

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
10/03/2018

TYPE OF WELL OIL GAS COALBED OTHER _____

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refilling
Sidetrack

Well Name: CC Well Number: 0697-10-03E

Name of Operator: LARAMIE ENERGY LLC COGCC Operator Number: 10433

Address: 1401 SEVENTEENTH STREET #1401

City: DENVER State: CO Zip: 80202

Contact Name: Joan Proulx Phone: (970)263-3641 Fax: ()

Email: jproulx@laramie-energy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20120081

WELL LOCATION INFORMATION

QtrQtr: NENW Sec: 10 Twp: 6S Rng: 97W Meridian: 6

Latitude: 39.544490 Longitude: -108.207013

Footage at Surface: 70 Feet ^{FNL/FSL} FNL 2386 Feet ^{FEL/FWL} FWL

Field Name: GRAND VALLEY Field Number: 31290

Ground Elevation: 8601 County: GARFIELD

GPS Data:
Date of Measurement: 08/04/2017 PDOP Reading: 1.5 Instrument Operator's Name: T Sherrill

If well is Directional Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: ^{FNL/FSL} 643 ^{FEL/FWL} FNL 703 ^{FEL} FEL Bottom Hole: ^{FNL/FSL} 643 ^{FEL} FNL 703 ^{FEL} FEL

Sec: 10 Twp: 6S Rng: 97W Sec: 10 Twp: 6S Rng: 97W

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: applicant is owner

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.)

See attached mineral lease map

Total Acres in Described Lease: 12120 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: 703 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: 5280 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 2889 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: 242 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.)
ILES	ILES	1-229		
WILLIAMS FORK	WMFK	1-229		

DRILLING PROGRAM

Proposed Total Measured Depth: 9991 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: _____ Feet No well belonging to another operator within 1,500 feet

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: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

See attached Cuttings Management Plan

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	18	47.4	0	80	100	80	0
SURF	14+3/4	9+5/8	36	0	2530	1310	2530	0
1ST	8+3/4	4+1/2	11.6	0	9991	1534	9991	2030

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 No CDP #: _____

Location ID: 383264

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: Joan Proulx

Title: Regulatory Analyst Date: 10/3/2018 Email: jproulx@laramie-energy.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: 2/13/2019

Expiration Date: 02/12/2021

API NUMBER

05 045 24259 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.

<u>COA Type</u>	<u>Description</u>
	1. Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operation (dated January 5, 2017).
	1. If conductors are preset, Operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016, revised October 6, 2016).
	Drilling / Completion Operations: The following COAs will apply: •Water/Bentonite-Based Drilling Mud (WBM) Generated Solids / Cuttings Management and Onsite Disposal or Onsite Beneficial Reuse COA: a) A closed loop system must be implemented during drilling (as indicated on the Form 2A and Form 2). B) All cuttings generated during drilling must be kept in a bermed portion of the well pad prior to disposition. c) The moisture content of any water/bentonite-based drilling mud (WBM-) generated cutting shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. Solids control equipment consisting of shale shakers, centrifuges, and flocculating unit may be utilized to separate WBM-generated cutting solids from liquids (water/bentonite drilling mud). Drill cuttings will be segregated between surface casing cuttings and the intermediate / production zone cuttings; and stockpiled on location. d) Within two weeks of the start of drilling, cuttings samples (a minimum of one well for pads with 10 or fewer wells and two wells for pads with 11 or more wells that are aerially representative of the total area being drilled from this location) from each interval will be collected and will be submitted for laboratory analysis of COGCC Table 910-1 constituents. If cuttings meet Table 910-1 standards, they will be treated as soil and beneficially reused on location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit, or utilized in onsite interim reclamation activities); e) In the event that a certain volume of drill cuttings analytically demonstrate constituents above Table 910-1 standards, the cuttings will be remediated during interim reclamation activities to levels below all applicable standards of Table 910-1; f) No liners (if used) are allowed to be disposed of with the drill cuttings.
	1) Operator shall comply with the most current revision of the Northwest Notification Policy. 2) Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesaverde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with a cement bond log.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
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 TD into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. 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 will state "No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 1 comment(s)

Applicable Policies and Notices to Operators

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

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401600787	FORM 2 SUBMITTED
401600804	MINERAL LEASE MAP
401781116	DEVIATED DRILLING PLAN
401781117	OTHER
401781119	WELL LOCATION PLAT
401781122	DIRECTIONAL DATA

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	-Changed spacing order 510-48 to 1-229 as 510-48 did not create a unit. -All corrections made with operator concurrence	01/15/2019
Engineer	Offset water well check: There are no permitted water wells within one mile of this proposed surface hole location. Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of the wellbores on this pad meet standards. No mitigation required.	10/16/2018
Permit	Corrected spacing order from 510-15 to 510-48 and removed unit acreage and configuration with operator concurrence. Form passes completeness.	10/12/2018

Total: 3 comment(s)