

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



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Document Number:  
400190518

Oil and Gas Location Assessment

New Location  Amend Existing Location Location#: \_\_\_\_\_

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:  
**425805**  
Expiration Date:  
**10/11/2014**

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: N. Parachute Number: WF H15 596  
 County: GARFIELD  
 Quarter: SENE Section: 15 Township: 5S Range: 96W Meridian: 6 Ground Elevation: 6458  
 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: 2049 feet FNL, from North or South section line, and 129 feet FEL, from East or West section line.  
 Latitude: 39.616708 Longitude: -108.146539 PDOP Reading: 2.6 Date of Measurement: 11/22/2010  
 Instrument Operator's Name: Robert Kay

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="18"/>	Production Pits: <input type="text" value="0"/>	Dehydrator Units: <input type="text" value="1"/>
Condensate Tanks: <input type="text" value="1"/>	Water Tanks: <input type="text" value="1"/>	Separators: <input type="text" value="2"/>	Electric Motors: <input type="text" value="0"/>	Multi-Well Pits: <input type="text" value="0"/>
Gas or Diesel Motors: <input type="text" value="2"/>	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="3"/>	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="1"/>	VOC Combustor: <input type="text" value="1"/>	Oil Tanks: <input type="text" value="0"/>	Fuel Tanks: <input type="text" value="0"/>	

Other: 9 meter houses

6. Construction:

Date planned to commence construction: 06/01/2012 Size of disturbed area during construction in acres: 9.53  
Estimated date that interim reclamation will begin: 06/30/2013 Size of location after interim reclamation in acres: 3.38  
Estimated post-construction ground elevation: 6429 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: 02/23/2011  
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 Mgnt. Surety ID: \_\_\_\_\_

### 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes  No   
Distance, in feet, to nearest building: 18471, public road: 18105, above ground utilit: 12777  
, railroad: 59277, property line: 129

### 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: #62 Rock Outcrop Torriorthents, very steep

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: 06/29/2011  
List individual species: Whitetop and Canada thistle

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: 275, water well: 2990, depth to ground water: 30  
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:**

This pad will be reclaimed to the South. ROW to be submitted to the BLM and copy provided upon approval

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 08/12/2011 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: David S. Nashin Director of COGCC Date: 10/12/2011

**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.

The access road will be constructed to prevent sediment migration from the access road to nearby surface water or any drainages leading to other nearby surface waters. Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

Well pad and access road to the well pad will be gravel surfaced. Operator must install adequately sized culverts that cross any drainages leading to the stream. Operator must ensure secondary containment for any potential volume of fluids that may be released from the pad/access road in the vicinity of all stream, intermittent stream, ditch, and drainage crossings.

The location is in an area of high runoff/run-on potential from the proposed pad area to the north; therefore the pad shall be constructed as quickly as possible and appropriate BMPs need to be in place both during and after well pad construction, as well as during all drilling and well completion operations. Standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater runoff. Slopes with potential for runoff should be stabilized immediately following pad construction.

Because of proximity of the well pad to both nearby surface water and steep slopes to the north, operator will grade the well pad surface to slope away from the stream towards a central collection point on the well pad.

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.

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, the drill cuttings must also meet the applicable standards of table 910-1.

### Attachment Check List

Att Doc Num	Name
2033974	NRCS MAP UNIT DESC
2034006	CORRESPONDENCE
400190518	FORM 2A SUBMITTED
400194935	REFERENCE AREA PICTURES
400194936	REFERENCE AREA PICTURES
400194938	REFERENCE AREA PICTURES
400194942	REFERENCE AREA PICTURES
400194943	CONST. LAYOUT DRAWINGS
400194944	HYDROLOGY MAP
400194945	LOCATION DRAWING
400194946	MULTI-WELL PLAN
400194947	ACCESS ROAD MAP
400194949	LOCATION PICTURES
400198741	SURFACE AGRMT/SURETY

Total Attach: 14 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	DOW concerns addressed. LGD/Pub. comments waived. Final Comprehensive Review Status--Passed.	10/11/2011 8:06:27 AM
DOW	The CPW affirms that the lease stipulations and conditions of approval assigned to this permit by the BLM suffice to address wildlife habitat and mitigation concerns.  Friday, September 30, 2011 at 4:50 p.m.	9/30/2011 4:50:11 PM
Permit	FINAL 2A APPROVAL WO DOW COMMENT PERIOD TO EXPIRE.	9/15/2011 2:01:33 PM
Permit	SURF. LOC. <150' FROM PROP. LINE & LEASE LINE. ENCANA OWNS MINERALS AND SURFACE IN ADJACENT SEC. 14 SO DID NOT REQ. VARIANCE LTR. APPLICATION TO BLM FOR SURFACE ACCESS MEETS RIGHT TO CONSTRUCT LOC. REQUIREMENT.	9/15/2011 11:00:20 AM
OGLA	Initiated/Completed OGLA Form 2A review on 08-02-11 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, lined pits/closed loop, flowback to tanks only, access road/pad gravelled and sediment control, slope control, and cuttings low moisture content COAs from operator on 08-29-11; received concurrence from operator on 08-29-11; passed by CDOW on 09-30-11 with operator submitted BMPs (with permit application) and BLM stipulations and COAs acceptable; passed OGLA Form 2A review on 10-07-11 by Dave Kubeczko; fluid containment, spill/release BMPs, lined pits/closed loop, flowback to tanks only, access road/pad gravelled and sediment control, slope control, and cuttings low moisture content COAs.	8/29/2011 10:59:10 AM
Permit	Returned to draft at operators request.	8/23/2011 7:08:13 AM
Permit	Returned to draft. ROW is not attached.	8/15/2011 10:14:23 AM
Permit	Returned to draft. ROW missing. Attachments mis labeled	8/15/2011 9:25:50 AM

Total: 8 comment(s)

## BMP

<u>Type</u>	<u>Comment</u>
Wildlife	<ul style="list-style-type: none"><li>• Prohibit Encana employees and contractors from carrying projectile weapons. Except during company organized events.</li><li>• Prohibit pets on property.</li><li>• 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.</li><li>• Perform biological surveys (on-site) for each new development, using the most recent data sets for wildlife and aquatic resources.</li><li>• Utilize the Encana Wildlife Resources Matrix to identify and document (where appropriate) potential impacts or concerns during the project planning phase for proposed drilling operations and construction of roads, pads and pipelines.</li></ul>
Construction	<ul style="list-style-type: none"><li>• Use solar panels as an alternative energy source for on-location production equipment, where appropriate, economically and technically feasible.</li><li>• Use multiple gathering lines placed in a single trench to minimize disturbance and construction, where appropriate, economically and technically feasible.</li><li>• Install trench plugs (sloped to allow wildlife or livestock to exit the trench should they enter) at known wildlife or livestock trails to allow safe crossing on long spans of open trench, where appropriate, economically and technically feasible.</li><li>• Install pipeline crossings at right angles to the drainages, wetlands and perennial water bodies, where appropriate, economically and technically feasible.</li><li>• Maintain a minimum of five feet of soil cover between the pipeline and the lowest point of the drainage or water body channel.</li></ul>

Total: 2 comment(s)