

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL	OIL <input checked="" type="checkbox"/>	GAS <input type="checkbox"/>	COALBED <input type="checkbox"/>	OTHER <u>Pilot Well</u>	Refiling <input type="checkbox"/>
ZONE TYPE	SINGLE ZONE <input checked="" type="checkbox"/>	MULTIPLE ZONES <input type="checkbox"/>	COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	Date Received: 06/02/2014

Well Name: BILLHEIMER Well Number: 31-33-16-52H

Name of Operator: PIONEER NATURAL RESOURCES USA INC COGCC Operator Number: 10084

Address: 1401 17TH ST STE 1200

City: DENVER State: CO Zip: 80202

Contact Name: Kristi McRedmond Phone: (303)928-7128 Fax: (303)218-5678

Email: regulatory@petro-fs.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20040083

WELL LOCATION INFORMATION

QtrQtr: NWNE Sec: 33 Twp: 16S Rng: 52W Meridian: 6

Latitude: 38.624600 Longitude: -103.237661

Footage at Surface: 663 feet FNL/FSL FNL 2681 feet FEL/FWL FEL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 4742 County: LINCOLN

GPS Data:
Date of Measurement: 05/01/2014 PDOP Reading: 1.9 Instrument Operator's Name: TOMMY BURDEN

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: _____

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: Bond

Surface damage assurance if no agreement is in place: Blanket Surface Surety ID: 20040084

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.)

Please see attached Oil and Gas Lease as it includes too many acres to include here.

Total Acres in Described Lease: 18400 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: 663 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 628 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: 5280 Feet

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

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

SPACING & FORMATIONS COMMENTS

There are no permitted or completed wells within a 5280' radius of Billheimer 31-33-16-52 in the same formation.

OBJECTIVE FORMATIONS

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

DRILLING PROGRAM

Proposed Total Measured Depth: 6500 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 5280 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? No

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: Other

Cuttings Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Fluids will be injected in disposal offsite. Solids will be treated onsite. Salt or Oil-based muds will be used in the production hole section of the well. See attachments for proposed mud treatment program for both water and oil-based cuttings.

Beneficial reuse or land application plan submitted? No

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	26	20	94	0	40			
SURF	17+1/2	13+3/8	54.5	0	3010	1750	3010	0

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 _____
- 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 permit is for a vertical pilot well, to be drilled to a depth of 6500' MD/TVD. The pilot well (open hole) will be cemented and sidetracked. Operator is filing one additional Form 2 APD for the horizontal sidetrack: Doc 400614115 is the APD for the horizontal sidetrack to the Cherokee formation.

Attached as "other" are 4 documents describing Pioneer's proposed mud treatment program for both water and oil-based cuttings as they apply to the sidetrack wellbore in the document referenced above, to address questions under the drilling and wastes tab.

A pit will be used for drilling and completion and will be 100' x 100', with a 10' depth + freeboard. Form 15 Pit Permit will be submitted.

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

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Kristi McRedmond

Title: Regulatory Technician Date: 6/2/2014 Email: regulatory@petro-fs.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: 7/16/2014

Expiration Date: 07/15/2016

API NUMBER 05 073 06629 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.

<u>COA Type</u>	<u>Description</u>
	1) Provide 48 hour notice prior to spud via electronic Form 42. 2) No oil or salt based mud until after setting surface casing. 3) As pilot hole for Chrk lateral completion plug back with 40 sx cement at top of Mississippian and 40 sx cement at top of Morrow.
	This permit is the pilot of a pilot/lateral drilling plan. Approval of this permit must precede the approval of the lateral in order that API sidetrack designations be correct.
	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>Keep well site location, the road, and the pipeline easement free of noxious weeds, litter and debris.</p> <p>Spray for noxious weeds and implement dust control, as needed.</p> <p>Operator will not permit the release or discharge of any toxic or hazardous chemicals or wastes on Owner's Land.</p> <p>Construct and maintain gates where any roads used by operator, its employees, or contactors can cross through fences on the leased premises.</p>
2	Pre-Construction	<p>Remove only the minimum amount of vegetation necessary for the construction of roads and facilities.</p> <p>Conserve topsoil during excavation and reuse as cover on disturbed areas to facilitate regrowth of vegetation.</p> <p>No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment.</p>
3	General Housekeeping	<p>Good housekeeping practices will be used to reduce the risk of spills or other accidental exposure of materials and substances to Stormwater runoff. The following housekeeping practices will be followed onsite during the construction project:</p> <ul style="list-style-type: none"> • No solid materials, including building materials, shall be discharged to State waters. • Vehicular traffic will be minimized as much as possible to reduce nuisance dust and prevent further soil erosion. • Any trash generated during the project will be disposed of properly. • Any chemicals used will be kept to a minimum. Any chemical or oil spills will be cleaned up immediately in accordance with established company procedures. • Store all materials in a neat and orderly manner in their appropriate containers. • Follow manufacturers' recommendations and company policies for proper use and disposal of products. • Monitor on-site vehicles for leaks.
4	Storm Water/Erosion Control	<p>Structural BMPs include, but are not limited to: diversion ditch, earthen berm, silt fence, straw bale, wattle (straw/mulch/bark), rip rap, bonded fiber matrix, erosion control blanket, coconut matting, slash, brush dam, sediment retention ponds, and turnout.</p>
5	Storm Water/Erosion Control	<p>Nonstructural BMPs include, but are not limited to: preservation of existing vegetation, vegetative buffer zones, slope roughening, and protection of trees.</p>
6	Material Handling and Spill Prevention	<p>All drums and totes temporarily stored onsite shall be inspected regularly to ensure integrity. Secondary containment shall be utilized when necessary or required by SPCC regulations. Spill response equipment shall be available in the event of a spill or release. Onsite personnel are instructed to report all spills; Pioneer shall investigate all spills to ensure proper cleanup/remediation measures and required reporting protocol is implemented. Spill cleanup materials are onsite in the event of a release. All spills are reported according to the state and federal requirements.</p>
7	Construction	<p>A skid-mounted cage/dumpster is placed at a well pad during construction and is utilized while crews are onsite during drilling and completion activities. Upon completion of these activities the dumpster is removed from the site.</p>
8	Drilling/Completion Operations	<p>The drilling pit will be lined.</p>
9	Interim Reclamation	<p>Utilize only such area around each producing well as is reasonably necessary.</p> <p>Restore the remainder of the well site location to its original condition within a reasonable time after the completion of operations.</p> <p>All reseeding shall be done with grasses consistent with the Rocky Mountain native mix or other grasses reasonably requested by surface owner and during planting period suggested by Owner.</p>

10	Final Reclamation	All surface restoration shall be accomplished to the satisfaction of Owner. All reseeding shall be done with grasses consistent with the Rocky Mountain native mix or other grasses reasonably requested by surface owner and during planting period suggested by Owner. Final reclamation shall be completed to the reasonable satisfaction of the Owner as soon as practical after installation (weather permitting) and in accordance with regulatory agency standards (BLM/COGCC)
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Total: 10 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2519152	LEGAL/LEASE DESCRIPTION
400615662	FORM 2 SUBMITTED
400617429	WELL LOCATION PLAT
400617430	WELLBORE DIAGRAM
400617435	OTHER
400617436	OTHER
400617437	OTHER
400617438	OTHER

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no public comment received.	7/9/2014 6:23:22 AM
Permit	Attached missing lease description.	3/6/2014 7:05:24 AM
LGD	County Permit #1464	6/3/2014 11:59:49 AM
Permit	Passed completeness.	3/2/2014 3:23:55 PM

Total: 4 comment(s)