

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:  
400412798

Date Received:  
05/02/2013

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

PluggingBond SuretyID  
20080107

3. Name of Operator: QUICKSILVER RESOURCES INC 4. COGCC Operator Number: 10255

5. Address: 801 CHERRY ST - #3700 UNIT 19  
City: FT WORTH State: TX Zip: 76102

6. Contact Name: PAMELA OSBURN Phone: (817)475-6482 Fax: (817)665-4918  
Email: posburn@qrinc.com

7. Well Name: PIRTLAW PARTNERS, LTD Well Number: 21-04

8. Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

9. Proposed Total Measured Depth: 8200

WELL LOCATION INFORMATION

10. QtrQtr: LOT 3 Sec: 4 Twp: 6N Rng: 87W Meridian: 6  
Latitude: 40.511862 Longitude: -107.156359

Footage at Surface: 912 feet FNL 1742 feet FWL

11. Field Name: WILDCAT Field Number: 99999

12. Ground Elevation: 6782 13. County: ROUTT

14. GPS Data:

Date of Measurement: 12/20/2012 PDOP Reading: 1.8 Instrument Operator's Name: GORDON R. DOWLING

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  
Sec:        Twp:        Rng:        Sec:        Twp:        Rng:       

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: 3270 ft

18. Distance to nearest property line: 5280 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1590 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.)
NIOBRARA	NBRR			

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 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):

SEE ATTACHED LEASE DESCRIPTION AND LEASE MAP

25. Distance to Nearest Mineral Lease Line: 429 ft 26. Total Acres in Lease: 2342

### 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	94	0	60	100	60	0
SURF	17+1/2	13+3/8	68	0	1,200	846	1,200	0
1ST	12+1/4	9+5/8	40	0	5,851	863	5,851	800
2ND	8+3/4	5+1/2	17	0	8,200	545	8,200	4,851

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

33. Comments \_\_\_\_\_

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: PAMELA S. OSBURN

Title: SR. REGULATORY ANALYST Date: 5/2/2013 Email: posburn@qrenc.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: 6/24/2013

API NUMBER: **05 107 06256 00** Permit Number: \_\_\_\_\_ Expiration Date: 6/23/2015

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) CEMENT ON PRODUCTION CASING MUST BE AT LEAST 200' ABOVE TOP OF FT. UNION AND COMPLY WITH RULES 209 AND 317.I. SEGREGATE OIL, GAS, AND FRESH-WATER-BEARING ZONES AND PROTECT COAL SEAMS. VERIFY TOP WITH CBL.

### **Applicable Policies and Notices to Operators**

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

### **Attachment Check List**

Att Doc Num	Name
2157104	EXCEPTION LOC REQUEST
2157146	SURFACE AGRMT/SURETY
400412798	FORM 2 SUBMITTED
400413001	WELL LOCATION PLAT
400413004	LEGAL/LEASE DESCRIPTION
400413005	LEASE MAP
400413123	EXCEPTION LOC WAIVERS

Total Attach: 7 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Attached fully executed SUA from oper. LGD comments addressed by OGLA on 2A #400413094. No public comments. Final Review--passed.	6/18/2013 10:35:21 AM
Permit	Attached exc. loc. request ltr. Operator requests approval of Rule 318.a exception location; request letter and signed waiver provided.	5/29/2013 10:30:40 AM

LGD	<p>Routt County has a permitting process for all oil/gas operations. The operator is aware that an application must be submitted to Routt County and is complying with this requirement.</p> <p>Routt County has a review process for all county roads used for oil/gas operations. The operator has contacted Routt County and is complying with road review procedures before operations can be conducted.</p> <p>Routt County requests information from the COGCC after drilling operations are complete for the located of aquifers and showing that casing was completed per minimum requirements of the COGCC regulations to protect all aquifers.</p> <p>The site is located within five miles of the Yampa Valley Regional Airport. The operator is required to file with the FAA an evaluation and receive approval for drilling operations.</p> <p>QRI has a Groundwater Monitoring program in place for this area. The proposed well is within the existing program and continued monitoring will be required.</p> <p>Continued best management practices should be used to test or monitor air quality. The COGCC should work with the CDPHE to develop monitoring system requirements and schedules for all operators. New technology should be used to prohibit emissions from tanks, equipment and flares on the onset of production.</p> <p>The site is mapped for moderate wildfire concerns. Fire equipment/extinguishers should be in all vehicles during construction of roads, well pad and drilling operations.</p> <p>There are wildlife concerns in this area. The well site is located near Bald Eagle Winter Concentration area, roost and nest sites, adjacent to Columbian Sharp-tail Grouse and Greater Sage Grouse Production areas, and Elk and Deer Severe Winter Range. There are also mapped areas for Great Blue Heron foraging and nesting and Osprey nest site within approximately ¾ miles. All CPW restrictions should be strictly adhered to.</p> <p>Farming operations surround the access and well pad area. The operator must work with the land owner to mitigate any Agriculture concerns. Interim reclamation should be completed within the COGCC requirements. Dust mitigation should be closely monitored during construction of the access road and well pad and during production operations. All disturbed areas included the access road should be monitored for weeds and control measures taken to eliminate weeds through the life of the project.</p>	5/20/2013 4:43:13 PM
Permit	<p>Corrected qtr/qtr. Added related 2A. Corrected distance to nearest cultural feature to 3270' to agree with 2A. Corrected distance to nearest well to 1590' per oper. Corrected #22b to "SUA attached" since #22 was "NO" per oper. Attached offset mineral owner's waiver of exception location from 2A. Req'd exc. request ltr. to COGCC.</p>	5/17/2013 7:56:35 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 415 FEET DEEP.	5/6/2013 4:35:29 PM
Permit	Pass completeness.	5/3/2013 12:54:55 PM
Permit	Oper. requested form be returned to draft.	5/2/2013 2:50:48 PM

Total: 7 comment(s)

**BMP**

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