

**APPLICATION FOR PERMIT TO:**

1.  Drill,  Deepen,  Re-enter,  Recomplete and Operate

**2. TYPE OF WELL**

OIL  GAS  COALBED  OTHER \_\_\_\_\_  
 SINGLE ZONE  MULTIPLE  COMMINGLE

Refiling   
 Sidetrack

3. Name of Operator: ENCANA OIL & GAS (USA) INC 4. COGCC Operator Number: 100185

5. Address: 370 17TH ST STE 1700  
 City: DENVER State: CO Zip: 80202-5632

6. Contact Name: Bonnie Lamond Phone: (720)876-5156 Fax: (720)876-6177  
 Email: bonnie.lamond@encana.com

7. Well Name: MCU Well Number: 21-4C (M16W)

8. Unit Name (if appl): Middleton Creek Unit Number: COC68997X

9. Proposed Total Measured Depth: 10260

**WELL LOCATION INFORMATION**

10. QtrQtr: SWSW Sec: 16 Twp: 7S Rng: 93W Meridian: 6  
 Latitude: 39.439850 Longitude: -107.783302

Footage at Surface: 538 feet FNL/FSL FSL 1264 feet FEL/FWL FWL

11. Field Name: Mamm Creek Field Number: 52500

12. Ground Elevation: 7888 13. County: GARFIELD

**14. GPS Data:**

Date of Measurement: 02/04/2013 PDOP Reading: 0.0 Instrument Operator's Name: Ted T. Taggart

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

Footage at Top of Prod Zone: FNL/FSL FNL 645 FWL Bottom Hole: FNL/FSL FNL 645 FWL  
785 785  
 Sec: 21 Twp: 7S Rng: 93W Sec: 21 Twp: 7S Rng: 93W

16. Is location in a high density area? (Rule 603b)?  Yes  No

17. Distance to the nearest building, public road, above ground utility or railroad: 815 ft

18. Distance to nearest property line: 538 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 270 ft

**20. LEASE, SPACING AND POOLING INFORMATION**

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
Williams Fork	WMFK			

21. Mineral Ownership:  Fee  State  Federal  Indian Lease #: COC61121

22. Surface Ownership:  Fee  State  Federal  Indian

23. Is the Surface Owner also the Mineral Owner?  Yes  No Surface Surety ID#:

23a. If 23 is Yes: Is the Surface Owner(s) signature on the lease?  Yes  No

23b. If 23 is No:  Surface Owners Agreement Attached or  \$25,000 Blanket Surface Bond  \$2,000 Surface Bond  \$5,000 Surface Bond

24. Using standard QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):

T7S - R93W Sec. 21: N2, N2S2, N2SW Sec. 28: NWNW, S2NW, S2

25. Distance to Nearest Mineral Lease Line: 645 ft 26. Total Acres in Lease: 1000

### DRILLING PLANS AND PROCEDURES

27. Is H2S anticipated?  Yes  No If Yes, attach contingency plan.

28. Will salt sections be encountered during drilling?  Yes  No

29. Will salt (>15,000 ppm TDS CL) or oil based muds be used during drilling?  Yes  No

30. If questions 28 or 29 are yes, is this location in a sensitive area (Rule 901.e)?  Yes  No

31. Mud disposal:  Offsite  Onsite

If 28, 29, or 30 are "Yes" a pit permit may be required.

Method:  Land Farming  Land Spreading  Disposal Facility Other: \_\_\_\_\_

Note: The use of an earthen pit for Recompletion fluids requires a pit permit (Rule 905b). If air/gas drilling, notify local fire officials.

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	24	16	.25" wall	0	60	50	60	
SURF	12+1/4	9+5/8	36	0	1,112	420	1,112	
1ST	7+7/8	4+1/2	11.6	0	10,260	861	10,260	

32. BOP Equipment Type:  Annular Preventer  Double Ram  Rotating Head  None

33. Comments A sundry was filed 03/12/2013 to change bottom hole location and drilling plans- all data on this form 2 reflects the most current changes. New attachments for the revised directional plans and a well location plat will be included, all other attachments will remain the same. Will be a tapered hole. Surface casing will go from 0-200' with a hole size of 14-3/4" and casing size of 9-5/8". Surface casing will continue from 200'- 1122' with a hole size of 12-1/4" and casing size of 9-5/8" Surface cement volume will change from 360 sx to 420 sx. Production casing will run from 0-8085' with hole size of 8-3/4" and casing size of 4-1/2". And continue on from 8085'-10260' with a hole size of 7-7/8" and casing size of 4-1/2", thus decreasing the TD from 10421' to 10260'. Production cement will increase from 729 sx to 861 sx

34. Location ID: 422418

35. Is this application in a Comprehensive Drilling Plan ?  Yes  No

36. Is this application part of submitted Oil and Gas Location Assessment ?  Yes  No

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: \_\_\_\_\_ Print Name: Bonnie Lamond

Title: Permitting Technician Date: 3/22/2013 Email: bonnie.lamond@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: 4/26/2013

**API NUMBER**  
05 045 20591 00

Permit Number: \_\_\_\_\_ Expiration Date: 4/25/2015

**CONDITIONS OF APPROVAL, IF ANY:**  
\_\_\_\_\_

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.

(1) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED.

(2) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE GARFIELD COUNTY RULISON-FIELD NOTICE TO OPERATORS IS REQUIRED.

(3) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE MAMM CREEK FIELD NOTICE TO OPERATORS IS REQUIRED.

(4) COMPLIANCE WITH THE NOTICE TO OPERATORS DRILLING WELLS IN THE BUZZARD, MAMM CREEK, AND RULISON FIELDS, GARFIELD COUNTY AND MESA COUNTY IS REQUIRED. (PROCEDURES AND SUBMITTAL REQUIREMENTS FOR COMPLIANCE WITH COGCC ORDERS NOS. 1-107, 139-56, 191-22, AND 369-2 (JULY 8, 2010)). SEE ATTACHED NOTICE.

### 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
400394747	FORM 2 SUBMITTED
400394757	DIRECTIONAL DATA
400394758	WELL LOCATION PLAT
400394759	DEVIATED DRILLING PLAN

Total Attach: 4 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	All other staff approvals or waivers received.	4/8/2013 11:25:38 AM
Engineer	THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1-MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1-MILE IS 00 FEET DEEP.	4/4/2013 9:50:44 AM
Permit	Passed completeness.	4/3/2013 7:23:54 AM
Permit	Returned to draft: 1)Invalid fm. code. Oper. agreed to withdraw related sundry #2166137.	3/25/2013 7:37:25 AM

Total: 4 comment(s)

### BMP

<u>Type</u>	<u>Comment</u>