

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:

400101831

## Oil and Gas Location Assessment

☐ New Location ☒ Amend Existing Location Location#: 335834

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:

**335834**

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 Number: 116 595

County: GARFIELD

QuarterQuarter: NESE Section: 16 Township: 5S Range: 95W Meridian: 6 Ground Elevation: 8291

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: 1532 feet, from North or South section line: FSL and 376 feet, from East or West section line: FEL

Latitude: 39.610778 Longitude: -108.051302 PDOP Reading: 2.5 Date of Measurement: 09/08/2010

Instrument Operator's Name: Ivan Martin / Construction Surveys, Inc.

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

Special Purpose Pits:	<input type="text" value="0"/>	Drilling Pits:	<input type="text" value="0"/>	Wells:	<input type="text" value="8"/>	Production Pits:	<input type="text" value="0"/>	Dehydrator Units:	<input type="text" value="2"/>
Condensate Tanks:	<input type="text" value="5"/>	Water Tanks:	<input type="text" value="1"/>	Separators:	<input type="text" value="1"/>	Electric Motors:	<input type="text" value="0"/>	Multi-Well Pits:	<input type="text" value="0"/>
Gas or Diesel Motors:	<input type="text" value="0"/>	Cavity Pumps:	<input type="text" value="0"/>	LACT Unit:	<input type="text" value="0"/>	Pump Jacks:	<input type="text" value="0"/>	Pigging Station:	<input type="text" value="0"/>
Electric Generators:	<input type="text" value="0"/>	Gas Pipeline:	<input type="text" value="1"/>	Oil Pipeline:	<input type="text" value="0"/>	Water Pipeline:	<input type="text" value="1"/>	Flare:	<input type="text" value="0"/>
Gas Compressors:	<input type="text" value="0"/>	VOC Combustor:	<input type="text" value="0"/>	Oil Tanks:	<input type="text" value="0"/>	Fuel Tanks:	<input type="text" value="0"/>		

Other: Separators used 2 quad dehydrators, 1 separator. Drilling rig, temporary office and temporary housing on location for approximately 10 days per well.

6. Construction:

Date planned to commence construction: 02/01/2011 Size of disturbed area during construction in acres: 5.21  
Estimated date that interim reclamation will begin: 02/15/2012 Size of location after interim reclamation in acres: 1.32  
Estimated post-construction ground elevation: 8291 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: Total 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 Date of Rule 306 surface owner consultation: 10/21/2010  
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 \_\_\_\_\_

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: 18165, public road: 20231, above ground utilit: 18258  
railroad: 51186, property line: 2401

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 - 30% 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: 09/08/2010

List individual species: See attached NRCS Rangeland Productivity & Composition data

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: 1087, water well: 10356, 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 Suppl 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:

The closest water well is Un-Named Well (Mobil Mining Company) (Permit # 133425/Receipt # 0232223M). I certify that there have been no changes on land use, lease description. Pad has been constructed. Conductors have been set. No rig on site. Reference well used for footages is the LR09C I16 595 (05-045-12923). 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. No reserve or cuttings pit is required with our total closed-loop system.

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

Signed: \_\_\_\_\_ Date: \_\_\_\_\_ 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
400102196	ACCESS ROAD MAP	LONG RIDGE I16-595 - Access Road Map.pdf
400102197	CONST. LAYOUT DRAWINGS	LONG RIDGE I16-595 - Construction Drawings (1-5).pdf
400102198	HYDROLOGY MAP	LONG RIDGE I16-595 - Hydrology Map.pdf
400102199	LOCATION DRAWING	LONG RIDGE I16-595 - Location Drawing.pdf
400102200	MULTI-WELL PLAN	LONG RIDGE I16-595 - Multi Well Plan.pdf
400102201	REFERENCE AREA MAP	LONG RIDGE I16-595 - Reference Area Map.pdf
400102202	LOCATION PICTURES	LONG RIDGE I16-595 Pad Photos.pdf
400102203	REFERENCE AREA PICTURES	LONG RIDGE I16-595 Ref Area Photos.pdf
400102204	NRCS MAP UNIT DESC	NRCS - Map Unit Descripton.pdf
400102205	OTHER	NRCS - Rangeland Productivity & Plant Composition.pdf
400102206	MINERAL LEASE MAP	Encana Mineral Lease Map.PDF
400102207	OTHER	Diesel Use and Cuttings Procedure.PDF
400102208	30 DAY NOTICE LETTER	I16 Pad - 30 Day Letter to Encana - Sent 10-20-2010.PDF

Total Attach: 13 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 I16 595 well Pad.</p> <p>A total of 8 wells will be directionally drilled from the I16 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.</p> <p>The I16 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.</p> <p>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.</p> <p>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.</p> <p>The pad will be constructed in compliance with CDPHE Stormwater Discharge regulations.</p> <p>The reserve/completion pit will be fenced/flagged and/or netted to prevent entry of wildlife (including birds) and livestock.</p> <p>Bear proof dumpsters/trash cans will be used on the location for solid/food waste disposal.</p> <p>Noxious weeds will be controlled.</p> <p>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.</p> <p>Production tanks shall be placed on a non-permeable liner and surrounded by a metal containment wall at least 3 feet in height.</p>

Total: 1 comment(s)