

FORM

2A

Rev
04/01

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE ET OE ES

Document Number:

400060470

Oil and Gas Location Assessment

☐ New Location ☒ Amend Existing Location Location#: 335835

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a stand alone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this 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. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

335835

Expiration Date:

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

1. 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.

2. Operator

Operator Number: 10091

Name: BERRY PETROLEUM COMPANY

Address: 1999 BROADWAY STE 3700

City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Kallasandra Moran

Phone: (303) 999-4225

Fax: (303) 999-4325

email: kmoran@bry-consultant.com

4. Location
Identification:

Name: LONG RIDGE PAD Number: N15 595

County: GARFIELD

QuarterQuarter: SESW Section: 15 Township: 5S Range: 95W Meridian: 6 Ground Elevation: 8385

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 845 feet, from North or South section line: FSL and 2077 feet, from East or West section line: FWL

Latitude: 39.608896 Longitude: -108.042600 PDOP Reading: 1.8 Date of Measurement: 07/17/2006

Instrument Operator's Name: K. STEWART

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: Drilling Pits: Wells: Production Pits: Dehydrator Units:
Condensate Tanks: Water Tanks: Separators: Electric Motors: Multi-Well Pits:
Gas or Diesel Motors: Cavity Pumps: LACT Unit: Pump Jacks: Pigging Station:
Electric Generators: Gas Pipeline: Oil Pipeline: Water Pipeline: Flare:
Gas Compressors: VOC Combustor: Oil Tanks: Fuel Tanks:

Other: • Separators used 2 quads, 1 single. Drilling rig, temporary office and temporary housing on location for approximately 10 days per well.

6. Construction:

Date planned to commence construction: 11/01/2010 Size of disturbed area during construction in acres: 5.09
Estimated date that interim reclamation will begin: 12/15/2011 Size of location after interim reclamation in acres: 1.19
Estimated post-construction ground elevation: 8376 Will a closed loop system be used for drilling fluids: Yes ☒
Will salt sections be encountered during drilling: Yes ☐ No ☒ Is H2S anticipated? Yes ☐ No ☒
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes ☐ No ☒
Mud disposal: Offsite ☐ Onsite ☒ Method: Land Farming ☐ Land Spreading ☐ Disposal Facility ☐
Other: Closed Loop System

7. Surface Owner:

Name: Encana Oil & Gas USA, Inc Phone: 303-623-2300
Address: 370 17th Street Fax: 303-623-2400
Address: Suite 1700 Email: _____
City: Denver State: CO Zip: 80202-5632 Date of Rule 306 surface owner consultation: 08/18/2010
Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
Mineral Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
The surface owner is: ☒ the mineral owner ☐ committed to an oil and gas lease
☐ is the executer of the oil and gas lease ☐ the applicant
The right to construct the location is granted by: ☐ oil and gas lease ☐ Surface Use Agreement ☐ Right of Way
☐ applicant is owner
Surface damage assurance if no agreement is in place: ☐ \$2000 ☐ \$5000 ☒ Blanket Surety ID 20040106

8. Reclamation Financial Assurance:

☒ Well Surety ID: 20040105 ☒ Gas Facility Surety ID: 20040107 ☐ Waste Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
Distance, in feet, to nearest building: 19727, public road: 21766, above ground utilit: 19773
railroad: 49746, property line: 3101

10. 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

11. 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

12. Soils:

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.gov/> 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: 53 Parachute-Rhone loams, 5 to 30 percent slopes

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

13. 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: 06/22/2010

List individual species: Letterman's needlegrass, Elk sedge, Mountain big sagebrush, Big bluegrass, Bluebunch
wheatgrass, Idaho fescue, Mountain snowberry, Utah serviceberry, Yellow rabbitbrush,
Muttongrass, Other shrubs, Western wheatgrass

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
☒ Native Grassland (Bluestern, 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): _____

14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: ☒ No ☐ Yes Was a Rule 901.e. Sensitive Areas Determination performed: ☒ No ☐ Yes

Distance (in feet) to nearest surface water: 1160, water well: 9305, depth to ground water: 470

Is the location in a riparian area: ☒ No ☐ Yes Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes

Is the location within a Rule 317B Surface Water Supply Area buffer zone:

☒ No ☐ 0-300 ft. zone ☐ 301-500 ft. zone ☐ 501-2640 ft. 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: ☐ No ☐ Yes

15. Comments:

Water Resources - The closest water well is an un-named well (Permit # 133425/Receipt #0232223M). Pad has been constructed. No pit has not been constructed, as originally permitted; Closed loop system to be used. Conductors have not been set. Wells have not been drilled. No rig on site. The APD will NOT require expansion / additional surface disturbance of pad. The location does not require a variance from any of the rules listed in Rule 306.d. (1). (A). (ii). The location is not in a restricted surface occupancy area.

The location is not in a sensitive wildlife habitat area.

The production casing Top of Cement will be 200' above the Top of Gas.

Berry Petroleum Company will be doing closed loop operations.

I certify that there have been no changes on land use, lease description.

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

Signed: _____ Date: 08/24/2010 Email: kmoran@bry-consultant.com

Print Name: Kallasandra M. Moran Title: Permit Agent

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: _____

CONDITIONS OF APPROVAL, IF ANY:

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.

Attachment Check List

Att Doc Num	Name	Doc Description
400060470	FORM 2A SUBMITTED	400060470.pdf
400086613	LOCATION PICTURES	LONG RIDGE N15-595 Pad Photos.pdf
400086614	LOCATION DRAWING	Pad N15 595 - Location Drawing.PDF
400086615	HYDROLOGY MAP	Pad N15 595 - Hydrology Map.PDF
400086616	ACCESS ROAD MAP	Pad N15 595 - Access Road Map.PDF
400086617	REFERENCE AREA MAP	Pad N15 595 - Reference Area Map.PDF
400086618	REFERENCE AREA PICTURES	LONG RIDGE N15-595 Ref Area Photos.pdf
400086619	NRCS MAP UNIT DESC	Long Ridge N15-595 - Map Unit Description.pdf
400086620	CONST. LAYOUT DRAWINGS	Pad N15 595 - Construction Layout Drawings.PDF
400086621	MULTI-WELL PLAN	Pad N15 595 - Multi Well Plan.PDF

Total Attach: 10 Files

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	<p>The following list of Best Management Practices (BMP's) that will be implemented by Berry Petroleum Company during the pad construction, well drilling, well completion, natural gas production and reclamation phases of activity on the Long Ridge N15 595 well Pad.</p> <ul style="list-style-type: none">• A total of 9 wells will be directionally drilled from the N15 well pad. Directional drilling has enabled Berry Petroleum Company to reduce the number of well pads required for gas recovery and will minimize surface damage.• The N15 well pad will be constructed adjacent to an existing road. This eliminates the need to construct an additional road for access and avoids additional surface disturbance.• In general, Berry Petroleum Company will comply with all applicable federal, state and local statues, rules, regulations and ordinances, including those of OSHA, the COGCC and the CDPHE. Relating to safety and the environment.• During construction of the well pad, topsoil will be isolated from other soils and placed and stacked per COGCC requirements. All cuts, fill slopes, pits and topsoil piles will be stabilized and revegetated immediately following construction.• The pad will be constructed in compliance with CDPHE Stormwater Discharge regulations.• The reserve/completion pit will be fenced/flagged and/or netted to prevent entry of wildlife (including birds) and livestock.• Bear proof dumpsters/trash cans will be used on the location for solid/food waste disposal.• Noxious weeds will be controlled.• Temporary housing for the drill rig crews will meet all Garfield County regulations. The housing quarters will receive 24/7 supervision by Berry Petroleum Company.• Production tanks shall be placed on a non-permeable liner and surrounded by a metal containment wall at least 3 feet in height.

Total: 1 comment(s)