

FORM

2

Rev  
08/13

## 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:

400618545

## APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate

Date Received:

06/04/2014

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER \_\_\_\_\_Refilling ☐ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: HARMON

Well Number: 12-32-16-53

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: SWNW Sec: 32 Twp: 16S Rng: 53W Meridian: 6

Latitude: 38.619802

Longitude: -103.370882

Footage at Surface: 1932 feet FNL/FSL FNL 1234 feet FEL/FWL FWL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 4737

County: LINCOLN

GPS Data:

Date of Measurement: 03/25/2014 PDOP Reading: 1.5 Instrument Operator's Name: Ben Hardenburgh

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 &amp; MINERALS &amp; RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe 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: oil and gas lease

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.)

Township 16 South, Range 53 West of the 6th P.M., Section 32: S/2NE/4, NW/4, S/2  
Township 17 South, Range 53 West of the 6th P.M., Section 5, Lots 1,2,3,4,S/2N/2, S/2

Total Acres in Described Lease: 1202 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: 1234 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: 4019 Feet  
Above Ground Utility: 4050 Feet  
Railroad: 5280 Feet  
Property Line: 1583 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 5280' radius of HARMON 12-32-16-53 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.)
ATOKA	ATOK			
CHEROKEE K	CRKE			
MISSISSIPPIAN	MSSP			
MORROW	MRRW			

## DRILLING PROGRAM

Proposed Total Measured Depth: 7500 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 5280 Feet (Including plugged wells)

Will a closed-loop drilling system be used? No

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S 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 the disposal. Solids will be treated onsite.

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	17+1/2	13+3/8	48	0	40			
SURF	12+1/4	9+5/8	40	0	3100	810	3100	0
1ST	7+7/8	5+1/2	17	0	7500	155	7500	4163

☐ 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 APD is for a vertical well.

A pit will be used for drilling and completion and will be 100' x 100', with a 10' + 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: 6/4/2014 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:  \_\_\_\_\_ Director of COGCC Date: 7/14/2014

Expiration Date: 07/13/2016

API NUMBER

05 073 06628 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>
	<p>1) Provide 48 hour notice prior to spud via electronic Form 42.</p> <p>2) If production casing is set provide cement coverage to at least 200' above shallowest completed interval. Run and submit CBL to verify.</p> <p>3) If well is a dry hole set plugs at the following depths: : 40 sks cement +/- 50' above the Morrow, 40 sks cement +/- 50' above the Cherokee, 40 sks cement across any DST w/ show, 50 sks cement from 50' below surface casing shoe up into surface casing, 15 sks cement in top of surface casing, cut 4 ft below GL, weld on plate, 5 sks cement each in rat hole and mouse hole.</p>
	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

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	<p>Keep well site location, road and 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 contractors 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"> <li>• No solid materials, including building materials, shall be discharged to State waters.</li> <li>• Vehicular traffic will be minimized as much as possible to reduce nuisance dust and prevent further soil erosion.</li> <li>• Any trash generated during the project will be disposed of properly.</li> <li>• 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.</li> <li>• Store all materials in a neat and orderly manner in their appropriate containers.</li> <li>• Follow manufacturers' recommendations and company policies for proper use and disposal of products.</li> <li>• Monitor on-site vehicles for leaks.</li> </ul>
4	Storm Water/Erosion Control	<p>Structural Practices for Erosion and Sediment Control:</p> <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	Non-Structural Practices for Erosion and Sediment Control: Nonstructural BMPs include, but are not limited to: preservation of existing vegetation, vegetative buffer zones, slope roughening, and protection of trees.
6	Material Handling and Spill Prevention	Materials Handling and Spill Prevention: 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.
7	Construction	Waste Management and Disposal: 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.
8	Drilling/Completion Operations	The drilling pit will be lined.
9	Interim Reclamation	Utilize only such area around each producing well as is reasonably necessary. Restore the remainder of the well site location to its original condition within a reasonable time after the completion of operations. 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.
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)

Total: 10 comment(s)

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

Notice Concerning Operating Requirements for Wildlife Protection.

### **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
400618545	FORM 2 SUBMITTED
400619241	WELL LOCATION PLAT

Total Attach: 2 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no LGD or public comment received.	7/9/2014 12:09:31 PM
Engineer	astephens@petro-fs.com wrote The Csg/Liner Top for 1st String 5-1/2" casing should be changed from 4163' to 0' please.	6/11/2014 11:27:28 AM
LGD	County Permit #1474	3/9/2014 8:40:13 AM
Permit	Passed completeness.	6/5/2014 10:44:25 AM

Total: 4 comment(s)