

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



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Document Number:

400186390

PluggingBond SuretyID

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: ANTERO RESOURCES PICEANCE CORPORATION

4. COGCC Operator Number: 10079

5. Address: 1625 17TH ST STE 300

City: DENVER State: CO Zip: 80202

6. Contact Name: Hannah Knopping Phone: (303)357-6412 Fax: (303)357-7315

Email: hknopping@anteroresources.com

7. Well Name: CSF Well Number: 31A-07-07-91

8. Unit Name (if appl): _____ Unit Number: _____

9. Proposed Total Measured Depth: 8707

WELL LOCATION INFORMATION

10. QtrQtr: SENW Sec: 7 Twp: 7S Rng: 91W Meridian: 6

Latitude: 39.463318 Longitude: -107.598778

Footage at Surface: 2070 feet FNL 2003 feet FWL

11. Field Name: MAMM CREEK Field Number: 52500

12. Ground Elevation: 6837 13. County: GARFIELD

14. GPS Data:

Date of Measurement: 07/08/2008 PDOP Reading: 1.9 Instrument Operator's Name: David B. Dusdal

15. 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
218 FNL 2200 FEL 218 FNL 2200 FEL
Sec: 7 Twp: 7S Rng: 91W Sec: 7 Twp: 7S Rng: 91W

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: 3260 ft

18. Distance to nearest property line: 2070 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 660 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.)
Iles	ILES	191-32		
Williams Fork	WMFK	191-32		

21. Mineral Ownership: ☐ Fee ☐ State ☒ Federal ☐ Indian Lease #: COC 66578

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):

All of Sec 7 (Lots 1-4, E/2 and E/2W/2), Sec 8 and Sec 9 of T7S, R91W

25. Distance to Nearest Mineral Lease Line: 218 ft 26. Total Acres in Lease: 1947

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: Onsite if app (See

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	55#	0	60	177	60	0
SURF	12+1/4	8+5/8	24/32#	0	1,430	595	1,430	0
1ST	7+7/8	4+1/2	11.6#	0	8,707	773	8,707	

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

33. Comments I certify that all conditions in the original permit are the same except for updated #19 - Distance to the nearest well and the updated casing and cement program. There have been no changes to land use, well construction or the lease. This Refile Form 2 does not require a Form 2A because the pad has been constructed, a closed loop system is being used so no pits need to be constructed, the refilled well will not require any expansion / additional surface disturbance of the pad. The location is not in a wildlife restricted surface occupancy area (RSO); consultation with CDOW is not required and the location does not require a variance from any of the rules listed in Rule 306.d.(1).(A). (ii).; consultation with CDPHE is not required.#31 Mud Disposal: Antero will bury onsite if disposal meets Table 910 and if there is a provision in SUA which allows for such operation. TOP OF CEMENT OF 1ST STRING/PRODUCTION CASING WILL BE >500 FEET ABOVE TOP OF GAS.

34. Location ID: 335055

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: Hannah Knopping

Title: Permit Representative Date: 9/6/2011 Email: hknopping@anteroresources.

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. Neslin Director of COGCC Date: 9/30/2011

API NUMBER

05 045 17086 00

Permit Number: _____ Expiration Date: 9/29/2013

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) GARFIELD COUNTY RULISON-FIELD NOTICE TO OPERATORS. NOTE: ALL NOTICES SHALL BE GIVEN VIA E-MAIL. SEE ATTACHED NOTICE

(3) NEW MAMM CREEK FIELD NOTICE TO OPERATORS APPLIES TO THIS WELL. NOTE: ALL NOTICES SHALL BE GIVEN VIA E-MAIL. SEE ATTACHED NOTICE.

(4) COMPLIANCE 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) -- IS REQUIRED. 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.

(7) 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 600 FEET DEEP.

SURFACE CASING AND CEMENT VOLUME SHOULD BE INCREASED TO 1430' AND 595 SACKS TO ENSURE COVERAGE OF A 600' WATER WELL WITHIN A MILE, AT 6060' ELEVATION. WILL EMAIL OPR REP.

Attachment Check List

Att Doc Num	Name
400186390	FORM 2 SUBMITTED

Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	NO PUB. COMMENTS. FINAL COMPREHENSIVE REVIEW STATUS--PASSED.	9/29/2011 8:07:37 AM
Permit	ready to approve in permitting when LGD/pub. comm. exp. 9/27	9/27/2011 3:19:15 PM

Total: 2 comment(s)

BMP

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

Total: 0 comment(s)