


| | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----|----|----|
| 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 |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DE</td> <td style="width: 25%;">ET</td> <td style="width: 25%;">OE</td> <td style="width: 25%;">ES</td> </tr> </table> | DE | ET | OE | ES |
| DE | ET | OE | ES | | | | |
| APPLICATION FOR PERMIT TO: | | | Document Number: <div style="text-align: center;">400156881</div> Plugging Bond Surety <div style="text-align: center;">20040071</div> | | | | |
| 1. <input checked="" type="checkbox"/> Drill, <input type="checkbox"/> Deepen, <input type="checkbox"/> Re-enter, <input type="checkbox"/> Recomplete and Operate | | | | | | | |
| 2. TYPE OF WELL OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/> COMMINGLE ZONE <input checked="" type="checkbox"/> | | Refiling <input checked="" type="checkbox"/> Sidetrack <input type="checkbox"/> | | | | | |
| 3. Name of Operator: <u>ANTERO RESOURCES PICEANCE CORPORATION</u> 4. COGCC Operator Number: <u>10079</u> | | | | | | | |
| 5. Address: <u>1625 17TH ST STE 300</u> City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u> | | | | | | | |
| 6. Contact Name: <u>Hannah Knopping</u> Phone: <u>(303)357-6412</u> Fax: <u>(303)357-7315</u> Email: <u>hknopping@anteroresources.com</u> | | | | | | | |
| 7. Well Name: <u>McPherson</u> Well Number: <u>A11</u> | | | | | | | |
| 8. Unit Name (if appl): _____ Unit Number: _____ | | | | | | | |
| 9. Proposed Total Measured Depth: <u>7957</u> | | | | | | | |
| WELL LOCATION INFORMATION | | | | | | | |
| 10. QtrQtr: <u>NENW</u> Sec: <u>16</u> Twp: <u>6S</u> Rng: <u>92W</u> Meridian: <u>6</u> Latitude: <u>39.531114</u> Longitude: <u>-107.675560</u> | | | | | | | |
| Footage at Surface: <u>1042</u> feet FNL/FSL <u>FNL</u> 1601 feet FEL/FWL <u>FWL</u> | | | | | | | |
| 11. Field Name: <u>Mamm Creek</u> Field Number: <u>52500</u> | | | | | | | |
| 12. Ground Elevation: <u>5448</u> 13. County: <u>GARFIELD</u> | | | | | | | |
| 14. GPS Data: Date of Measurement: <u>01/04/2011</u> PDOP Reading: <u>2.5</u> Instrument Operator's Name: <u>Scott E. Aibner</u> | | | | | | | |
| 15. If well is <input checked="" type="checkbox"/> Directional <input type="checkbox"/> Horizontal (highly deviated) submit deviated drilling plan. Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL <div style="display: flex; justify-content: space-around;"> <u>1083</u> <u>FNL</u> <u>2116</u> <u>FEL</u> <u>1083</u> <u>FNL</u> <u>2116</u> <u>FEL</u> </div> Sec: <u>16</u> Twp: <u>6S</u> Rng: <u>92W</u> Sec: <u>16</u> Twp: <u>6S</u> Rng: <u>92W</u> | | | | | | | |
| 16. Is location in a high density area? (Rule 603b)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | |
| 17. Distance to the nearest building, public road, above ground utility or railroad: <u>700 ft</u> | | | | | | | |
| 18. Distance to nearest property line: <u>254 ft</u> 19. Distance to nearest well permitted/completed in the same formation: <u>350 ft</u> | | | | | | | |
| 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 | 191-25 | | | | | |
| Williams Fork | WMFK | 191-17 | | | | | |

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

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

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 Bon ☐ \$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):
Section 16, T6S, R92W: Portions of the NENW and E/2NWNE (See Plat #4 or lease map previously submitted)

25. Distance to Nearest Mineral Lease Line: _____ 222 ft 26. Total Acres in Lease: _____ 56

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

Method: ☐ Land Farming ☐ Land Spreading ☒ Disposal Facility Other: Onsite if app(see comments)

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

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 | 1,000 | 416 | 1,000 | 0 |
| 1ST | 7+7/8 | 4+1/2 | 11.6# | 0 | 7,957 | 356 | 7,957 | |

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

33. Comments I certify that conditions from the last approved permit are the same except updated SHL and BHL and casing/cementing program has been updated. There have been no other 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. Please note, however, that a Form 2A has been filed per Rule 303d.(1) in conjunction with a new well that is being added to this pad (the McPherson A10). #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: _____ 335539

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: 4/28/2011 Email: hknopping@anteroresources.co

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved. *Daniel S. Neslin*

COGCC Approved: _____ Director of COGCC Date: 5/31/2011

API NUMBER

05 045 17071 00

Permit Number: _____ Expiration Date: 5/30/2013

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 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 300 FEET DEEP.

Attachment Check List

| Att Doc Num | Name |
|-------------|------------------------|
| 1635643 | SURFACE AGRMT/SURETY |
| 400156881 | FORM 2 SUBMITTED |
| 400160020 | WELL LOCATION PLAT |
| 400160024 | 30 DAY NOTICE LETTER |
| 400160026 | DEVIATED DRILLING PLAN |

Total Attach: 5 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Permit | From Opr-Hannah Knopping: Can you make the following corrections to the pending/"in process" McPherson A Pad Form 2A and associated Form 2's described below concerning mineral ownership? I was originally told by the Land Department that the surface owners were also mineral owners but they just advised that they misspoke. Therefore that changes a couple things on the Form 2. #23: Please check "No"; #23a: Leave Blank; 23b: Check "Surface Owners Agreement Attached. Corrections made and SUA uploaded and attached. sf | 5/10/2011 8:58:22 AM |

Total: 1 comment(s)

BMP

| <u>Type</u> | <u>Comment</u> |
|-------------|----------------|
| | |

Total: 0 comment(s)