

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.)

NENE, T6S, R54W, SEC 15:E/2

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: 610 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: 610 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 610 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: 1901 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.)
ARBUCKLE	ABCK			

DRILLING PROGRAM

Proposed Total Measured Depth: 9000 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1901 Feet (Including plugged wells)

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: ONSITE Drilling Fluids Disposal Methods: Evaporation

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	9+5/8	36	0	300	85	300	0
1ST	8+3/4	7	26	0	9000	937	9000	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

12.0 PPG LEAD CEMENT DESIGNED TO SURFACE W/627 SACKS OF CEMENT.
13.0 PPG TAIL CEMENT DESIGNED TO 6000' W/310 SACKS OF CEMENT.

UIC forms 31, 33 & 26 were submitted via USPS 10/25/13.

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 VAUGHAN

Title: AGENT FOR NIGHTHAWK Date: 10/25/2013 Email: KVAUGHAN@LTENV.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: 12/19/2013

Expiration Date: 12/18/2015

API NUMBER

05 073 06571 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) Provide cement coverage to at least 200' above the Marmaton and across Cheyenne/Dakota (5300'-4500' minimum). Run and submit CBL to verify cemented intervals.
- 3) Injection is not authorized until approval of Forms 31 and 33.
- 4) Prior approval of Form 4 is required for step rate and injectivity tests.
- 5) Retrieve water sample before stimulating formation.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
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 this site specific conditions. BMP's to be utilized may include, but are not limited to:</p> <ul style="list-style-type: none">-Dirt Ditch/Berm-Erosion Control Blankets-Straw Bale Barrier-Straw Wattles-Seeding-Imported Hard Armor-Check Dams-Culvert/Culvert Protection-Crimped Straw-Silt Fence-Surface Roughening <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

<u>Att Doc Num</u>	<u>Name</u>
400489798	FORM 2 SUBMITTED
400489863	TOPO MAP
400489864	WELL LOCATION PLAT
400489865	SURFACE AGRMT/SURETY

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Operator replied RE: Doc [#400505861] SNOWBIRD 1-15, Doc [#400489798] ARIKAREE CREEK SWD 1: We will monitor the deviation in each of the wells. We have taken into consideration of stimulation and as of right now do not anticipate any stimulation of either well. We currently, in the offset producing wells perform a matrix clean up utilizing 7.5% acetic acid. In the SWD well we only anticipate performing the step rate tests that are required once we get the well drilled to get the UIC permit.	12/18/2013 2:15:40 PM
Engineer	Contacted operator regarding proximity of SNOWBIRD 1-15	12/11/2013 1:02:52 PM
Permit	Final review completed; no public comment received.	12/10/2013 3:34:01 PM
Permit	From 2A on hold. Waiting on form 2a to go into process. Form 2A in process 12/10/2013.	12/2/2013 9:36:25 AM
Permit	Injection permit received.	11/1/2013 4:35:15 AM
Permit	At this point in time injection permits have not been received.	10/31/2013 1:51:39 PM
LGD	County Permit #1378	10/29/2013 7:52:51 AM
Permit	This form has passed completeness.	10/28/2013 3:55:53 PM
Permit	Returned to draft: Need UIC comment.	10/28/2013 2:30:34 PM
Permit	Returned to draft: 1) Need dist. to lease line. 2) Need comment that UIC forms 31 and 33 have been submitted.	10/28/2013 9:20:40 AM

Total: 10 comment(s)