

APPLICATION FOR PERMIT TO:

Drill

 Deepen

 Re-enter

 Recomplete and Operate

Date Received:
09/13/2013

TYPE OF WELL OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refilling <input type="checkbox"/>
ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input checked="" type="checkbox"/>

Well Name: <u>PIRTLAW PARTNERS Ltd</u>	Well Number: <u>32-09H</u>
Name of Operator: <u>QUICKSILVER RESOURCES INC</u>	COGCC Operator Number: <u>10255</u>
Address: <u>801 CHERRY ST - #3700 UNIT 19</u>	
City: <u>FT WORTH</u>	State: <u>TX</u> Zip: <u>76102</u>
Contact Name: <u>Pamela Osburn</u>	Phone: <u>(817)665-4918</u> Fax: <u>(817)665-5009</u>
Email: <u>posburn@qrinc.com</u>	

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20080107

WELL LOCATION INFORMATION

QtrQtr: SWNE Sec: 9 Twp: 6N Rng: 87W Meridian: 6

Latitude: 40.496215 Longitude: -107.152379

Footage at Surface: <u>1336</u> feet	FNL/FSL <u>FNL</u> <u>2385</u> feet	FEL/FWL <u>FEL</u>
--------------------------------------	--	-----------------------

Field Name: BEAR RIVER Field Number: 5950

Ground Elevation: 6616 County: ROUTT

GPS Data:

Date of Measurement: 11/14/2011 PDOP Reading: 1.8 Instrument Operator's Name: DOWLING LAND SURVEYORS

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

Footage at Top of Prod Zone: <u>1033</u> feet	FNL/FSL <u>FNL</u> <u>2025</u> feet	FEL/FWL <u>FEL</u>
Bottom Hole: <u>2348</u> feet	FNL/FSL <u>FSL</u> <u>602</u> feet	FEL/FWL <u>FEL</u>
Sec: <u>9</u> Twp: <u>6N</u> Rng: <u>87W</u>	Sec: <u>3</u> Twp: <u>6N</u> Rng: <u>87W</u>	

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: Fee State Federal Indian

The Surface Owner is: is the mineral owner beneath the location.
 (check all that apply) is committed to an Oil and Gas Lease.
 has signed the Oil and Gas Lease.
 is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: Fee State Federal Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: Yes

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

SEE ATTACHED LEGAL DESCRIPTION

Total Acres in Described Lease: 2342 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 1545 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 4670 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1500 Feet

Above Ground Utility: 3100 Feet

Railroad: 3095 Feet

Property Line: 1336 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).

- Enter 5280 for distance greater than 1 mile.

- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.

- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: Buffer Zone
 Exception Zone
 Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit

- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.

- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 397 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 602 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR			

DRILLING PROGRAM

Proposed Total Measured Depth: 12811 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 397 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	20	16	65	0	97			
SURF	17+1/2	13+3/8	68	0	1173	850	1176	0
1ST	12+1/4	9+5/8	40	0	5200	915	5215	0
2ND	8+3/4	5+1/2	17	0	12810	450	12810	4000

Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number

OTHER LOCATION EXCEPTIONS

Check all that apply:

- Rule 318.c. Exception Location from Rule or Spacing Order Number 318.a
- Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 430437Is this application being submitted with an Oil and Gas Location Assessment application? 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 OsburnTitle: Sr. Regulatory Analyst Date: 9/13/2013 Email: posburn@qinc.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: _____ Director of COGCC Date: _____

Expiration Date: _____

API NUMBER

05 107 06250 00

Conditions Of Approval

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.

COA Type **Description**

<u>COA Type</u>	<u>Description</u>

Best Management Practices**No BMP/COA Type** **Description**

<u>No BMP/COA Type</u>	<u>Description</u>

Data retrieval failed for the subreport 'IntPolicy_NTC' located at: \\Westpub\NetReports\policy_ntr.rdl. Please check th

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400477169	FORM 2 SUBMITTED
400477278	SURFACE AGRMT/SURETY
400477279	EXCEPTION LOC REQUEST
400480967	EXCEPTION LOC WAIVERS
400481550	PLAT
400481578	LEGAL/LEASE DESCRIPTION
400482619	DIRECTIONAL DATA
400482621	DEVIATED DRILLING PLAN
400483553	DRILLING PLAN
400485445	VARIANCE REQUEST
400485447	WELLBORE DIAGRAM

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Returned to Draft: Casing programs (pilot hole and horizontal) should match on pipe set to date. Send Form 5 reporting well as it exists with 9 5/8" set.	9/23/2013 3:24:18 PM
Permit	Returned to draft; (4) A request to drill a sidetrack of an existing well shall be filed on a Form 2, Application for Permit-to-Drill, including details of the proposed work and a wellbore diagram.	9/19/2013 2:30:39 PM
Permit	Returned to draft: 1) TD on dev. drlg. plan and directional template do not agree with TD on permit and casing tab.	9/16/2013 12:35:05 PM
Permit	Returned to draft: 1) PDF of dev. drlg. plan does not have side/plan views.	9/16/2013 11:56:03 AM
Permit	Returned to draft: 1) Well location plat should be one attachment with two pages. 2) Groundwater sampling rule must be checked. 3) Cultural setbacks: if greater than 5280, enter 5280, not 0'. 4) Not a property line setback exception but exception request to Rule 318.a which requires 1200' between wellbores. 5) Not a designated setback location exception--uncheck box.	9/16/2013 10:45:47 AM

Total: 5 comment(s)