

FORM  
2  
Rev  
08/13

State of Colorado  
Oil and Gas Conservation Commission  
1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:  
400707889

APPLICATION FOR PERMIT TO:

Drill       Deepen       Re-enter       Recomplete and Operate

Date Received:  
12/18/2014

TYPE OF WELL    OIL     GAS     COALBED     OTHER \_\_\_\_\_  
ZONE TYPE      SINGLE ZONE     MULTIPLE ZONES     COMMINGLE ZONES

Refiling   
Sidetrack

Well Name: Federal      Well Number: 29-1C 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: 39.412604      Longitude: -108.015610

Footage at Surface: 1148 feet      FNL/FSL      FNL 1129 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  
1278    FNL    1193    FEL      1278    FNL    1193    FEL  
Sec: 29    Twp: 7S    Rng: 95W      Sec: 29    Twp: 7S    Rng: 95W

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 map has been attached to the 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: 1193 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: 5280 Feet

Above Ground Utility: 3500 Feet

Railroad: 5280 Feet

Property Line: 1129 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: 270 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1193 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: 7042 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 270 Feet (Including plugged wells)

Will a closed-loop drilling system be used? No

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S 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	1100	295	1100	0
1ST	7+7/8	4+1/2	11.6	0	7042	669	7042	

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 29-1C PA29 05-045-21718-0000. 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 21718 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>
	<p>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.</p>
	<p>1)Operator shall comply with the most current revision of the Northwest Colorado 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 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.</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)The Operator shall monitor the bradenhead pressure of well S.PARACHUTE FEDERAL #29-14 (API #045-07914) that is within 300 feet of the well which is to be treated. The Operator shall install a bradenhead pressure gauge on the well at least 24 hours prior to initiating a Treatment. The Operator shall monitor the gauge at least once during every 24-hour period until 24 hours after the Treatment is completed and shall continue to do so until the pressure stabilizes with allowance for a ten percent daily fluctuation. The bradenhead pressure gauge shall be capable of monitoring current pressure and also capable of recording the maximum pressure encountered in a 24 hour period. The gauge shall be reset between each 24 hour period. The pressures shall be recorded and saved for a period of one year. Alternate electronic measurement may be used to record the prescribed pressures.</p> <p>If at any time during the Treatment or the 24-hour post-stimulation period, the bradenhead annulus pressure of the Treatment well or offset well increases by more than 200 psig, the Operator shall verbally notify the Director, as soon as practicable, but no later than twenty-four (24) hours following such incident. Within fifteen (15) days after the occurrence, the Operator shall submit a Sundry Notice, Form 4, giving all details, including corrective actions taken.</p>

## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	General Housekeeping	<ul style="list-style-type: none"> <li>• Prohibit Encana employees and contractors from carrying projectile weapons on Encana property, except during company organized events.</li> <li>• Prohibit pets on Encana property.</li> <li>• 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.</li> </ul>
2	Wildlife	<ul style="list-style-type: none"> <li>• Perform biological surveys (on-site) for each new development, using the most recent data sets for wildlife and wetland resources.</li> <li>• 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.</li> <li>• 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.</li> <li>• Minimize the number, length and footprint of oil &amp; gas development roads</li> <li>• Use existing access routes where possible</li> <li>• Combine utility infrastructure planning (gas, electric &amp; water) when possible with roadway planning to avoid separate utility corridors</li> <li>• 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.</li> </ul>
3	Construction	<p>At this location, the following construction best management practices will apply:</p> <ul style="list-style-type: none"> <li>• Wattles</li> <li>• Topsoil Windrows (Diversion &amp; ROPs)</li> <li>• Phased Construction</li> <li>• Run-on Protection</li> <li>• Erosion Control Mulch</li> <li>• Seeding</li> <li>• Stabilized unpaved surface</li> <li>• Rip Rap/ECB</li> <li>• Use multiple gathering lines placed in a single trench to minimize disturbance and construction, where appropriate, economically and technically feasible.</li> <li>• Install pipeline crossings at right angles to the drainages, wetlands, and perennial water bodies, where appropriate, economically and technically feasible.</li> <li>• Maintain a minimum of five feet of soil cover between the pipeline and the lowest point of the drainage or water body channel.</li> </ul>

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

<b>Att Doc Num</b>	<b>Name</b>
400707889	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 9:08:46 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 2:22:49 PM
Permit	Corrected distance to unit boundary from 1111 to 1193 as per opr. Ready to pass pending public comment 1/12/15.	1/7/2015 10:30:06 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. Removed production casing planned TOC. See COA #3 for required cement coverage. Evaluated existing offset wells within 1,500 feet of this wellbore. Existing offset well S.PARACHUTE FEDERAL #29-14 (API #045-07914) is less than 300' from this planned wellbore. See COA#4.	12/29/2014 11:56:25 AM
Permit	Confirmed that SO is committed to O&G lease and corrected missing value. Passed completeness.	12/22/2014 10:08:32 AM

Total: 5 comment(s)