

FORM
2

Rev
12/05

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE	ET	OE	ES
Document Number: 400198828			
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) INC 4. COGCC Operator Number: 100185
5. Address: 370 17TH ST STE 1700
City: DENVER State: CO Zip: 80202-5632
6. Contact Name: MIRACLE PFISTER Phone: (720)876-3761 Fax: (720)876-4861
Email: miracle.pfister@encana.com
7. Well Name: KEINATH FEDERAL Well Number: 10-16H (H16OU)
8. Unit Name (if appl): ORCHARD Unit Number: COC66496X
9. Proposed Total Measured Depth: 15243

WELL LOCATION INFORMATION

10. QtrQtr: SENE Sec: 16 Twp: 8S Rng: 96W Meridian: 6
Latitude: 39.350993 Longitude: -108.106870

Footage at Surface: 2185 feet FNL/FSL 680 feet FEL/FWL FEL

11. Field Name: GRAND VALLEY Field Number: 31290
12. Ground Elevation: 5845 13. County: MESA

14. GPS Data:

Date of Measurement: 07/14/2010 PDOP Reading: 3.7 Instrument Operator's Name: C.D. SLAUGH

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

Footage at Top of Prod Zone: FNL/FSL 1643 FNL 1117 FEL 1433 FSL 710 FEL 1433 FSL 710 FEL 1433
Sec: 16 Twp: 8S Rng: 96W Sec: 10 Twp: 8S Rng: 96W

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: 1004 ft

18. Distance to nearest property line: 680 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1500 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.)
MANCOS GROUP	MNCS			

21. Mineral Ownership: ☐ Fee ☐ State ☒ Federal ☐ Indian Lease #: COC58674

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):

8S-96W FEDERAL LEASE - SEC 9: NE, S2NW, S2 SEC 10: W2NW, SW, W2SE SEC 14: SWNW, NWSW, SESW SEC 15: W2E2, SENE, W2, NESE SEC 16: ALL 2200 ACRES FEE LEASE - SEC 10: SESE 40 ACRES

25. Distance to Nearest Mineral Lease Line: 629 ft

26. Total Acres in Lease: 2240

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	20	LINEPIPE	0	40	40	40	0
SURF	14+3/4	10+3/4	40.5	0	1,510	717	1,510	0
1ST	9+7/8	7+5/8	26.4	0	7,700	1,045	7,700	0
2ND	6+3/4	5	23.2	0	15,243	568	15,243	7,200

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

33. Comments THE NEAREST DISTANCE IS TO A ABOVE GROUND UTILITY. INTEREMDIATE CASING TOP OF CEMENT WILL BE 200' ABOVE MESAVERDE. TOP OF PRODUCTION CEMENT WILL BE 500 FT INSIDE THE INTERMEDIATE CASING. MINERAL OWNERSHIP IS MOSTLY FEDERAL BUT THE BOTTOM HOLE LOCATION IS IN A FEE LEASE. BOTH LEASES ARE IN THE ORCHARD UNIT.

34. Location ID: 334148

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: MIRACLE PFISTER

Title: REGULATORY ANALYST

Date: 8/26/2011

Email: miracle.pfister@encana.com

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: David S. Nesline

Director of COGCC

Date: 10/16/2011

API NUMBER

05 077 10179 00

Permit Number: _____ Expiration Date: 10/15/2013

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) 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.

(3) 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.

(4) THE 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.

(5) PROVIDE CEMENT COVERAGE FROM THE INTERMEDIATE CASING SHOE TO A MINIMUM OF 200' ABOVE SHALLOWEST-KNOWN PRODUCING HORIZON. VERIFY CEMENT WITH A CEMENT BOND LOG.
•IF THE PRODUCTION LINER IS CEMENTED, VERIFY CEMENT WITH A CEMENT BOND LOG.

Attachment Check List

Att Doc Num	Name
2537555	FED. DRILLING PERMIT
400198828	FORM 2 SUBMITTED
400200323	DEVIATED DRILLING PLAN
400200324	DRILLING PLAN
400200326	WELL LOCATION PLAT
400200327	SURFACE AGRMT/SURETY
400200328	30 DAY NOTICE LETTER

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	LGD/Pub. comments waived. Final Comprehensive Review Status--Passed.	10/11/2011 8:57:30 AM
Permit	copy of fed. permit not req'd. ready to approve in permitting when 2A comes off DOW 10/9 and OGLA passes. (did receive fed. permit 10/6).	10/5/2011 3:51:23 PM
Permit	CORRECTED SURF. OWNERSHIP TO FEE. ADDED PLUG BOND EVEN THOUGH FED. MIN. BECAUSE OF HORIZONTAL MANCOS. req'd fed. permit.	9/22/2011 2:07:27 PM

Total: 3 comment(s)

BMP

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

Total: 0 comment(s)