

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.)

SITE RELEASES HAVE BEEN SIGNED AND ATTACHED.

Total Acres in Described Lease: _____ 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: _____ 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: 596 Feet

Above Ground Utility: 2495 Feet

Railroad: 528 Feet

Property Line: 660 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: 1270 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.)

DRILLING PROGRAM

Proposed Total Measured Depth: 6719 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 570 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 N/A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

No pits to be used and the surface disturbance will not be enlarged beyond original disturbance.

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	14	0	37	50	37	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

Operator would like to re-enter this well to adequately re-plug. Procedures for plugging are included below and also attached in pdf format. Proposed wellbore diagram attached as well. No pits to be used and the surface disturbance will not be enlarged beyond original disturbance. PDOP reading not provided due to the survey on this well being done in 1955.

1. Locate old surface casing using magnetometer. Record the GPS coordinates and the datum used for the GPS coordinates. Set a stake and try to locate the boundaries of the old pad site.
2. Dig down to the old surface casing and cut plate off, install a slip collar to fit over the 8 5/8".
3. Install flange. If rig is not on location then install a dry hole tree to secure the well until the rig arrives.
4. MIRU workover rig and related equipment including power swivel, mud tank and pump. Bleed off any pressure on the dry hole tree. ND the dry hole tree and NU the rig BOP's.
5. Test the BOP's to 250 psi for a low test and 4,500 psi for a high test. RU the work floor and PU 2 7/8" 8 rd work string, 6-6 1/2" DCs, and a 7 7/8" rock bit.
6. Drill up surface cement plug to bottom of surface casing at approximately 37', POOH. GIH with 4 3/4" wash tool and wash down to top of Niobrara at 5656'.
7. Circulate and prepare to set cement plugs.
8. If unable to wash down past surface casing, GIH with 6 1/8" rock bit and wash down to 5656'. POOH and GIH open ended to set required cement plugs.
9. RU cements. Test lines to 4,500 psi.
10. Set plugs coming up hole according to the following Cement Plug Table.
11. Once the top plug has been set cut casing to 5' below surface and weld on a plate to seal the well. Cover up the well and remediate the disturbed area with the appropriate seed mix.

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: Cynthia Pinel

Title: Regulatory Comp. Analyst Date: 11/1/2013 Email: cynthia.pinel@crzo.net

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: 11/22/2013

Expiration Date: 11/21/2015

API NUMBER

05 123 05791 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

	Set plugs as proposed. Proposed Plug #1: 5656' to 5356' (300' plug at top of Niobrara): 52 sks Proposed Plug #2: 600' to surface (covering all FW sands): 108 sks
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Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	'The scope of this work is to re-enter the old wellbore that had previously been plugged and abandoned. The well will be properly plugged and abandoned by setting cement plugs to isolate the formation, freshwater zone, and setting a cement cap near the surface. Then the surface casing will have a plate welded as final seal 5' below the surface. The old wellbore will then be buried and the surface location will be remediated.
2	General Housekeeping	'Perform safety meeting prior to rigging up ANY equipment on location. Discuss the job procedure and objectives with all personnel on location. Document the safety meeting on the report sent to Carrizo. Make note of all potential risks/hazards, and clearly identify an emergency route and emergency vehicle. Also make note of any new or inexperienced personnel on location. Ensure proper Personal Protective Equipment (PPE) is used during the job. Minimums are hard hats, steel toes, and safety glasses.
3	Dust control	All personnel should keep their speed down to 30 mph once they are near a residence or in a high traffic area to minimize dust.

Total: 3 comment(s)

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Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400503027	FORM 2 SUBMITTED
400503033	WELLBORE DIAGRAM
400503034	WELLBORE DIAGRAM
400503035	PROPOSED PLUGGING PROCEDURE
400503036	SURFACE OWNER CONSENT
400503037	SURFACE OWNER CONSENT
400505995	WAIVERS

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Corrected 8-5/8" casing weight from 37 ppf (which was the setting depth, not the casing weight) to 14 ppf, as shown on the Log of Oil and Gas Well, COGCC Document No. 243473.	11/22/2013 7:47:09 AM
Permit	Oper. decided not to request expedited approval.	11/19/2013 8:46:38 AM
Permit	Re-req'd var. req. ltr. and SO waiver. Per oper. added surface owner & min. owner info. Added drilling tab info.	11/15/2013 8:59:45 AM
Permit	Checked S.O. is fee. Req'd waiver of 20 day comment period from SO. Req'd 502.b variance req. ltr.	11/1/2013 12:05:14 PM
Permit	This form has passed completeness.	11/1/2013 11:52:31 AM

Total: 5 comment(s)