

# State of Colorado Oil and Gas Conservation Commission

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Document Number:

400446628

Date Received:

07/24/2013

## Oil and Gas Location Assessment

☐ New Location☒ Amend Existing Location Location#: 336330

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 standalone 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:

**336330**

Expiration Date:

**11/21/2016**☒ 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: 100185

Name: ENCANA OIL & GAS (USA) INC

Address: 370 17TH ST STE 1700

City: DENVER State: CO Zip: 80202-5632

### 3. Contact Information

Name: Erin Hochstetler

Phone: (720) 876-5827

Fax: ( )

email: erin.hochstetler@encana.com

### 4. Location Identification:

Name: Wandell Number: 7H-D267County: WELDQuarterQuarter: NWNW Section: 7 Township: 2N Range: 67W Meridian: 6 Ground Elevation: 4872

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: 1107 feet FNL, from North or South section line, and 1032 feet FWL, from East or West section line.Latitude: 40.157530 Longitude: -104.938150 PDOP Reading: 2.2 Date of Measurement: 05/31/2013Instrument Operator's Name: JOHN RICE

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

Special Purpose Pits: <input type="checkbox"/>	Drilling Pits: <input type="checkbox"/>	Wells: <input type="text" value="9"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="text" value="5"/>	Separators: <input type="text" value="10"/>	Electric Motors: <input type="checkbox"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="checkbox"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="text" value="12"/>	Oil Tanks: <input type="text" value="16"/>	Fuel Tanks: <input type="checkbox"/>	

Other: IN ADDITION: 4 BUFFER VESSELS, 5 VRUs, 1 VRU DISCHARGE SCRUBBER, 3 VRTs, & 8 METER RUNS.

### 6. Construction:

Date planned to commence construction: 08/15/2014 Size of disturbed area during construction in acres: 9.50  
Estimated date that interim reclamation will begin: 08/15/2015 Size of location after interim reclamation in acres: 4.50  
Estimated post-construction ground elevation: 4872 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: \_\_\_\_\_

## 7. Surface Owner:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_ Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Date of Rule 306 surface owner consultation: 05/29/2013  
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 20090011

## 8. Reclamation Financial Assurance:

☒ Well Surety ID: 20100017 ☐ Gas Facility Surety ID: \_\_\_\_\_ ☐ Waste Mgnt. Surety ID: \_\_\_\_\_

## 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☒ No ☐  
Distance, in feet, to nearest building: 555, public road: 683, above ground utility: 1025,  
railroad: 23234, property line: 207

## 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: Symbol 73: Vona loamy sand, 3 to 5 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: \_\_\_\_\_

List individual species: prairie sandreed, sand bluestem, switchgrass, neddleandthread, sand sagebrush, sideoats grama, and western wheatgrass.

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): \_\_\_\_\_

### 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: 480, water well: 916, depth to ground water: 17

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:

Depth to ground water taken from water well permit #223766. Equipment for tank battery includes existing equipment. A temporary completions area approximately 4 acres will be utilized for up to 3 fresh water storage tanks to be used during completions operations. This area will be completely reclaimed. See attached drawing for reference (labeled as 'other'). Total disturbed area will be reclaimed to land directly west of this location. Reference area map not needed.

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

Signed: \_\_\_\_\_ Date: 07/24/2013 Email: erin.hochstetler@encana.com

Print Name: Erin Hochstetler Title: Permitting 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: \_\_\_\_\_

Director of COGCC

Date: 11/22/2013

**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.

**Description**

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**Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
400446628	FORM 2A SUBMITTED
400451182	NRCS MAP UNIT DESC
400451183	OTHER
400451184	HYDROLOGY MAP
400451185	ACCESS ROAD MAP
400451186	MULTI-WELL PLAN
400451187	LOCATION PICTURES
400451188	LOCATION DRAWING
400451189	REFERENCE AREA PICTURES
400451190	WASTE MANAGEMENT PLAN

Total Attach: 10 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Final Review Completed. No LGD or public comment received.	11/18/2013 1:24:30 PM
OGLA	Attached BMPs as provided by the Operator to address the potential impacts to the public due to proximity to the nearby school. Review completed 11/14/2013.	11/14/2013 11:30:59 AM
Permit	Sent email requesting update on Mitigation measures. ON HOLD: w/o resolve of BMP's.	10/18/2013 12:01:17 PM
Permit	ON HOLD: Per operator meeting Tuesday Sept 17th to discuss the mitigation measures.	9/13/2013 9:01:58 AM
Permit	Sent email requesting update on the BMP's.	8/26/2013 11:30:54 AM
OGLA	Requesting appropriate BMPs from the Operator.	8/19/2013 12:56:17 PM
Permit	Noted a School within 1000' of wellsite. Changed to HD = yes. ok to pass.	8/12/2013 2:33:30 PM
Permit	This form has passed completeness.	7/25/2013 8:03:36 AM

Total: 8 comment(s)

**Best Management Practices**

No	BMP/COA Type	Description
1	Planning	<p>Maximize equipment and wellhead setbacks from occupied buildings and residences to the extent feasible and practicable within the proposed location.</p> <p>Prior to commencement of operations, provide notification to landowners within one-half mile of the site.</p> <p>c. Prior to commencement of drilling and completion operations, provide to a Firestone designated staff member the following for the well site for informational purposes only, which Encana may revise from time to time during operations:</p> <p>i. A summary of planned operations, including identified access points and operational timeline, for posting to a local community information web-page.</p> <p>ii. A site plan including final reclamation of the site</p> <p>1. We will work with Firestone to establish landscaping/visual mitigation.</p> <p>iii. A plan for noise, light and dust mitigation, to the extent feasible</p> <p>1. Noise and light - We will perform a baseline noise survey prior to construction and will install temporary sound walls to minimize noise and light impacts during drilling and completions. We will install permanent noise mitigation at the facility location as necessary to meet all COGCC regulations.</p> <p>2. Dust - The access road location will be maintained at regular intervals with water and/or mag chloride to minimize dust during the construction and drilling/completions phases and as necessary during routine visits from pumper trucks or other maintenance vehicles. We utilize closed-loop dust control protocols to manage and minimize dust associated with the use of sand during the completions phase and will apply crushed asphalt or tracking mats along entire length of the access road (this will aid with dust control/mud tracking).</p> <p>iv. A traffic management plan</p> <p>1. We plan to engage Firestone and Weld County and conduct a traffic study to evaluate / optimize access routes with consideration of road limitations, school/ neighborhood impacts, parks, trails/bike paths, railroad crossing.</p> <p>2. To the extent feasible, limit traffic to occur in certain time frames (for example: outside of school drop-off/pick-up times).</p> <p>3. Traffic control measures such as a stop sign/no left hand turn sign will be placed at the access road entrance. We will use pilot cars/flaggers/signage/communication devices when moving overweight/oversize loads to/from location.</p> <p>4. To the extent feasible, we will draw water to be used during the drilling and completions phases from a local fire hydrant and store the water on-site to reduce truck traffic.</p> <p>v. Updates of this information if any plans change during operations</p> <p>d. Utilize steel-rim berms around tanks and separators instead of sand or soil berms. Utilize lined berms for all liquid storage tanks.</p> <p>e. Utilize closed-loop systems for drilling and completion operations</p> <p>f. Utilize a high-low pressure vessel (HLP) and vapor recovery unit (VRU) for the newly drilled wells for at least the first year of production.</p>

2	Community Outreach and Notification	<p>Encana is committed to protecting the health and safety of all individuals affected by our activities. Our goal to minimize the impact our activities have on area residents to the greatest extent practicable. We acknowledge Coal Ridge Middle School is 900' from the site and the closest residential building is 727' away. The previously listed BMPs seek to minimize our impact. We will work with Firestone officials to coordinate the activity schedule for the Wandell location in an effort to further minimize community impact. We will also conduct a community meeting in advance of our operations. Encana has worked hard to develop strong relationships with the local emergency responder community. Table top exercises, on-site tours and good communication ensure that in the event of an emergency, our efforts are coordinated.</p> <p>Encana's Emergency Response Plans (ERP) ensure Encana is prepared to respond to emergencies having the potential to compromise the safety of employees and the public, the environment and company property damage. The ERP is based on the National Incident Management System (NIMS) and describes the functional roles and accountabilities for life safety, property damage, and environmental impacts. The ERP also describes the communication and notification protocols to engage local emergency responder support, based on the nature and complexity of the emergency. Some of the ERP details include making the facility and immediate surrounding area safe (people first, then property), isolating the area, establishing and maintaining adequate communication with appropriate governmental agencies (fire, police, and public officials) and to clarify our collective responsibilities.</p>
3	Community Outreach and Notification	<p>We will work with Firestone to re-route the user trail as necessary to avoid the temporary and permanent disturbance areas. We will provide 24 hour/day site security at the access road entrance and will fence off the entire length of the access road. We will employ a gate guard during drilling and completions activities to help monitor the access to the pad.</p> <p>The temporary sound walls will be installed around the entire perimeter of the drilling and temporary completions area to further secure the site. Permanent fencing will be installed around the permanent equipment upon conclusion of the drilling and completion operations.</p>

Total: 3 comment(s)