

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.)

See attached mineral lease map. This well will produce from 2 leases within the Bull Mountain Unit: Federal lease COC 66705 (1040 acres) and a fee lease (1040 acres). Combined total acres for both leases is 2080 acres. The lease listed on this APD is the first lease encountered at the top of production.

Total Acres in Described Lease: 1040 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC 66705

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1659 Feet
 Building Unit: 1659 Feet
 High Occupancy Building Unit: 5280 Feet
 Designated Outside Activity Area: 5280 Feet
 Public Road: 2234 Feet
 Above Ground Utility: 2113 Feet
 Railroad: 5280 Feet
 Property Line: 707 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: 2106 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 688 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Bull Mountain U Unit Number: COC 067120x

SPACING & FORMATIONS COMMENTS

This well is within the Federal Bull Mountain Unit

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
MANCOS	MNCS			

DRILLING PROGRAM

Proposed Total Measured Depth: 13960 Feet

Distance from proposed wellbore to nearest existing or permitted wellbore belonging to another operator:

2106 Feet (Including plugged wells)

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: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

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
CONDUCTOR	26	20	106.5	0	80	137	80	0
SURF	16	13+3/8	54.5	0	970	394	970	0
1ST	12+1/4	9+5/8	40	0	5500	1270	5500	0
2ND	8+1/2	5+1/2	20	0	13960	1757	13960	5200

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 The nearest well permitted/completed in the same formation is the Hotchkiss Federal 1289 17-11 (approximately 2106' south of the completed portion of the wellbore).

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

Location ID: 429333

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: Catherine Dickert

Title: Env & Permitting Manager Date: 10/20/2015 Email: cdickert@sginterests.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: 12/30/2015

Expiration Date: 12/29/2017

API NUMBER

05 051 06150 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) Operator shall comply with the most current revision of the Northwest Notification Policy. See attached notice. |
| | (2) COGCC concurs with operator's proposed cement to surface for the first-string casing. First-string casing cement shall extend from the first-string casing shoe to a minimum of 200' above the surface casing shoe. Casing cement coverage verification by CBL is required for first-string casing and non-horizontal section of production string. |

Best Management Practices

No	BMP/COA Type	Description
1	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 kickoff point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing from kickoff point (or on intermediate casing if production liner is run) into the surface casing or into the overlap between the production and intermediate casing in the event intermediate casing is run. The horizontal portion of a well from kickoff point to TD will be logged-while-drilling with a gamma ray tool. 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: 1 comment(s)

Applicable Policies and Notices to Operators

Policy
NW Colorado Notification Policy. http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf

Attachment Check List

Att Doc Num	Name
400916552	FORM 2 SUBMITTED
400916800	TOPO MAP
400916805	WELL LOCATION PLAT
400916910	DIRECTIONAL DATA
400920561	DEVIATED DRILLING PLAN
400925359	LEASE MAP
400925361	FED. DRILLING PERMIT

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	12/22/2015 1:08:48 PM
Permit	Corrected acres in lease to match COC 066705, from 2080' to 1040' as per operator. Corrected that minerals beneath the location will be produced as per operator. Ready to pass.	11/10/2015 2:21:32 PM
Engineer	Evaluated existing offset oil and gas wells within 1,500 feet of this wellbore. No mitigation required. Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. This information was used in addition to locally-available geophysical logs and hydrogeologic information to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within one mile is 460 feet.	11/4/2015 2:06:42 PM
Permit	Check on minerals developed re phone call from Tracy at SG.	10/28/2015 10:28:33 AM
Permit	Passes Completeness.	10/28/2015 9:19:57 AM
Permit	10/26/2015: Mineral Lease Map needs to include township and range; Missing Federal Drilling Permit. Returning to Draft and sending an email to permitter to upload documents.	10/26/2015 8:15:55 AM

Total: 6 comment(s)