

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:
400640917

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter **Recomplete and Operate**

Date Received:
07/29/2014

TYPE OF WELL OIL GAS COALBED OTHER Water Injection
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Well Name: Wieben Well Number: 2-13 (M2SW)
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: Alexis Kubat Phone: (720)876-3074 Fax: ()
Email: Alexis.Kubat@encana.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20100017

WELL LOCATION INFORMATION

QtrQtr: TR 43 Sec: 2 Twp: 8S Rng: 93W Meridian: 6
Latitude: 39.388030 Longitude: -107.748030

Footage at Surface: 871 feet FNL/FSL FSL 728 feet FEL/FWL FWL

Field Name: MAMM CREEK Field Number: 52500
Ground Elevation: 7769.5 County: GARFIELD

GPS Data:
Date of Measurement: 05/09/2004 PDOP Reading: 0.0 Instrument Operator's Name: Stacy Stewart

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 _____
Sec: _____ Twp: _____ Rng: _____ Sec: _____ Twp: _____ Rng: _____

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: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

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.)

T8W-R93W Section 2 Tract 43. Section 3: Tract 43. Section 10 Tract 43 & 47; Sec 11: Tract 43, 47, 48. Sec 14: Tract 48. Sec 15 Tract 48

Total Acres in Described Lease: 640 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: 728 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: 893 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: 2385 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 5280 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): Middleton Creek Unit Number: COC06899X

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			
WASATCH	WSTC			
WILLIAMS FORK	WMFK			

DRILLING PROGRAM

Proposed Total Measured Depth: 9508 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 2385 Feet (Including plugged wells)

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: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

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	9+5/8	36	0	1193	465	1193	0
1ST	8+3/4	5+1/2	17	0	9508	2265	9508	1370

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 Oil & Gas would like to request permission to convert this existing vertical well into an injection well. A sundry with procedures, Forms 26, 31, and 33 will be submitted in conjunction with this conversion.

Wieben 2-13 (M2SW) API# 05-045-09364

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

Location ID: 334322

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: Alexis Kubat

Title: Regulatory Analyst Date: 7/29/2014 Email: Alexis.Kubat@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:  Director of COGCC Date: 3/12/2015

Expiration Date: 03/11/2017

API NUMBER

05 045 09364 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

	<p>1. For all new drill Underground Injection Control wells a suite of open-hole Resistivity/Gamma Ray and Density/Neutron logs is required from Surface Casing shoe to TD. A PDF, TIFF, or PDS visual image and a LAS or DILS file version of each log is required.</p> <p>2. For all new and converted Underground Injection Control wells a Cement Bond Log (CBL) is a required on the cased portions of the hole from the bottom of the casing to the top of the next shallower casing string for all casing strings other than the Surface Casing. Only a PDF, TIFF, or PDS visual image is required.</p> <p>3. Operator must provide all tops of formations encountered from surface to TD on the Form 5 when submitted.</p>
	<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). See attached notice.</p> <p>(3) Operator shall comply with the most current revision of the Mamm Creek 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). See attached notice.</p> <p>(4) Operator shall comply with the Notice to Operators Drilling Wells in the Buzzard, Mamm Creek, and Rulison fields, Garfield County and Mesa County – Procedures and Submittal Requirements for Compliance with COGCC Order Nos. 1-107, 139-56, 191-22, and 369-2 (July 8, 2010). See attached notice.</p> <p>(5) Operator shall provide cement coverage from the production casing shoe (5+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. This requirement shall supersede the top of cement requirements in the Mamm Creek Field Notice to Operators.</p> <p>(6) Approval of this form does not authorize injection. Authorization to inject requires approval of Form 31 and Form 33.</p> <p>(7) Before stimulating the objective injection formation(s), collect water sample(s) and analyze for Total Dissolved Solids. Prior approval of Form 4 is required for step rate and injectivity tests.</p>

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.
2	Wildlife	<ul style="list-style-type: none"> • Install trench plugs (sloped to allow wildlife or livestock to exit the trench should they enter) at known wildlife or livestock trails to allow safe crossing on long spans of open trench, where appropriate, economically and technically feasible. • Perform biological surveys (on-site) for each new development, using the most recent data sets for wildlife and aquatic 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 aquatic 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. • Use enclosed, locking garbage receptacles or implement a strict daily trash removal regime on each temporary or permanent work location.
3	Dust control	<ul style="list-style-type: none"> • Strategically apply fugitive dust control measures, including enforcing established speed limits on Encana private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.
4	Construction	<ul style="list-style-type: none"> • Use solar panels as an alternative energy source for on-location production equipment, where appropriate, economically and technically feasible. • 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: 4 comment(s)

Applicable Policies and Notices to Operators

Mamm Creek Field Area Notice to Operators.
Piceance Rulison Field - Notice to Operators.
NW Colorado Notification Policy.
Bradenhead Pressure Reporting-Garfield County (Mamm Creek & Rulison Fields) Mesa County (Buzzard Field).
Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
2167955	SURFACE AGRMT/SURETY
400640917	FORM 2 SUBMITTED

Total Attach: 2 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	will ask OPR for precise intervals for proposed new perfs and formations. See doc # 2122141 -- Correspondence: has the data mentioned above. (all perfs, and formation (= Wasatch), etc.)	1/29/2015 9:40:11 AM
Permit	Attached SUA from Opr. Final review complete.	1/22/2015 7:04:54 AM
Permit	Form 33, and the Form 4 are in process. Ready to pass.	1/14/2015 8:41:21 AM
Permit	This is not a new drill, the operator is proposing conversion on an existing producer to an injection well.	8/28/2014 2:27:44 PM
Engineer	Offset water well check: There are no permitted water wells within 1 mile of this proposed surface hole location. Evaluated existing offset wells within 1,500 feet of this wellbore. No mitigation required.	8/12/2014 10:11:02 AM
LGD	pass, gdb	8/8/2014 10:59:26 AM
Permit	Passed Completeness	3/6/2014 9:34:50 AM
Permit	Return to draft: 1. H2S Expected? Y/N 2. Casing shows 3rd string. 3. Casing does not reflect the proposed TD. 4. Well has matching BHL and SHL footages and no deviated drilling plan/directional data in documents. Asked operator to remove BHL footages if a vertical well.	7/29/2014 1:50:07 PM

Total: 8 comment(s)