

FORM
2A

Rev
04/01

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:

400273467

Date Received:

04/18/2012

Oil and Gas Location Assessment

☐ New Location

☒ Amend Existing Location Location#: 383009

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:

383009

Expiration Date:

05/17/2015

☒ 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: Heather Mitchell

Phone: (720) 876-3070

Fax: (720) 876-4070

email: heather.mitchell@encana.com

4. Location Identification:

Name: Cedar Bench

Number: K29 6100

County: GARFIELD

QuarterQuarter: NESW Section: 29 Township: 6S Range: 100W Meridian: 6 Ground Elevation: 7034

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: 2205 feet FSL, from North or South section line, and 2346 feet FEL, from East or West section line.

Latitude: 39.503564 Longitude: -108.578325 PDOP Reading: 1.8 Date of Measurement: 01/25/2012

Instrument Operator's Name: Ben Johnson

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

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="8"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text" value="12"/>	Water Tanks: <input type="text" value="12"/>	Separators: <input type="text" value="8"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text"/>	Pigging Station: <input type="text"/>
Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text" value="1"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text" value="1"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text" value="1"/>	

Other: 2 meter houses

6. Construction:

Date planned to commence construction: 06/30/2012 Size of disturbed area during construction in acres: 4.97
Estimated date that interim reclamation will begin: 09/01/2014 Size of location after interim reclamation in acres: 1.50
Estimated post-construction ground elevation: 7034 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: recycle and bury

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 11/17/2011
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: _____ ☐ Gas Facility Surety ID: _____ ☐ 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: 24655, public road: 6824, above ground utilit: 18064
, railroad: 116160, property line: 281

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: NRCS #47 Hesperus-Empedrado, moist-Pagoda complex

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: 02/26/2012
List individual species: _____

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: 510, water well: 7701, depth to ground water: 40
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

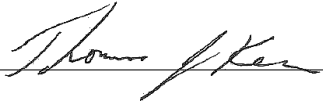
15. Comments:

The BLM owns the surface and minerals for this location. This location was onsite on 11.17.2011. Distances in the cultural section are taken from the DHS3B-32 K29 6100. This pad will be reclaimed to adjacent area to the West. Reference Area photos will be sent along when the snow melts.

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

Signed: _____ Date: 04/18/2012 Email: heather.mitchell@encana.com
Print Name: Heather Mitchell Title: Regulatory Analyst

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: 5/18/2012

**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.

SITE SPECIFIC COAs:

Operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals, and maintained in good condition.

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried permanent pipelines.

If the well is to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or pit located on the well pad or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if drill cuttings are to remain/disposed of onsite, they must also meet the applicable standards of table 910-1.

Attachment Check List

Att Doc Num	Name
2034344	CORRESPONDENCE
400273467	FORM 2A SUBMITTED
400273475	HYDROLOGY MAP
400273479	MULTI-WELL PLAN
400273480	CONST. LAYOUT DRAWINGS
400273482	ACCESS ROAD MAP
400273485	LOCATION DRAWING
400273488	NRCS MAP UNIT DESC
400273546	LOCATION PICTURES

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Two related APD's still in draft waiting on ROW's. Remaining six APD's have unit map attached. LGD & pub. comments waived. Final Review--passed.	5/17/2012 9:48:20 AM
Permit	Associated APD's on hold pending receipt of new proposed federal unit boundary.	5/16/2012 2:46:13 PM
OGLA	Initiated/Completed OGLA Form 2A review on 04-22-12 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, moisture content cuttings, and flowback to tanks COAs from operator on 04-22-12; received acknowledgement of COAs from operator on 04-24-12; passed by CPW on 04-20-12 with BLM stipulations and COAs and operator submitted BMPs acceptable; passed OGLA Form 2A review on 05-14-12 by Dave Kubeczko; fluid containment, spill/release BMPs, moisture content cuttings, and flowback to tanks COAs.	4/22/2012 6:49:33 PM
DOW	This site is in the Roan Creek drainage and falls within an Elk Winter concentration area. The BMPs provided, and COGCC regulations, address most CPW wildlife mitigation concerns. CPW also requests that Encana use reclamation seed mix suitable for elk, that they restrict post-development well site visitations to between the hours of 10:00 am and 3:00 pm, and that they reduce well site visitations between December 1 and April 15 due to the Elk winter range. Comments by Bill Buchholz on 20 April 2012	4/20/2012 3:48:18 PM

Total: 4 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Construction	<ul style="list-style-type: none">• Use solar panels as an alternative energy source for on-location production equipment, where appropriate, economically and technically feasible.• Use multiple gathering lines placed in a single trench to minimize disturbance and construction, where appropriate, economically and technically feasible.• Install pipeline crossings at right angles to the drainages, wetlands, and perennial water bodies, where appropriate, economically and technically feasible.
Wildlife	<ul style="list-style-type: none">• Prohibit Encana employees and contractors from carrying projectile weapons on Encana leases.• Prohibit pets on Encana leases.• Strategically apply fugitive dust control measures, including enforcing established speed limits on Encana private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.• Use enclosed, locking garbage receptacles or implement a strict daily trash removal regime on each temporary or permanent work location.

Total: 2 comment(s)