

FORM

2

Rev
12/05

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:

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Date Received:

01/29/2013

PluggingBond SuretyID

20100017

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) INC4. COGCC Operator Number: 1001855. Address: 370 17TH ST STE 1700City: DENVER State: CO Zip: 80202-56326. Contact Name: Bonnie Lamond Phone: (720)876-5156 Fax: (720)876-6177Email: bonnie.lamond@encana.com7. Well Name: HMU Well Number: 6-13AA (J6SEB)8. Unit Name (if appl): Hunter Mesa Unit Number: COC055972

X

9. Proposed Total Measured Depth: 9134

WELL LOCATION INFORMATION

10. QtrQtr: NWSE Sec: 6 Twp: 8S Rng: 92W Meridian: 6Latitude: 39.387420 Longitude: -107.706123

Footage at Surface: 1933 feet FNL/FSL FSL 1908 feet FEL/FWL FEL

11. Field Name: Mamm Creek Field Number: 5250012. Ground Elevation: 7143 13. County: GARFIELD

14. GPS Data:

Date of Measurement: 12/17/2012 PDOP Reading: 1.4 Instrument Operator's Name: C.D. Slaugh15. If well is ☒ Directional ☐ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL 814 FSL 818 FWL 814 FSL 818 FWL 814 FSL 818 FWL 814
 Sec: 6 Twp: 8S Rng: 92W Sec: 6 Twp: 8S Rng: 92W

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No17. Distance to the nearest building, public road, above ground utility or railroad: 3463 ft18. Distance to nearest property line: 703 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 330 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 #: COC5115622. Surface Ownership: ☐ Fee ☐ State ☒ Federal ☐ Indian23. 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 ☐ No23b. 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):

T8S R92W Sec 5: Lots 3, 4, swnw,w2sw, Sec. 6: Lots 3, 4, 5, 6, se, Sec.7: Lots 1,2,3,4, E2. COC 51156

25. Distance to Nearest Mineral Lease Line: 818 ft 26. Total Acres in Lease: 1172

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	100	60	0
SURF	12+1/4	9+5/8	36	0	1,257	458	1,257	0
1ST	7+7/8	4+1/2	11.6	0	9,134	851	9,134	0

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

33. Comments The well is nearest to a public road, about 3463 feet away. Surface casing will run from 0'-200' with a hole size of 14-3/4 in and casing size of 9-5/8 in. Surface casing will continue to run from 200'-1257' with a hole size of 12-1/4 in and casing size of 9-5/8. Production casing will run from 0'-7060' with a hole size of 8-3/4 and casing size of 4-1/2. Production casing will continue to run from 7060'-9134' with a hole size of 7-7/8 and casing size of 4-1/2 in.

34. Location ID: _____

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: 1/29/2013 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: 3/20/2013

API NUMBER

05 045 21937 00

Permit Number: _____ Expiration Date: 3/19/2015

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.

(5) THE MOISTURE CONTENT OF ANY DRILL CUTTINGS IN A CUTTINGS PIT, TRENCH, OR PILE SHALL BE AS LOW AS PRACTICABLE TO PREVENT ACCUMULATION OF LIQUIDS GREATER THAN DE-MINIMIS AMOUNTS. AT THE TIME OF CLOSURE, THE DRILL CUTTINGS MUST ALSO MEET THE APPLICABLE STANDARDS OF TABLE 910-1.

(6) NO PORTION OF ANY PIT THAT WILL BE USED TO HOLD LIQUIDS SHALL BE CONSTRUCTED ON FILL MATERIAL, UNLESS THE PIT AND FILL SLOPE ARE DESIGNED AND CERTIFIED BY A PROFESSIONAL ENGINEER, SUBJECT TO REVIEW AND APPROVAL BY THE DIRECTOR PRIOR TO CONSTRUCTION OF THE PIT. THE CONSTRUCTION AND LINING OF THE PIT SHALL BE SUPERVISED BY A PROFESSIONAL ENGINEER OR THEIR AGENT. THE ENTIRE BASE OF THE PIT MUST BE IN CUT.

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).

Attachment Check List

Att Doc Num	Name
400374580	FORM 2 SUBMITTED
400374587	WELL LOCATION PLAT
400375347	DIRECTIONAL DATA
400375348	DEVIATED DRILLING PLAN
400375672	FED. DRILLING PERMIT

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	OK and 2A ready for Final approval. Added lease description per Bonnie Lamond of Encana.	2/27/2013 9:41:55 AM
LGD	Passed DB	2/12/2013 3:45:13 PM
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.	2/5/2013 12:30:51 PM
Permit	Passed completeness.	1/30/2013 6:08:14 AM

Total: 4 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Interim Reclamation	Maintenance Revegetation Monitoring BMP maintenance & monitoring Weed Management
Wildlife	Minimize the number, length and footprint of oil & gas development roads Use existing routes where possible Combine utility infrastructure planning (gas, electric & water) when possible with roadway planning to avoid separate utility corridors Coordinate Employee transport when possible Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors. 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. Reclaim mule deer and elk habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed.
Construction	(Not all are used all the time) Terminal Containment, Diversions, Run-On Protection, Tracking, Benching, Terracing, ECM (Erosion Control Mulch), ECB (Erosion Control Blanket), Check Dams, Seeding, Mulching, Water Bars, Stabilized Unpaved Surfaces (Gravel), Stormwater & Snow Storage Containment, Scheduling, Phased Construction, Temporary Flumes, Culverts with inlet & outlet protection, Rip Rap, TRM (Turf Reinforcement Mats), Maintenance, Scheduling, Phased Construction, Fueling BMP's, Waste Management BMP's, Materials Handling BMP's
Pre-Construction	Wattles, Silt Fence, Vegetation Buffers, Slash, Topsoil Windrows (diversions & ROP's), Scheduling, Phased Construction

Total: 4 comment(s)