

FORM
2A

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:

400614359

Date Received:

06/02/2014

Oil and Gas Location Assessment

☒ New Location ☐ Refile ☐ Amend Existing Location Location#: _____

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

438138

Expiration Date:

07/15/2017

☒ This location assessment is included as part of a permit application.

CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # _____
- ☐ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 10084

Name: PIONEER NATURAL RESOURCES USA INC

Address: 1401 17TH ST STE 1200

City: DENVER State: CO Zip: 80202

Contact Information

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 ☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

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

County: LINCOLN

QuarterQuarter: NWNE Section: 33 Township: 16S Range: 52W Meridian: 6 Ground Elevation: 4742

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 663 feet FNL from North or South section line

2681 feet FEL from East or West section line

Latitude: 38.624600 Longitude: -103.237661

PDOP Reading: 1.9 Date of Measurement: 05/01/2014

Instrument Operator's Name: Tommy Burden

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	<u>1</u>	Oil Tanks	<u>3</u>	Condensate Tanks	<u> </u>	Water Tanks	<u>5</u>	Buried Produced Water Vaults	<u> </u>
Drilling Pits	<u>1</u>	Production Pits	<u>1</u>	Special Purpose Pits	<u> </u>	Multi-Well Pits	<u> </u>	Temporary Large Volume Above Ground Tanks	<u> </u>
Pump Jacks	<u>1</u>	Separators	<u> </u>	Injection Pumps	<u> </u>	Cavity Pumps	<u> </u>		
Gas or Diesel Motors	<u>1</u>	Electric Motors	<u> </u>	Electric Generators	<u>1</u>	Fuel Tanks	<u>2</u>	Gas Compressors	<u> </u>
Dehydrator Units	<u> </u>	Vapor Recovery Unit	<u> </u>	VOC Combustor	<u> </u>	Flare	<u>1</u>	LACT Unit	<u> </u>
								Pigging Station	<u> </u>

OTHER FACILITIES

Other Facility Type

Number

Heater Treater

1

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

4" steel flowline from wellhead to production equipment and tank battery carrying oil, gas and water.

CONSTRUCTION

Date planned to commence construction: 07/14/2014 Size of disturbed area during construction in acres: 5.74

Estimated date that interim reclamation will begin: 09/09/2014 Size of location after interim reclamation in acres: 2.87

Estimated post-construction ground elevation: 4742

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? Yes

Will oil based drilling fluids be used? Yes

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Other

Cutting Disposal: ONSITE

Cuttings Disposal Method: Other

Other Disposal Description:

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

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: or Document Number:

Centralized E&P Waste Management Facility ID, if applicable:

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Diana J. Billheimer, Shel

Phone:

Address: 19551 County Road V

Fax: _____

Address: _____

Email: _____

City: Haswell State: CO Zip: 81045

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☐ is the mineral owner

☐ 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 from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: Bond

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

Date of Rule 306 surface owner consultation 05/01/2014

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☒ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☐ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Future Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☒ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☐ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

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 nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- 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: _____

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 111- Bacid Silt Loam - 0-2 Percent Slopes

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☐ NRCS or, ☐ field observation Date of observation: _____

List individual species: No Noxious weeds at this time. Surveys are typically done from Late May to early August for individual species identification.

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- ☐ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- ☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- ☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- ☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- ☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- ☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- ☐ Alpine (above timberline)
- ☐ Other (describe): _____

WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 952 Feet

water well: 2363 Feet

Estimated depth to ground water at Oil and Gas Location 77 Feet

Basis for depth to groundwater and sensitive area determination:

Downgradient surface water feature is a Pond. Closest water well with reported static water level is DWR Permit 25059 at 77'.

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

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)

RULE 502.b VARIANCE REQUEST

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

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

The Well Pad Location is within Mapped Lesser Prairie Chicken Habitat. According to David Klute of the Colorado Parks and Wildlife - the proposed pad and access roads are within Lesser Prairie Chicken sensitive habitat (Designated CHAT 3 habitat). Lesser Prairie Chicken surveys were completed within a 1.25 mile buffer around the proposed disturbance area including well pad and access road in accordance to CPW protocol. No Lesser Prairie Chickens were observed or heard within the 1.25 mile buffer zone. Swift fox den surveys are currently in progress to determine if burrows are active and sensitive wildlife habitat exist.

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

The well location is being permitted for two (2) wellbores: one pilot and one horizontal.

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.

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

Signed: _____ Date: 06/02/2014 Email: regulatory@petro-fs.com

Print Name: Kristi McRedmond Title: Regulatory Technician

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

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type

Description

	Operator shall demonstrate compliance with Rule 907.e and provide laboratory analytical results demonstrating compliance with Table 910-1 standards prior to onsite cutting disposal.
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Best Management Practices

No BMP/COA Type

Description

1	Planning	Keep well site location, the road, and the pipeline easement free of noxious weeds, litter and debris. Spray for noxious weeds and implement dust control, as needed. Operator will not permit the release or discharge of any toxic or hazardous chemicals or wastes on Owner's Land. Construct and maintain gates where any roads used by operator, its employees, or contractors can cross through fences on the leased premises.
2	Pre-Construction	Remove only the minimum amount of vegetation necessary for the construction of roads and facilities. Conserve topsoil during excavation and reuse as cover on disturbed areas to facilitate regrowth of vegetation. No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment.

3	General Housekeeping	<p>Good Housekeeping:</p> <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 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	<p>Non-Structural Practices for Erosion and Sediment Control:</p> <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>Materials Handling and Spill Prevention:</p> <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. 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	<p>All surface restoration shall be accomplished to the satisfaction of Owner.</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> <p>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)</p>

Total: 10 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400614359	FORM 2A SUBMITTED
400616849	LOCATION PICTURES
400616852	ACCESS ROAD MAP
400616860	HYDROLOGY MAP
400616863	REFERENCE AREA MAP
400616865	REFERENCE AREA PICTURES
400616868	LOCATION DRAWING
400617519	OTHER
400617520	OTHER
400617521	OTHER
400617525	OTHER
400617550	NRCS MAP UNIT DESC

Total Attach: 12 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 6:56:09 AM
Permit	Will closed loop be used. Forms are not the same. Requested clarification. All forms should say closed loop. per A. Stephens	7/9/2014 6:54:31 AM
Permit	Changed footage location to what was on survey plat. Operator must submit a sundry and a new location plat to move the well location. Final review completed; no public comment received.	7/9/2014 5:58:59 AM
OGLA	Changes made and concured with per Operator telephone call on July 8, 2014.	7/8/2014 2:34:32 PM
OGLA	Reference Area is not needed on cropland	7/7/2014 3:11:47 PM
OGLA	Changed typo in soils section to read "0 to 2 percent slopes"	7/7/2014 3:09:50 PM
OGLA	Changed the date of interim reclamation to 09/09/2014 for compliance with reclamation on cropland	7/2/2014 5:39:43 PM
LGD	County Permit#1464	5/3/2014 1:06:56 PM
Permit	Passed completeness.	5/2/2014 3:13:33 PM

Total: 9 comment(s)