECLAMATION FINANCIAL ASSURANCE**  
Plugging and Abandonment Bond Surety ID: 20120011

**WELL LOCATION INFORMATION**

QtrQtr: NWNE      Sec: 7      Twp: 7S      Rng: 54W      Meridian: 6

Latitude: 39.460030      Longitude: -103.482520

Footage at Surface: 679 feet      FNL/FSL      FNL 2560 feet      FEL/FWL      FEL

Field Name: ARIKAREE CREEK      Field Number: 2914

Ground Elevation: 5328      County: LINCOLN

GPS Data:  
Date of Measurement: 07/24/2014      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 7:ALL

Total Acres in Described Lease: 640 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: 679 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 3610 Feet

Building Unit: 3610 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 2511 Feet

Above Ground Utility: 2511 Feet

Railroad: 5280 Feet

Property Line: 1967 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 Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 2369 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: 9000 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 2369 Feet (Including plugged wells)

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	410	160	410	0
1ST	7+7/8	5+1/2	17	0	9000	1274	9000	6000

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? \_\_\_\_\_ Yes

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

Signed: \_\_\_\_\_ Print Name: KYLA HOWL

Title: permit tech. Date: 10/15/2014 Email: kylahowl@nighthawkenegy.co

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: Matthew Lee Director of COGCC Date: 11/21/2014

Expiration Date: 11/20/2016

API NUMBER  
05 073 06683 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

	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.
	1) Provide 48 hour notice prior to spud via electronic Form 42. 2) Set at least 410' 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 Spergen, whichever is shallower and across Cheyenne/Dakota interval (5200' to 4600' min). Run and submit CBL 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 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

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Construction	<p>Certificate to Discharge Under CDPHE General Permit No. COR-030000 Stormwater Discharges Associated with Construction Certification No. COR031825 Prior to construction, perimeter controls will be installed utilizing cuttings from the clearing operations. Once the well pad has been constructed a variety of BMP's shall be utilized for the site specific condtions. BMP's to be utilized may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>-Dirt Ditch/Berm</li> <li>-Erosion Control Blankets</li> <li>-Straw Bale Barrier</li> <li>-Seeding</li> <li>-Imported Hard Armor</li> <li>-Check Dams</li> <li>-Culvert/Culvert Protection</li> <li>-Crimped Straw</li> <li>-Silt Fence</li> <li>-Surface Roughening/Surface Rip</li> </ul> <p>During construction, each site will be inspected every 14 days and 24-72 hours after any precipitation event causing erosion depending on the current site activities. These inspections will be recorded and maintained at Nighthawk's office. Repairs shall be completed as soon as possible after an inspection reporting BMP repairs are required. Any site specific modifications will be revised on the site plan when implemented at the site. A field wide Stormwater Management Plan (SWMP) for the Project Area is located at Nighthawk's office. Spill Protection Control and Countermeasures (SPCC) plans for the Project Area are stored on file at Nighthawk's office. The field wide SWMP addresses SPCC during construction operations.</p>

Total: 1 comment(s)

### Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

### Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
400706308	FORM 2 SUBMITTED
400706333	WELL LOCATION PLAT
400706334	TOPO MAP
400709100	SURFACE AGRMT/SURETY

Total Attach: 4 Files

### General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final review completed; no public comment received.	11/21/2014 7:01:29 AM
LGD	County Permit #14119	10/17/2014 2:14:11 PM
Permit	Passed Completeness	10/17/2014 10:18:03 AM

Total: 3 comment(s)