

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 _____	Refiling <input checked="" type="checkbox"/>
ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received:
12/18/2014

Well Name: Federal Well Number: 29-8B PA29

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: Kelly Hamden Phone: (720)876-5185 Fax: (720)876-6185

Email: Kelly.Hamden@encana.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: _____

WELL LOCATION INFORMATION

QtrQtr: Lot 1 Sec: 29 Twp: 7S Rng: 95W Meridian: 6

Latitude: 39.412635 Longitude: -108.015599

Footage at Surface: 1137 feet ^{FNL/FSL} FNL 1126 feet ^{FEL/FWL} FEL

Field Name: PARACHUTE Field Number: 67350

Ground Elevation: 6192 County: GARFIELD

GPS Data:
Date of Measurement: 04/06/2010 PDOP Reading: 0.0 Instrument Operator's Name: Ted Taggart

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}
<u>1572</u>	<u>FNL</u> <u>1171</u>	<u>FEL</u>	<u>1572</u>	<u>FNL</u> <u>1171</u>	<u>FEL</u>
Sec: <u>29</u>	Twp: <u>7S</u>	Rng: <u>95W</u>	Sec: <u>29</u>	Twp: <u>7S</u>	Rng: <u>95W</u>

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: oil and gas lease

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.)

Lease description attached on initial approved APD.

Total Acres in Described Lease: 2535 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # COC01523

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 1171 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5170 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 350 Feet

Above Ground Utility: 3500 Feet

Railroad: 5280 Feet

Property Line: 1126 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: 280 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1171 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	440-62	640	All

DRILLING PROGRAM

Proposed Total Measured Depth: 7073 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 280 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: 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	24	16	65	0	40	118	40	0
SURF	12+1/4	9+5/8	36	0	1061	285	1061	0
1ST	7+7/8	4+1/2	11.6	0	7073	632	7073	

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 intends to refile Federal 29-8B PA29 05-045-21716-0000. There have been no changes to the location, land use or lease description.

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

Location ID: 334983

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: Kelly Hamden

Title: Regulatory Analyst Date: 12/18/2014 Email: Kelly.Hamden@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: 1/24/2015

Expiration Date: 01/23/2017

API NUMBER
05 045 21716 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
	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.
	1)Operator shall comply with the most current revision of the Northwest Colorado Notification Policy. See attached notice. 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 this notice to operators are superseded by the requirements of the most current revision of the Northwest Colorado Notification Policy (see condition of approval #1). See attached notice. 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.

Best Management Practices

No	BMP/COA Type	Description
1	General Housekeeping	<ul style="list-style-type: none"> • Prohibit Encana employees and contractors from carrying projectile weapons on Encana property, except during company organized events. • Prohibit pets on Encana property. • Strategically apply fugitive dust control measures, including enforce established speed limits on Encana private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.
2	Wildlife	<ul style="list-style-type: none"> • Perform biological surveys (on-site) for each new development, using the most recent data sets for wildlife and wetland resources. • Perform pre-disturbance surveys when the on-site inspection and commencement of disturbance occur in different field seasons using the most recent data sets for wildlife and wetland resources. • Utilize the Encana Wildlife Resources Matrix to identify and document (where appropriate) potential impacts or concerns during the project planning phase for proposed drilling operations and construction of roads, pads and pipelines. • Minimize the number, length and footprint of oil & gas development roads • Use existing access routes where possible • Combine utility infrastructure planning (gas, electric & water) when possible with roadway planning to avoid separate utility corridors • Reduce visits to well-sites through remote monitoring when practical (i.e. SCADA). Maximize use of state-of-the-art drilling technology (e.g., high efficiency rigs, coiled-tubing unit rigs, closed-loop or pitless drilling, etc.) to minimize disturbance.
3	Construction	<p>At this location, the following construction best management practices will apply:</p> <ul style="list-style-type: none"> • Wattles • Topsoil Windrows (Diversion & ROPs) • Phased Construction • Run-on Protection • Erosion Control Mulch • Seeding • Stabilized unpaved surface • Rip Rap/ECB • Use multiple gathering lines placed in a single trench to minimize disturbance and construction, where appropriate, economically and technically feasible. • Install pipeline crossings at right angles to the drainages, wetlands, and perennial water bodies, where appropriate, economically and technically feasible. • Maintain a minimum of five feet of soil cover between the pipeline and the lowest point of the drainage or water body channel.

Total: 3 comment(s)

Applicable Policies and Notices to Operators

Piceance Rulison Field - Notice to Operators.

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
400706651	FORM 2 SUBMITTED

Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	1/21/2015 8:59:21 AM
LGD	KHW Pass: Please note any non federal location with greater than 5,000 barrels of total storage capacity (pits/tanks) would require a Garfield County land use change permit.	1/19/2015 2:21:25 PM
Permit	Corrected distance to lease line and unit boundary as per opr. Ready to pass pending public comment 1/12/15.	1/6/2015 8:59:19 AM
Engineer	Offset water well check: There are no permitted water wells within 1 mile of this proposed surface hole location. A water well 155' deep is shown on the COGCC/COGIS map within a mile. The water well is actually more than one-mile away located in the NWNE of Section 20 as noted in the Form 2A. Evaluated existing offset wells within 1,500 feet of this wellbore. No mitigation required. Removed production casing planned TOC. See COA #3 for required cement coverage.	12/29/2014 9:35:38 AM
Permit	Confirmed that SO is committed to O&G lease and corrected missing value. Passed completeness.	12/22/2014 8:59:30 AM

Total: 5 comment(s)