

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____ ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Refilling <input checked="" type="checkbox"/> Sidetrack <input type="checkbox"/>
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Date Received:
08/26/2016

Well Name: N Parachute Well Number: UWF12A-03H04596
 Name of Operator: ENCANA OIL & GAS (USA) INC COGCC Operator Number: 100185
 Address: 370 17TH ST STE 1700
 City: DENVER State: CO Zip: 80202-5632
 Contact Name: Jevin Croteau Phone: (720)876-5339 Fax: (720)876-6339
 Email: jevin.croteau@encana.com

RECLAMATION FINANCIAL ASSURANCE
 Plugging and Abandonment Bond Surety ID: 20100017

WELL LOCATION INFORMATION
 QtrQtr: SENE Sec: 4 Twp: 5S Rng: 96W Meridian: 6
 Latitude: 39.645942 Longitude: -108.165000
 Footage at Surface: 1959 Feet FNL/FSL FNL 47 Feet FEL/FWL FEL
 Field Name: GRAND VALLEY Field Number: 31290
 Ground Elevation: 8271 County: GARFIELD
 GPS Data:
 Date of Measurement: 04/11/2012 PDOP Reading: 1.4 Instrument Operator's Name: Robert Kay
 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
 2452 FSL 1309 FWL 2452 FSL 1309 FWL
 Sec: 3 Twp: 5S Rng: 96W Sec: 3 Twp: 5S Rng: 96W

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.)

T5S, R96W-Sec. 4: All and other lands

Total Acres in Described Lease: 25341 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: 2836 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1696 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 2578 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 3089 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: 268 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.)
WILLIAMS FORK	WMFK	510-13		

DRILLING PROGRAM

Proposed Total Measured Depth: 13000 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: ONSITE Drilling Fluids Disposal Methods: Other

Cuttings Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Recycle and bury.

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
CONDUCTOR	26	20	Line pipe	0	120	176	120	0
SURF	14+3/4	9+5/8	36	0	2211	851	2211	0
1ST	8+3/4	4+1/2	12	0	13000	822	13000	

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 Encana owns both the surface and the minerals. There are no changes on this application from the original approved APD other than the additional data as required on this new Form 2.
The location has been built and the conductor has been set for the subject well.
There are currently no drilling operations taking place on this location.

This application is in a Comprehensive Drilling Plan No CDP #: _____

Location ID: 335907

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: Jevin Croteau

Title: Senior Regulatory Analyst Date: 8/26/2016 Email: jevin.croteau@encana.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: Matthew Lee Director of COGCC Date: 10/4/2016

Expiration Date: 10/03/2018

API NUMBER
05 045 21813 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>
	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016).
	<p>1) Operator shall comply with the most current revision of the Northwest Notification Policy. See attached notice.</p> <p>2) Operator shall comply with the most current revision of the Garfield County Rulison Field Notice to Operators, with the following exception: All field notice requirements specified in that Notice to Operators are superseded by the requirements of the most current revision of the Northwest Colorado Notification Policy (see Condition of Approval #1).</p> <p>3) Operator shall provide cement coverage from the production casing shoe (4+1/2" First String) to a minimum of 200' above all Mesa Verde 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.</p> <p>4) Minimum surface casing setting depth requirements: 50' below the base of the Parachute Creek with the shoe in the Garden Gulch. Full cement to surface is required for the surface casing; increase cement volume as necessary to accomplish that objective. Refer to COGCC's comment on this form regarding the operator's prognosed depth to the Garden Gulch Formation.</p> <p>5) The Operator shall monitor the bradenhead pressure of the proposed well and all offset wells under Operator's control which penetrate the stimulated formation and have a treated interval separation of 300 feet or less. Monitoring shall occur from 24 hours prior to stimulation and shall continue until 24 hours after stimulation is complete. Recording shall be at a frequency of at least once per 24 hours with the capability of recording the maximum pressure observed during each 24 hour period. Operator shall notify COGCC Engineering staff if bradenhead pressures increase by more than 200 psig.</p>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	<ul style="list-style-type: none"> 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 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
Piceance Rulison Field - Notice to Operators. http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf
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

Att Doc Num

Name

401100137

FORM 2 SUBMITTED

Total Attach: 1 Files

General Comments

User Group

Comment

Comment Date

Permit	Final review complete.	10/4/2016 1:09:51 PM
Permit	Received permission from operator to remove distance to unit boundary. There is no unit. There is no change in the waste management program from the approved 2A.	9/16/2016 2:25:53 PM
Engineer	Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. Operator to submit conductor setting sundry for this location. Offset water well check: There are no permitted water wells within one mile of this proposed surface hole location. Uinta Formation outcrops at the surface. The operator's prognosis for top of the Garden Gulch and bottom of the Parachute Creek members is 2161'. Operator's proposed surface casing setting depth of 2200' has been changed to 2211' with operator concurrence. Surface casing coverage of the Parachute Creek member is required, as specified in Condition of Approval #4.	9/8/2016 4:18:47 PM
Permit	Passed completeness.	9/1/2016 3:45:16 PM

Total: 4 comment(s)